



ED 34 - 762A

**R-410A**

# Engineering Data

**VRV III**

THE INTELLIGENT AIR CONDITIONING SYSTEM



**COOLING ONLY**

Cooling Only  
50 Hz



<b>Introduction .....</b>	<b>ii</b>	
<b>Part 1 General Information .....</b>	<b>1</b>	<b>1</b>
<b>Part 2 Indoor Units .....</b>	<b>43</b>	<b>3</b>
Ceiling Mounted Cassette Type (Double Flow) .....	<b>2</b> FXCQ-M .....	<b>4</b> 45
Ceiling Mounted Cassette Type (Multi Flow) .....	<b>3</b> FXFQ-M .....	<b>5</b> 67
Ceiling Mounted Cassette Corner Type .....	<b>4</b> FXKQ-MA .....	<b>6</b> 111
Slim Ceiling Mounted Duct Type .....	<b>5</b> FXDQ-P, N(A) .....	<b>7</b> 131
Ceiling Mounted Built-In Type .....	<b>6</b> FXSQ-M .....	<b>8</b> 171
Ceiling Mounted Duct Type .....	<b>7</b> FXMQ-MA .....	<b>9</b> 213
Ceiling Suspended Type .....	<b>8</b> FXHQ-MA .....	<b>10</b> 239
Wall Mounted Type .....	<b>9</b> FXAQ-MA .....	<b>11</b> 255
Floor Standing Type / Concealed Floor Standing Type .....	<b>10</b> FXLQ/FXNQ-MA .....	<b>12</b> 279
Ceiling Suspended Cassette Type (Connection Unit Series) .....	<b>11</b> FXUQ-MA .....	<b>13</b> 301
<b>Part 3 Outdoor Air Processing Unit .....</b>	<b>335</b>	<b>14</b>
Outdoor Air Processing Unit .....	<b>12</b> FXMQ-MF .....	<b>15</b> 337
<b>Part 4 Outdoor Units; Normal Series (Space Saving Series) .....</b>	<b>371</b>	<b>16</b>
Cooling Only (50Hz) .....	<b>13</b> RXQ-P .....	<b>17</b> 373
<b>Part 5 Outdoor Units; High COP Series (Energy Saving Series) .....</b>	<b>451</b>	<b>18</b>
Cooling Only (50Hz) .....	<b>14</b> RXQ-PH .....	<b>19</b> 453
<b>Part 6 Installation of Outdoor Units .....</b>	<b>497</b>	<b>20</b>
<b>Part 7 Control .....</b>	<b>559</b>	<b>21</b>
<b>Part 8 Guide Specification .....</b>	<b>739</b>	<b>22</b>



# 1. Introduction

## Preface

Along higher quality building environment and more sophisticated building function, there is now a greater demand for system expansion for a flexible air-conditioning system capable of finer air-conditioning, thus increasing importance of individual air-conditioning systems. On the other hand, due to social significance of environmental and energy problems, elements such as energy-efficiency and low maintenance are still strongly desired.

Daikin is the sole air conditioning company in the world that manufactures every component from refrigerant to complete air conditioning systems itself. Our commitment to offering the best for people as well as the environment inspires us to develop new systems that make the most effective use of energy resources.


**Daikin, the first in the industry to develop the VRV system, has now enhanced the R-410A, R-22 with the Inverter that features an upgraded capacity of up to 54 horsepower (R-22 : 48 horsepower), VRV system to further refine all the features of the current VRV system.**

This publication contains a variety of information related to the design and installation of this new VRV System. We hope this information will serve to deepen your understanding of the system, and will help you to efficiently develop its highly evolved characteristics.

DAIKIN INDUSTRIES, LTD  
Global Operations Division

## 2. Publication History of VRV Engineering Data

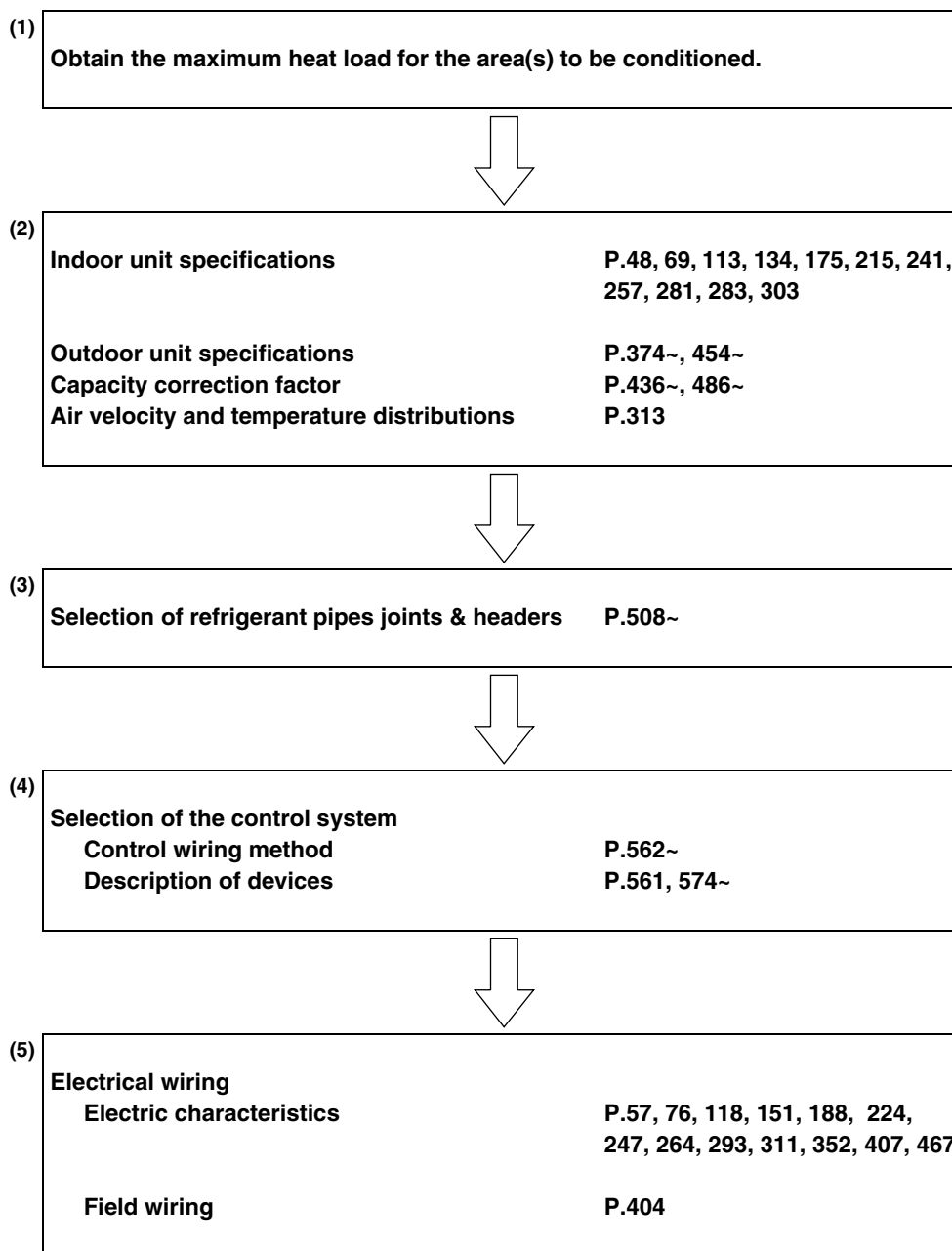
Refrigerant	Type		Pub. : No.	Outdoor Units		Notes	Published In
R-410A	Air Cooled	■ INVERTER M	ED39-436	50/60Hz H/P RXYMQ4, 5, 6M		VRV II-S Heat Pump ■ New line up of 4, 5, 6HP outdoor units ■ New line up of FXDQ Indoor units	Jul. 2004
			ED39-526	50Hz H/R REYQ8M~48M		VRV II Heat Recovery Separation of Heat Recovery Series from ED39-226B	Feb. 2006
			ED35-511B	50/60Hz H/P RXYQ8~30MY1K(E) RXYQ8~30MYLK(E)		VRV II Heat Pump for High outdoor temperature. ■ Minor change of Indoor Units from M to MA ■ Model change of Remote Controller as follows BRC1A61, 62 →BRC1C62 BRC8A61	Jul. 2006
		■ INVERTER MA	ED39-428B	50/60Hz H/P 50Hz C/O	RXYQ5MA~48MA RXQ5MA~48MA	VRV II Heat Pump, Cooling Only ■ New line up of 60Hz Heat Pump outdoor units to ED39-428A	Oct. 2005
		■ INVERTER P	ED34-645B	50/60Hz H/P	Normal Series RXYQ5P~54P High COP Series RXYQ16PH~50PH	VRV III Heat Pump ■ Addition of 60Hz Heat Pump to ED34-645A	Nov. 2006
			ED34-762	50Hz C/O	Normal Series RXQ5P~54P High COP Series RXQ16PH~50PH	VRV III Cooling Only ■ New line up of 50Hz Cooling Only outdoor units.	Dec. 2006
			ED34-762A	50Hz C/O	Normal Series RXQ5P~54P High COP Series RXQ16PH~50PH	VRV III Cooling Only ■ Correction of errors	Sep.2007
	Water Cooled	■ INVERTER M	ED30-442B	50Hz H/P 50Hz H/R	RWEYQ10, 20, 30M Y1	VRV-W II Heat Pump, Heat Recovery Following change has been newly added to ED30-442A ■ Minor change of Indoor Units from M to MA ■ Model change of Remote Controller as follows BRC1A61, 62 →BRC1C62 BRC8A61	May. 2006
			ED30-653	60Hz H/P 60Hz H/R	RWEYQ10, 20, 30M YL, TL	VRV-W II Heat Pump, Heat Recovery 60Hz	Apr. 2006
	R-22	Air Cooled	■ INVERTER K-K	ED35-211	50/60Hz 50/60Hz	RXY 16K-K~30K-K RX 16K-K~30K-K	VRV Heat Pump, Cooling Only ■ For High Outdoor Temperature up to 50°CDB ■ For Saudi Arabia and Middle East
■ INVERTER M			ED38-225C	50/60Hz H/P 50Hz C/O	RXY5M~48M RX5M~48M	VRV II Heat Pump, Cooling Only Following change has been newly added to ED38-225B ■ FXD20~32P (Additional) ■ Model change of Remote Controller as follows BRC1A61, 62 →BRC1C62 BRC8A61 ■ VAM150~2000FA→VAM150~2000GJ (Model change)	Jun. 2006
			ED38-329	50/60Hz H/P 50Hz C/O	RXYM4, 5, 6M RXM4, 5, 6M	VRV II-S Heat Pump, Cooling Only ■ New line up of 4, 5, 6HP outdoor units ■ New line up of FXD Indoor units	Jan. 2004
For All Types			OH 06-1	For Indoor and Outdoor Units.		Option Handbook	Jul. 2006
HRV(VAM)		GJ	ED71-613	50/60Hz	VAM150~2000GJ	HRV ■ New line-up from FA to GJ Series	Feb. 2006
HRV(VKM)		G(M)	ED71-440	50Hz	VKM50~100G(M) (R-410A)	HRV • With DX Coil (VKM-G) • With DX Coil and Humidities (VKM-GM)	Mar. 2005

This time we publish **ED34-762A** as shown by .

H/P : Heat Pump  
H/R : Heat Recovery  
C/O : Cooling Only

**Note:** The reference number “(V○○○○)” are noted on each figures in this book however they are only used for printing convenience.

### 3. Step by Step VRV System Selection Process (Reference)



#### Caution

1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.
2. If the outdoor units are to be installed close to the sea shore, direct exposure to the sea breeze should be avoided.
3. Refer to the latest drawing numbers.

# Part 1

## General Information

1. Model Names of Indoor/Outdoor Units.....	2
2. External Appearance.....	4
2.1 Indoor Units .....	4
2.2 Outdoor Units .....	5
3. Combination of Outdoor Units.....	7
4. Nomenclature.....	9
5. Capacity Range.....	11
6. Features .....	13
6.1 Technologies .....	13
6.2 Flexible Design.....	15
6.3 A sense of responsibility.....	18
6.4 Enhanced Comfort .....	19
6.5 Control Systems .....	20
6.6 Advanced Control Systems .....	22
6.7 HRV (Heat Reclaim Ventilation) .....	25
6.8 HRV-With DX Coil-(Heat Reclaim Ventilation) VKM-GA(M) Series .....	33

# 1. Model Names of Indoor/Outdoor Units

## \*Indoor Units

Type		Model Name												Power Supply
Ceiling Mounted Cassette Type (Double Flow)	FXCQ	20M	25M	32M	40M	50M	63M	80M	—	125M	—	—	VE	
Ceiling Mounted Cassette Type (Multi Flow)	FXFQ	—	25M	32M	40M	50M	63M	80M	100M	125M	—	—		
Ceiling Mounted Cassette Corner Type	FXKQ	—	25MA	32MA	40MA	—	63MA	—	—	—	—	—		
Slim Ceiling Mounted Duct Type	FXDQ-PVE	20P	25P	32P	—	—	—	—	—	—	—	—		
	FXDQ-PVET	20P	25P	32P	—	—	—	—	—	—	—	—		
	FXDQ-NAVE	20NA	25NA	32NA	40NA	50NA	63NA	—	—	—	—	—		
	FXDQ-NVET	20N	25N	32N	40N	50N	63N	—	—	—	—	—		
Ceiling Mounted Built-In Type	FXSQ	20M	25M	32M	40M	50M	63M	80M	100M	125M	—	—		
Ceiling Mounted Duct Type	FXMQ	—	—	—	40MA	50MA	63MA	80MA	100MA	125MA	200MA	250MA		
Ceiling Suspended Type	FXHQ	—	—	32MA	—	—	63MA	—	100MA	—	—	—		
Wall Mounted Type	FXAQ	20MA	25MA	32MA	40MA	50MA	63MA	—	—	—	—	—		
Floor Standing Type	FXLQ	20MA	25MA	32MA	40MA	50MA	63MA	—	—	—	—	—		
Concealed Floor Standing Type	FXNQ	20MA	25MA	32MA	40MA	50MA	63MA	—	—	—	—	—		
Ceiling Suspended Cassette Type	FXUQ	—	—	—	—	—	—	71MA	100MA	125MA	—	—	V1	
Connection Unit for FXUQ	BEVQ	—	—	—	—	—	—	71MA	100MA	125MA	—	—	VE	

**Note:**FXDQ has following 2 Series, as shown below.

FXDQ-P, N(A)VET: without Drain Pump (For General, Asia: except for EU, China and Australia)

FXDQ-P, N(A)VE: with Drain Pump

BEV unit is required for FXUQ only.

MA, NA: RoHS Directive models; Specifications, Dimensions and other functions are not changed compared with M, N type.

## Outdoor Units

### Normal Series (Space Saving Series)

Series	Model Name										Power Supply
Cooling Only	RXQ	5P	8P	10P	12P	14P	16P	18P	20P	22P	Y1
		24P	26P	28P	30P	32P	34P	36P	38P	40P	
		42P	44P	46P	48P	50P	52P	54P			

### High COP Series (Energy Saving Series)

Series	Model Name										Power Supply
Cooling Only	RXQ	16PH	18PH	24PH	26PH	28PH	30PH	32PH	34PH	36PH	Y1
		38PH	40PH	42PH	44PH	46PH	48PH	50PH			

VE: 1φ, 220~240V, 50Hz

V1: 1φ, 220~240V, 50Hz

Y1: 3φ, 380~415V, 50Hz

### Combination of Outdoor Units (Normal Series (Space Saving Series))

HP	5HP	8HP	10HP	12HP	14HP	16HP	18HP
<b>Model name</b>	<b>RXQ5P</b>	<b>RXQ8P</b>	<b>RXQ10P</b>	<b>RXQ12P</b>	<b>RXQ14P</b>	<b>RXQ16P</b>	<b>RXQ18P</b>
HP	20HP	22HP	24HP	26HP	28HP	30HP	32HP
<b>Model name</b>	<b>RXQ20P</b>	<b>RXQ22P</b>	<b>RXQ24P</b>	<b>RXQ26P</b>	<b>RXQ28P</b>	<b>RXQ30P</b>	<b>RXQ32P</b>
Outdoor unit 1	RXQ8P	RXQ10P	RXQ8P	RXQ8P	RXQ10P	RXQ12P	RXQ16P
Outdoor unit 2	RXQ12P	RXQ12P	RXQ16P	RXQ18P	RXQ18P	RXQ18P	RXQ16P
Outdoor unit 3	—	—	—	—	—	—	—
HP	34HP	36HP	38HP	40HP	42HP	44HP	46HP
<b>Model name</b>	<b>RXQ34P</b>	<b>RXQ36P</b>	<b>RXQ38P</b>	<b>RXQ40P</b>	<b>RXQ42P</b>	<b>RXQ44P</b>	<b>RXQ46P</b>
Outdoor unit 1	RXQ16P	RXQ18P	RXQ8P	RXQ8P	RXQ8P	RXQ8P	RXQ10P
Outdoor unit 2	RXQ18P	RXQ18P	RXQ12P	RXQ16P	RXQ16P	RXQ18P	RXQ18P
Outdoor unit 3	—	—	RXQ18P	RXQ16P	RXQ18P	RXQ18P	RXQ18P
HP	48HP	50HP	52HP	54HP			
<b>Model name</b>	<b>RXQ48P</b>	<b>RXQ50P</b>	<b>RXQ52P</b>	<b>RXQ54P</b>			
Outdoor unit 1	RXQ12P	RXQ14P	RXQ16P	RXQ18P			
Outdoor unit 2	RXQ18P	RXQ18P	RXQ18P	RXQ18P			
Outdoor unit 3	RXQ18P	RXQ18P	RXQ18P	RXQ18P			







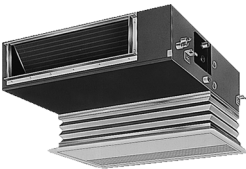



### Combination of Outdoor Units (High COP Series (Energy Saving Series))

HP	16HP	18HP	24HP	26HP	28HP	30HP	32HP
<b>Model name</b>	<b>RXQ16PH</b>	<b>RXQ18PH</b>	<b>RXQ24PH</b>	<b>RXQ26PH</b>	<b>RXQ28PH</b>	<b>RXQ30PH</b>	<b>RXQ32PH</b>
Outdoor unit 1	RXQ8P	RXQ8P	RXQ8P	RXQ8P	RXQ8P	RXQ8P	RXQ8P
Outdoor unit 2	RXQ8P	RXQ10P	RXQ8P	RXQ8P	RXQ8P	RXQ10P	RXQ12P
Outdoor unit 3	—	—	RXQ8P	RXQ10P	RXQ12P	RXQ12P	RXQ12P
HP	34HP	36HP	38HP	40HP	42HP	44HP	46HP
<b>Model name</b>	<b>RXQ34PH</b>	<b>RXQ36PH</b>	<b>RXQ38PH</b>	<b>RXQ40PH</b>	<b>RXQ42PH</b>	<b>RXQ44PH</b>	<b>RXQ46PH</b>
Outdoor unit 1	RXQ10P	RXQ12P	RXQ12P	RXQ12P	RXQ12P	RXQ12P	RXQ12P
Outdoor unit 2	RXQ12P	RXQ12P	RXQ12P	RXQ12P	RXQ12P	RXQ16P	RXQ16P
Outdoor unit 3	RXQ12P	RXQ12P	RXQ14P	RXQ16P	RXQ18P	RXQ16P	RXQ18P
HP	48HP	50HP					
<b>Model name</b>	<b>RXYQ48PH</b>	<b>RXYQ50PH</b>					
Outdoor unit 1	RXQ16P	RXQ16P					
Outdoor unit 2	RXQ16P	RXQ16P					
Outdoor unit 3	RXQ16P	RXQ18P					










## 2. External Appearance

### 2.1 Indoor Units

<b>Ceiling Mounted Cassette Type (Double Flow)</b> FXCQ20M FXCQ25M FXCQ32M FXCQ40M FXCQ50M FXCQ63M FXCQ80M FXCQ125M 	<b>Ceiling Suspended Type</b> FXHQ32MA FXHQ63MA FXHQ100MA 
<b>Ceiling Mounted Cassette Type (Multi Flow)</b> FXFQ25M FXFQ32M FXFQ40M FXFQ50M FXFQ63M FXFQ80M FXFQ100M FXFQ125M 	<b>Wall Mounted Type</b> FXAQ20MA FXAQ25MA FXAQ32MA FXAQ40MA FXAQ50MA FXAQ63MA 
<b>Ceiling Mounted Cassette Corner Type</b> FXKQ25MA FXKQ32MA FXKQ40MA FXKQ63MA 	<b>Floor Standing Type</b> FXLQ20MA FXLQ25MA FXLQ32MA FXLQ40MA FXLQ50MA FXLQ63MA 
<b>Slim Ceiling Mounted Duct Type</b> FXDQ20P      FXDQ20N(A) FXDQ25P      FXDQ25N(A) FXDQ32P      FXDQ32N(A) FXDQ40N(A) FXDQ50N(A) FXDQ63N(A) with Drain Pump (VE) without Drain Pump (VET) 	<b>Concealed Floor Standing Type</b> FXNQ20MA FXNQ25MA FXNQ32MA FXNQ40MA FXNQ50MA FXNQ63MA 
<b>Ceiling Mounted Built-In Type</b> FXSQ20M FXSQ25M FXSQ32M FXSQ40M FXSQ50M FXSQ63M FXSQ80M FXSQ100M FXSQ125M 	<b>Ceiling Suspended Cassette Type (Connection Unit Series)</b> FXUQ71MA + BEVQ71MA FXUQ100MA + BEVQ100MA FXUQ125MA + BEVQ125MA Connection Unit 
<b>Ceiling Mounted Duct Type</b> FXMQ40MA FXMQ50MA FXMQ63MA FXMQ80MA FXMQ100MA FXMQ125MA FXMQ200MA FXMQ250MA  FXMQ40~125MA  FXMQ200 · 250MA	

## 2.2 Outdoor Units

### Normal Series (Space Saving Series)

RXQ5P	RXQ8P, 10P	RXQ12P, 14P, 16P, 18P
 <p data-bbox="336 741 397 763">5HP</p>	 <p data-bbox="756 741 833 763">8, 10HP</p>	 <p data-bbox="1153 741 1316 763">12, 14, 16, 18HP</p>
RXQ20P, 22P, 24P, 26P, 28P		RXQ30P, 32P, 34P, 36P
 <p data-bbox="368 1323 571 1346">20, 22, 24, 26, 28HP</p>		 <p data-bbox="1043 1323 1206 1346">30, 32, 34, 36HP</p>
RXQ38P, 40P, 42P, 44P, 46P		RXQ48P, 50P, 52P, 54P
 <p data-bbox="368 1906 571 1928">38, 40, 42, 44, 46HP</p>		 <p data-bbox="1043 1906 1206 1928">48, 50, 52, 54HP</p>

High COP Series (Energy Saving Series)

<div><p>RXQ16PH, 18PH</p><p>16, 18HP</p></div>	<div><p>RXQ24PH, 26PH</p><p>24, 26HP</p></div>
<div><p>RXQ28PH, 30PH</p><p>28, 30HP</p></div>	<div><p>RXQ32PH, 34PH</p><p>32, 34HP</p></div>
<div><p>RXQ36PH, 38PH, 40PH, 42PH, 44PH, 46PH, 48PH, 50PH</p><p>36, 38, 40, 42, 44, 46, 48, 50HP</p></div>	

### 3. Combination of Outdoor Units

#### Normal Series (Space Saving Series)

System Capacity	Number of units	Module							Outdoor Unit Multi Connection Piping Kit (Option)
		5	8	10	12	14	16	18	
5HP	1	●							—
8HP	1		●						
10HP	1			●					
12HP	1				●				
14HP	1					●			
16HP	1						●		
18HP	1							●	
20HP	2		●		●				BHFP22P100
22HP	2			●	●				
24HP	2		●				●		
26HP	2		●					●	
28HP	2			●				●	
30HP	2				●			●	
32HP	2						●●		
34HP	2						●	●	
36HP	2							●●	
38HP	3		●		●			●	BHFP22P151
40HP	3		●				●●		
42HP	3		●				●	●	
44HP	3		●					●●	
46HP	3			●				●●	
48HP	3				●			●●	
50HP	3					●		●●	
52HP	3						●	●●	
54HP	3							●●●	

★Note: For multiple connection of 20HP system or more, an optional Daikin Outdoor Unit Multi Connection Piping Kit is required.

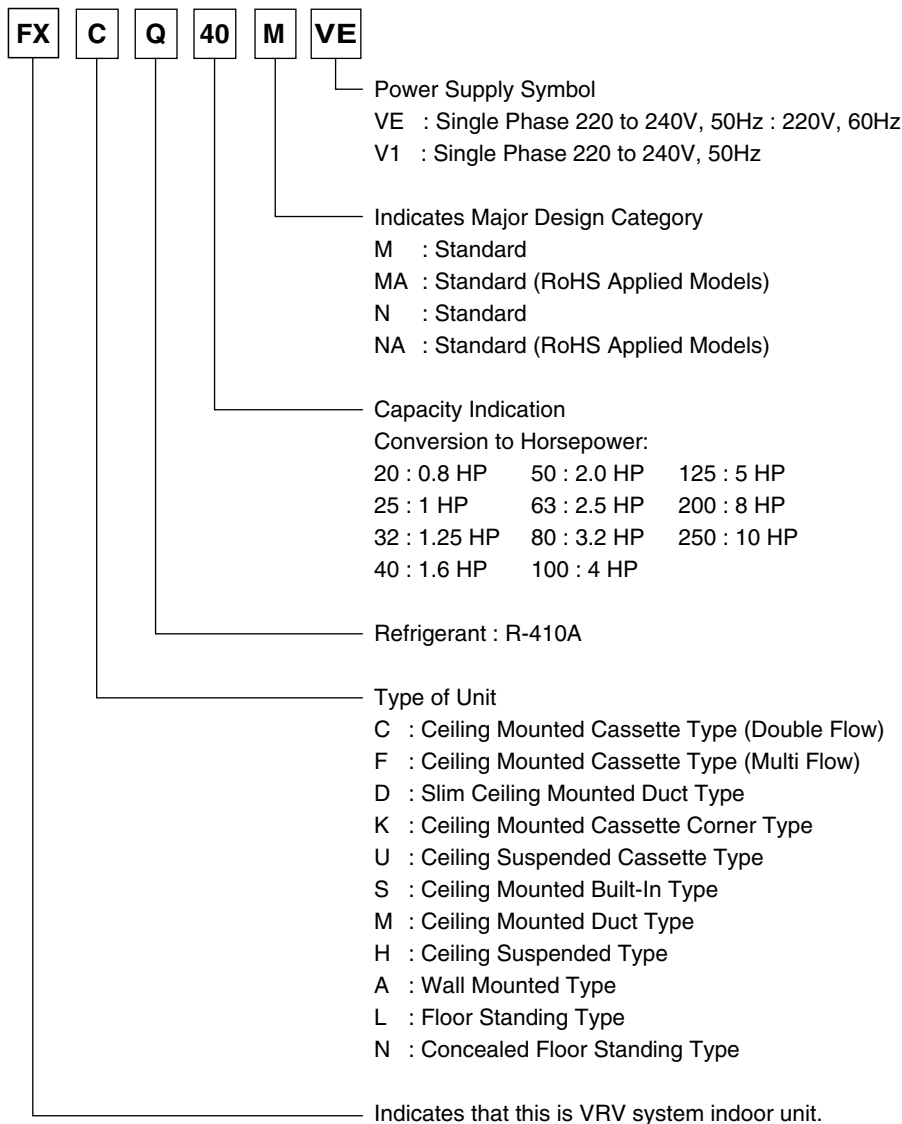
**High COP Series (Energy Saving Series)**

System Capacity	Number of units	Module						Outdoor Unit Multi Connection Piping Kit (Option)
		8	10	12	14	16	18	
16HP	2	●●						BHFP22P100
18HP	2	●	●					
24HP	3	●●●						BHFP22P151
26HP	3	●●	●					
28HP	3	●●		●				
30HP	3	●	●	●				
32HP	3	●		●●				
34HP	3		●	●●				
36HP	3			●●●				
38HP	3			●●	●			
40HP	3			●●		●		
42HP	3			●●			●	
44HP	3			●		●●		
46HP	3			●		●	●	
48HP	3					●●●		
50HP	3					●●	●	

★Note: For multiple connection of 16HP system or more, an optional Daikin Outdoor Unit Multi Connection Piping Kit is required.

## 4. Nomenclature

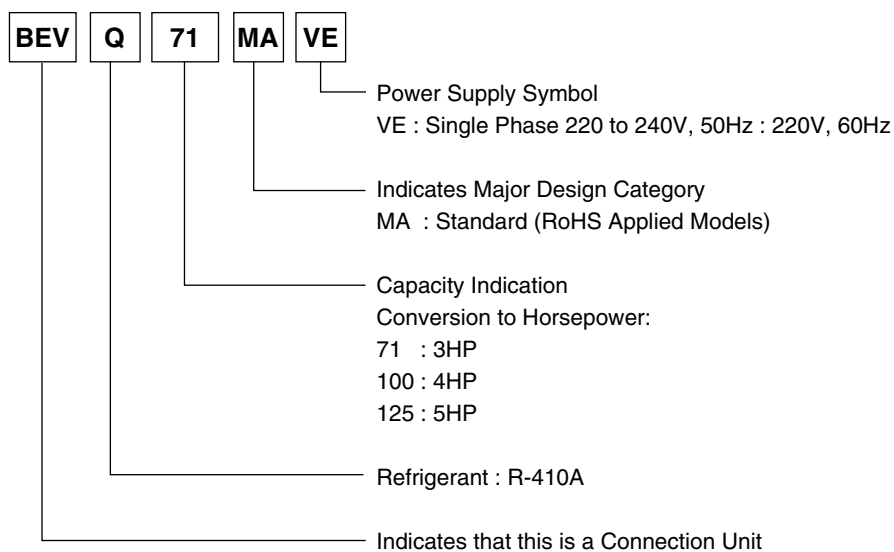
### Indoor Unit



(V2286)

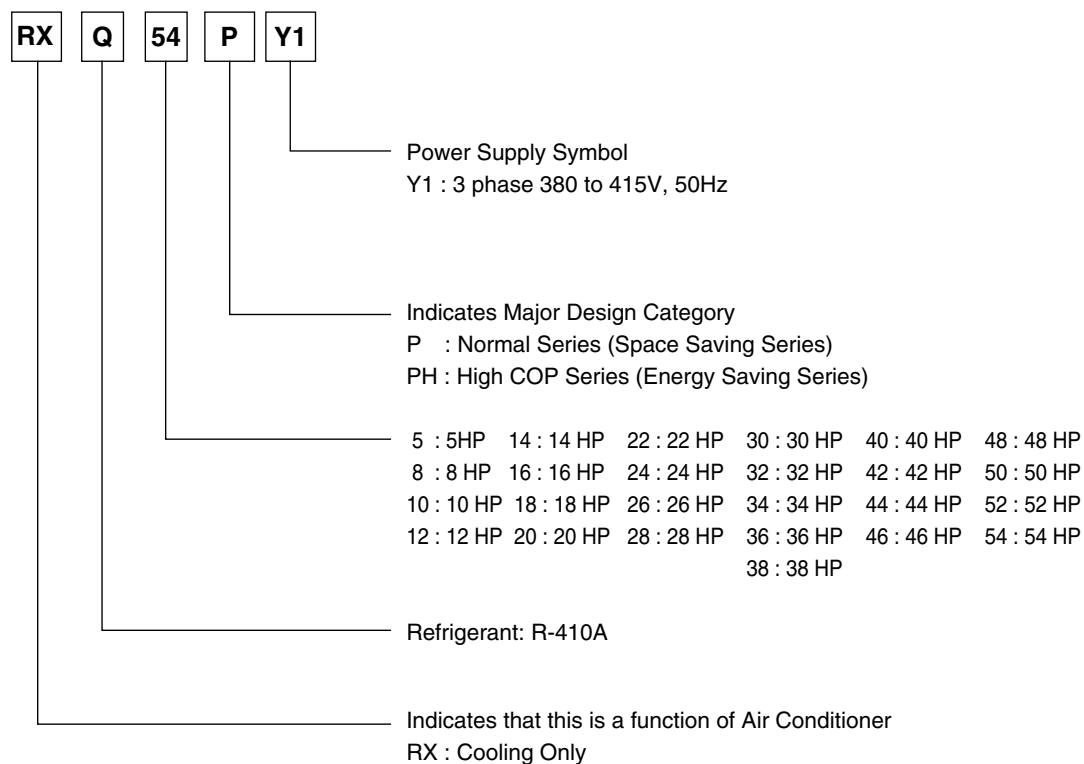


## Connection Unit



(V2864)

## Outdoor Unit



(V2288)

## 5. Capacity Range

### Outdoor Units

#### Normal type

Outdoor unit			Types of connected indoor units						
Type	HP	Capacity index	Min. Combination ratio (%)	FXDQ, FXSQ, FXAQ		FXCQ, FXFQ32-125, FXZQ, FXKQ, FXDQ, FXSQ, FXMQ, FXHQ, FXAQ, FXLQ, FXNQ (All Types except for FXFQ25.)		The case which includes FXFQ25	
				Max. Combination ratio (%)	Max. Number of connectable indoor units	Max. Combination ratio (%)	Max. Number of connectable indoor units	Max. Combination ratio (%)	Max. Number of connectable indoor units
Single outdoor units	5	125	50	200	12	200	12	130	8
	8	200			20		20		13
	10	250			25		25		16
	12	300			30		30		19
	14	350			35		35		22
	16	400			40		40		26
	18	450			45		45		29
	20	500			50		40		32
Double outdoor units	22	550			55	160	44		35
	24	600			60		48		39
	26	650			64		52		42
	28	700					56		45
	30	750					60		48
	32	800					64		52
	34	850					64		55
	36	900					64		58
	Triple outdoor units	38					950		130
40		1000			64	64	64		
42		1050							
44		1100							
46		1150							
48		1200							
50		1250							
52		1300							
54		1350							

#### High COP type

Outdoor unit			Types of connected indoor units						
Type	HP	Capacity index	Min. Combination ratio of index (%)	FXDQ, FXSQ, FXAQ		FXCQ, FXFQ32-125, FXZQ, FXKQ, FXDQ, FXSQ, FXMQ, FXHQ, FXAQ, FXLQ, FXNQ (All Types except for FXFQ25.)		The case which includes FXFQ25	
				Max. Combination ratio (%)	Max. Number of connectable indoor units	Max. Combination ratio (%)	Max. Number of connectable indoor units	Max. Combination ratio (%)	Max. Number of connectable indoor units
Doble outdoor units	16	400	50	200	40	160	32	130	26
	18	450			45		36		29
Triple outdoor units	24	600			60	130	39		39
	26	650			64		42		42
	28	700					45		45
	30	750					48		48
	32	800					52		52
	34	850					55		55
	36	900					58		58
	38	950					61		61
	40	1000					64		64
	42	1050							
	44	1100							
	46	1150							
	48	1200							
	50	1250							

## Indoor Units

Capacity Range		0.8HP	1HP	1.25HP	1.6HP	2HP	2.5HP	3.2HP	4HP	5HP	8HP	10HP
Capacity Index		20	25	31.25	40	50	62.5	80	100	125	200	250
Ceiling Mounted Cassette Type (Double Flow)	FXCQ	20M	25M	32M	40M	50M	63M	80M	—	125M	—	—
Ceiling Mounted Cassette Type (Multi Flow)	FXFQ	—	25M	32M	40M	50M	63M	80M	100M	125M	—	—
Ceiling Mounted Cassette Corner Type	FXKQ	—	25MA	32MA	40MA	—	63MA	—	—	—	—	—
Slim Ceiling Mounted Duct Type	FXDQ-PVE	20P	25P	32P	—	—	—	—	—	—	—	—
	FXDQ-PVET	20P	25P	32P	—	—	—	—	—	—	—	—
	FXDQ-NAVE	20NA	25NA	32NA	40NA	50NA	63NA	—	—	—	—	—
	FXDQ-NVET	20N	25N	32N	40N	50N	63N	—	—	—	—	—
Ceiling Mounted Built-In Type	FXSQ	20M	25M	32M	40M	50M	63M	80M	100M	125M	—	—
Ceiling Mounted Duct Type	FXMQ	—	—	—	40MA	50MA	63MA	80MA	100MA	125MA	200MA	250MA
Ceiling Suspended Type	FXHQ	—	—	32MA	—	—	63MA	—	100MA	—	—	—
Wall Mounted Type	FXAQ	20MA	25MA	32MA	40MA	50MA	63MA	—	—	—	—	—
Floor Standing Type	FXLQ	20MA	25MA	32MA	40MA	50MA	63MA	—	—	—	—	—
Concealed Floor Standing Type	FXNQ	20MA	25MA	32MA	40MA	50MA	63MA	—	—	—	—	—
Ceiling Suspended Cassette Type	FXUQ	—	—	—	—	—	—	71MA	100MA	125MA	—	—

**Note:** FXDQ has following 2 Series, as shown below.

FXDQ-P, NVET: without Drain Pump (For General, Asia: except for EU, China and Australia)

FXDQ-P, NAVE: with Drain Pump

## 6. Features

### 6.1 Technologies

## **VRV III**—Created to respond to the needs of large-sized buildings

Daikin's constant efforts have been devoted towards using the latest and most revolutionary technologies in the development of the VRV III system for large-sized buildings. The system offers larger outdoor capacities, greater energy savings, easier installation, longer actual and total piping, and more.

New

#### 1 Newly improved fans and grilles

A higher external static pressure has been achieved—from 58.8 Pa to 78.4 Pa—thanks to reduced internal pressure loss, use of the new fans and the new grilles.

##### New aero spiral fan and aero asymmetrical fan

The area of these new fan blades has been increased and optimized for each casing. This greatly reduces pressure loss, resulting in a higher external static pressure.

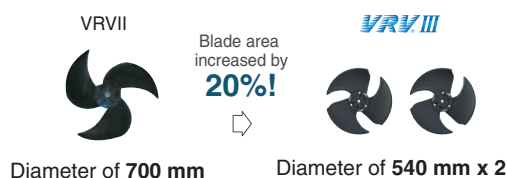
##### New aero asymmetrical fan

The three-bladed fan on the 10 HP unit, with a diameter of 700 mm, has been redesigned to include four blades and now has a diameter of 680 mm. Blade area has been increased by 25%.



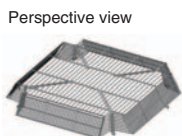
##### New aero spiral fan (Powerful Dual DC fan)

In the 14 and 16 HP unit, a single fan with a diameter of 700 mm has been split into two fans with diameters of 540 mm each. Blade area has been increased by 20% to increase airflow.



##### Aero smooth grille

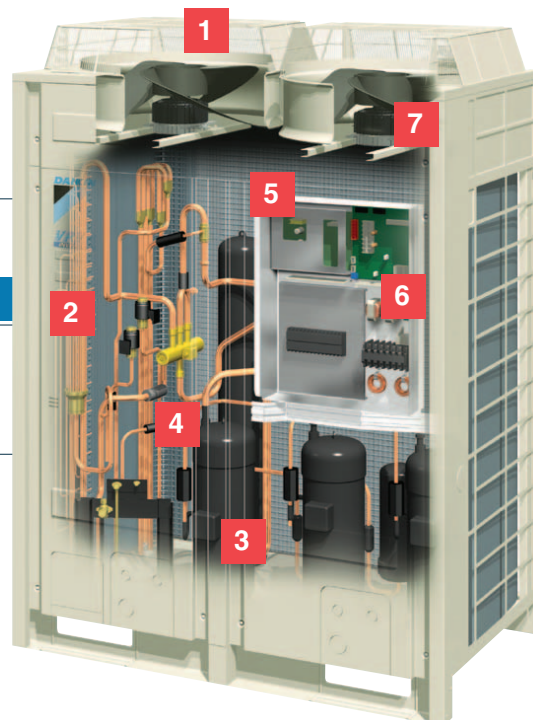
The three-dimensional, integrated, soft woven steel grilles are covered with a plastic coating that protects them from rotating elements and the possibility of fire damage.



New

#### 2 Heat exchanger

The new heat exchanger contributes to a higher COP because of an increase from 7% to 10% of the effective length as well as an optimized e-Pass heat exchanger.



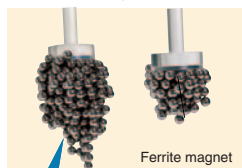
### 3 Improving the high efficiency compressor to achieve a higher COP and larger capacity

#### Reluctance DC scroll compressor

Daikin's unique scroll compressor minimizes heat loss, and is driven by a high efficiency motor to achieve significant energy savings.

High torque and efficiency is attained by employing neodymium magnets. Achieves 70% reduction in volume.

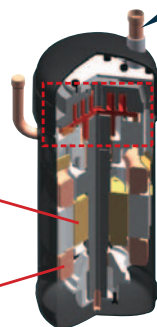
#### Secret to raising energy-efficiency! Powerful magnets



Neodymium magnet

Neodymium magnets are much more powerful than the widely used ferrite magnets.

Reluctance DC motor



New

High-performance, low-noise new scroll compressor operates at a faster rate. The speed increase has been achieved through advanced stress analysis for increased strength and utilization of the advantages (oil film control) of the high thrust mechanism\*.

#### \*High thrust mechanism

By introducing high pressure oil, the reactive force from the fixed scroll is added to the internal force, thereby reducing thrust losses. This results in improved efficiency and suppressed sound levels.

### 4 Heat transfer circuit

By performing super cooling before the expansion process, the volume of refrigerant that needs to be circulated to the indoor units can be reduced without lowering the evaporation temperature. This permits the use of narrower piping.

### 6 Smooth sine wave DC Inverter

By adoption of the Sine Wave which smoothes rotation of motor, operation efficiency is improved sharply.



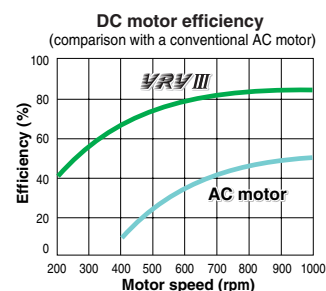
### 5 Compact aero box

Realizes a compact casing by stacking the Inverter and control PC boards plus optimizing the internal design to suit airflow speed. This achieves lower noise and reduces the power required by the large-diameter fanned outdoor unit.

### 7 DC fan motor

- Across entire range of models (from 5 to 54 HP).
- Efficiency improvement by 40% especially in low speed.

DC fan motor structure



## 6.2 Flexible Design

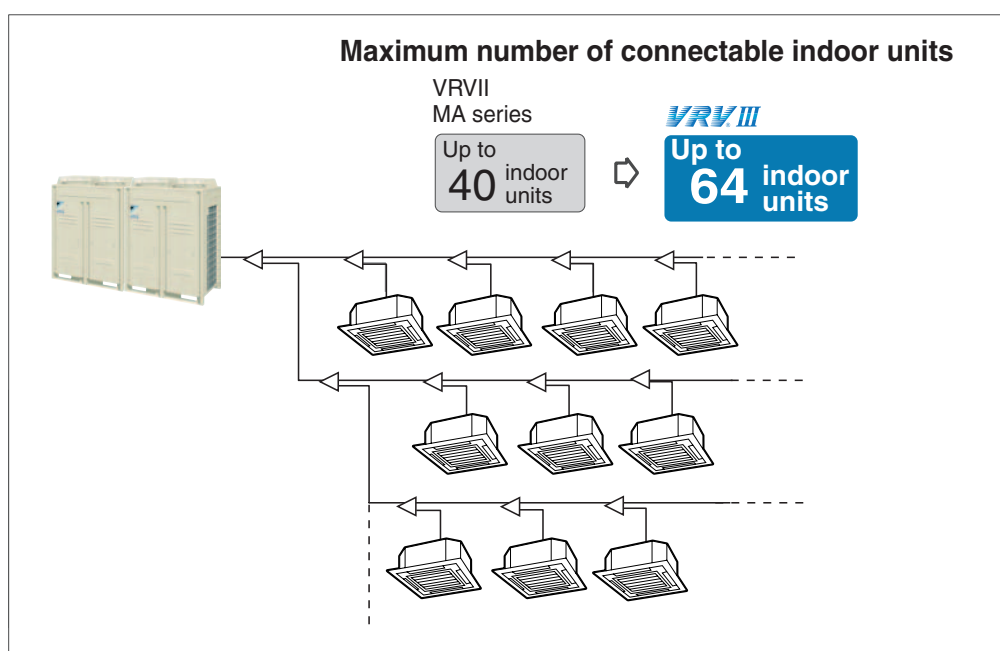
### Large capacities for large-sized buildings

New

#### An increased number of connectable indoor units

The number of connectable indoor units has been drastically increased from 40 to 64!

#### Increased indoor unit connections



New

#### Combination ratio

Connection capacity at maximum is 200%.

Connection capacity  
**50%—200%**

#### Conditions of indoor unit connection capacity

Applicable indoor units	 FXDQ, FXSQ, FXAQ models	Other indoor unit models*
Single outdoor units	<b>200%</b>	<b>200%</b>
Double outdoor units		<b>160%</b>
Triple outdoor units		<b>130%</b>

\* For the FXFQ25 models, maximum connection ratio is 130% for the entire range of outdoor units.

**Notes:** • If the operational capacity of indoor units is more than 130%, low airflow operation is enforced in all the indoor units.



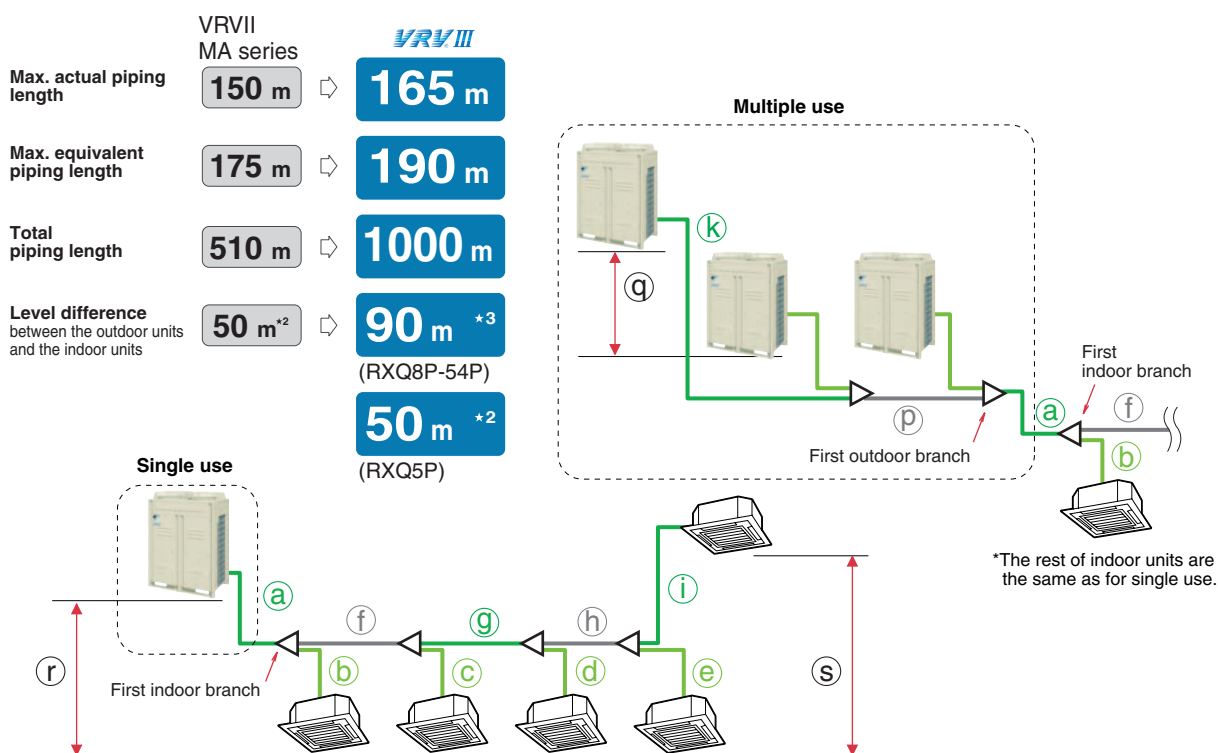
## Large capacities for large-sized buildings

New

### Extended long piping length

Piping length is drastically extended! The long piping length provides more design flexibility, which can match even large-sized buildings.

#### Standard system



Colors in the diagram above are merely for identifying pipes referenced with symbols such as (a).

Maximum allowable piping length		Actual piping length	Example	Equivalent piping length
	Refrigerant piping length	165 m or less	a+f+g+h+i	190 m or less
	Total extension length	1000 m or less	a+b+c+d+e+f+g+h+i	—
	Between the first indoor branch and the farthest indoor unit	90 m or less <sup>*1</sup>	f+g+h+i	—
	Between the outdoor branch and the last outdoor unit	10 m or less	k+p	13 m or less

Maximum allowable level difference		Level Difference	Example	Outdoor Units
	Between the outdoor units (Multiple use)	5 m or less	q	RXQ8P-54P
	Between the indoor units	15 m or less	s	—
	Between the outdoor units and the indoor units	If the outdoor unit is above. <sup>*3</sup> Available on request	r	RXQ8P-54P
		If the outdoor unit is below.	r	
		If the outdoor unit is above.	r	RXQ5P
		If the outdoor unit is below.	r	

\* 1. No special requirements up to 40 m. The maximum actual piping length can be 90 m, or less depending on conditions. Various conditions and requirements have to be met to allow utilization of 90 m piping length. Be sure to refer to the Engineering Data (P528 Note2) for details of these conditions and requirements.

\* 2. 40 m or less if the outdoor unit is below.

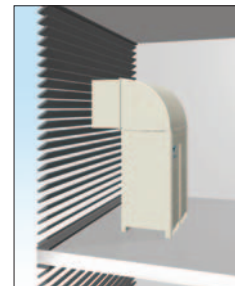
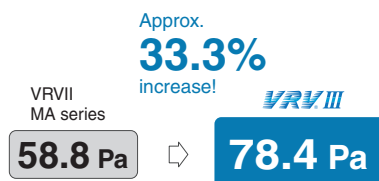
\* 3. Available on request if the difference in level is between 50 m and 90 m (if the outdoor unit is above) .

## Large capacities for large-sized buildings

**New**

### High external static pressure 78.4 Pa (8 mm H<sub>2</sub>O)

Higher external static pressure has been achieved thanks to the fan grilles and the dual DC fans that reduce internal pressure loss. Exceeding the previous 58.8 Pa (6 mm H<sub>2</sub>O) level, Daikin now offers 78.4 Pa (8 mm H<sub>2</sub>O) external static pressure by field setting to meet the requirements for installation on each floor, often requested for large-sized buildings.



## Easier installation and maintenance

**New**

### Automatic test operation

Simply press the test operation button and the unit performs an automatic system check, including wiring, shutoff valves, sensors, and refrigerant volume. The results are returned automatically after the check finishes.

**New**

### Memory function for operational data

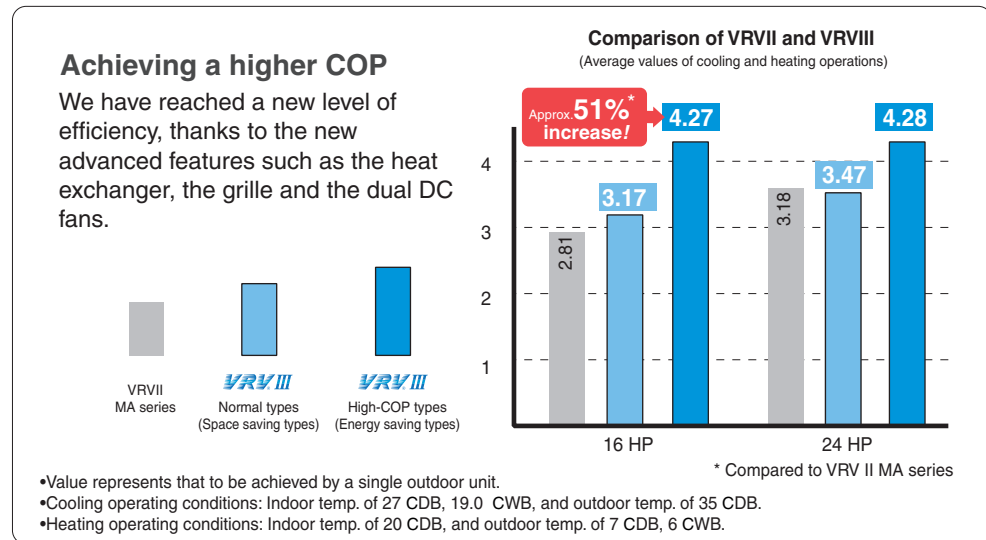
Operating data for the preceding 3 minutes is automatically stored in memory. Should a malfunction occur, this speeds up the process of identifying and fixing the cause of the problem. It also helps in developing measures to eliminate malfunctions.

## 6.3 A sense of responsibility

New

### High COPs

It has become essential for air conditioning manufacturers to develop systems that provide high energy savings. We at Daikin have made great efforts in this field, and the newly-developed VRV<sup>III</sup> delivers highly efficient performance, contributing to high energy savings.



New

### Compliant with the RoHS Directive\*

We have been making efforts to facilitate the transition to using RoHS Directive\*-compliant materials for system parts.

\* RoHS Directive

The RoHS (Restriction of Hazardous Substances (in electrical and electronic equipment)) Directive is an environmental directive enacted to regulate the use of designated chemical substances (lead, cadmium, hexavalent chromium, mercury, polybrominated biphenyls and polybrominated diphenylether) in electrical equipment. All household products subject to this Directive and sold in Europe from July 1, 2006 are legally bound to comply with the RoHS Directive.

New

### Less chances of refrigerant leakage

Conventionally, shutoff valve connections are flanged or flared. In the VRV<sup>III</sup> system, the connections for all outdoor units are brazed, meaning less chance of refrigerant leakage.

## 6.4 Enhanced Comfort

### Enhanced comfort

New

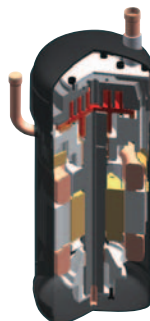
#### Outdoor units designed for low-sound operation

Outdoor units created with cutting-edge technologies provide quiet operation to increase users' comfort.

New

#### Efficient compressor

New high-performance, low-noise scroll compressor operates at a faster rate, reducing start-up time. This helps the unit to bring the room temperature up to the set level quickly.



#### Nighttime quiet operation function

#### Operation sound level selectable from 3 steps for the night mode

New

##### Mode 1. Automatic mode

Set on the outdoor PCB. Time of maximum temperature is memorised. The low operating mode will become active 8 hours<sup>\*2</sup> after the peak temperature in the daytime, and operation will return to normal 10 hours<sup>\*3</sup> after that. The operation sound level for the night mode can be selected from 55 dB (Step 1), 50 dB (Step 2) and 45 dB (Step 3). (For a single outdoor unit.)

##### Mode 2. Manual mode

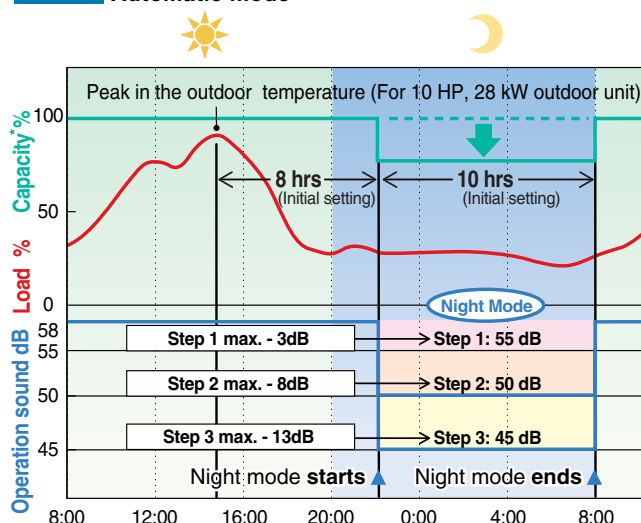
Starting time and ending time can be input. (External control adaptor for outdoor unit, DTA104A61 or DTA104A62, and a subsequently obtained timer are necessary.)

##### Mode 3. Combined mode

Combination of mode 1 and 2 can be used depending on your needs.

- \*1. Determine which mode to select depending on the climatic characteristics of each country.  
 \*2. Initial setting. Can be selected from 6, 8 and 10 hours.  
 \*3. Initial setting. Can be selected from 8, 9 and 10 hours.

##### Mode 1. Automatic mode



Note: • This function is available in setting at site.

- The relationship of outdoor temperature (load) and time shown in the graph is just an example.

\* The capacity reduction rate differs depending on the operation sound level step selected.

## 6.5 Control Systems

### Individual Control Systems

#### Wired remote controller (Optional)



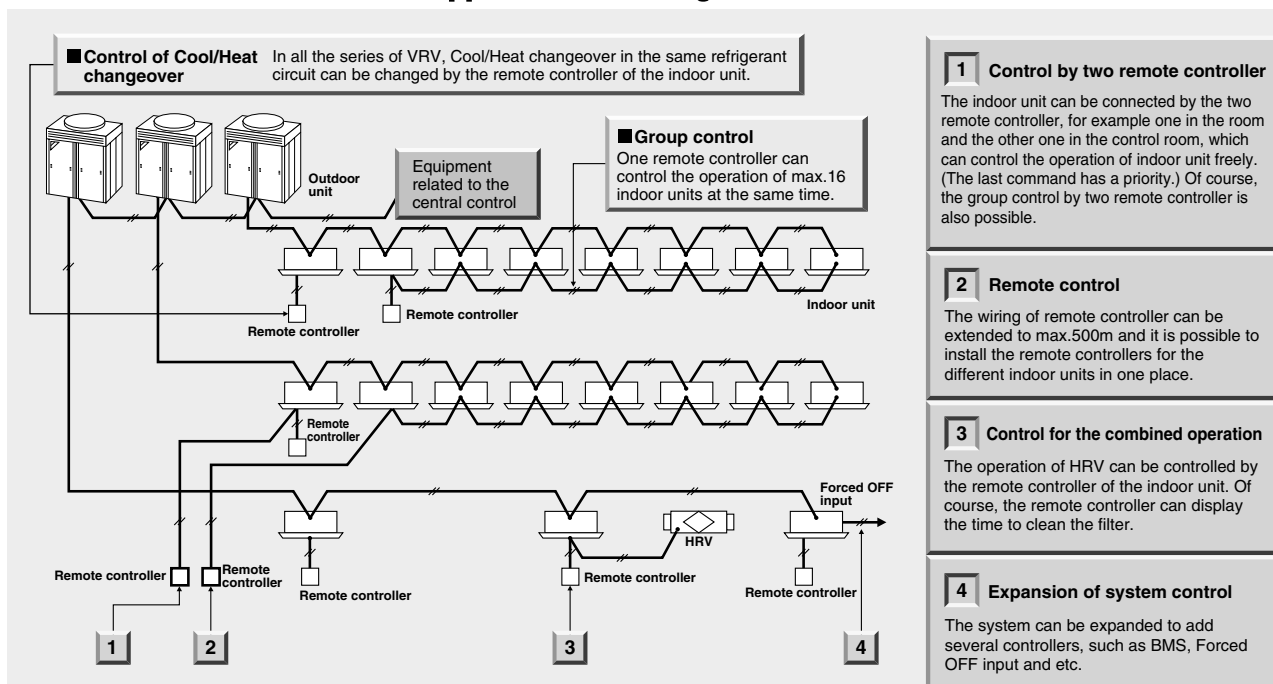
BRC1C62

- Easier to read because LCD screen is larger.
- Digital display lets you set temperature in 1°C units.
- Lets you individually program by timer the respective times for operation start and stop within a maximum of 72 hours.
- Equipped with a thermostat sensor in the remote controller that makes possible more comfortable room temperature control.
- Enables you to select cool/heat/fan operation mode with the indoor remote controller of your choice without using the cool/heat selector.

- Constantly monitors malfunctions in the system for 80 items, and is equipped with a "self-diagnosis function" that lets you know by message immediately when a malfunction occurs.
- Lets you carry out various field settings by remote controller.
- Enables you to select the ventilation mode and the volume of the HRV.
- The rubber switch and the oil-resisting resin casing have been adopted for durability.

\* When the auto-swing function is not available, the message, THIS FUNCTION IS NOT AVAILABLE is displayed when the wind direction adjustment button is pressed.

### The wired remote controller supports a wide range of control functions



#### Wired remote Controller with weekly schedule timer (Optional)



BRC1D61

Adds new, advanced functions to those of the above wired remote controller.

- Includes ventilation mode and airflow rate switching, the main functions of HRV series.
- 24-hour clock function (1-hour backup for power failures)
- Programming function for each day of week.
- Scheduling possible of start/stop and temperature limit (5 settings/day)
- Programming can be enabled or disabled.
- Copy function for programmed schedules.

Notes: 1. Standard remote controllers (BRC1C62) not required.

2. If the BRC1D61 is connected to the centralized remote controllers (DCS302CA61, DCS301BA61, DST301BA61), the schedule function is not available.

## Wireless remote controller (Optional)



Wireless remote controller

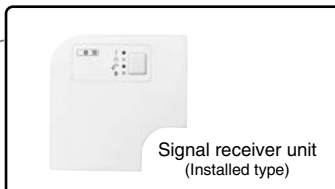


Signal receiver unit  
(Separate type)

- The same operation modes and settings as with wired remote controllers are possible.
- A compact light receiving unit to be mounted into a wall or ceiling is included.
  - A light receiving unit for a ceiling-mounted cassette (double-flow, multi-flow) type, ceiling-suspended type and wall-mounted type is mounted into the indoor unit.



Signal receiving unit can be installed on the panel  
ex. Ceiling mounted cassette (multi-flow) type



Signal receiver unit  
(Installed type)

## Simple remote controller (Optional)



Exposed type  
BRC2C51



Concealed type  
(For hotel use)  
(BRC3A61)

- The remote controller has centralized its frequently used operation selectors and switches (on/off, operation mode, temperature setting and airflow volume), making itself suitable for use in hotel rooms or conference rooms.
- The exposed type remote controller is fitted with a thermostat sensor.



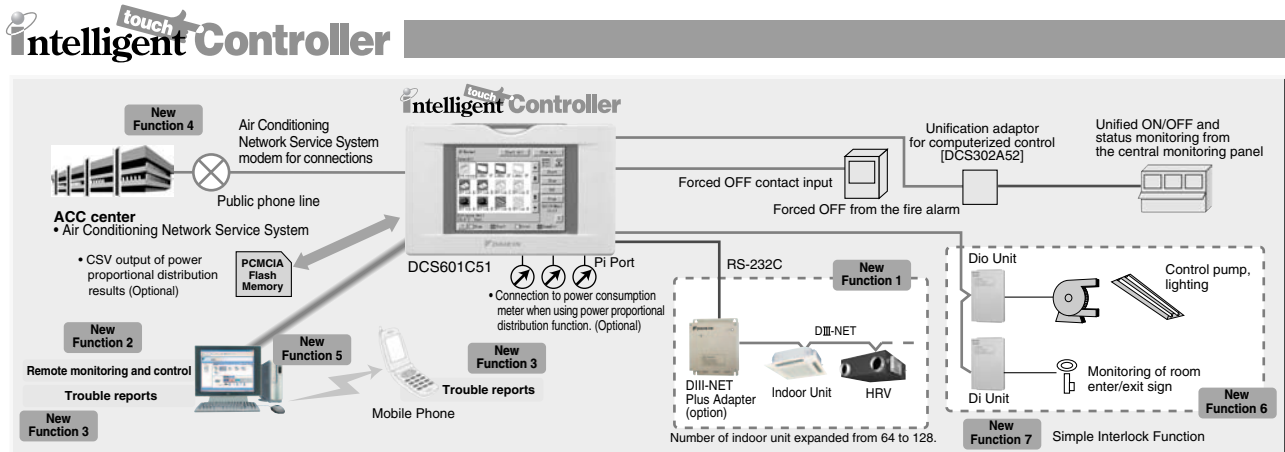
The concealed-type remote controller smartly fits into a night table or console panel in a hotel room.

## Wide variation of remote controllers for indoor units

	FXCQ	FXFQ	FXKQ	FXDQ	FXSQ	FXMQ	FXHQ	FXAQ	FXL(N)Q	FXUQ
Wired remote controller	●	●	●	●	●	●	●	●	●	●
Wired remote controller with weekly shedule timer	●	●	●	●	●	●	●	●	●	●
Wireless remote controller (Installed signal receiver unit)	●	●					●	●		●
Wireless remote controller (Separate type signal receiver unit)			●	●	●	●			●	
Simple remote controller (Exposed type)				●	●	●			●	
Simple remote controller (Concealed type: for Hotel use)				●	●	●			●	



## 6.6 Advanced Control Systems



**New communication functions in the user-friendly icon-based multilingual controller simplify centralized control of the VRV system.**

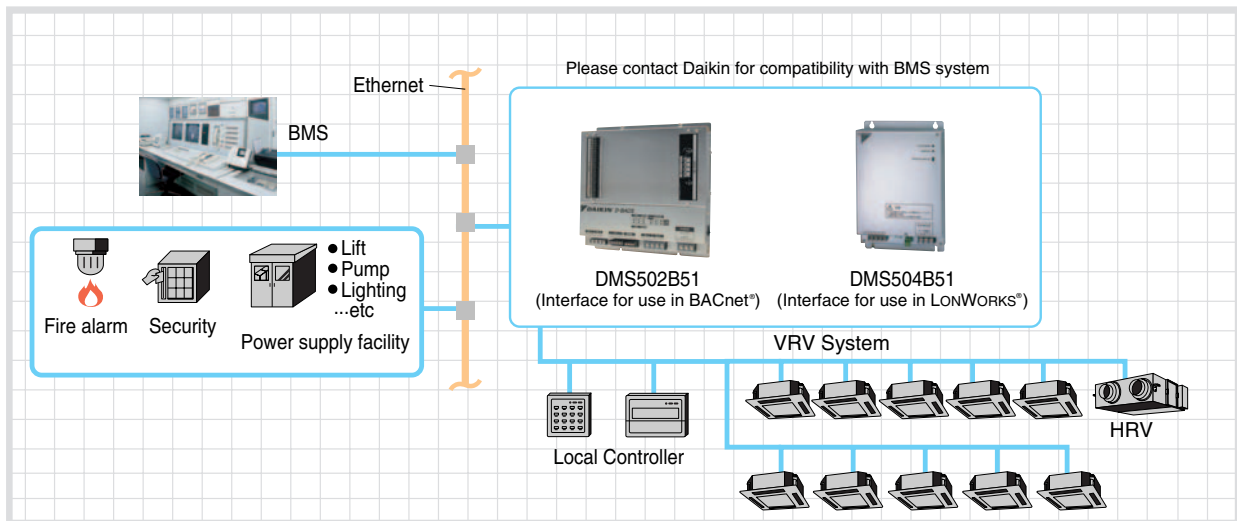
- Color LCD touch panel icon display
- Small manageable size
- Simplified engineering
- Multi language (English, French, Italian, German, Spanish and Chinese)
- Yearly schedule
- P.P.D. (Power Proportional Distribution function) (Optional)
- Auto heat/cool change-over
- Temperature limitation
- History of 500 actions
- Air Conditioning Network Service System (Optional Maintenance Service)
- Simple Interlock Function

### New Functions

- |                       |   |
|-----------------------|---|
| <b>New Function 1</b> | <b>Doubling of number of control points by adding a DIII-NET Plus Adapter</b> (Optional)                |
| <b>New Function 2</b> | <b>Support for centralized control from elsewhere using a PC with a Web browser</b> (Optional)          |
| <b>New Function 3</b> | <b>Sending of e-mail alerts to a specified address when malfunctions occur</b> (Optional)               |
| <b>New Function 4</b> | <b>Built-in modem for connecting to Airnet Service System</b> (Optional)                                |
| <b>New Function 5</b> | <b>Built-in Ethernet port for connecting to the Internet or an intranet</b>                             |
| <b>New Function 6</b> | <b>Management of facilities / equipment other than A/C units</b> (Compatible with Dio unit and Di unit) |
| <b>New Function 7</b> | <b>Simple Interlock Function</b>  |

## Interface for BACnet® and LONWORKS®

### Integrated control systems that recognise the trend of open control systems



- Compatibility with BMS enhanced by utilising the international communication standards, BACnet® or LONWORKS®.

#### DMS504B51 Interface for use in LONWORKS®

- XIF file for confirming of specifications of the units.
- Connectable up to 10 outdoor units and 64 indoor unit groups.

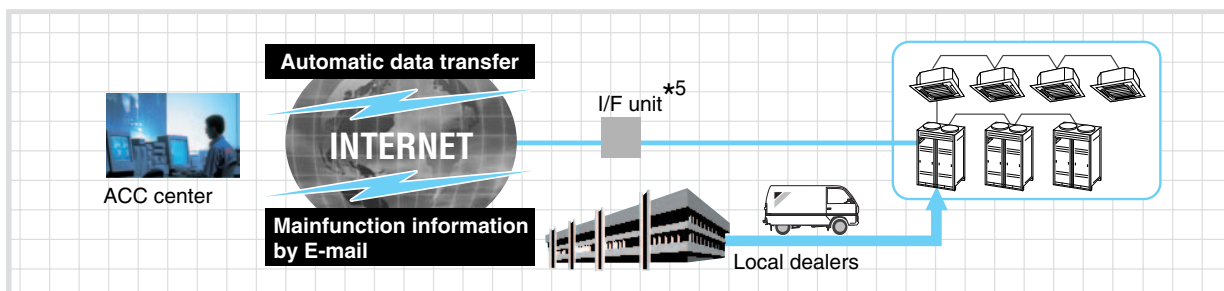
New

#### DMS502B51 Interface for use in BACnet®

- Conformance class 3 (ASHRAE 135–1995)
- Standard BACnet® Device B-ASC (ASHRAE 135–2001)
- PPD data (Optional Di board is required.)
- ISO 16484-5 (Does not support IEEE 802.3 protocol for BACnet®)
- Compliant with the RoHS Directive (refer to page 18 for details.)
- Up to 40 outdoor units and 256 indoor unit groups on one gateway. (optional adapter)

## Air Conditioning Network Service System

### Maintenance services that boost profits and customer satisfaction



- 24 hour on-line diagnostic system
- Energy saving and extension of aircon operating life
- Maintenance management via A/C network service system reports
- Reliable service at shortest lead time

\*1. There are restrictions in applicable areas and release times, therefore please consult us separately for details.

\*2. Model name varies upon the system size.

\*3. BACnet® is a registered trademark of American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

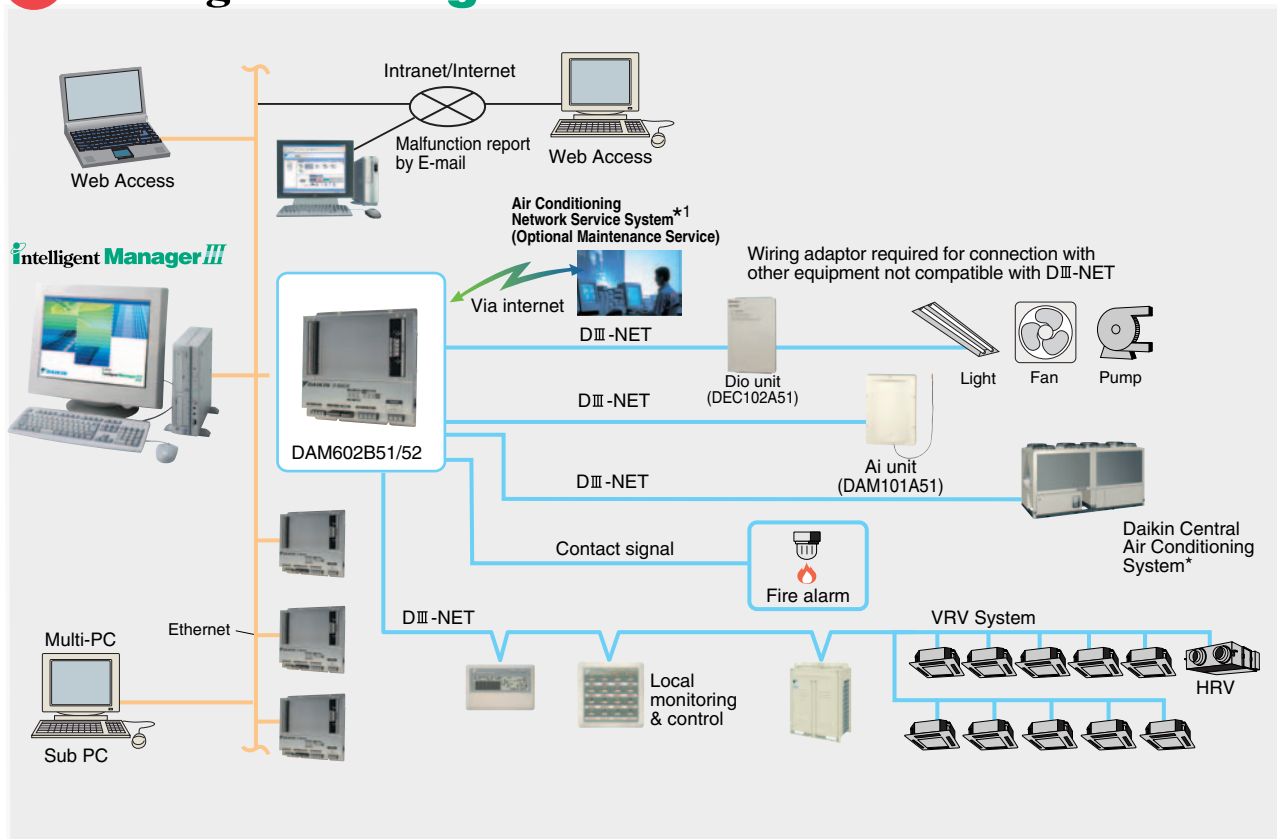
\*4. LONWORKS® is a registered trade mark of Echelon Corporation.

\*5. For an I/F unit, one of the following can be selected: **Local Controller**, intelligent touch Controller, or intelligent Manager III.

\*6. Ethernet is a registered trademark of Xerox Corporation.

\*7. Refer to the Options page for the name of each model.

## New Intelligent Manager III



\*Interfacing requirements vary depending on model, and some systems may not be suitable. Please contact your distributor for details.  
 • Information on these systems is preliminary only. Please contact Daikin for formal information on the products.

## Centralized control system for easy provision of effective control and monitoring of VRV system functions

### Special Functions

- Features control and monitoring functions for central A/C products and an Air Conditioning Network Service function.
- Using an external contact via DIII-NET, monitors and controls equipment such as lighting, fans, or building security systems.

- Floor visual navigation
- Graphical report
- Multi-PC access
- Analogue interlock
- Automatic heat/cool change-over
- Temperature limitation
- Sliding temperature <Optional (DAM101A51) unit required>
- Energy saving function (ECO mode. Power limit control) (Optional)
- Air Conditioning Network Service System (Optional Maintenance Service)

### New Functions

- Monitor and control from the remote site by Web browser (Optional)
- PPD data can be managed from the remote site by Web browser (Optional)
- Send malfunction report through the Internet by E-mail (Optional)
- Compliant with the RoHS Directive (DAM602B51/52)

## 6.7 HRV (Heat Reclaim Ventilation)

### 6.7.1 Product Introduction

#### Background

To maintain the comfortable environment in a building, the fresh air intake is essential the same as an appropriate room temperature control.

The heating / cooling efficiency of conventional standard ventilating systems drops during cooling / heating operation and it is waste of energy.

The Heat Reclaim Ventilation was developed to solve those problems.

#### What is HRV (Heat Reclaim Ventilation) ?

HRV is a system which recovers the thermal energy of exhaust air and reuses it for heating or cooling of supply air. It exchanges heat between the exhaust and the supply air.

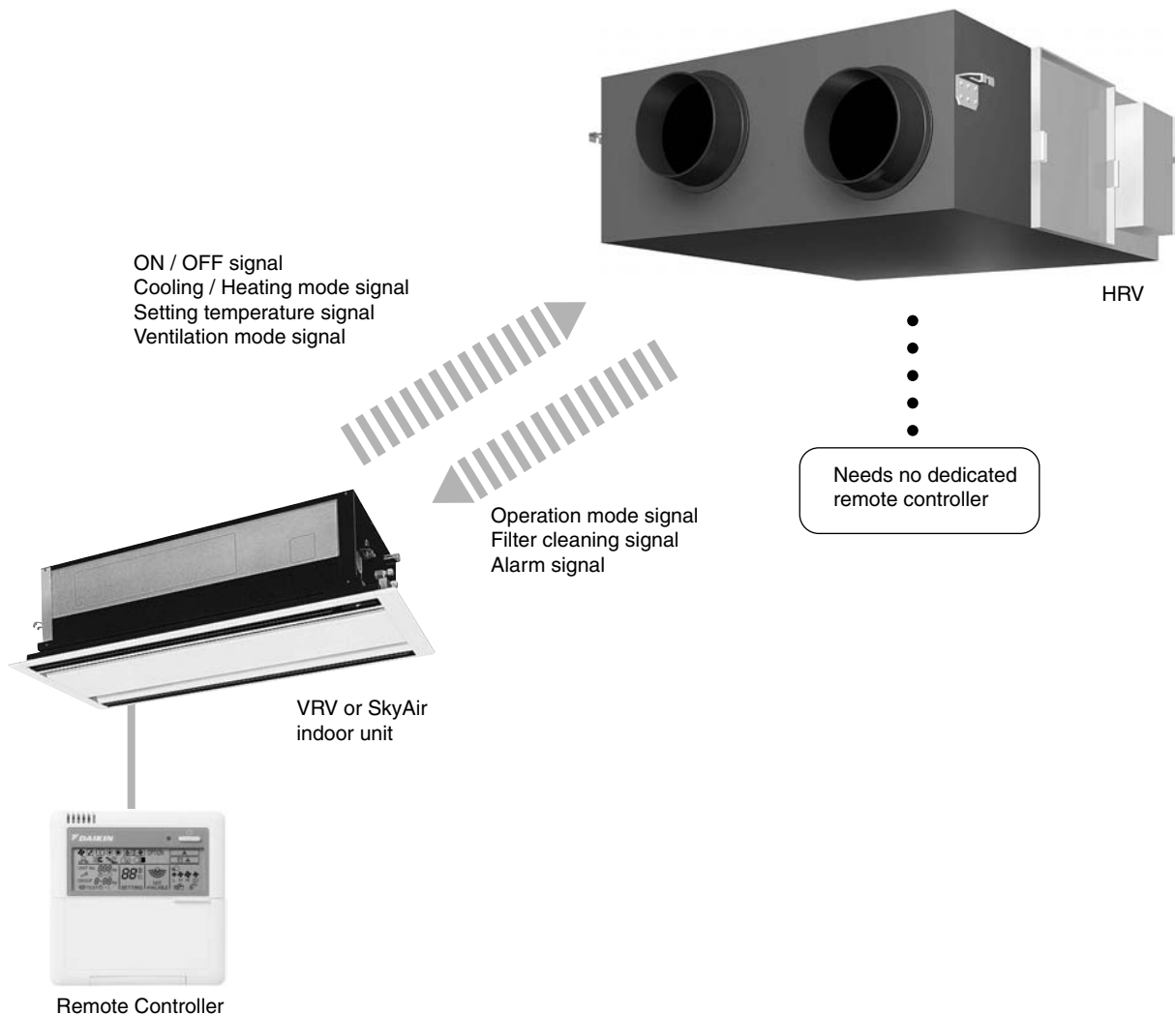
#### Daikin's HRV

Daikin's HRV greatly reduces the total power consumption by operation interlocked with air conditioner such as VRV or SkyAir.

The total heat exchange mode and the ventilation mode can be automatically selected by setting to the automatic ventilation mode.

#### Main Features

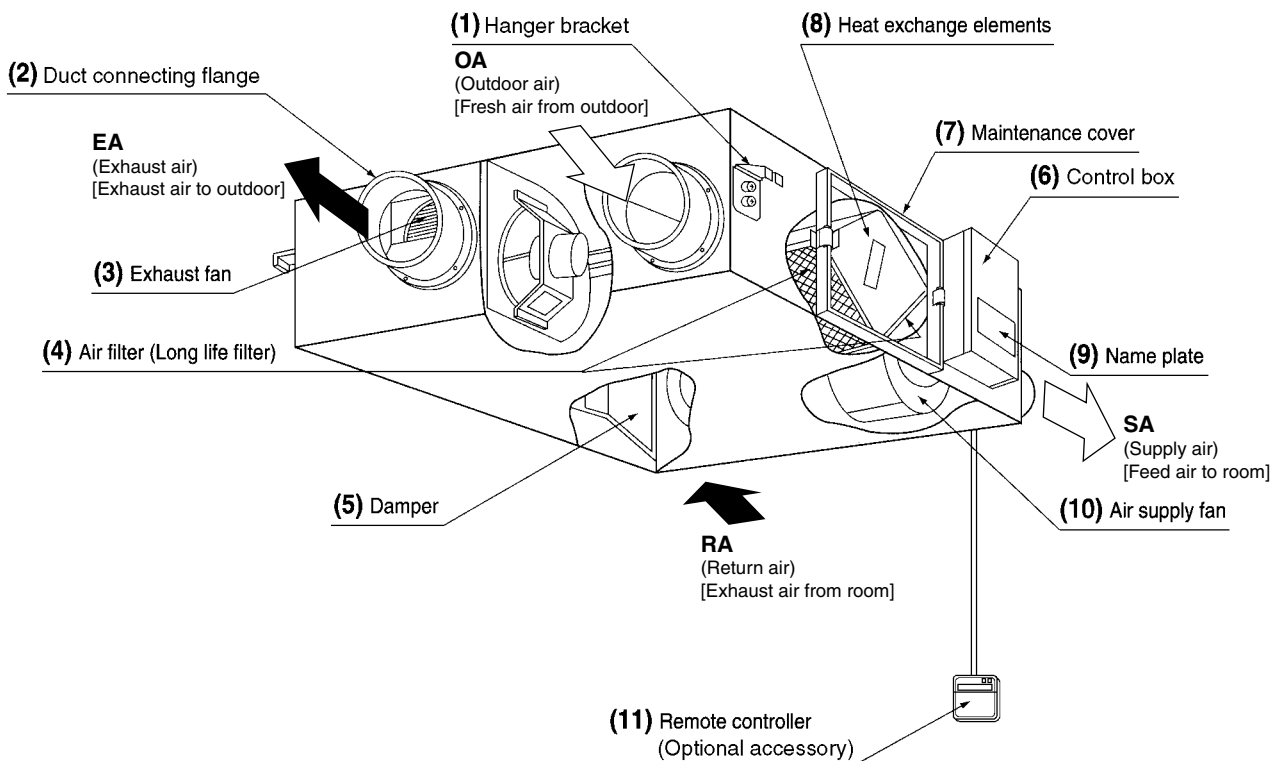
1. The operation is available when the outdoor air temperature is down to  $-15^{\circ}\text{C}$ .
2. Interlocked operation with VRV (SkyAir)
3. Automatic ventilation mode changeover
4. Energy Saving
5. FRESH-UP operation
6. Quiet operation
7. Easy installation
8. Easy maintenance
9. Wide variety of optional accessories



(HC0002)

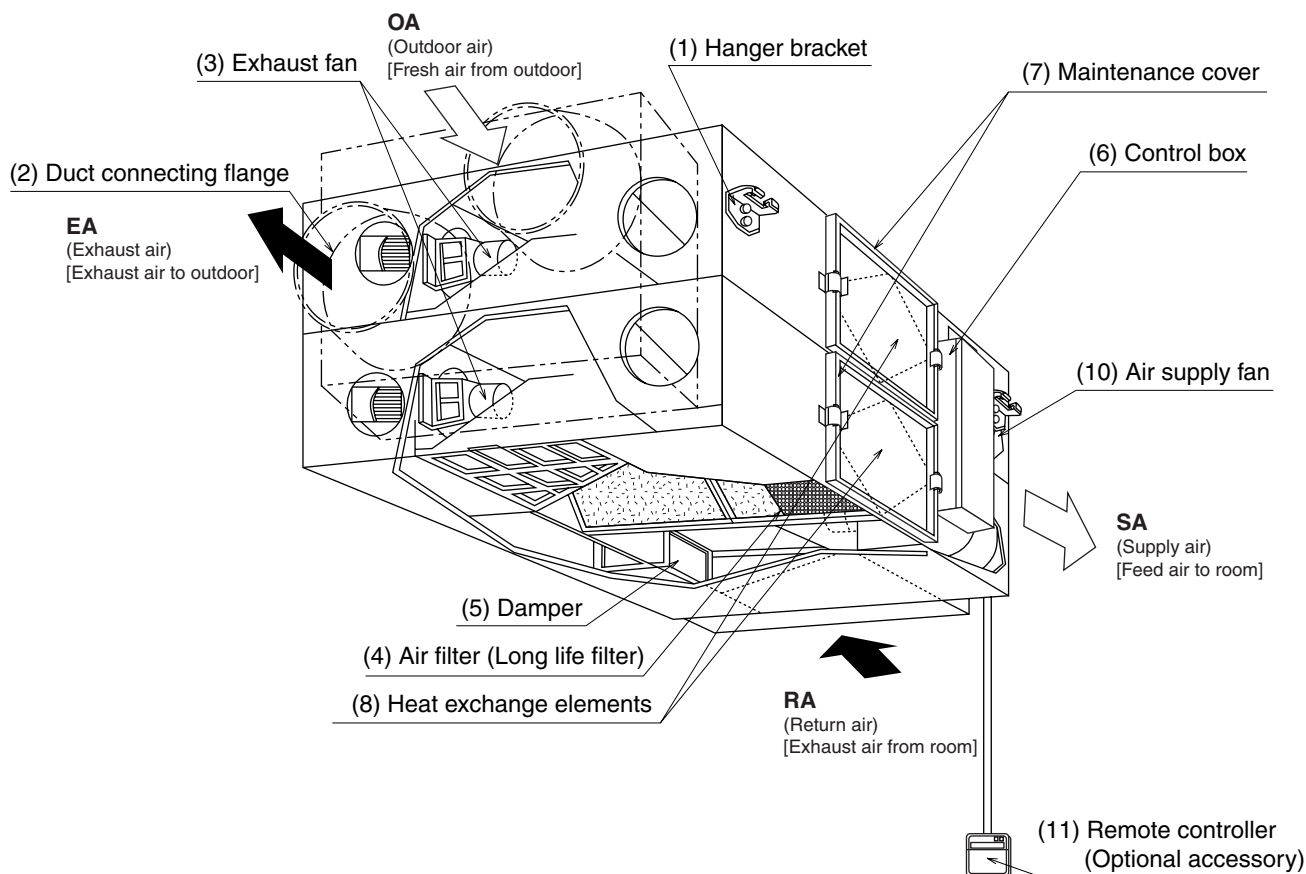
## 6.7.2 Structure

VAM150GJVE, VAM250GJVE, VAM350GJVE, VAM500GJVE, VAM650GJVE, VAM800GJVE, VAM1000GJVE



3P034927-5J

VAM1500GJVE, VAM2000GJVE



3P034927-5J

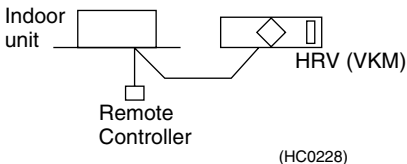
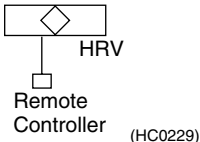
### 6.7.3 Features

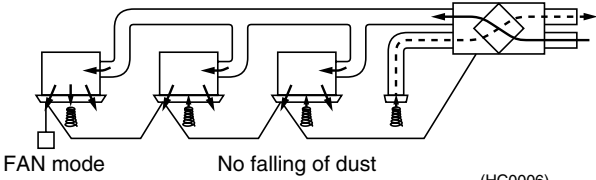
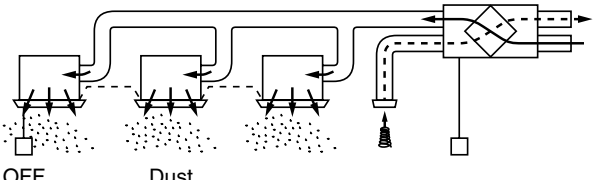
#### Interlocked Operation with VRV (SkyAir)

1. Simultaneous ON / OFF with the indoor unit by the indoor unit remote controller.
2. HRV independent operation during air conditioning off season by the indoor unit remote controller.
3. Automatic ventilation mode changeover: Auto / Heat Recovery / Bypass
4. Fan speed changeover by the indoor unit remote controller : High / Low (Ultra-High / High, Ultra-High / Low)
5. Precooling / heating control function setting to delay the start of ventilation during air conditioner start-up to realize the high energy saving efficiency.
6. FRESH-UP operation setting
7. Filter sign display notifies the time for cleaning the filter.
8. No need to purchase or install the HRV exclusive remote controller
9. Advantage to IAQ (Internal Air Quality)

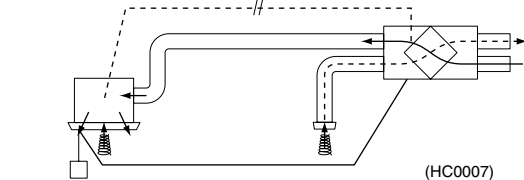
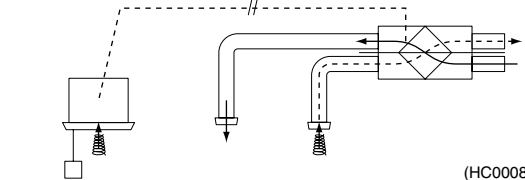
#### Note:

5,6 can be set at the initial setting only.

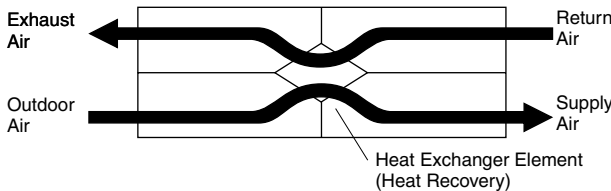
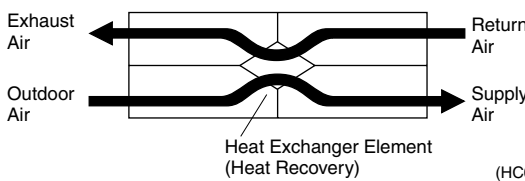
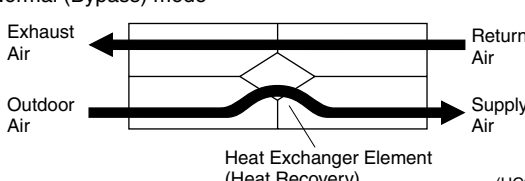
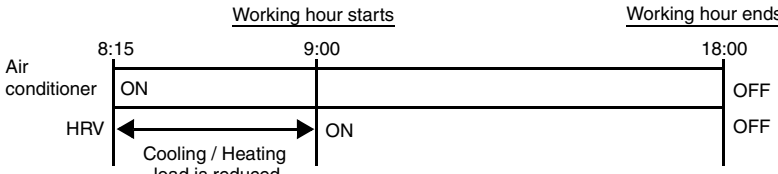
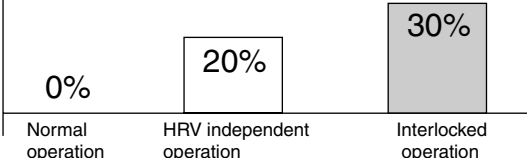
Type	Interlocked operation with air conditioner	HRV independent operation
Structure		
Features	<ul style="list-style-type: none"> <li>■ Simultaneous operation by air conditioner's remote controller is available.</li> </ul>	<ul style="list-style-type: none"> <li>■ Operation / Stop</li> <li>■ Ventilation mode changeover</li> <li>■ Fresh-up changeover</li> <li>■ Timer mode start / stop</li> <li>■ Malfunction digital display</li> </ul>
Connectable Indoor unit	VRV (all indoor unit), SkyAir	

<p>Daikin's HRV</p>  <p>FAN mode      No falling of dust      (HC0006)</p> <p>Dust does not fall off from the air filter because the air supply fan of the interlocked indoor unit remains activated even when the HRV is operated independently.</p>	<p>Other types</p>  <p>OFF      Dust      (HC0005)</p> <p>If conventional HRV, with exclusive remote controller, is directly connected to indoor unit of air conditioner, dust may fall off from air filter when air conditioner is OFF.</p>
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#### Installation Examples

<p>Direct duct connection system</p>  <p>(HC0007)</p>	<p>Independent duct system</p>  <p>(HC0008)</p>
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## Energy Saving

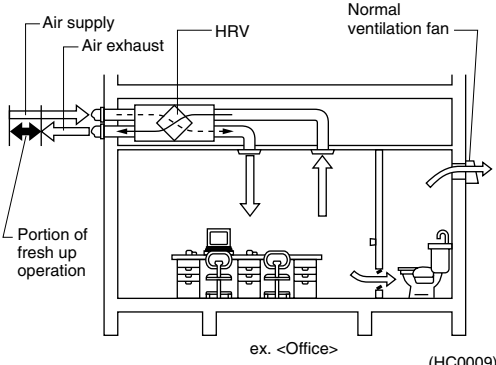
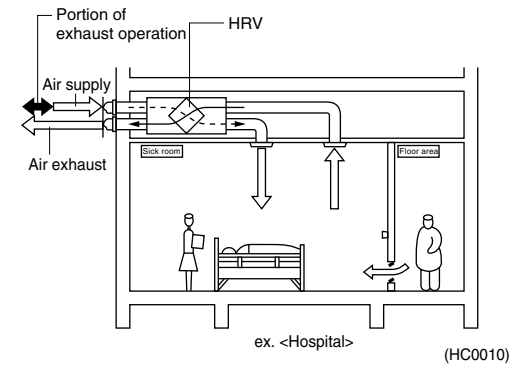
<div>By heat recovery operation</div> <div>Approx. <b>20%</b> reduction of heating / cooling load</div> <div>+</div>	<div>HRV unit recovers the thermal energy during cooling / heating operation of air conditioner. HRV reduces the cooling / heating load drastically and enhances the heating / cooling efficiency.</div> <div></div> <div>(HC0230)</div>												
<div>By setting to automatic ventilation mode</div> <div>Approx. <b>8%</b> reduction of heating / cooling load</div> <div>+</div>	<div>Proper use of Heat recovery ventilation and normal ventilation saves energy. When the cooling operation is required in winter, use of heat recovery ventilation is not efficient because the outdoor air temperature is normally lower than that of the indoor. Thus, the proper use of ventilation mode enhances the heating / cooling efficiency.</div> <div>Automatic Ventilation mode changeover</div> <table><tr><th>Operation</th><th>Sensor of ventilation</th><th>Decision of mode (Which is more energy efficient?)</th></tr><tr><td></td><td>Difference between indoor / outdoor temp.</td><td></td></tr><tr><td>Cooling</td><td>Indoor temp. &gt; Outdoor temp. Indoor temp. &lt; Outdoor temp.</td><td>Normal ventilation (Bypass) Heat recovery ventilation</td></tr><tr><td>Heating</td><td>Indoor temp. &gt; Outdoor temp. Indoor temp. &lt; Outdoor temp.</td><td>Heat recovery ventilation Normal ventilation (Bypass)</td></tr></table> <div>Refer to the CONTROL for the mode changeover.</div> <div><div><div>Heat Recovery mode</div><div></div><div>(HC0231)</div></div><div><div>Normal (Bypass) mode</div><div></div><div>(HC0232)</div></div><div>Automatic Changeover</div></div>	Operation	Sensor of ventilation	Decision of mode (Which is more energy efficient?)		Difference between indoor / outdoor temp.		Cooling	Indoor temp. > Outdoor temp. Indoor temp. < Outdoor temp.	Normal ventilation (Bypass) Heat recovery ventilation	Heating	Indoor temp. > Outdoor temp. Indoor temp. < Outdoor temp.	Heat recovery ventilation Normal ventilation (Bypass)
Operation	Sensor of ventilation	Decision of mode (Which is more energy efficient?)											
	Difference between indoor / outdoor temp.												
Cooling	Indoor temp. > Outdoor temp. Indoor temp. < Outdoor temp.	Normal ventilation (Bypass) Heat recovery ventilation											
Heating	Indoor temp. > Outdoor temp. Indoor temp. < Outdoor temp.	Heat recovery ventilation Normal ventilation (Bypass)											
<div>By Precooling / heating operation</div> <div>Approx. <b>2%</b> reduction of heating / cooling load</div> <div>  </div>	<div>The load is reduced at startup of the air conditioner by the following control. Before the working hour, the room air is clean. Therefore, the startup of HRV can be delayed.</div> <div></div>												
<div>Total <b>30%</b> reduction of heating / cooling load</div>	<div>Reduction of heating / cooling load (%)</div> <div></div> <div>(HC0233)</div>												

**Note:**

The total heating / cooling load may vary depending on the climate or the other environmental conditions.

## FRESH-UP Operation

Both the excessive supply mode and the excessive exhaust mode are selectable.  
This function creates a more comfortable air environment.

	Supply Fresh-up (Excessive outdoor air supply)	Exhaust Fresh-up (Excessive exhaust air supply)
Detail	Supply air volume can be set at a higher level than the exhaust air by the remote controller.	Exhaust air volume can be set at a higher level than the supply air by the remote controller.
Major effects	<ul style="list-style-type: none"> <li>Prevents inflow of toilet odor</li> <li>Prevents inflow of outdoor air in winter</li> </ul>	<ul style="list-style-type: none"> <li>Prevents outflow of airborne bacteria from rooms in a hospital</li> <li>Prevents outflow of odors from rooms in a nursing home</li> </ul>
Application	Offices, etc.	Hospitals, Nursing homes, etc.
Example		

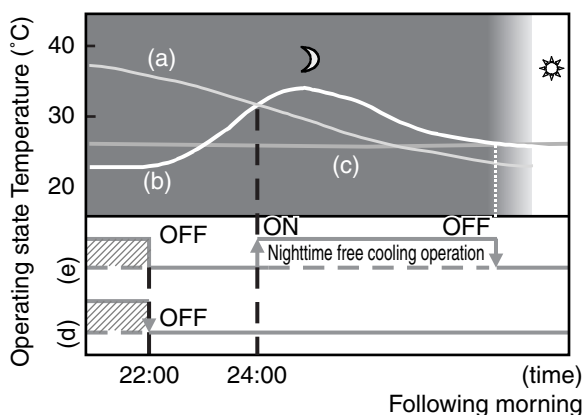
## Nighttime free cooling operation

### (AUTOMATIC HEAT PORGE FUNCTION AT NIGHT)

The nighttime free cooling is an energy-conserving function which works at night when the air conditioners is off, reducing the cooling load in the morning when the air conditioner is turned on by ventilating rooms which contain office equipment which raises the room temperature.

- Nighttime free cooling only works during cooling and when connected to Building Multi or VRV systems.
- Nighttime free cooling is set to "off" in the factory settings; so request your dealer to turn it on if you intend to use it.

## Operation image



- (a) Outside temperature
- (b) Indoor temperature
- (c) Set temperature
- (d) Operating state of Air conditioner
- (e) Operating state of Total heat exchanger

## ■ EXPLANATION OF NIGHTTIME FREE COOLING OPERATION IMAGE

The unit compares the indoor and outdoor temperatures after the air conditioning operation stops for the night. If the following conditions are satisfied, the operation starts, and when the indoor temperature reaches the air conditioning setting, the operation stops.

### <Conditions>

- the indoor temperature is higher than the air conditioning setting and
- the outdoor temperature is lower than the indoor temperature,

If the above conditions are not satisfied, revaluation is made every 60 minutes.

### NOTE

- The nighttime free cooling operation works when the HRV unit is off. Therefore, it is not possible to stop the nighttime free cooling operation, though the forced off is input from the optional controllers for centralized control.



## Element (HEP element) Material

### Material

The partition sheet in the heat exchanger element has been significantly upgraded. It is approximately two-third thinner than the conventional type, resulting in a great improvement in moisture absorption!

The material is flame-retardant for safety.

The fungi proof design also keeps the air clean.

### Structure

The heat exchanger element is designed without moving parts for higher durability and reliability.

The supply air passage and the exhaust air passage are arranged in right angle to prevent the supply and exhaust air from getting mixed.



(HC0013)

## Features

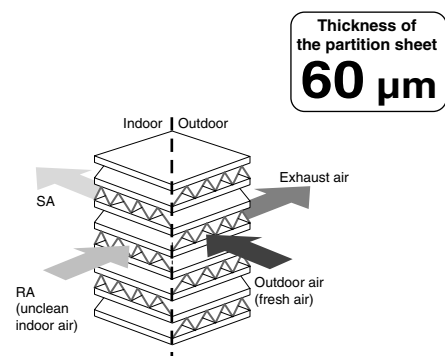
### ■ High air shielding

Even in the conventional less humidity conditions, maintaining the features of the material that can get excellent moisture permeability, we have achieved high air shielding, by special processing in the step of milling paper.

### New ultra-thin film element

#### Conventional element

Moisture absorption is less effective due to the thickness of the partition sheets. It also limits the effective area that supply and exhaust air can be exposed to.

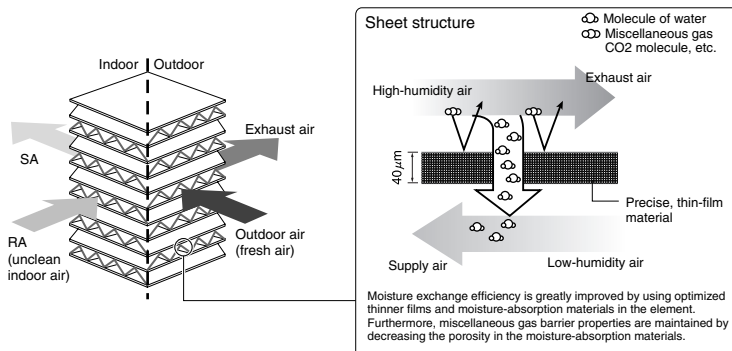


#### New ultra-thin film element

Due to the thinner film...

- Decreases the moisture resistance of the partition sheets drastically.
- Realizes more space for extra layers in the element, resulting in increased effective area that supply and exhaust air can be exposed to.

Moisture absorption increased by approx. 10%!



Newly developed!

Thickness of the partition sheet  
**40 μm**

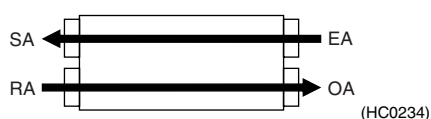
## Easy installation and service maintenance

### Downsized

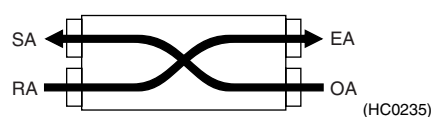
Model name	Height (mm)
VAM150GJVE	278
VAM250GJVE	278
VAM350GJVE	306
VAM500GJVE	306
VAM650GJVE	338
VAM800GJVE	387
VAM1000GJVE	387
VAM1500GJVE	785
VAM2000GJVE	785

### Parallel air flow system (Daikin)

This system prevents misconnection and simplifies the installation work



### Cross air flow system



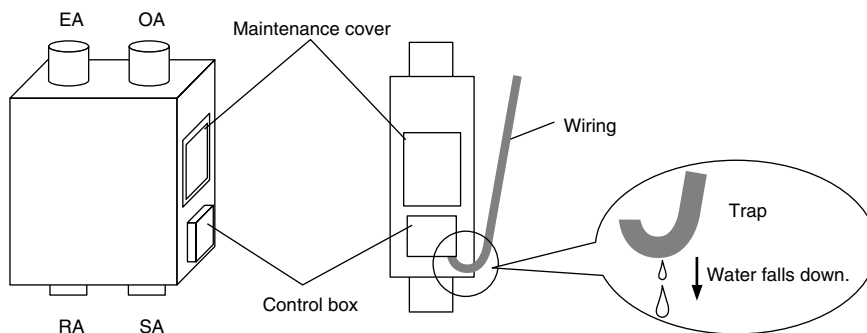
### Service Maintenance

Vertical installation is available.

The unit must be installed with the side of RA, SA down.

It is necessary to make a trap.

Because the trap of wiring can protect against ingress of water.

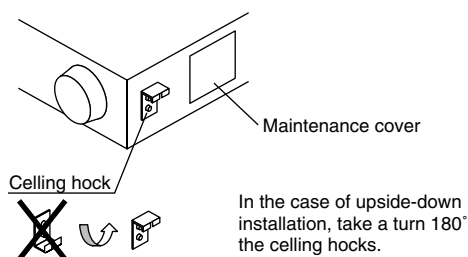
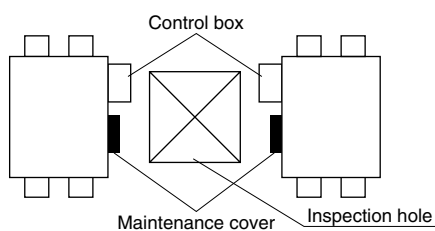


Upside-down installation is available.

It allows the common use of the inspection hole and reduces the space and installation work.

For 2 units closely installed, only one inspection hole of 450 × 450 mm will do for maintenance or replacement of the heat exchanger element, etc.

Long life filter is equipped.



### The operation is available when the outdoor air temperature is down to -15°C

(Operation when the outdoor air temperature becomes lower than -10°C)

When the outdoor air suction temperature becomes lower than -10°C, the unit is changed to intermittent operation to prevent freezing of the heat exchanger element and dew condensation within the unit.

#### Intermittent operation

The outdoor air thermistor (standard equipment) within the unit detects the temperature. According to the detected temperature, the following operation determines.

##### <Step 1>

- The air supply fan is changed to intermittent operation, when the temperature is lower than -10°C.
- The intermittent operation of the air supply fan is changed to an operation of each cycle for 45 minutes' operation after stopping operation for 15 minutes.
- The exhaust fan operates continuously according to setup.

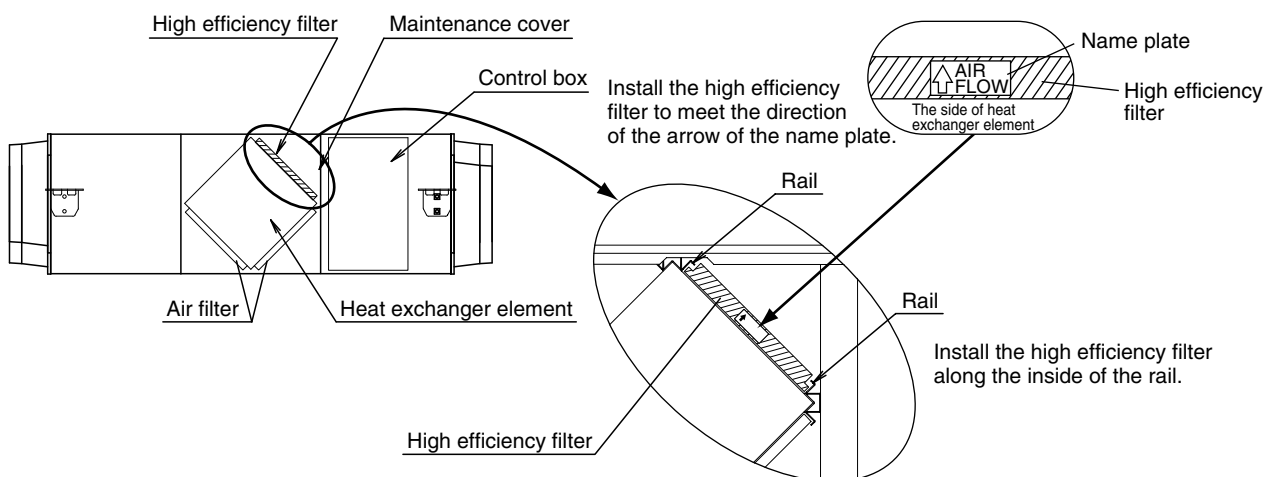
##### <Step 2>

- When the temperature becomes lower than -15°C, the unit stops operation to prevent any defect, such as dew condensation and freezing. The unit does not ventilate.  
But, to detect the elevation of the outdoor air temperature, the unit operates for 5 minutes per hour.
- The control by the external damper (local purchase) is available.  
When the unit is not operating, the unit prevents the cool outdoor air from invading.  
The power is applied from the connector X15A to the external damper. Therefore, the operation of the unit is controlled in conjunction with the external damper.

#### Note:

Local setting is required.

### The high efficiency filter (that has 65% of average dust collecting efficiency) is suitable



#### Additional optional accessories

Built-in optional high efficiency filter

BRP4A50: Heater control kit

## 6.8 HRV-With DX Coil-(Heat Reclaim Ventilation) VKM-GA(M) Series

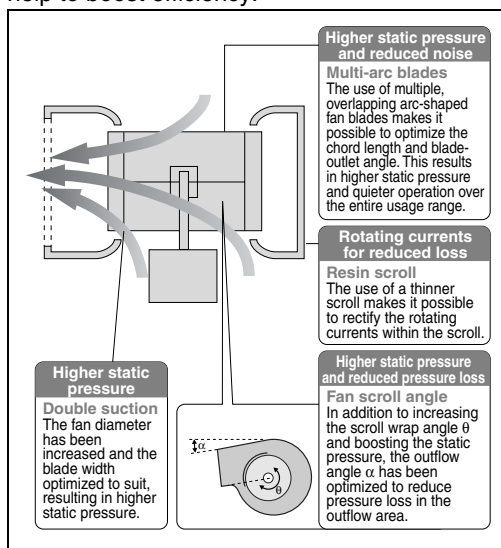
### 6.8.1 General

- Interlocked operation with VRV
  - (Controls of interlocked operation for energy saving : The remote controller for air conditioner can be used, so special remote controller for HRV is unnecessary.)
  - Mounted for Direct expansion coil unit for outdoor air treatment
  - Changeover function for ventilation mode to Auto/Manual
  - FRESH-UP operation (Selectable : Supply air rich mode or exhaust air rich mode ; initial setting)
  - Mounted for Water flow type Natural evaporating humidifier
  - Possible to attach the High efficiency filter
  - Attaching the Power supply terminal for easy connection
  - Quiet operation
  - Changeover function for air flow rate to High/Low (Ultra-high setting is possible.)
  - The power supply of HRV is commonly used with the air-conditioner (Single-phase 220-240V, 50Hz)
  - Filter sign display and reset
  - Timer setting
- Features of Direct Expansion Coil
- Draftless ventilation in Heating.
  - High humidifying function.
- How to use this unit
- This unit should be used with air conditioners.
  - Air conditioning is impossible only by this unit, because this unit does not have temperature control function. (It's capacity is too small in order to control the room temperature to the whole)  
And should be operated in combination with standard indoor units. (Interlocked operation)
  - Independent operation without taking an interlock with indoor units is possible, however, temperature setting by remote controller is impossible.  
In this ON/OFF operation by thermostat depends on factory setting, however, this value is changeable by setting mode on site.
  - Model selection should be done not by cooling capacity but by ventilating air flow rate.

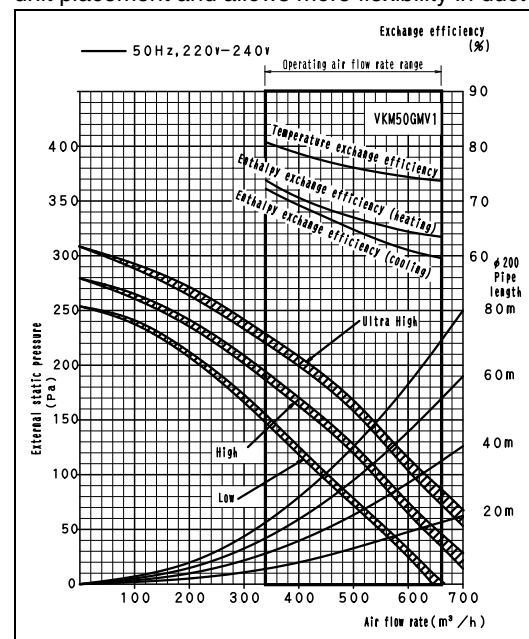
### 6.8.2 Design Flexibility

#### 6.8.2.1 Efficient Fan Performance Produces a High Static Pressure

Improvements to the fan, including the use of multi-arc blades, a thinner scroll and optimized fan scroll angle, help to boost efficiency.



Dramatically higher static pressure is achieved due to improved fan performance. This reduces limitations on unit placement and allows more flexibility in duct design.



### 6.8.2.2 Operable Outdoor Temperature Down to $-15^{\circ}\text{C}$

If the outdoor air temperature falls below  $-10^{\circ}\text{C}$ , the unit changes to intermittent operation to prevent freezing of the heat exchanger element and dew condensation within the unit.

#### Intermittent operation

A thermistor (standard equipment) within the unit detects the outdoor air temperature. Unit operation varies according to the detected temperature.

### 6.8.2.3 Indoor Unit Connectable to up to 130% of the Capacity

### 6.8.2.4 Slim Design

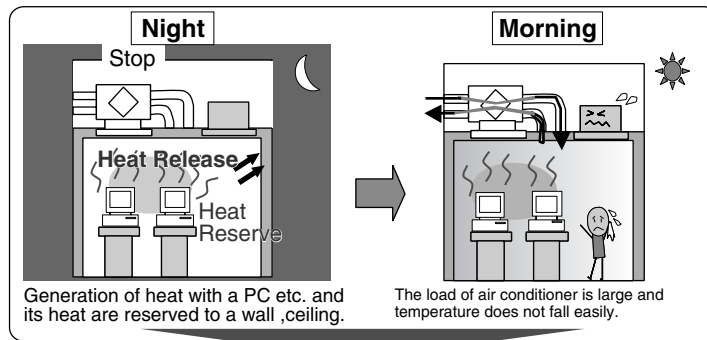
The slim design of only 387 mm in height enables installation inside ceilings with less than 400 mm of clearance.



## 6.8.3 Energy Saving

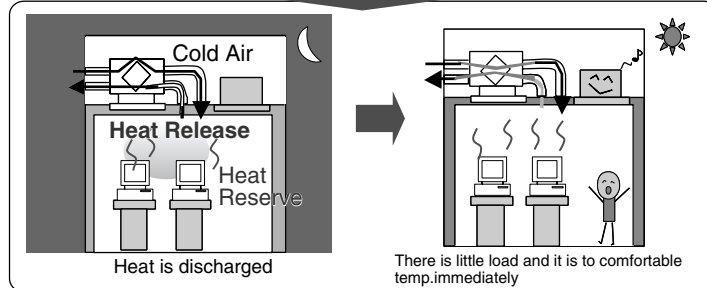
### 6.8.3.1 Automatic Heat Purge Function at Night

#### Not operation



#### Automatic heat purge control

The heat which accumulated indoors is discharged at night. Air Conditioning load of the next day is reduced, and efficiency is increased.



In case of interlocking operation with an air conditioner

#### ■ Mechanism

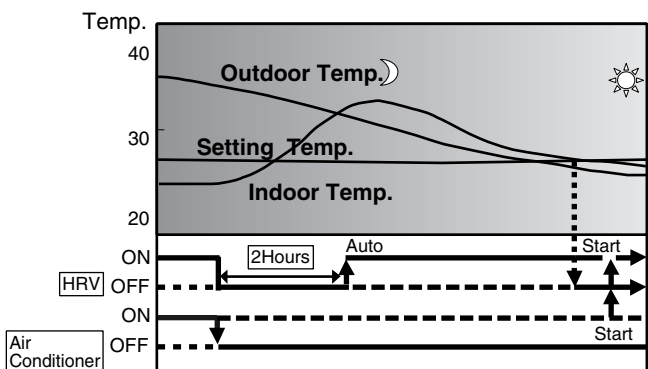
##### <Operation>

1. Interlocking operation is carried out with the air-conditioning machine, and the time of 2 hours passing after an operation stop is judged to be night. (The same judgment as the present preparatory operation)
2. After 2-hour progress, when indoor temperature is higher than the preset temperature of an air-conditioning machine and higher than outdoor temperature, operation is started.
3. Operation will be stopped if indoor temperature falls to air-conditioning machine preset temperature.

#### ■ Effect (Field Setting by remote controller)

**It is reduction of about 5% of air-conditioning load at the time of cooling operation.**

Air conditioning operation carries out to April to October, and air-conditioning load is calculated only with sensible heat load.

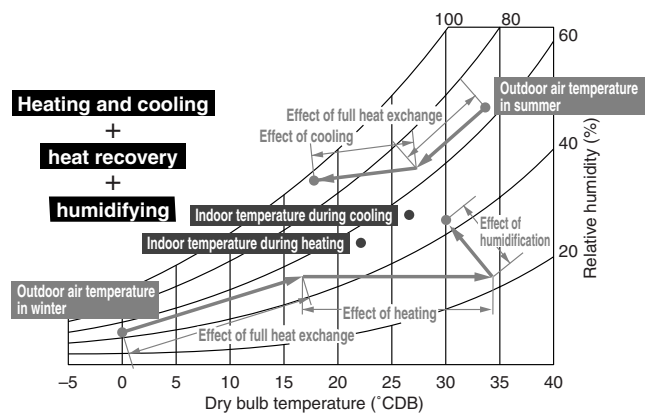




### 6.8.3.3 Efficient Outdoor Air Introduction with Heat Exchanger and Cooling/heating Operation

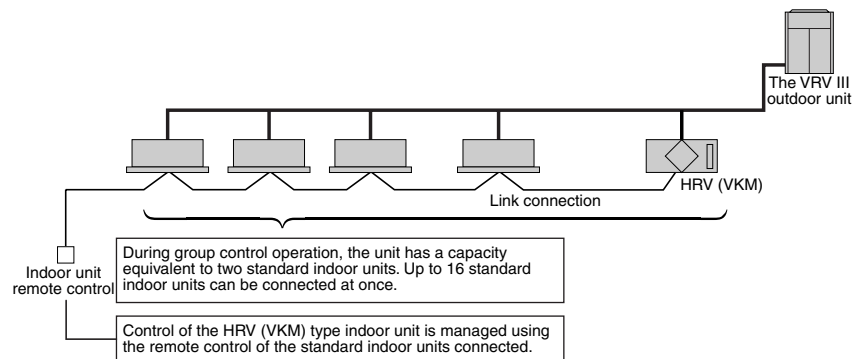
#### Indoor unit with outdoor air treatment

Using outdoor air, the temperature can be brought near room temperature with minimal cooling capacity through the use of outdoor air.



### 6.8.3.4 Operations, Such as Cleaning, Ventilation, Cooling/heating and Humidifying, are Possible with One Remote Controller.

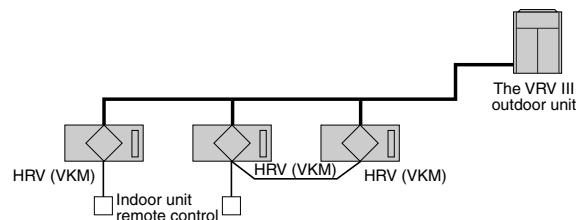
Four air conditioner functions can be managed using a single remote control. This makes it easy to obtain high-quality and energy-efficient outdoor air treatment.



### 6.8.4 Unique Control System

#### 6.8.4.1 Independent Control Possible

Individual outdoor air treatment operation is possible by connecting an optional remote controller.



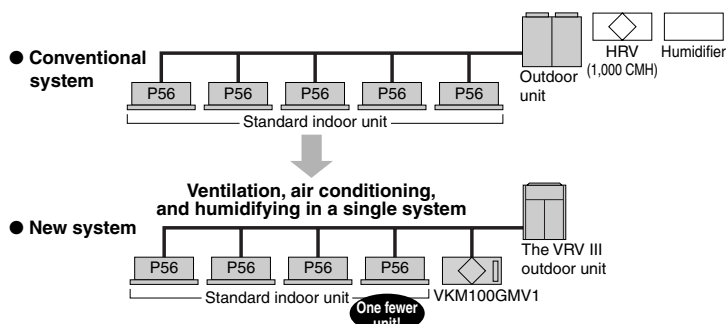
### 6.8.5 Quiet Operation

Reduced pressure loss and quieter operation internally lowers the noise output of the 1,000m<sup>3</sup>/h type system to 38dB (50Hz 240V, High mode).

## 6.8.6 Easy Installation

### 6.8.6.1 Integrated System Includes Ventilation, Air Conditioning and Humidifying Operations

Rather than using separate ventilation, air conditioning, and humidifying components, the system incorporating HRV (VKM) integrates all functions, reducing the total number of indoor units and facilitating a far simpler system. The installation space becomes smaller and the labor required for installation and maintenance is reduced significantly.



## 6.8.7 Other Features

### 6.8.7.1 Interlocked Operation with VRV

1. Simultaneous ON / OFF with the indoor unit by the indoor unit remote controller.
2. HRV independent operation during air conditioning off season by the indoor unit remote controller.
3. Automatic ventilation mode changeover : Auto / Heat Recovery / Bypass
4. Fan speed changeover by the indoor unit remote controller : High / Low, Ultra-High / High
5. FRESH-UP operation setting
6. Filter sign display notifies the time for cleaning the filter.
7. No need to purchase or install the HRV exclusive remote controller
8. Advantage to IAQ (Internal Air Quality)

#### Note

4-6 can be set at the initial setting only. (When using the remote controller BRC1C62)

Type	Interlocked operation with air conditioner
Structure	
Features	<ul style="list-style-type: none"> <li>• Simultaneous operation by air conditioner's remote controller is available.</li> <li>• Fan speed can be set at the initial setting.</li> </ul>
Connectable Indoor unit	VRV (all indoor unit)

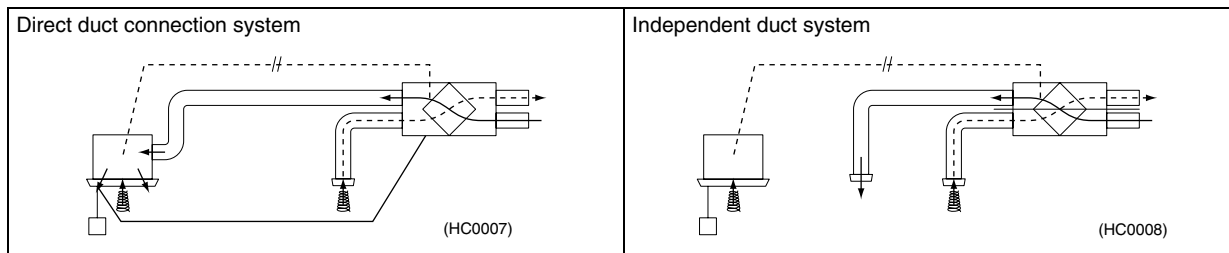
Daikin's HRV	Other types
<p>FAN mode No falling of dust (HC0006)</p> <p>Dust does not fall off from the air filter because the air supply fan of the interlocked indoor unit remains activated even when the HRV is operated independently.</p>	<p>OFF Dust (HC0005)</p> <p>If conventional HRV, with exclusive remote controller, is directly connected to indoor unit of air conditioner, dust may fall off from air filter when air conditioner is OFF.</p>

#### Note

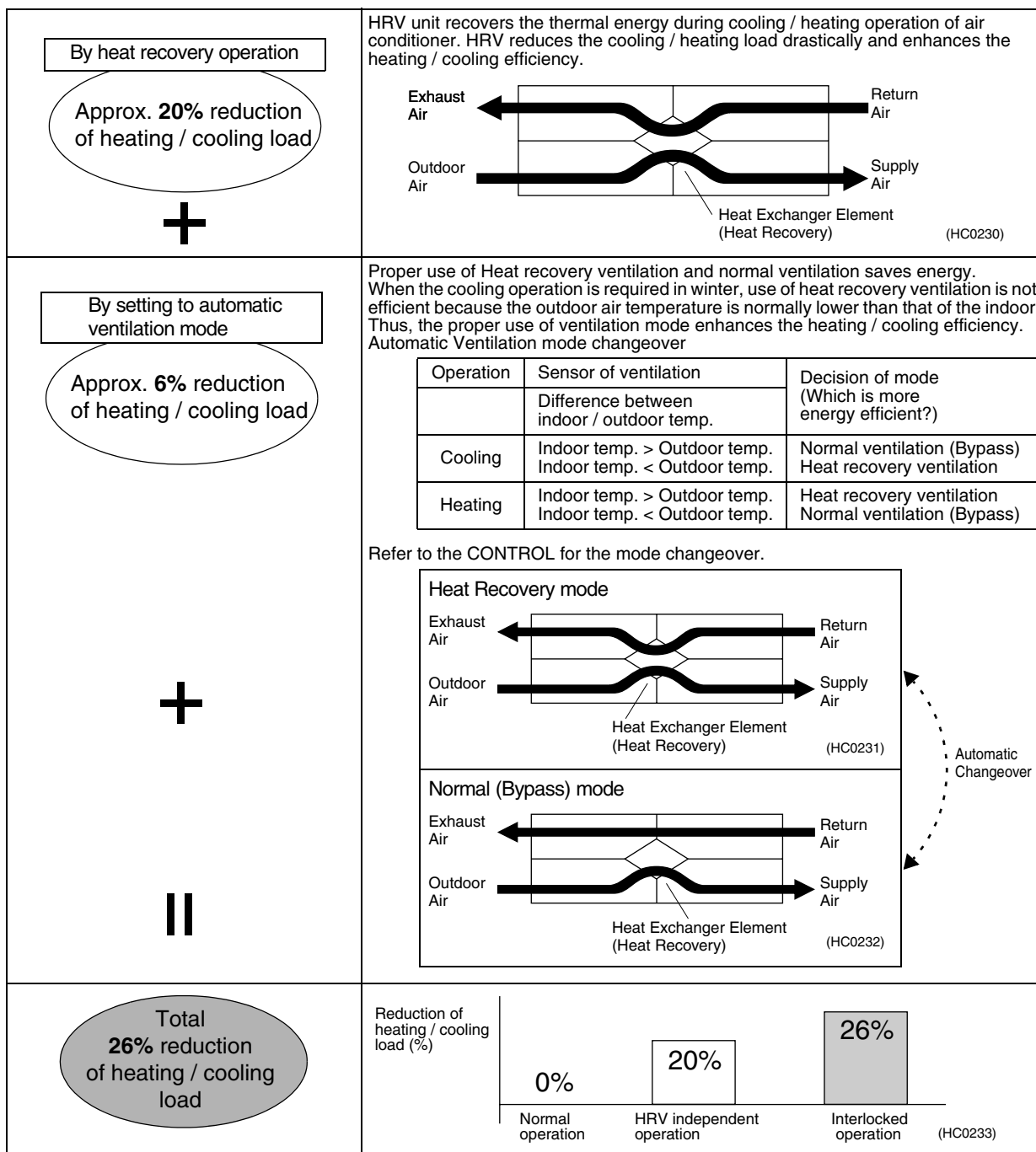
- 1) In case of the direct duct connection system, operate interlocking with indoor units.
- 2) Do not connect the duct with discharge air side of indoor units.



## Installation Examples



## 6.8.7.2 Mechanism of Energy Saving



## Note :

The total heating / cooling load may vary depending on the climate or the other environmental conditions.

### 6.8.7.3 Fresh-up Operation

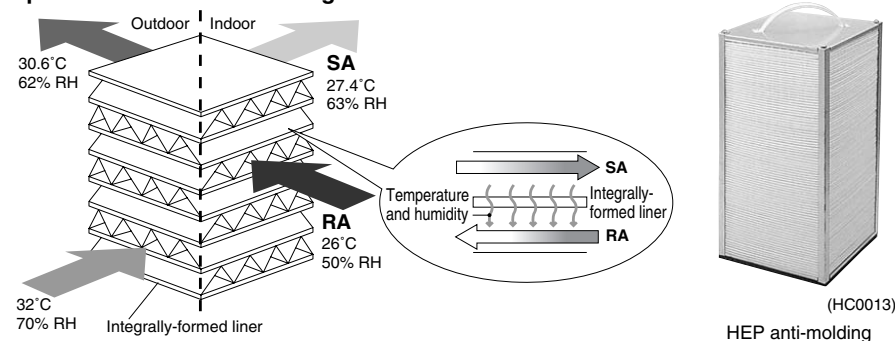
Both the excessive supply mode and the excessive exhaust mode are selectable.  
This function creates a more comfortable air environment.

	Supply Fresh-up (Excessive outdoor air supply)	Exhaust Fresh-up (Excessive exhaust air supply)
Detail	Supply air volume can be set at a higher level than the exhaust air by the remote controller.	Exhaust air volume can be set at a higher level than the supply air by the remote controller.
Major effects	<ul style="list-style-type: none"> <li>Prevents inflow of toilet odor</li> <li>Prevents inflow of outdoor air in winter</li> </ul>	<ul style="list-style-type: none"> <li>Prevents outflow of airborne bacteria from rooms in a hospital</li> <li>Prevents outflow of odors from rooms in a nursing home</li> </ul>
Application	Offices, etc.	Hospitals, Nursing homes, etc.
Example		

### 6.8.7.4 Proprietary Developed HEP Element

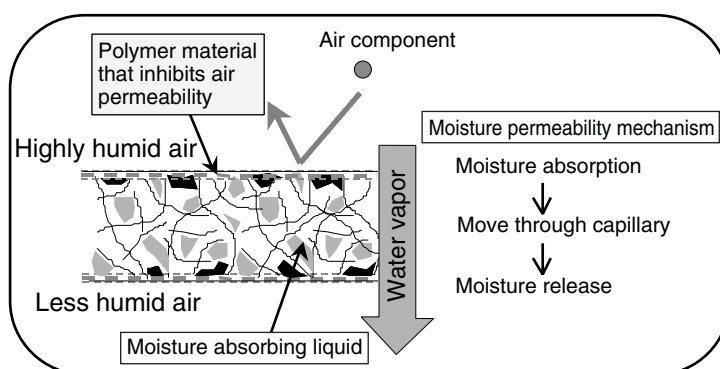
The heat exchange element uses a High Efficiency Paper (HEP) that has superior moisture-absorption and humidifying properties and doubles the current efficiency of moisture absorption. The heat exchange unit speedily recovers heat contained as latent heat (vapor). The element is made of a material with superior flame-resistant properties and is treated with an anti-molding agent.

#### Operation of the heat exchanger element



#### Features

- High air shielding  
Even in the conventional less humidity conditions, maintaining the features of the material that can get excellent moisture permeability, we have achieved high air shielding, by special processing in the step of milling paper.



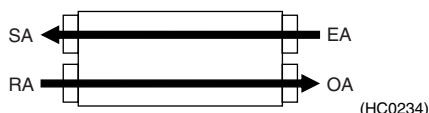
- Polymer material that inhibits air permeability that treated on the surface of the heat exchanger element restrains air permeability.

### 6.8.7.5 Easy Installation and Service Maintenance Downsized

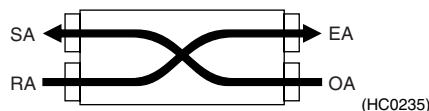
Model name	Height (mm)
VKM50GAMV1	387
VKM50GAV1	
VKM80GAMV1	
VKM80GAV1	
VKM100GAMV1	
VKM100GAV1	

#### Parallel air flow system (Daikin)

This system prevents misconnection and simplifies the installation work



#### Cross air flow system (Others)



### 6.8.7.6 The Operation is Available When the Outdoor Air Temperature is Down to -15°C

(Operation when the outdoor air temperature becomes lower than -10°C)

When the outdoor air suction temperature becomes lower than -10°C, the unit is changed to intermittent operation to prevent freezing of the heat exchanger element and dew condensation within the unit.

#### Intermittent operation

The outdoor air thermistor (standard equipment) within the unit detects the temperature. According to the detected temperature, the following operation determines.

##### <Step1>

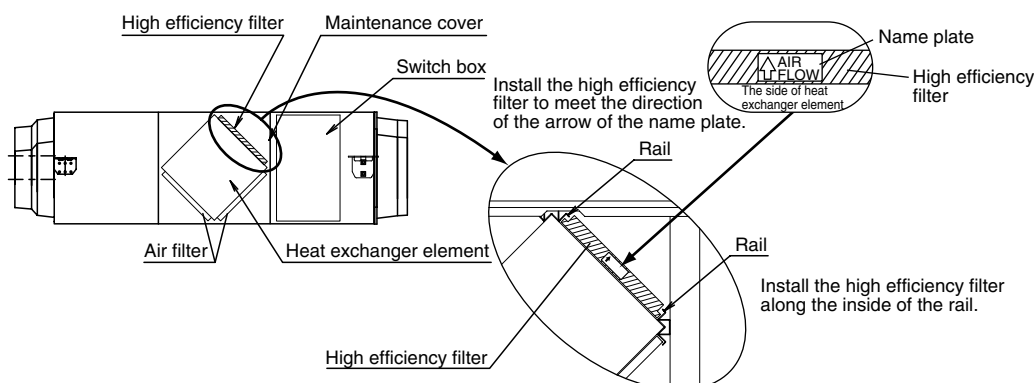
- The air supply fan is changed to intermittent operation, when the temperature is lower than -10°C.
- The intermittent operation of the air supply fan is changed to an operation of each cycle for 45 minutes' operation after stopping operation for 15 minutes.
- The exhaust fan operates continuously according to setup.

##### <Step2>

- When the temperature becomes lower than -15°C, the unit stops operation to prevent any defect, such as dew condensation and freezing. The unit does not ventilate.

But, to detect the elevation of the outdoor air temperature, the unit operates for 5 minutes per hour.

### 6.8.7.7 The High Efficiency Filter (that has 65% of Average Dust Collecting Efficiency) is Suitable



### 6.8.7.8 Additional Optional Accessories

#### Built-in optional high efficiency filter

It greatly reduces the installation space.

The installation of access doors and the unit can be reduced.

### ■ Selection Procedures (in Japan)

Various methods are used to calculate the required ventilating air flow rate according to CO<sub>2</sub> generated by inhabitants in a room, waste gas generated by use of fire, and other conditions of a room.

Here are 2 patterns of calculating methods.

#### Based on inhabitants

$$\text{Required ventilating air flow rate (m}^3/\text{h)} = \frac{20 \times A}{B}$$

A : 20 × Living room floor space (m<sup>2</sup>)

B : Area occupied per person (m<sup>2</sup>)

The above equation conforms to article 20, 2 No.2 of the Building Standards Act in Japan.

#### Note :

1. 20 (in the above equation) means “20(m<sup>3</sup> / h / person)”, which is the required ventilating air flow rate based on the CO<sub>2</sub> exhausted by an adult sitting still in a room. If smoking is allowed, other calculation method should be used.
2. Use 10 (m<sup>2</sup>) if the area occupied per person exceeds 10 (m<sup>2</sup>).

<Table 1>

Type of building	Area occupied per person (N)	Remarks
Dining houses, restaurants, coffee-shops	3 m <sup>2</sup>	Floor space of a part used for business purposes.
Cabarets, beer halls	2 m <sup>2</sup>	Floor space of a part used for business purposes.
Japanese-style restaurants, hall for hire	3 m <sup>2</sup>	Floor space of a part used for business purposes.
Store market	3 m <sup>2</sup>	Floor space of a part used for business purposes.
Pool rooms, Ping-pong rooms, dance halls, bowling alleys	2 m <sup>2</sup>	Floor space of a part used for business purposes.
Pin-ball parlors, Go club houses, mahjong parlors	2 m <sup>2</sup>	Floor space of a part used for business purposes.
Inns, hotels, and motels	10 m <sup>2</sup>	Floor space of a part used for business purposes.
Massage parlors	5 m <sup>2</sup>	Floor space of a part used for business purposes.
Meeting places, public halls	0.5 – 1 m <sup>2</sup>	Persons accommodated simultaneously with the number of persons calculated per unit.
Offices	5 m <sup>2</sup>	Floor space of an office.

\* : Values set by the Metropolitan Maintenance Bureau in Japan.

#### Note :

1. Table indicates the required ventilating air flow rate calculated as 20 m<sup>3</sup> / h.
2. The area occupied per person by type of business is calculated in reference to Application Standards for building administration in compliance with Building Standards Act in Japan.

#### Based on Room size

$$\text{Required ventilating air flow rate (m}^3/\text{h)} = C \times D \times E$$

C : Number of ventilation required per hour (ventilation / h)

D : Area of room (m<sup>2</sup>)

E : Height of Ceiling (m)

Calculation is based on the experiences of hygienic laboratory, etc. to find out the number of hourly ventilation of the room air.

(Selection example)

Place : Living room of common household

Required ventilation : 6 times / h (See Table 2)

Area of room : Approx. 30 (m<sup>2</sup>)

Height of ceiling : 2.4 m

Required ventilating air flow rate = 6 × 30 × 2.4 = 432 (m<sup>3</sup> / h)

Required ventilating air flow rate and the unit size 500 is almost equal.

So select the close size of the unit.

In this case, select VKM500GMV1.

&lt;Table 2&gt;

Groups	Type of room	Ventilation required	Groups	Type of room	Ventilation required
Common household	Living room	6	Playhouses and movie theaters	Audience room	6
	Bathroom	6		Corridor	6
	Drawing room	6		Smoking room	12
	Toilet	10		Toilet	12
	Kitchen	15		Projector room	20
Dining places	Restaurant	6	Plants	Office room	6
	Sushi restaurant	6		General work room	6
	Banquet hall	10		Telephone room	6
	Tempura restaurant	20		Spinning plant,	10
	Cooking room	20		Printing plant	10
Inns and hotels	Guest room	5		Battery room	10
	Corridor	5		Machinery plant	10
	Dance hall	8		Generator room	15
	Large dining hall	8		Substation room,	15
	Washroom, Toilet	10		Painting shop,	15
	Cooking room	15		Welding plant	15
	Laundry room	15		Chemical plant	15
	Engine room	20		Food plant	20
	Boiler room	20		Wood working plant	20
Hospitals	Consultation office	6		Casting plant	50
	Sick room	6	General buildings	Office room	6
	Office room	6		Waiting room	10
	Corridor	10		Show room, Toilet	10
	Waiting room	10		Conference room	12
	Bathroom	10	Comfort stations		20
	Dining room, Toilet	10	Dark rooms	Dark rooms for photo	16
	Respiratory disease room	10	Guest rooms of ship		6
	Laundry room	15	Room of potential noxious gas or combustible gas		20 or more
	Cooking room	15			
	Surgery room	15			
	Sterilizing room	15			
	Engine room	20			
	Boiler room	20			
Schools	Class room, library	6			
	Auditorium	6			
	Experimental chemistry room	6			
	Gymnasium	8			
	Toilet	12			
	Cooking room	15			

# Part 2

## Indoor Units

<b>FXCQ-M</b>	
<b>Ceiling Mounted Cassette Type</b>	
<b>(Double-Flow) . . . . .</b>	<b>45</b>
<b>FXFQ-M</b>	
<b>Ceiling Mounted Cassette Type</b>	
<b>(Multi-Flow) . . . . .</b>	<b>67</b>
<b>FXKQ-MA</b>	
<b>Ceiling Mounted Cassette</b>	
<b>Corner Type . . . . .</b>	<b>111</b>
<b>FXDQ-P, FXDQ-N(A)</b>	
<b>Slim Ceiling Mounted Duct Type . . . . .</b>	<b>131</b>
<b>FXSQ-M</b>	
<b>Ceiling Mounted Built-In Type . . . . .</b>	<b>171</b>
<b>FXMQ-MA</b>	
<b>Ceiling Mounted Duct Type . . . . .</b>	<b>213</b>
<b>FXHQ-MA</b>	
<b>Ceiling Suspended Type . . . . .</b>	<b>239</b>
<b>FXAQ-MA</b>	
<b>Wall Mounted Type . . . . .</b>	<b>255</b>
<b>FXLQ-MA / FXNQ-MA</b>	
<b>Floor Standing Type /</b>	
<b>Concealed Floor Standing Type . . . . .</b>	<b>279</b>
<b>FXUQ-MA</b>	
<b>Ceiling Suspended Cassette Type</b>	
<b>(Connection Unit Series) . . . . .</b>	<b>301</b>



# **FXCQ-M**

## **Ceiling Mounted Cassette Type**

### **(Double-Flow)**

**2**

1. Features .....	46
2. Specifications .....	48
3. Dimensions .....	50
4. Piping Diagrams .....	54
5. Wiring Diagrams .....	55
6. Electric Characteristics .....	57
7. Capacity Tables .....	58
7.1 Cooling Capacity .....	58
8. Sound Levels .....	59
9. Installation .....	60
10. Accessories .....	63



# 1. Features

= Drastic change of performance, function and design =



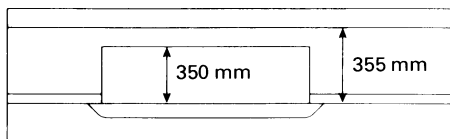
## Line-up

FXCQ20MVE-FXCQ125MVE

### <Features>

#### Compactness

- Lowest height in the industry with whisper quietness



(V0030)

#### Low operation sound

#### Less weight

#### Improvement in installation and design flexibility

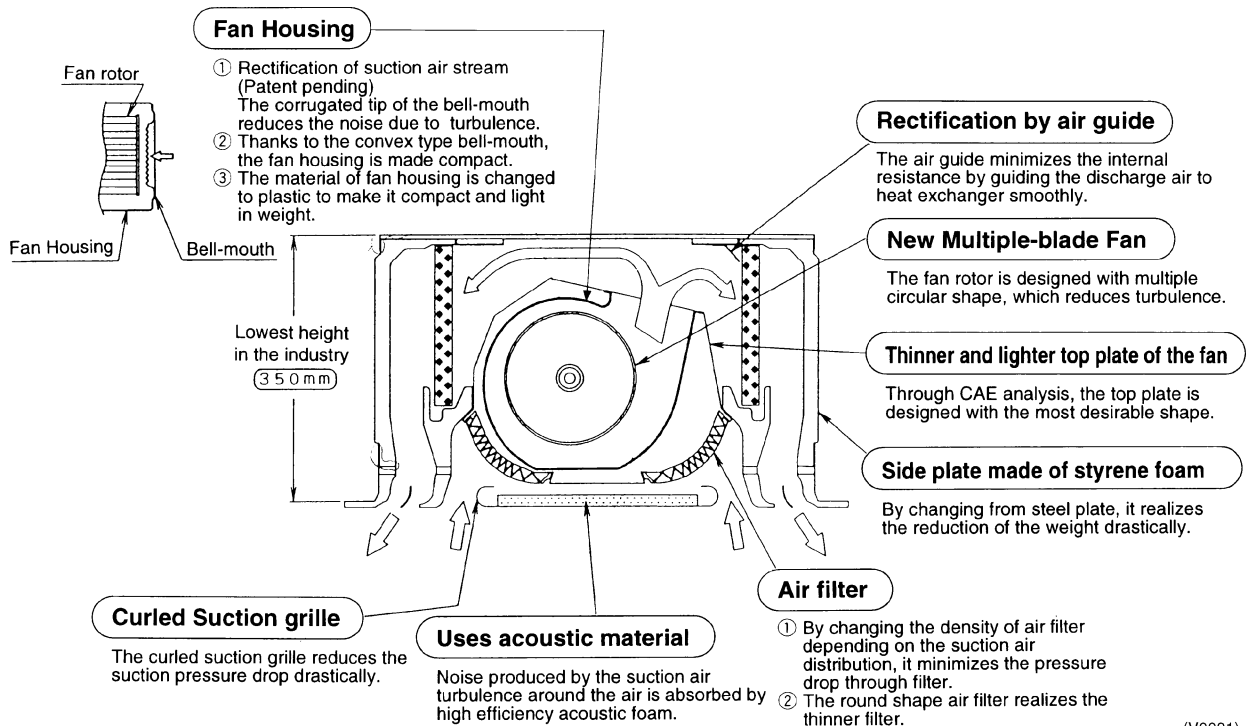
- Reduction of weight of both main unit and panel
- Standardized sectional module
- Matching the center of main unit and panel

#### Less maintenance

- Flat type suction grille of easy cleaning
- Detachable blade
- To minimize the soiling of the ceiling

### <Details>

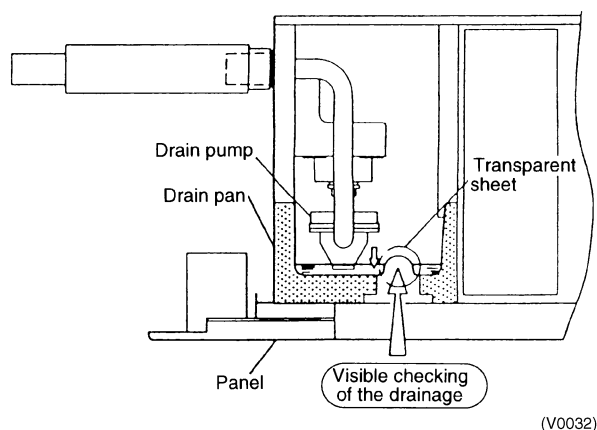
#### (1) Main technical improvement for compactness



## (2) Improvements for facilitating the installation and maintenance

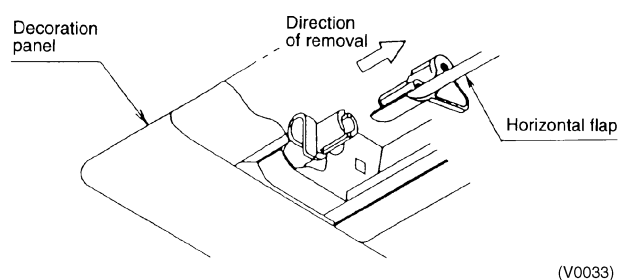
### Facilitating the installation

- **Lighter in weight**  
(Main unit and panel)
- **Center of the ceiling opening and the unit.**  
The same position
- **Checking the drainage flow**  
The cover of inspection hatch is detachable with one touch.
- **Facilitating the checking of drainage**



### Facilitating the maintenance

- **Soiling of the ceiling**  
About 1/5 of the conventional model
- **Cleaning of the suction grille**  
Easy to clean because of flat shape
- **Cleaning of the air discharge flap (Detachability)**  
The flap can be detached with one touch without removing the panel
- **Detachment of air discharge flap**



### ■ 2 different positions of auto-swing for more comfort.

Position of Auto-Swing	Standard Position	Ceiling Soiling Prevention Position
Operation of Auto-Swing	<p>(V0034)</p> <p>Flaps swing within the range of 0°~60°</p>	
5 Steps of Direction	<p>(V1226)</p> <p>5 steps within the range of 0°~60°</p>	<p>(V0036)</p> <p>5 steps within the range of 45°~60°</p>
Prevention of Draft	<p>(V0037)</p> <p>Prevents cold draft (heating operation)</p>	—
Auto-set Air Direction	<p>(V0038)</p> <p>The position of flaps is automatically set at the position of previous operation. (Initial position is 30° for cooling, and 60° for heating.)</p>	

## 2. Specifications

### Ceiling Mounted Cassette Type (Double-Flow)

Model			FXCQ20MVE	FXCQ25MVE	FXCQ32MVE	FXCQ40MVE
*1 Cooling Capacity (19.5°CWB)		kcal/h	2,000	2,500	3,200	4,000
		Btu/h	7,800	9,900	12,600	16,000
		kW	2.3	2.9	3.7	4.7
*2 Cooling Capacity (19.0°CWB)		kW	2.2	2.8	3.6	4.5
Casing			Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
Dimensions: (H×W×D)			mm	305×775×600	305×775×600	305×990×600
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	2×10×1.5	2×10×1.5	2×10×1.5	2×10×1.5
	Face Area	m <sup>2</sup>	2×0.100	2×0.100	2×0.100	2×0.145
Fan	Model		D17K2AA1	D17K2AB1	D17K2AB1	2D17K1AA1
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	10×1	15×1	15×1	20×1
	Air Flow Rate (H/L)	m <sup>3</sup> /min	7/5	9/6.5	9/6.5	12/9
		cfm	247/177	318/230	318/230	424/318
	Drive		Direct Drive	Direct Drive	Direct Drive	Direct Drive
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material			Glass Wool/Urethane Foam	Glass Wool/Urethane Foam	Glass Wool/Urethane Foam	Glass Wool/Urethane Foam
Piping Connections	Liquid Pipes	mm	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)
	Gas Pipes	mm	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)
	Drain Pipe	mm	VP25 ( External Dia. 32 Internal Dia. 25 )	VP25 ( External Dia. 32 Internal Dia. 25 )	VP25 ( External Dia. 32 Internal Dia. 25 )	VP25 ( External Dia. 32 Internal Dia. 25 )
Machine Weight (Mass)			kg	26	26	31
*4 Sound Level (H/L) (220V)			dBA	32/27	34/28	34/29
Safety Devices			Fuse. Thermal Protector for Fan Motor.	Fuse. Thermal Protector for Fan Motor.	Fuse. Thermal Protector for Fan Motor.	Fuse. Thermal Protector for Fan Motor.
Refrigerant Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Connectable Outdoor Unit			R-410A P Series	R-410A P Series	R-410A P Series	R-410A P Series
Decoration Panels (Option)	Model		BYBC32G-W1	BYBC32G-W1	BYBC32G-W1	BYBC50G-W1
	Panel Color		White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)
	Dimensions: (H×W×D)	mm	53×1,030×680	53×1,030×680	53×1,030×680	53×1,245×680
	Air Filter		Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)
	Weight	kg	8	8	8	8.5
Standard Accessories			Operation Manual. Installation Manual. Paper Pattern for Installation. Washer for Hanging Brackets. Clamp Metal. Drain Hose. Insulation for Fitting. Washer Fixing Plates. Sealing Pads. Clamps. Screws. Washers.	Operation Manual. Installation Manual. Paper Pattern for Installation. Washer for Hanging Brackets. Clamp Metal. Drain Hose. Insulation for Fitting. Washer Fixing Plates. Sealing Pads. Clamps. Screws. Washers.	Operation Manual. Installation Manual. Paper Pattern for Installation. Washer for Hanging Brackets. Clamp Metal. Drain Hose. Insulation for Fitting. Washer Fixing Plates. Sealing Pads. Clamps. Screws. Washers.	Operation Manual. Installation Manual. Paper Pattern for Installation. Washer for Hanging Brackets. Clamp Metal. Drain Hose. Insulation for Fitting. Washer Fixing Plates. Sealing Pads. Clamps. Screws. Washers.
Drawing No.			C : 3D039413			

#### Note:

- \*1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.  
 \*2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.  
 \*3 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.  
 \*4 Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit center. During actual operation, these values are normally somewhat higher as a result of ambient conditions.  
 5 Refer to page 57 for Fan Motor Input.

#### Conversion Formulae

$$\begin{aligned} \text{kcal/h} &= \text{kW} \times 860 \\ \text{Btu/h} &= \text{kW} \times 3412 \\ \text{cfm} &= \text{m}^3/\text{min} \times 35.3 \end{aligned}$$

## Ceiling Mounted Cassette Type (Double-Flow)

Model			FXCQ50MVE	FXCQ63MVE	FXCQ80MVE	FXCQ125MVE
*1 Cooling Capacity (19.5°CWB)		kcal/h	5,000	6,300	8,000	12,500
		Btu/h	19,800	24,900	31,700	49,500
		kW	5.8	7.3	9.3	14.5
*2 Cooling Capacity (19.0°CWB)		kW	5.6	7.1	9.0	14.0
Casing			Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
Dimensions: (H×W×D)			mm	305×990×600	305×1,175×600	305×1,665×600
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	2×10×1.5	2×10×1.5	2×10×1.5	2×10×1.5
	Face Area	m <sup>2</sup>	2×0.145	2×0.184	2×0.287	2×0.287
Fan	Model		2D17K1AA1	2D17K2AA1VE	3D17K2AA1	3D17K2AB1
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	20×1	30×1	50×1	85×1
	Air Flow Rate (H/L)	m <sup>3</sup> /min	12/9	16.5/13	26/21	33/25
		cfm	424/318	582/459	918/741	1,165/883
	Drive		Direct Drive	Direct Drive	Direct Drive	Direct Drive
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material			Glass Wool/Urethane Foam	Glass Wool/Urethane Foam	Glass Wool/Urethane Foam	Glass Wool/Urethane Foam
Piping Connections	Liquid Pipes	mm	φ6.4 (Flare Connection)	φ9.5 (Flare Connection)	φ9.5 (Flare Connection)	φ9.5 (Flare Connection)
	Gas Pipes	mm	φ12.7 (Flare Connection)	φ15.9 (Flare Connection)	φ15.9 (Flare Connection)	φ15.9 (Flare Connection)
	Drain Pipe	mm	VP25 ( External Dia. 32 Internal Dia. 25 )	VP25 ( External Dia. 32 Internal Dia. 25 )	VP25 ( External Dia. 32 Internal Dia. 25 )	VP25 ( External Dia. 32 Internal Dia. 25 )
Machine Weight (Mass)			kg	32	47	48
*4 Sound Level (H/L) (220V)			dBA	34/29	37/32	39/34
Safety Devices			Fuse. Thermal Protector for Fan Motor.	Fuse. Thermal Protector for Fan Motor.	Fuse. Thermal Protector for Fan Motor.	Fuse. Thermal Protector for Fan Motor.
Refrigerant Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Connectable Outdoor Unit			R-410A P Series	R-410A P Series	R-410A P Series	R-410A P Series
Decoration Panels (Option)	Model		BYBC50G-W1	BYBC63G-W1	BYBC125G-W1	BYBC125G-W1
	Panel Color		White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)
	Dimensions: (H×W×D)	mm	53×1,245×680	53×1,430×680	53×1,920×680	53×1,920×680
	Air Filter		Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)
	Weight	kg	8.5	9.5	12	12
Standard Accessories			Operation Manual. Installation Manual. Paper Pattern for Installation. Washer for Hanging Brackets. Clamp Metal. Drain Hose. Insulation for Fitting. Washer Fixing Plates. Sealing Pads. Clamps. Screws. Washers.	Operation Manual. Installation Manual. Paper Pattern for Installation. Washer for Hanging Brackets. Clamp Metal. Drain Hose. Insulation for Fitting. Washer Fixing Plates. Sealing Pads. Clamps. Screws. Washers.	Operation Manual. Installation Manual. Paper Pattern for Installation. Washer for Hanging Brackets. Clamp Metal. Drain Hose. Insulation for Fitting. Washer Fixing Plates. Sealing Pads. Clamps. Screws. Washers.	Operation Manual. Installation Manual. Paper Pattern for Installation. Washer for Hanging Brackets. Clamp Metal. Drain Hose. Insulation for Fitting. Washer Fixing Plates. Sealing Pads. Clamps. Screws. Washers.
Drawing No.			C : 3D039413			

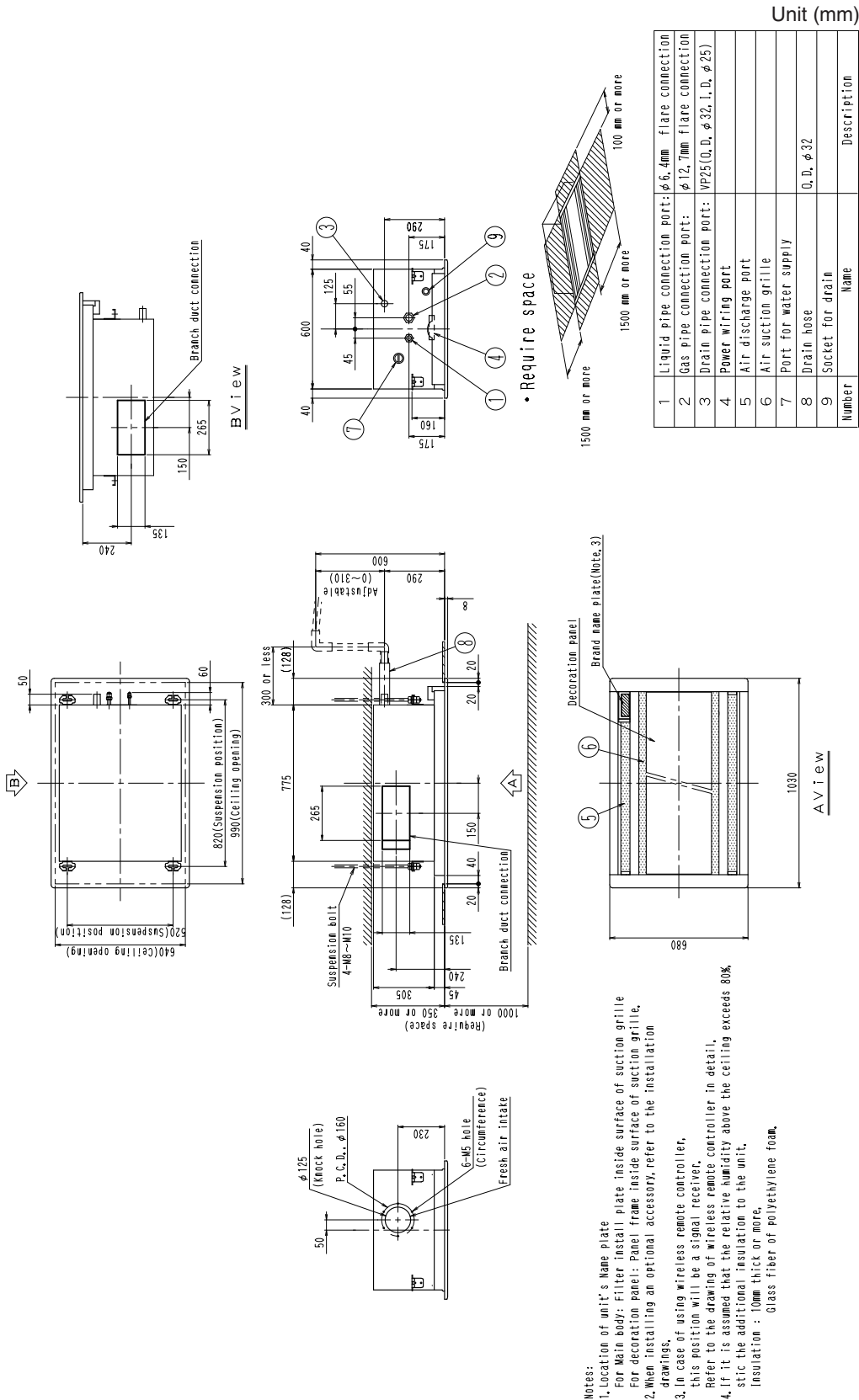
## Note:

- \*1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.  
 \*2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.  
 \*3 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.  
 \*4 Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit center. During actual operation, these values are normally somewhat higher as a result of ambient conditions.  
 5 Refer to page 57 for Fan Motor Input.

Conversion Formulae	
kcal/h=	kW×860
Btu/h=	kW×3412
cfm=	m <sup>3</sup> /min×35.3

3. Dimensions

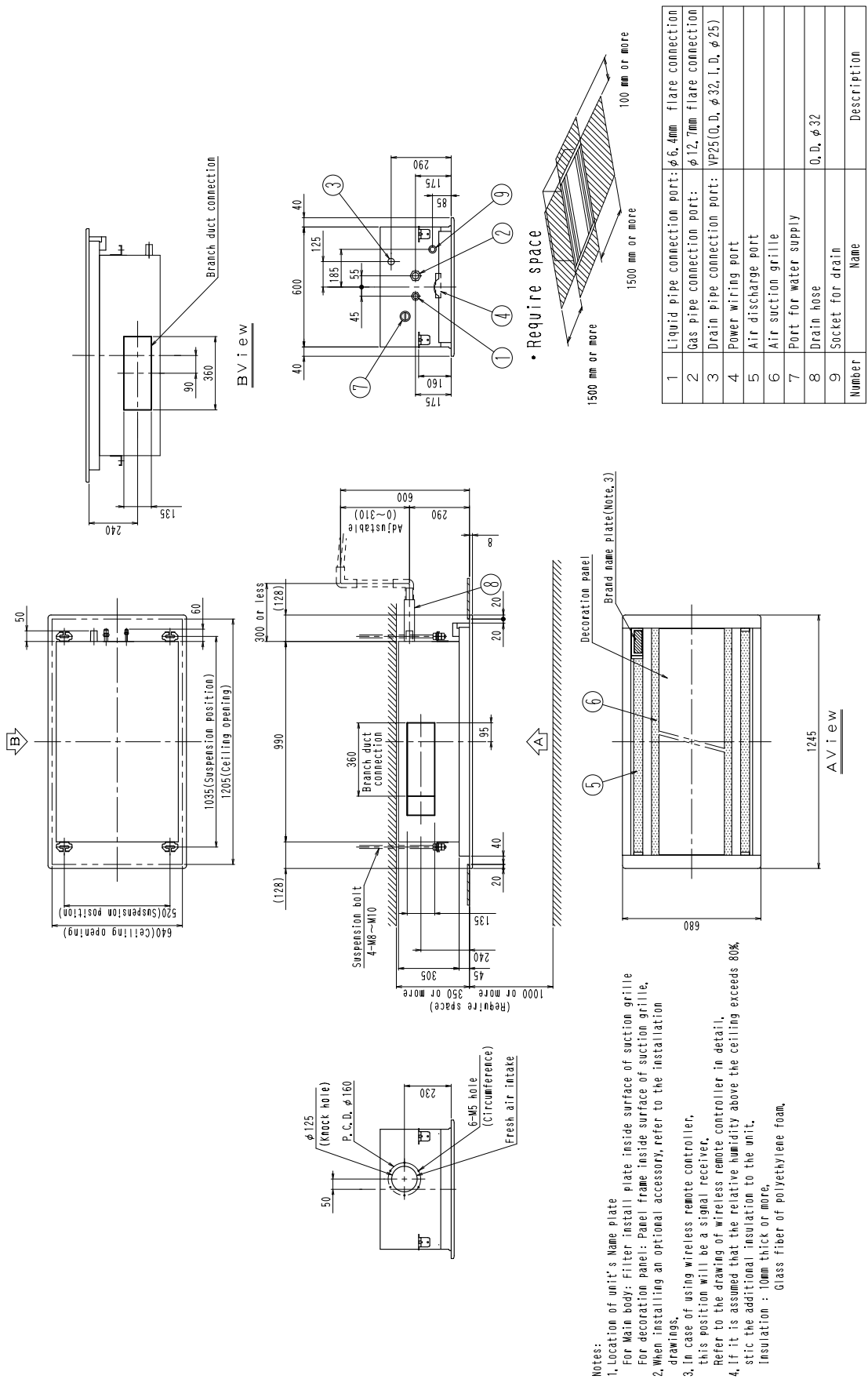
FXCQ20M + BYBC32G-W1 (Decoration Panel)  
FXCQ25M + BYBC32G-W1 (Decoration Panel)  
FXCQ32M + BYBC32G-W1 (Decoration Panel)



FXCQ40M + BYBC50G-W1 (Decoration Panel)  
FXCQ50M + BYBC50G-W1 (Decoration Panel)

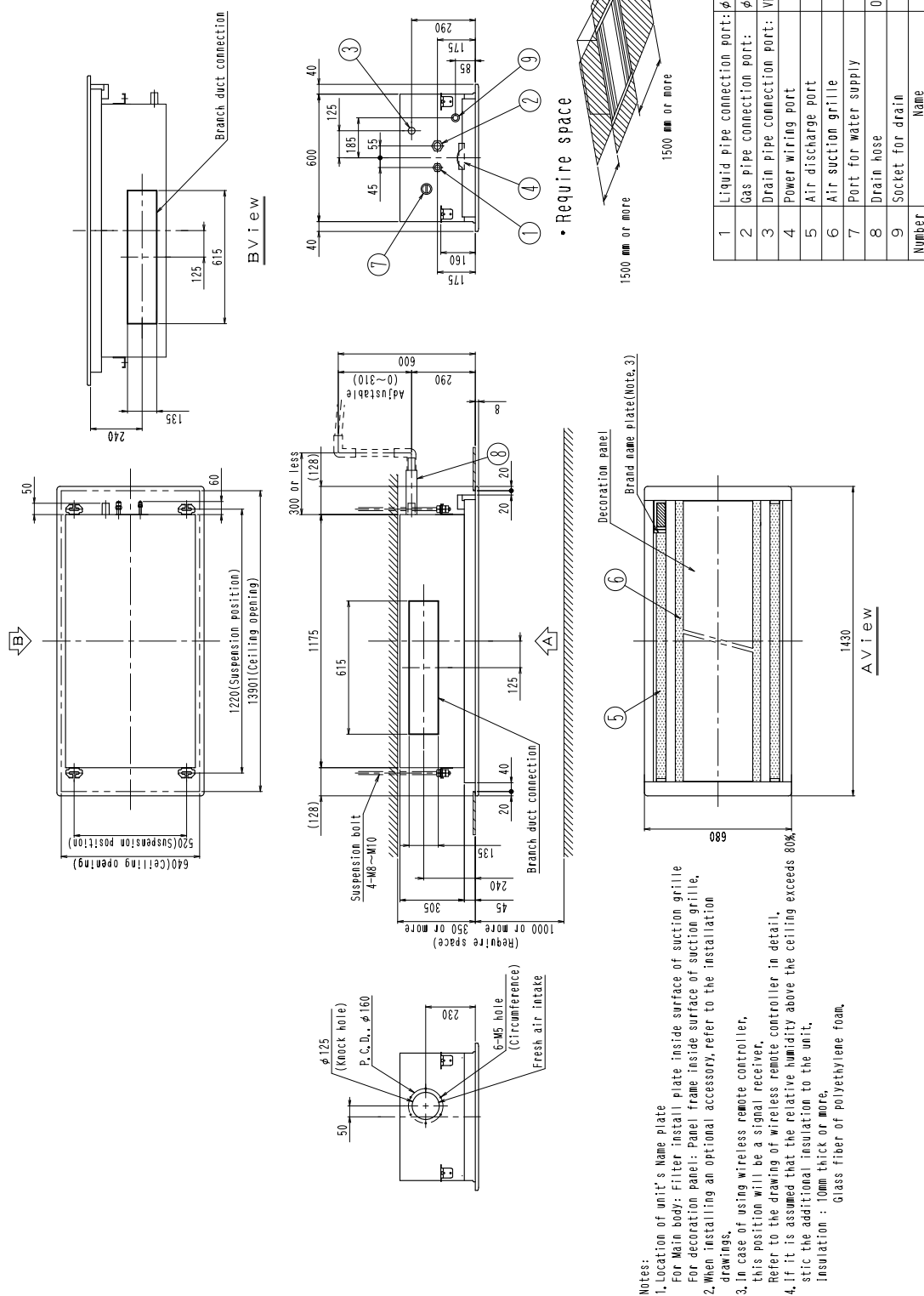
2

Unit (mm)



### FXCQ63M + BYBC63G-W1 (Decoration Panel)

Unit (mm)

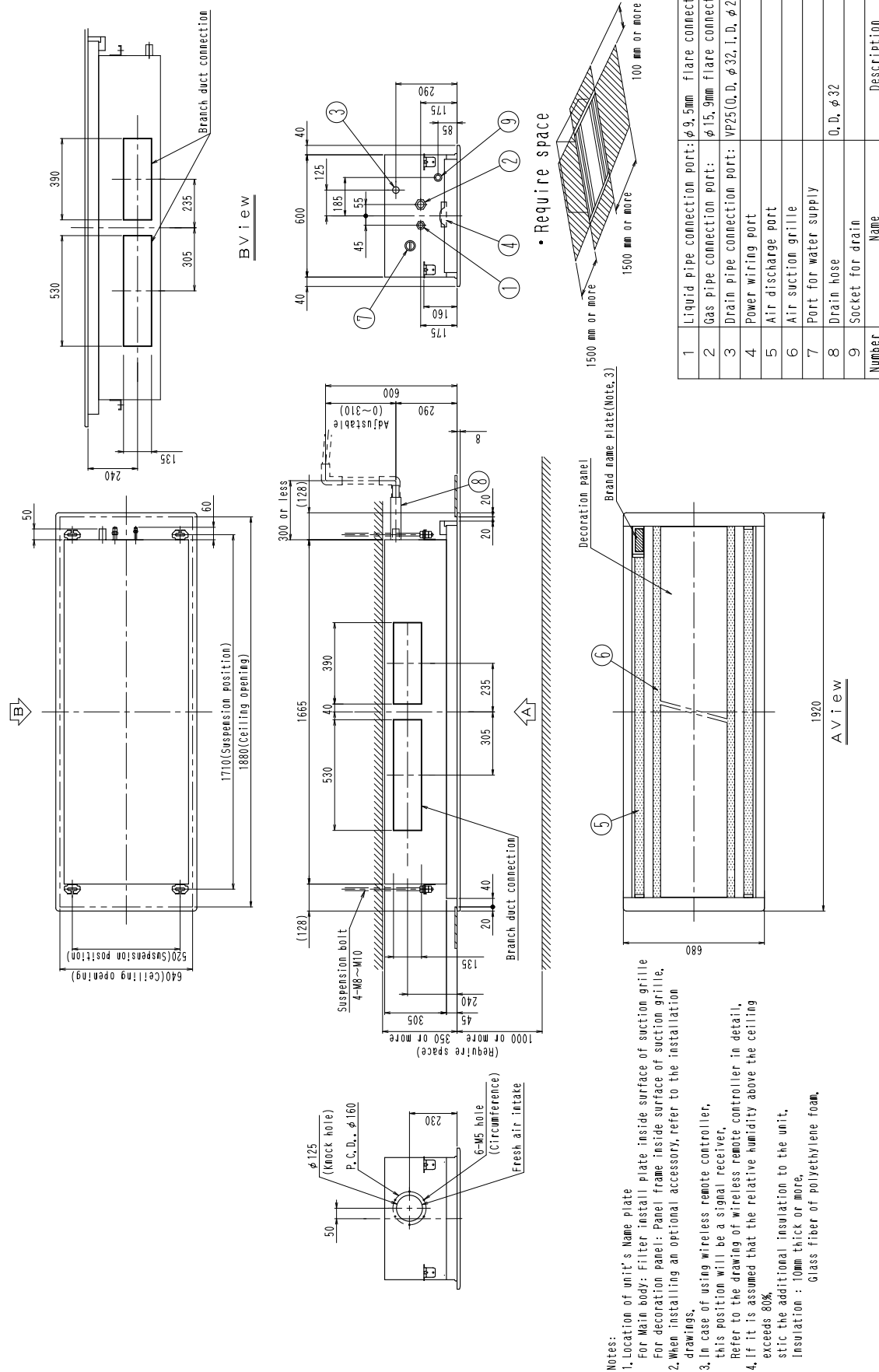


3D039407A

**FXCQ80M + BYBC125G-W1 (Decoration Panel)**  
**FXCQ125M + BYBC125G-W1 (Decoration Panel)**

2

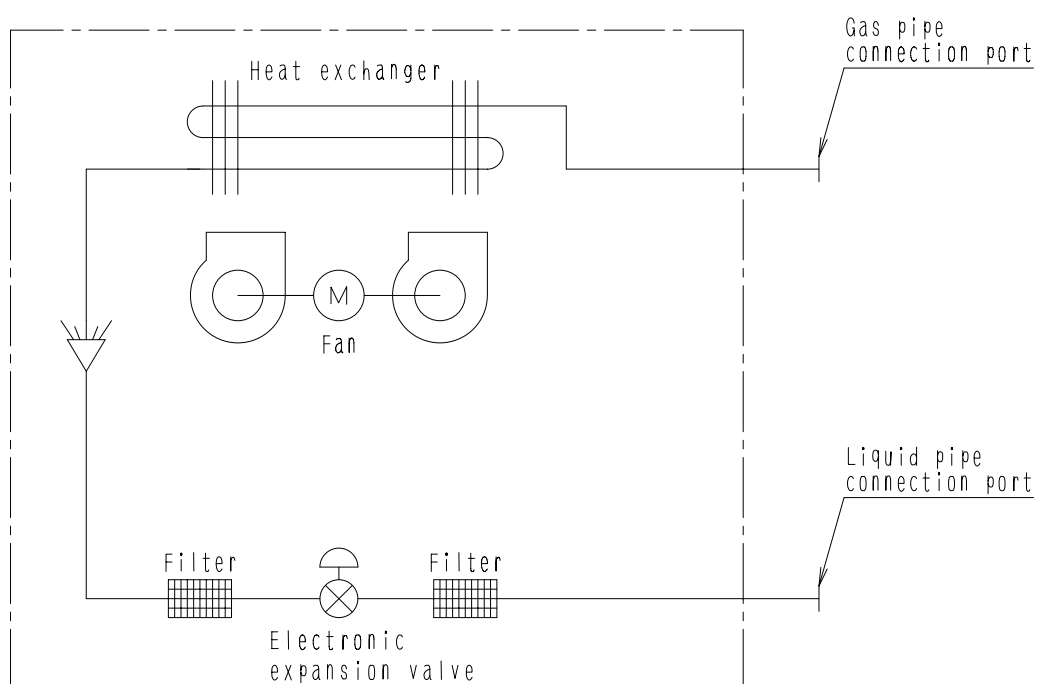
Unit (mm)



3D039409A



## 4. Piping Diagrams



4D034245

### ■ Refrigerant pipe connection port diameters

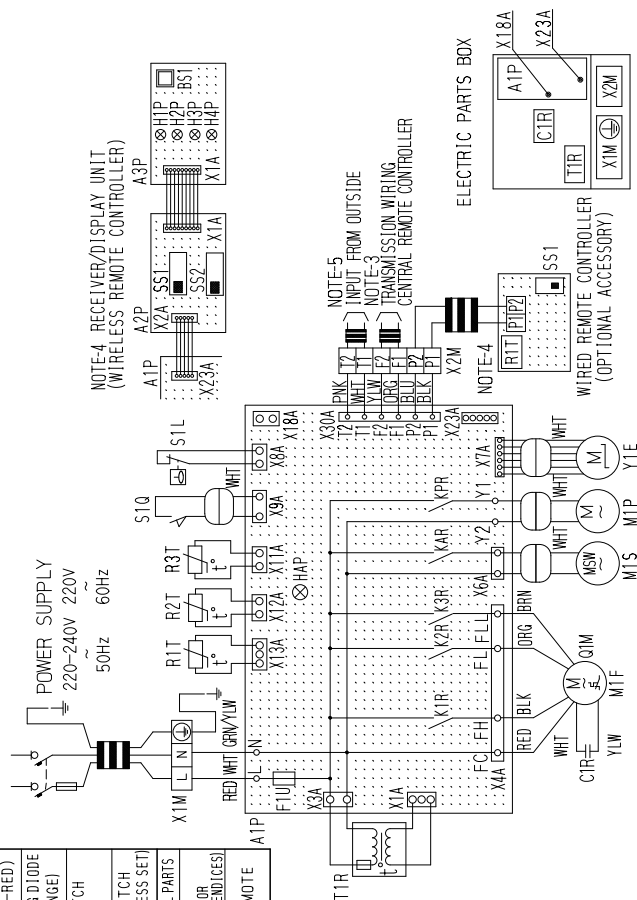
Model	(mm)	
	Gas	Liquid
FXCQ20 · 25 · 32 · 40 · 50M	φ12.7	φ6.4
FXCQ63 · 80 · 125M	φ15.9	φ9.5





## 5. Wiring Diagrams

**FXCQ20 · 25 · 32 · 63MVE**

2

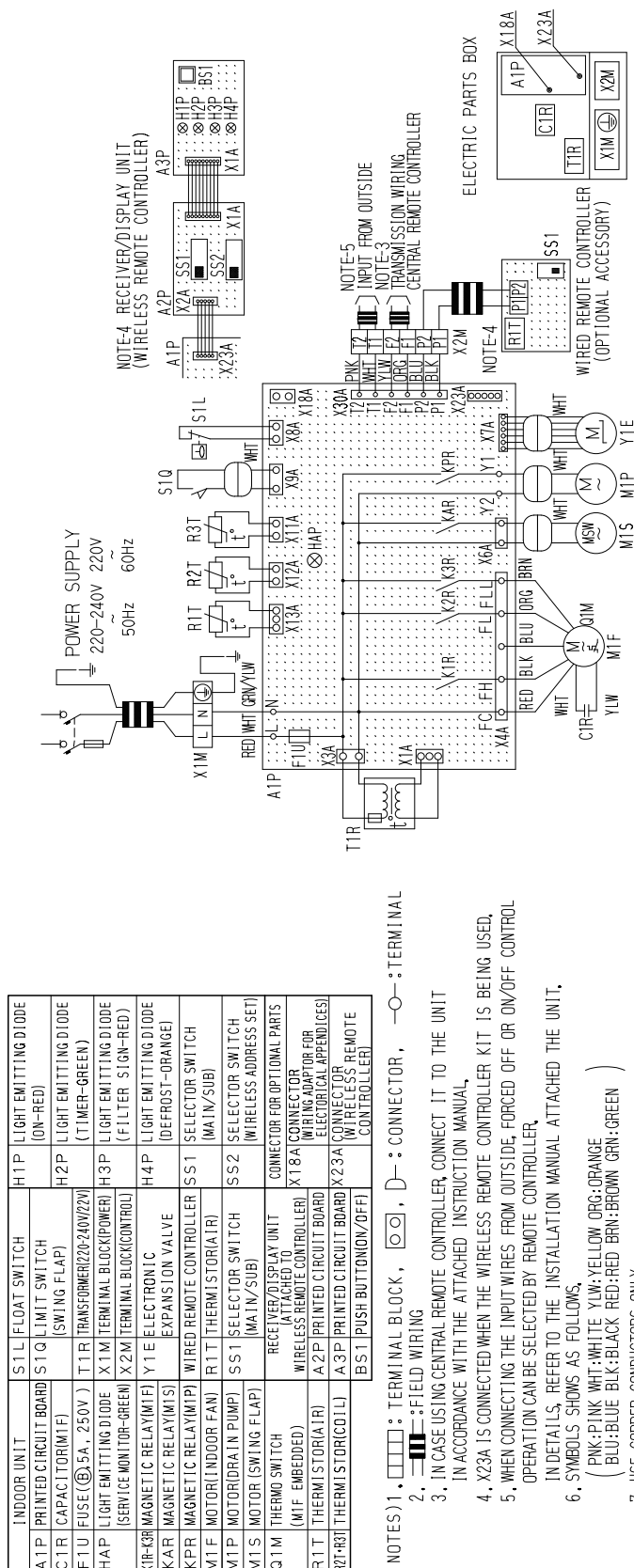
INDOOR UNIT		Q1M	TERMO SWITCH (W/F EMBEDDED)	WIRED REMOTE CONTROLLER	H3P	LIGHT EMITTING DIODE (FILTER SIGN-RED)
K1A1P	PRINTED CIRCUIT BOARD			R1T1 THERMISTOR(A1R)		
K1C1R	CAPACITOR(M/F)	R1T1	THERMISTOR(A1R)	S51 SELECTOR SWITCH (MAIN/SUB)	H4P	LIGHT EMITTING DIODE (DEFROST-ORANGE)
K1F1P	FUSE (⑤ 5A, 250V)	R2T4-R3T7	THERMISTOR(CO1L1)			
K1H1P	LIGHT EMITTING DIODE (SERVICE MONITOR-GREEN)	S1L1	FLOAT SWITCH	RECEIVER/DISPLAY UNIT (ATTACHED TO WIRED REMOTE CONTROLLER)	SS1	SELECTOR SWITCH (MAIN/SUB)
K1R1R	MAGNETIC RELAY(M/S)	S1Q	LIMIT SWITCH (SWING FLAP)			
K2A1R	MAGNETIC RELAY(M/S)	T1R	TRANSFORMER(220V/220V)	A3P PRINTED CIRCUIT BOARD	SS2	SELECTOR SWITCH (WIRELESS ADDRESS SET)
K2P1R	MAGNETIC RELAY(M/P)	X1M	TERMINAL BLOCK(POWER)	B51 PUSH BUTTON(ON/OFF)		CONNECTOR FOR OPTIONAL PARTS
M1T1F	MOTOR(INDOOR FAN)	X2M	TERMINAL BLOCK(CONTROL)	H1P LIGHT EMITTING DIODE (ON-RED)	X1T18A	CONNECTOR FOR WIRING ADaptor FOR ELECTRICAL APPENDICES)
M1P1P	MOTOR(ORA IN PUMP)	Y1E	ELECTRONIC		X23A	CONNECTOR (WIRELESS REMOTE CONTROL) (F)
M1S1S	MOTOR (SWING FLAP)		EXPANSION VALVE	H2P LIGHT EMITTING DIODE (TIMER-GREEN)		



- NOTES) 1.  : TERMINAL BLOCK,  : CONNECTOR,  : TERMINAL
2.  : FIELD WIRING
3. IN CASE USING CENTRAL REMOTE CONTROLLER, CONNECT IT TO THE UNIT IN ACCORDANCE WITH THE ATTACHED INSTRUCTION MANUAL.
4. X23A IS CONNECTED WHEN THE WIRELESS REMOTE CONTROLLER KIT IS BEING USED.
5. WHEN CONNECTING THE INPUT WIRES FROM OUTSIDE, FORCED OFF OR ON/OFF CONTROL OPERATION CAN BE SELECTED BY REMOTE CONTROLLER.
6. SYMBOLS SHOWS AS FOLLOWS,  
 ( PINK:PINK WHT:WHITE YLW:YELLOW ORG:ORANGE  
 BLU:BLUE BLK:BLACK RED:RED BRN:BROWN GRN:GREEN )
7. USE COPPER CONDUCTORS ONLY.

3D039556A

**FXCQ40 · 50 · 80 · 125MVE**



3D039557A

## 6. Electric Characteristics

2

Units					Power supply		IFM		Input (W)	
Model	Type	Hz	Volts	Voltage range	MCA	MFA	KW	FLA	Cooling	Heating
FXCQ20M	VE	50	220-240	MAX. 264 Min. 198	0.5	15	0.010	0.4	77	44
FXCQ25・32M					0.5	15	0.015	0.4	92	59
FXCQ40・50M					0.8	15	0.020	0.6	130	97
FXCQ63M					0.9	15	0.030	0.7	161	126
FXCQ80M					1.1	15	0.050	0.9	209	176
FXCQ125M					1.3	15	0.085	1.0	256	223

### Symbols :

MCA : Min. Circuit Amps (A)  
 MFA : Max. Fuse Amps (See note 5)  
 KW : Fan Motor Rated Output (KW)  
 FLA : Full Load Amps (A)  
 IFM : Indoor Fan Motor

### Note :

- Voltage range  
Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.
- Maximum allowable voltage unbalance between phases is 2%.
- MCA/MFA  

$$MCA = 1.25 \times FLA$$

$$MFA \leq 4 \times FLA$$
 (Next lower standard fuse rating. Min. 15A)
- Select wire size based on the MCA.
- Instead of fuse, use Circuit Breaker.

C : 4D034243A

# 7. Capacity Tables

## 7.1 Cooling Capacity

FXCQ-M

[50Hz]

Unit Size	Outdoor air temp. °CDB	Indoor air temp.						Cooling capacity					
		14.0°CWB		16.0°CWB		18.0°CWB		20.0°CWB		22.0°CWB		24.0°CWB	
		TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
50	100	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	120	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	140	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	160	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	180	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	200	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	210	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	230	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	250	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	270	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	290	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	310	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
63	100	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	120	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	140	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	160	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	180	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	200	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	210	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	230	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	250	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	270	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	290	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	310	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
80	100	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	120	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	140	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	160	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	180	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	200	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	210	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	230	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	250	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	270	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	290	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	310	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
125	100	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	120	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	140	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	160	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	180	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	200	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	210	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	230	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	250	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	270	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	290	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1
	310	3.8	3.1	4.5	3.4	5.2	3.8	5.6	3.9	6.0	4.0	6.7	4.1

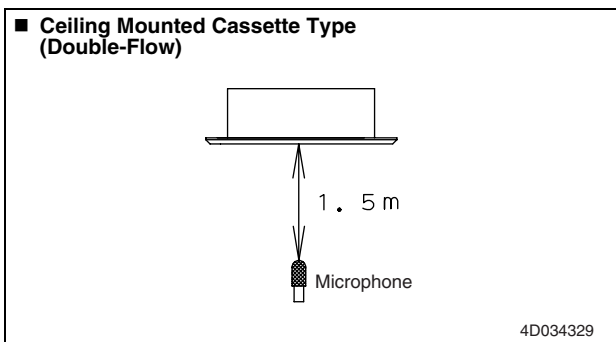
Total capacity : kW  
Sensible capacity : kW

Refer to Outdoor Unit Capacity Tables : on page 411~ 470~, for the actual performance data of each indoor and outdoor unit combination.

## 8. Sound Levels

2

### Overall



#### Note:

1. The operating conditions are assumed to be standard (JIS conditions).
2. These operating values were obtained in a dead room (conversion values).  
Sound level will vary depending on a range of factors such as the construction (acoustic absorption coefficient) of the particular room in which the equipments installed.

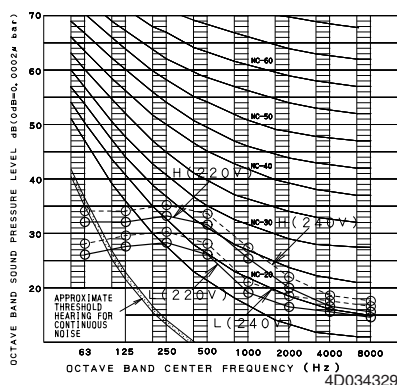
dBA

Model	220V, 50Hz		240V, 50Hz	
	H	L	H	L
FXCQ20M	32	27	34	29
FXCQ25M FXCQ32M	34	28	36	30
FXCQ40M FXCQ50M	34	29	37	32
FXCQ63M	37	32	39	34
FXCQ80M	39	34	41	36
FXCQ125M	44	38	46	40

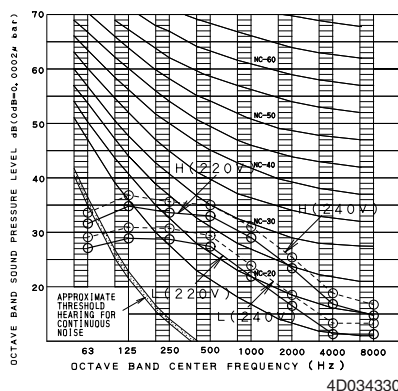
### Octave Band Level

- — ○ 220V 50Hz  
○ - - - ○ 240V 50Hz

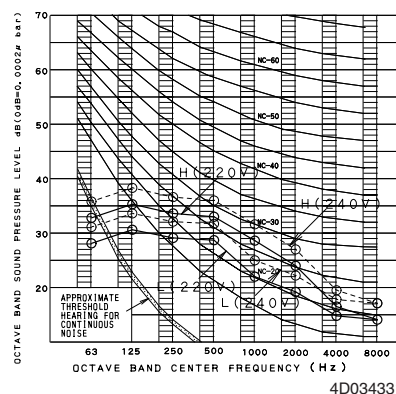
FXCQ20MVE



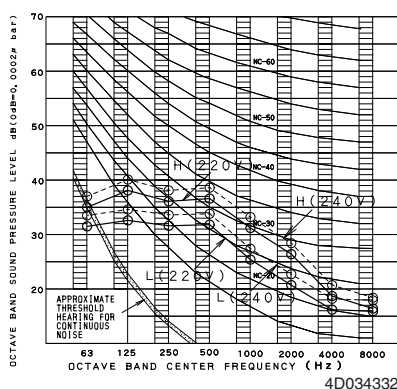
FXCQ25 · 32MVE



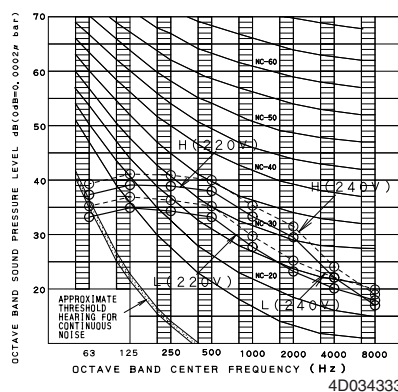
FXCQ40 · 50MVE



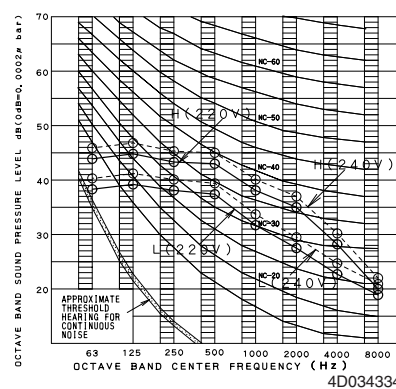
FXCQ63MVE



FXCQ80MVE

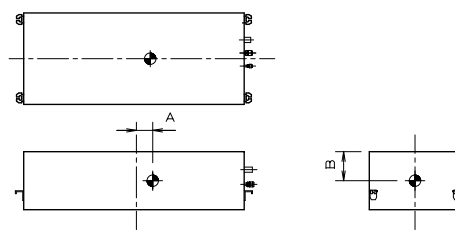


FXCQ125MVE



## 9. Installation

### Center of Gravity

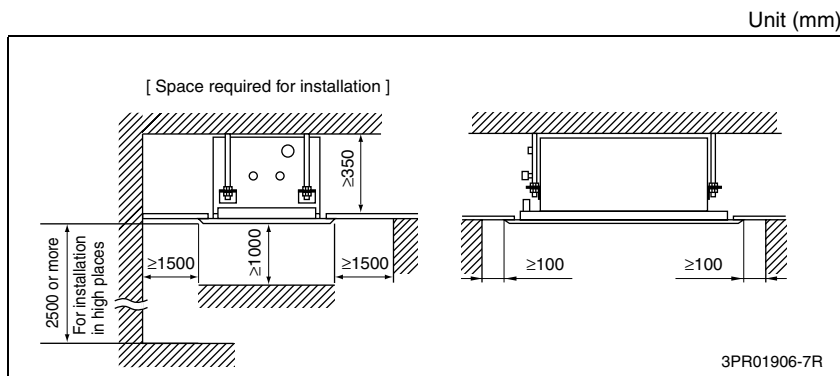


Unit (mm)

MODEL	A	B
FXCQ20・25・32MVE	20	140
FXCQ40・50MVE	25	
FXCQ63MVE	30	
FXCQ80・125MVE	35	150

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### Service Space

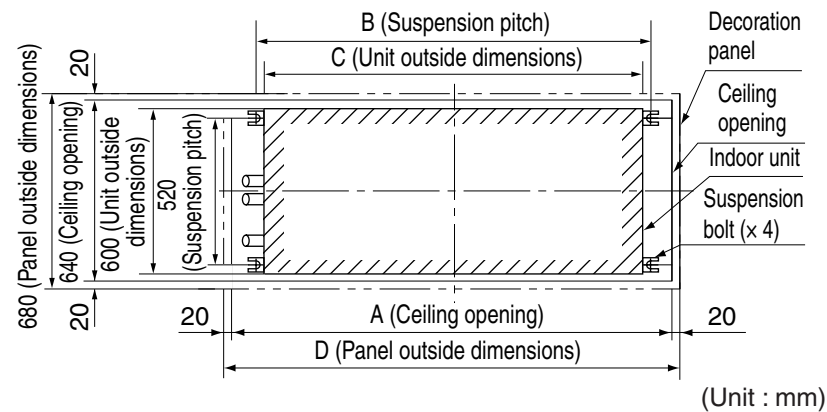


Unit (mm)

**Note:**

Above figure means minimum value. Please keep these value at least.

### Bolt Pitch



(Unit : mm)

Model	A	B	C	D
FXCQ20・25・32MVE	990	820	775	1030
FXCQ40・50MVE	1205	1035	990	1245
FXCQ63MVE	1390	1220	1175	1430
FXCQ80・125MVE	1880	1710	1665	1920

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## Drain Pump Kit

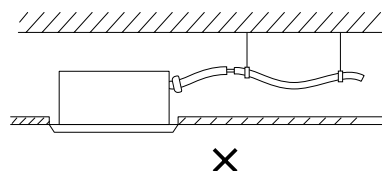
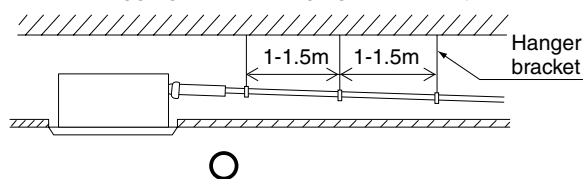
Indoor unit	Drain pump kit
FXCQ-M	Standard (Equipped with indoor unit)

## Drain Piping Work

«Rig the drain pipe as shown below and take measures against condensation. Improperly rigged piping could lead to leaks and eventually wet furniture and belongings.»

### (1) Carry out the drain piping

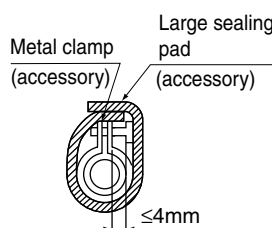
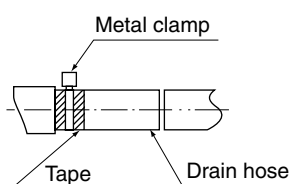
- The diameter of the drain pipe should be greater than or equal to the diameter of the connecting pipe (vinyl tube ; pipe size : 25 mm ; outer dimension : 32 mm).
- Keep the drain pipe short and sloping downwards at a gradient of at least 1 / 100 to prevent air pockets from forming.
- If the drain hose cannot be sufficiently set on a slope, execute the drain raising piping.
- To keep the drain hose from sagging, space hanging wires every 1 to 1.5 m.



### CAUTION

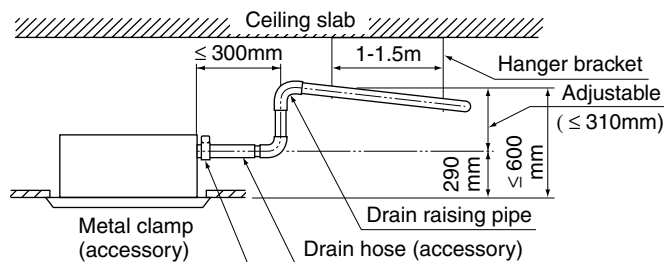
Setting the unit at an angle opposite to the drain piping might cause leaks.

- Use the drain hose and the metal clamp.  
Insert the drain hose into the drain socket, up to the tape.  
Tighten the clamp until the screw head is less than 4 mm from the hose.
- Wrap the attached sealing pad over the clamp and drain hose to insulate.
- Insulate the drain hose inside the building.

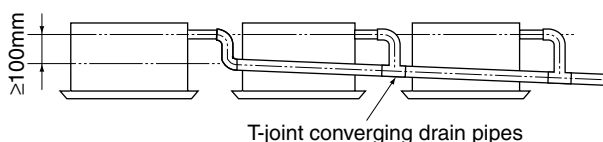


### 〈 PRECAUTIONS FOR DRAIN RAISING PIPING 〉

- Install the drain raising pipes at a height of less than 310 mm.
- Install the drain raising pipes at a right angle to the indoor unit and no more than 300 mm from the unit.



- If converging multiple drain pipes, install according to the procedure shown below.

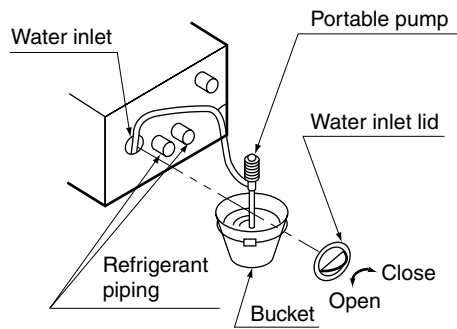


Select converging drain pipes whose gauge is suitable for the operating capacity of the unit.

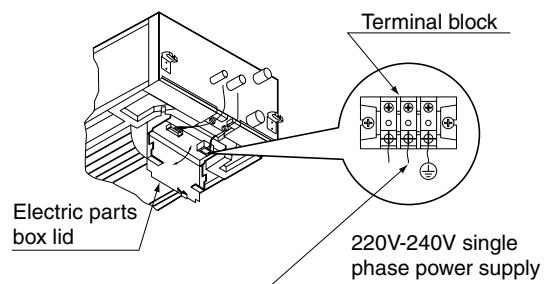







**(2) After piping work is finished, check drainage flows smoothly.**

- Open the water inlet lid, add approximately 2.5 liter of water gradually and check drainage flow.

**[ WHEN ELECTRIC WIRING WORK IS FINISHED ]**

- Check drainage flow during COOL running, explained under “TEST OPERATION.”

**[ WHEN ELECTRIC WIRING WORK IS NOT FINISHED ]**

- Remove the electric parts box lid, connect a power supply and remote controller to the terminals.  
(Refer to the “HOW TO CONNECT WIRINGS”)  
Be sure attach the electric parts box lid before turning on the power.
- Next, press the inspection / test operation button “ ” on the remote controller. The unit will engage the test operation mode. Press the operation mode selector button “ ” until selecting FAN OPERATION “ ”. Then, press the ON / OFF button “ ”. The indoor unit fan and drain pump will start up. Check that the water has drained from the unit. Press “ ” to go back to the first mode.
- **Be careful when doing so because the fan is turning at the same time.**
- Attach the electric parts box lid as before.

**CAUTION**

- Drain piping connections  
Do not connect the drain piping directly to sewage pipes that smell of ammonia. The ammonia in the sewage might enter the indoor unit through the drain pipes and corrode the heat exchanger.
- Keep in mind that it will become the cause of getting drain pipe blocked if water collects on drain pipe.









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## 10. Accessories

2

### Standard Accessories

#### FXCQ20~125M

Name	Metal clamp	Paper pattern for installation	Drain hose	Insulation for fitting	Washer fixing plate	Sealing pad
Quantity	1 pc.	1 pc.	1 pc.	1 each	4 pcs.	1 each
Shape				 for gas pipe  for liquid pipe		 Large  Small

Name	Washer for hanging bracket	Clamp	Screws (M5)	(Other) • Operation manual • Installation manual
Quantity	8 pcs.	8 pcs.	4 pcs.	
Shape			For paper pattern for installation 	

- Screws for fixing panels are attached to decoration panel.

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### Optional Accessories (For Unit)

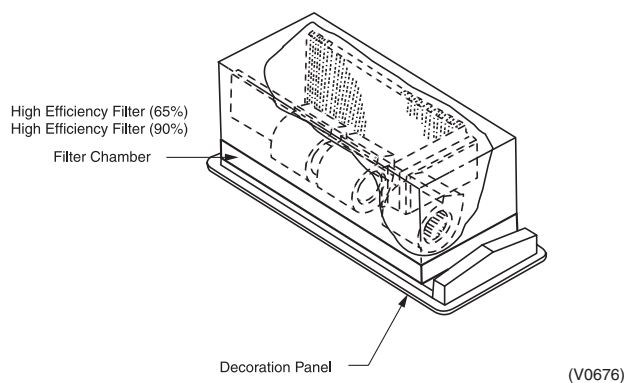
Type		FXCQ20M FXCQ25M FXCQ32M	FXCQ40M	FXCQ50M	FXCQ63M	FXCQ80M	FXCQ125M
Decoration panel		BYBC32G-W1	BYBC50G-W1		BYBC63G-W1	BYBC125G-W1	
Filter related	*1 High efficiency filter 65%	KAFJ532G36	KAFJ532G56		KAFJ532G80	KAFJ532G160	
	*1 High efficiency filter 90%	KAFJ533G36	KAFJ533G56		KAFJ533G80	KAFJ533G160	
	Filter chamber    Bottom suction	KDDFJ53G36	KDDFJ53G56		KDDFJ53G80	KDDFJ53G160	
	Long life replacement filter	KAFJ531G36	KAFJ531G56		KAFJ531G80	KAFJ531G160	

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#### Note:

- \*1. Filter chamber is required if installing high efficiency filter.

### Optional Accessories (For Controls) : Refer to P.561



## Filter Chamber

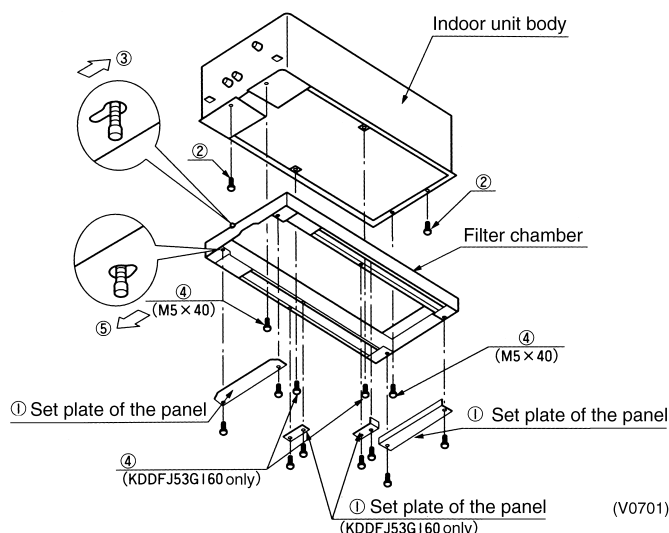
### Specifications

Item	Model	KDDFJ53G36	KDDFJ53G56	KDDFJ53G80	KDDFJ53G160
External Dimensions (mm)	H	50	50	50	50
	W	780	995	1180	1670
	D	600	600	600	600
Applicable Models		20 · 25 · 32 Class	40 · 50 Class	63 Class	80 · 125 Class

### Precaution at use

1. The filter chamber will be needed when the high efficiency filter will be built in. But, it is impossible to build in more than two kinds filter at the same time.

### Installation



## High Efficiency Filter (Filter chamber is required for the high efficiency filter)

### Specifications

Item	Model	KAFJ532G36	KAFJ532G56	KAFJ532G80	KAFJ532G160	KAFJ533G36	KAFJ533G56	KAFJ533G80	KAFJ533G160
External Dimensions (H×W×D)(mm)		(30×460×145) x2	(30×675×145) x2	(30×860×145) x2	(30×660×145) x4	(30×460×145) x2	(30×675×145) x2	(30×860×145) x2	(30×660×145) x4
Dust Collection Efficiency (%)		65% (Colorimetric method)				90% (Colorimetric method)			
Initial Pressure Loss (Pa)		29			39	39			49
Final Pressure Loss (Pa)		78				78			
Filter		Non-woven fabric of synthetic fiber				Non-woven fabric of synthetic fiber			
Life Time (h) *		2500 hours				2500 hours		2100 hours	2000 hours
Applicable Models		20 · 25 · 32 Class	40 · 50 Class	63 Class	80 · 125 Class	20 · 25 · 32 Class	40 · 50 Class	63 Class	80 · 125 Class

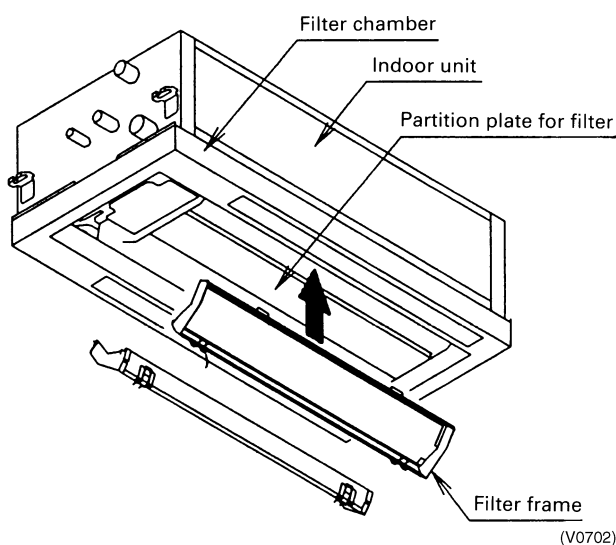
### Note:

1. \* The life time at the dust density 0.15 mg/m<sup>3</sup>.
2. Replace the fan motor's capacitor in accordance with the guide in next page, when the high efficiency filter is used.

## Installation

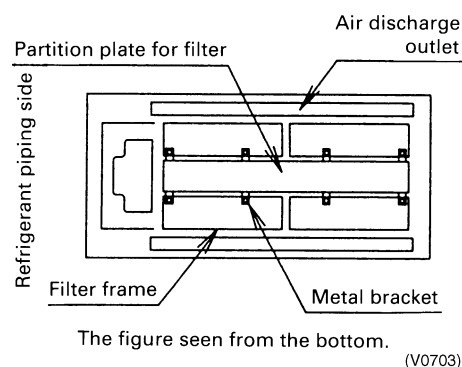
### ■ Installation of the filter frame

Attach the filter frame to the indoor unit, where the original filter was located. (Refer to the operation manual of the indoor unit how to remove the standard filter. The standard filter removed shall not be used.)



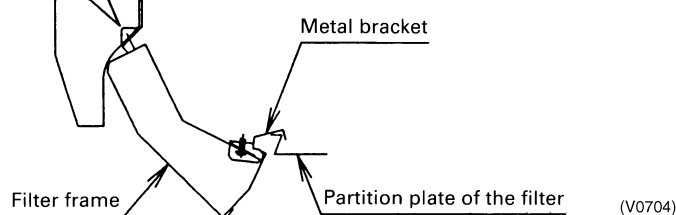
### In case of KAFJ532G160 and KAFJ533G160

There are four filter frames of 2 kinds of each having different position of the metal bracket. Install the filter frames to the indoor unit as shown below.

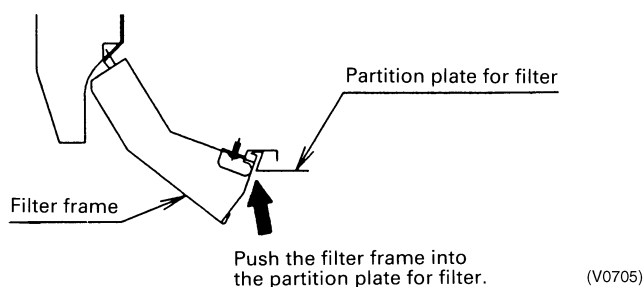


1. Loosen the screw of the metal bracket located on each end of the filter frame and hook the filter frame temporarily to the partition plate located at the center of the indoor unit.

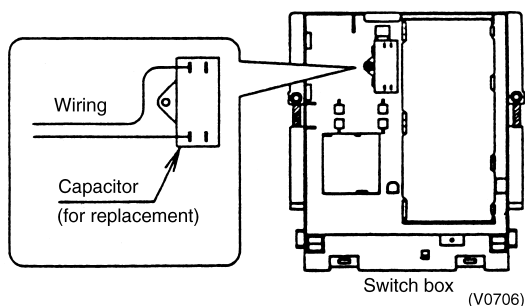
Insert the tip of the filter frame into the setting hole for the standard filter.



2. Fasten the screw of the metal bracket tightly.



## Replacement guide of capacitor for fan motor



### ■ Capacity of a capacitor to be replaced.

Model	Capacitor's Capacity	Applicable Models
KAFJ532 · 533G36	2 $\mu$ F	20 · 25 · 32 Class
KAFJ532 · 533G56	2 $\mu$ F	40 · 50 Class
KAFJ532 · 533G80	2 $\mu$ F	63 Class
KAFJ532 · 533G160	4.5 $\mu$ F	80 Class
	6 $\mu$ F	125 Class



# **FXFQ-M**

## **Ceiling Mounted Cassette Type**

### **(Multi-Flow)**

**3**

1. Features .....	68
2. Specifications .....	69
3. Dimensions .....	71
4. Piping Diagrams .....	74
5. Wiring Diagrams .....	75
6. Electric Characteristics .....	76
7. Capacity Tables .....	77
7.1 Cooling Capacity .....	77
8. Fan Performance and Discharge Pattern in case of using Branch Duct .....	78
9. Sound Levels .....	81
10. Installation .....	83
11. Accessories .....	87

# 1. Features

## External Appearance



**New Super Cassette type is compact, quiet and easy to install.**

- Regardless of their difference in capacity, all indoor units feature the same panel size and design, in consideration of harmonized interior decor.



- The FXFQ25M-80M are thin models (246mm) which can be installed in narrow false ceilings of at least 265mm depth.

- Because of the light weight, suspension is easy.

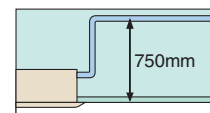
- Low operating sound (220V-240V)(dB(A))

Class	25	32	40	50	63	80	100	125
Operating sound (H/L)	30/27	30/27	31/27	32/27	33(34)★/28	36/31	39/33	42(43)★/36

Note: Operating sound may increase more than that when using with 3-way discharge or 2-way discharge, or when using together with a optional kit.

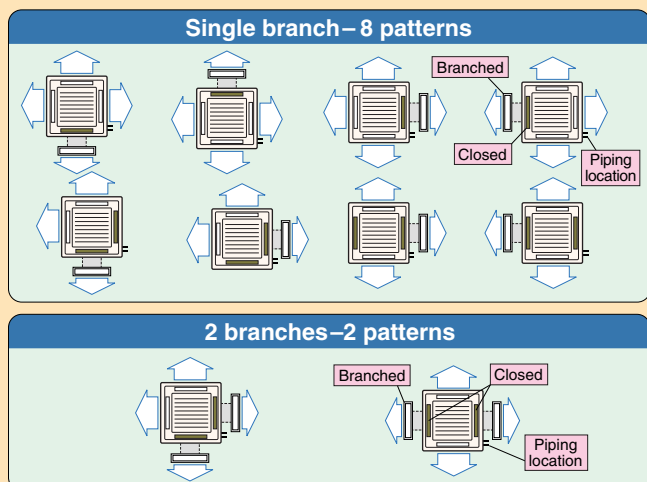
★: The values of Hi mode Sound level represent those during cooling operation. Those during heating operation are shown in brackets for two models only.

- Provided with high lift drain water lift-up mechanism. (Increased lift of drain pipe up to 750mm from the ceiling.)



- Installing the fresh air intake is now easier using the new optional kit which requires no special chambers.
- A new long-life filter (maintenance-free period extended from one year to two) is equipped as standard accessory.

- 7 discharge patterns in 2 to 4 directions can be selected to suit the requirements of installation site or the shape of the room.
- The number of installation method using ducts has increased as shown below.

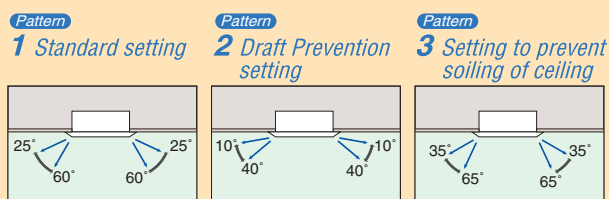


**Can also be installed in high ceilings.**

		Number of discharge outlets used					
		FXFQ25M-80M			FXFQ100M-125M		
Ceiling height	Standard	2.7m	3.0m	3.5m	3.2m	3.6m	4.2m
	High ceiling ①	3.0m	3.3m	3.8m	3.6m	4.0m	4.2m
	High ceiling ②	3.5m	3.5m	—	4.2m	4.2m	—

Note: Set standard 4-way discharge when shipped.  
High ceiling types ① and ② will be set for remote control operation

**There are 3 patterns in auto swing operation**



\* Has been set to standard setting at time of shipment.  
This can be changed using the remote control

## 2. Specifications

### Ceiling Mounted Cassette Type (Multi-Flow)

Model			FXFQ25MVE	FXFQ32MVE	FXFQ40MVE	FXFQ50MVE
※1 Cooling Capacity (19.5°CWB)		kcal/h	2,500	3,200	4,000	5,000
		Btu/h	9,900	12,600	16,000	19,800
		kW	2.9	3.7	4.7	5.8
※2 Cooling Capacity (19.0°CWB)		kW	2.8	3.6	4.5	5.6
Casing			Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
Dimensions: (H×W×D)		mm	246×840×840	246×840×840	246×840×840	246×840×840
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	2×8×1.2	2×8×1.2	2×8×1.2	2×8×1.2
	Face Area	m²	0.363	0.363	0.363	0.363
Fan	Model		QTS46D14M	QTS46D14M	QTS46D14M	QTS46D14M
	Type		Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
	Motor Output × Number of Units	W	30×1	30×1	30×1	30×1
	Air Flow Rate (H/L)	m³/min	13/10	13/10	15/11	16/11
		cfm	459/353	459/353	530/388	565/388
	Drive		Direct Drive	Direct Drive	Direct Drive	Direct Drive
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material			Polyurethane Form	Polyurethane Form	Polyurethane Form	Polyurethane Form
Piping Connections	Liquid Pipes	mm	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)
	Gas Pipes	mm	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)
	Drain Pipe	mm	VP25 （ External Dia. 32 Internal Dia. 25 ）	VP25 （ External Dia. 32 Internal Dia. 25 ）	VP25 （ External Dia. 32 Internal Dia. 25 ）	VP25 （ External Dia. 32 Internal Dia. 25 ）
Machine Weight (Mass)		kg	24	24	24	24
※4 Sound Level (H/L) (220-240V)		dBA	30/27	30/27	31/27	32/27
Safety Devices			Fuse	Fuse	Fuse	Fuse
Refrigerant Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Connectable Outdoor Unit			R-410A P Series	R-410A P Series	R-410A P Series	R-410A P Series
Decoration Panels (Option)	Model		BYCP125D-W1	BYCP125D-W1	BYCP125D-W1	BYCP125D-W1
	Panel Color		White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)
	Dimensions: (H×W×D)	mm	45×950×950	45×950×950	45×950×950	45×950×950
	Air Filter		Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)
	Weight		kg	5.5	5.5	5.5
Standard Accessories			Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Washer Fixing Plate. Sealing Pads. Clamps. Screws. Washer for Hanging Bracket. Insulation for Fitting.	Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Washer Fixing Plate. Sealing Pads. Clamps. Screws. Washer for Hanging Bracket. Insulation for Fitting.	Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Washer Fixing Plate. Sealing Pads. Clamps. Screws. Washer for Hanging Bracket. Insulation for Fitting.	Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Washer Fixing Plate. Sealing Pads. Clamps. Screws. Washer for Hanging Bracket. Insulation for Fitting.
Drawing No.			C : 3D038812			

#### Note:

- \*1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.  
 \*2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.  
 \*3 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.  
 \*4 Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit center. During actual operation, these values are normally somewhat higher as a result of ambient conditions.  
 5 Refer to page 76 for Fan Motor Input.

#### Conversion Formulae

kcal/h=kW×860  
 Btu/h=kW×3412  
 cfm=m<sup>3</sup>/min×35.3



## Ceiling Mounted Cassette Type (Multi-Flow)

Model			FXFQ63MVE	FXFQ80MVE	FXFQ100MVE	FXFQ125MVE
*1 Cooling Capacity (19.5°CWB)		kcal/h	6,300	8,000	10,000	12,500
		Btu/h	24,900	31,700	39,600	49,500
		kW	7.3	9.3	11.6	14.5
*2 Cooling Capacity (19.0°CWB)		kW	7.1	9.0	11.2	14.0
Casing			Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
Dimensions: (H×W×D)			mm	246×840×840	246×840×840	288×840×840
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	2×10×1.2	2×10×1.2	2×12×1.2	2×12×1.2
	Face Area	m <sup>2</sup>	0.454	0.454	0.544	0.544
Fan	Model		QTS46D14M	QTS46D14M	QTS46C17M	QTS46C17M
	Type		Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
	Motor Output × Number of Units	W	30×1	30×1	120×1	120×1
	Air Flow Rate (H/L)	m <sup>3</sup> /min	18.5/14	20/15	26/21	30/24
		cfm	653/494	706/530	918/741	1,059/847
	Drive		Direct Drive	Direct Drive	Direct Drive	Direct Drive
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material			Polyurethane Form	Polyurethane Form	Polyurethane Form	Polyurethane Form
Piping Connections	Liquid Pipes	mm	φ9.5 (Flare Connection)	φ9.5 (Flare Connection)	φ9.5 (Flare Connection)	φ9.5 (Flare Connection)
	Gas Pipes	mm	φ15.9 (Flare Connection)	φ15.9 (Flare Connection)	φ15.9 (Flare Connection)	φ15.9 (Flare Connection)
	Drain Pipe	mm	VP25 ( External Dia. 32 Internal Dia. 25 )	VP25 ( External Dia. 32 Internal Dia. 25 )	VP25 ( External Dia. 32 Internal Dia. 25 )	VP25 ( External Dia. 32 Internal Dia. 25 )
Machine Weight (Mass)			kg	25	29	29
*4 Sound Level (H/L) (220-240V)			dBA	33/28	36/31	39/33
Safety Devices				Fuse	Fuse	Fuse
Refrigerant Control				Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Connectable Outdoor Unit				R-410A P Series	R-410A P Series	R-410A P Series
Decoration Panels (Option)	Model		BYCP125D-W1	BYCP125D-W1	BYCP125D-W1	BYCP125D-W1
	Panel Color		White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)
	Dimensions: (H×W×D)	mm	45×950×950	45×950×950	45×950×950	45×950×950
	Air Filter		Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)
	Weight	kg	5.5	5.5	5.5	5.5
Standard Accessories			Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Washer Fixing Plate. Sealing Pads. Clamps. Screws. Washer for Hanging Bracket. Insulation for Fitting.	Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Washer Fixing Plate. Sealing Pads. Clamps. Screws. Washer for Hanging Bracket. Insulation for Fitting.	Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Washer Fixing Plate. Sealing Pads. Clamps. Screws. Washer for Hanging Bracket. Insulation for Fitting.	Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Washer Fixing Plate. Sealing Pads. Clamps. Screws. Washer for Hanging Bracket. Insulation for Fitting.
Drawing No.			C : 3D038812			

## Note:

- \*1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.  
 \*2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.  
 \*3 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.  
 \*4 Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit center. During actual operation, these values are normally somewhat higher as a result of ambient conditions.  
 5 Refer to page 76 for Fan Motor Input.

## Conversion Formulae

$$\begin{aligned} \text{kcal/h} &= \text{kW} \times 860 \\ \text{Btu/h} &= \text{kW} \times 3412 \\ \text{cfm} &= \text{m}^3/\text{min} \times 35.3 \end{aligned}$$

### 3. Dimensions

FXFQ25M + BYCP125D-W1(Decoration Panel)

FXFQ32M + BYCP125D-W1(Decoration Panel)

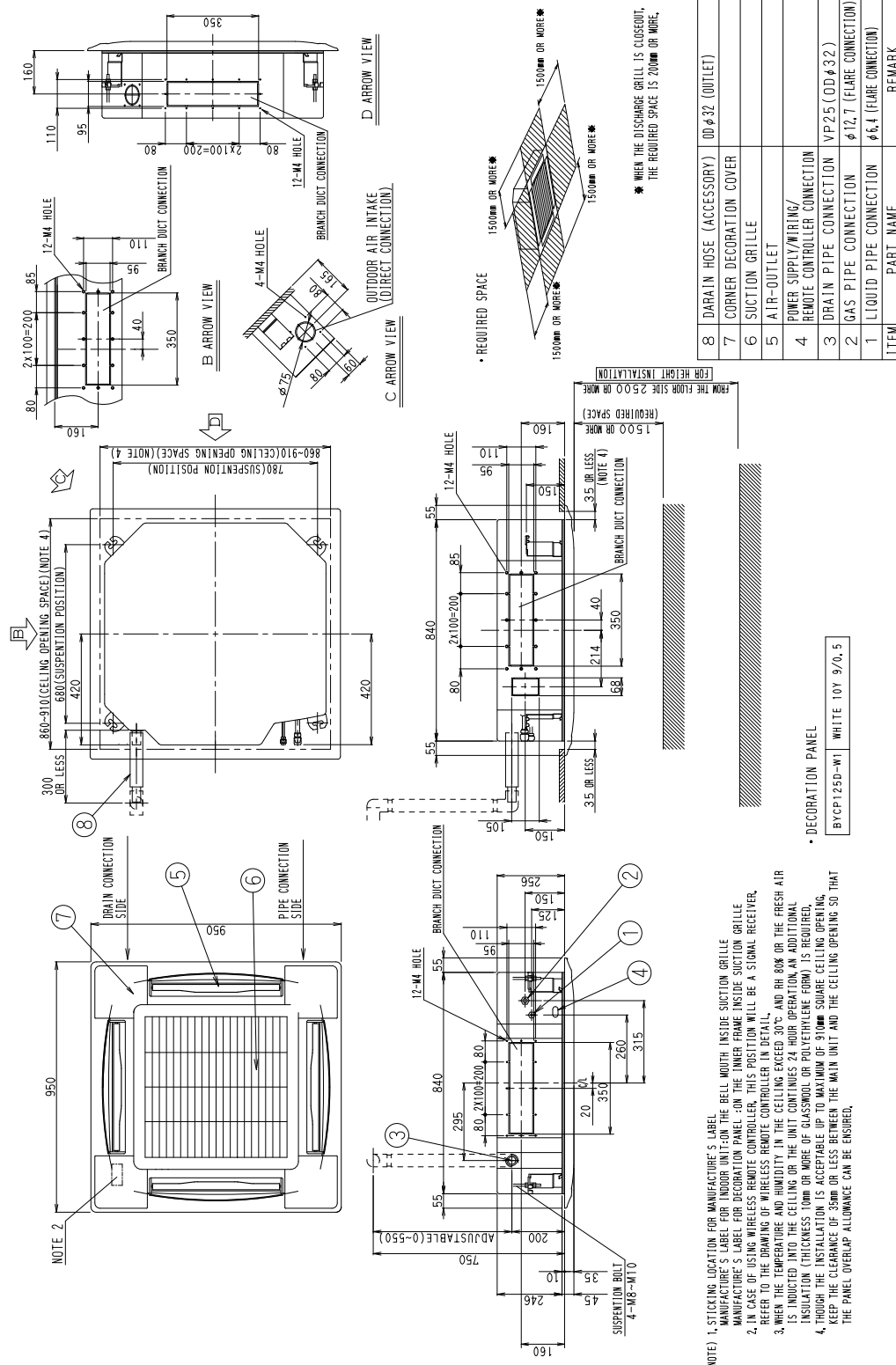
FXFQ40M + BYCP125D-W1(Decoration Panel)

FXFQ50M + BYCP125D-W1(Decoration Panel)

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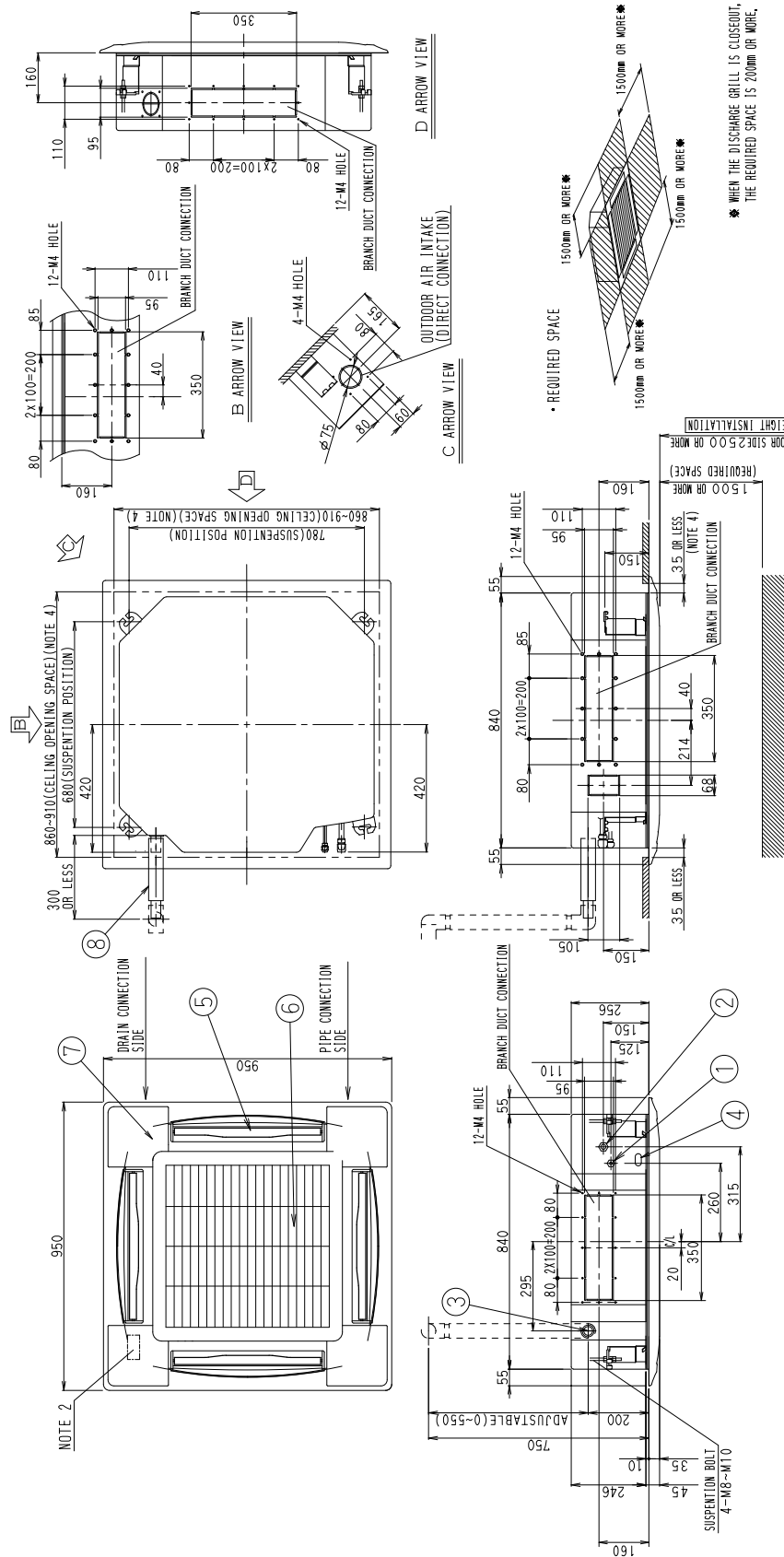
3D038837

Unit (mm)



FXFQ63M + BYCP125D-W1 (Decoration Panel)

FXFQ80M + BYCP125D-W1 (Decoration Panel)



Unit (mm)

ITEM	PART NAME	REMARK
8	DRAIN HOSE (ACCESSORY)	OD φ32 (OUTLET)
7	CORNER DECORATION COVER	
6	SUCTION GRILLE	
5	AIR-OUTLET	
4	POWER SUPPLY/WIRING/ REMOTE CONTROLLER CONNECTION	
3	DRAIN PIPE CONNECTION	VP25 (OD φ32)
2	GAS PIPE CONNECTION	φ15.9 (FLARE CONNECTION)
1	LIQUID PIPE CONNECTION	φ9.5 (FLARE CONNECTION)

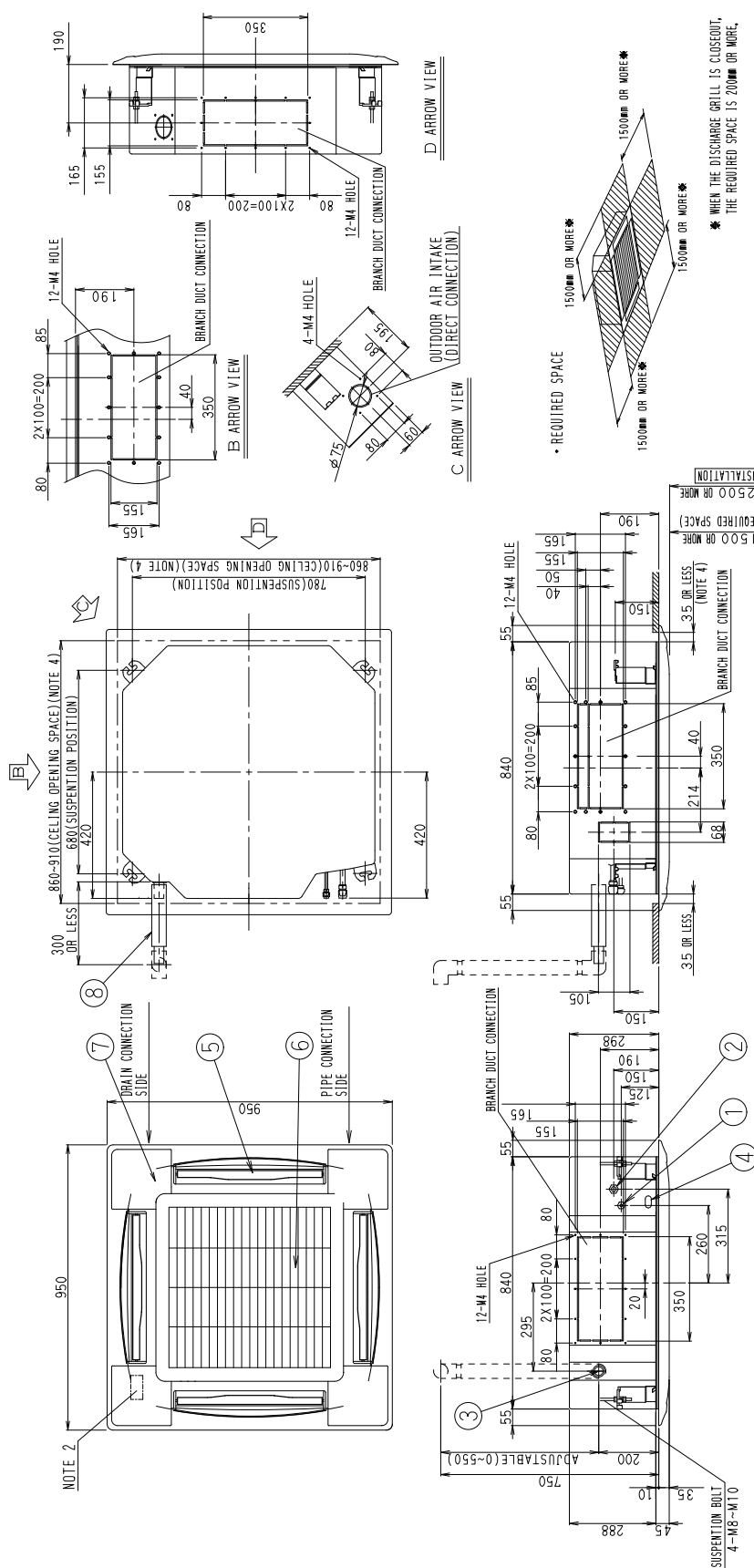
• DECORATION PANEL

BYCP125D-W1	WHITE 10Y 9/0, 5
BYCP125D-WI	

3D038838

**FXFQ100M + BYCP125D-W1 (Decoration Panel)**  
**FXFQ125M + BYCP125D-W1 (Decoration Panel)**

Unit (mm)



ITEM	PART NAME	REMARK
8	DRAIN HOSE (ACCESSORY)	OD φ32 (OUTLET)
7	CORNER DECORATION COVER	
6	SUCTION GRILLE	
5	AIR-OUTLET	
4	POWER SUPPLY/WIRING/ REMOTE CONTROLLER CONNECTION	VP25 (OD φ32)
3	DRAIN PIPE CONNECTION	φ15.9 (FLARE CONNECTION)
2	GAS PIPE CONNECTION	φ9.5 (FLARE CONNECTION)
1	LIQUID PIPE CONNECTION	φ9.5 (FLARE CONNECTION)

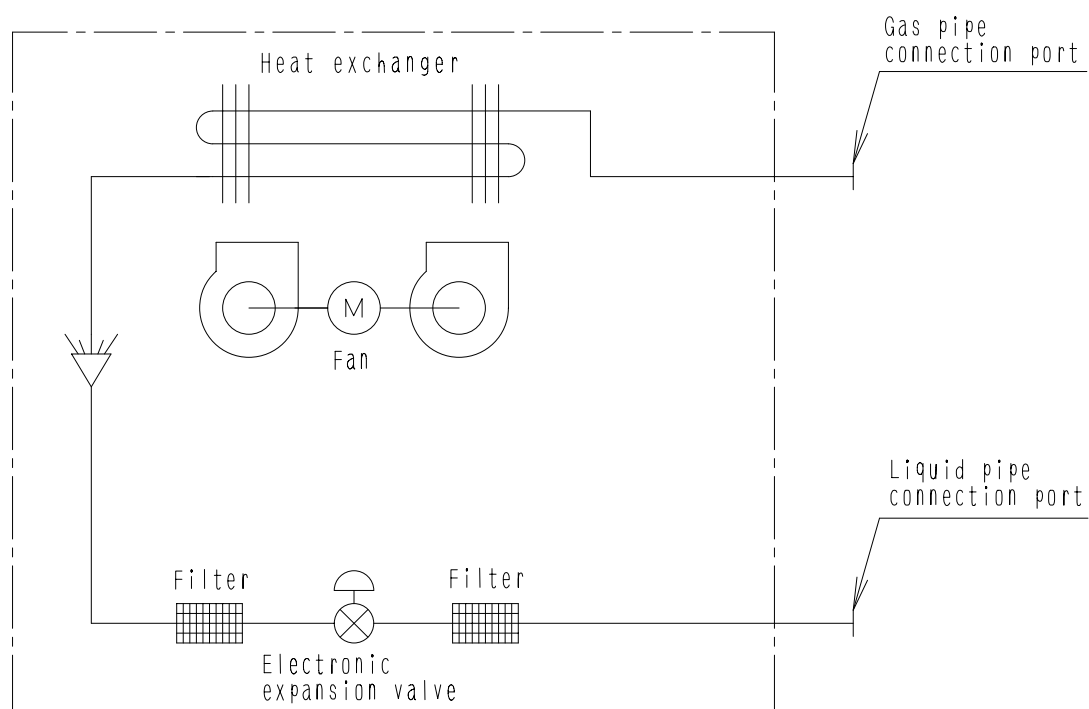
• DECORATION PANEL

BYCP125DJW1	WHITE 10Y 9/0.5
BYCP125D-W1	

3D038839

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## 4. Piping Diagrams



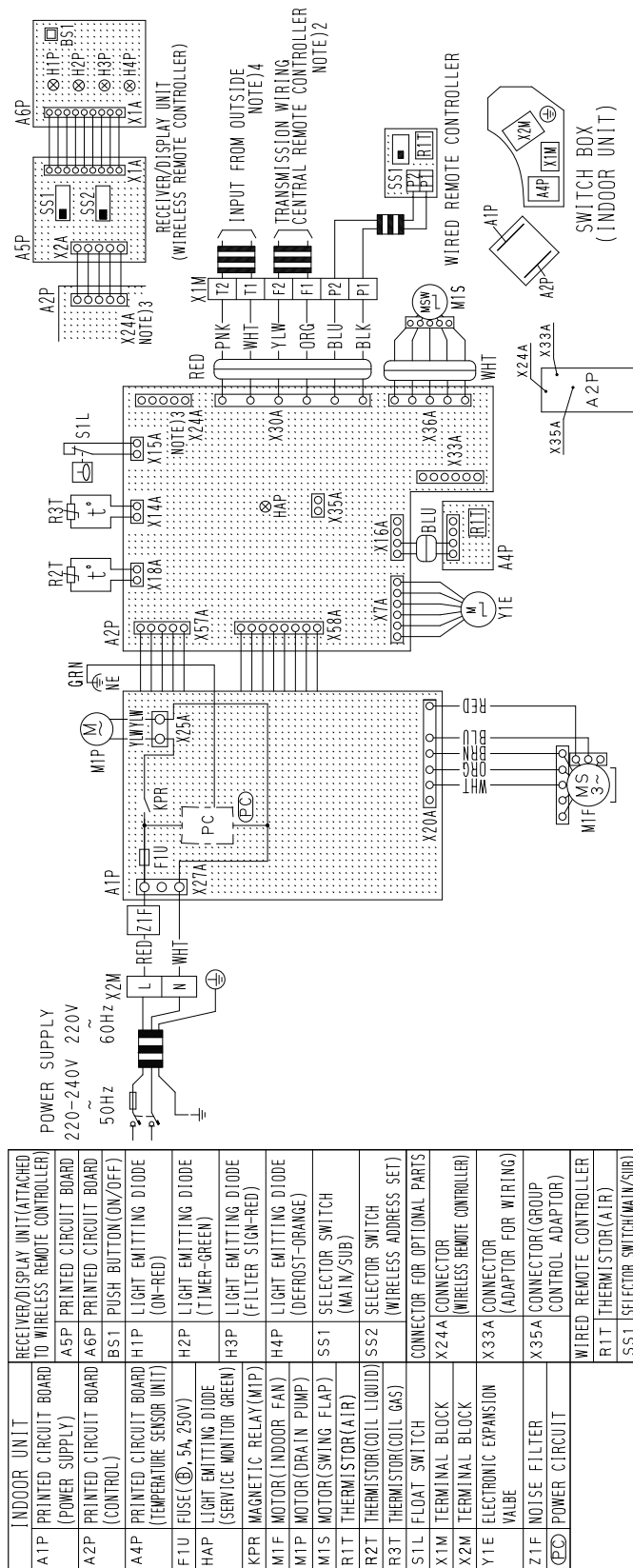
C : 4D024460

### ■ Refrigerant pipe connection port diameters

Model	(mm)	
	Gas	Liquid
FXFQ25 · 32 · 40 · 50M	φ12.7	φ6.4
FXFQ63 · 80 · 100 · 125M	φ15.9	φ9.5

## 5. Wiring Diagrams

FXFQ25 · 32 · 40 · 50 · 63 · 80 · 100 · 125MVE



5. REMOTE CONTROLLER MODEL VARIES ACCORDING TO THE COMBINATION SYSTEM, CONFIRM ENGINEERING DATA AND CATALOGS, ETC, BEFORE CONNECTING.

6. CONFIRM THE METHOD OF SETTING THE SELECTOR SWITCH (SS1, SS2) OF WIRED REMOTE CONTROLLER AND WIRELESS REMOTE CONTROLLER BY INSTALLATION MANUAL AND ENGINEERING DATA, ETC.

7. SYMBOLS SHOWS AS FOLLOWS:

RED: RED BLK: BLACK WHT: WHITE YLW: YELLOW GRN: GREEN  
ORG: ORANGE BRN: BROWN PNK: PINK GRY: GRAY BLU: BLUE

3D039600A

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## 6. Electric Characteristics

Units					Power supply		IFM		Input(W)	
Model	Type	Hz	Volts	Voltage range	MCA	MFA	kW	FLA	Cooling	Heating
FXFQ25M	VE VEC	50	220-240	MAX. 264 Min. 198	0.3	15	0.030	0.2	43	30
FXFQ32M					0.3	15	0.030	0.2	43	30
FXFQ40M					0.3	15	0.030	0.2	47	34
FXFQ50M					0.3	15	0.030	0.2	53	38
FXFQ63M					0.4	15	0.030	0.3	67	54
FXFQ80M					0.5	15	0.030	0.4	94	76
FXFQ100M					0.6	15	0.120	0.5	89	94
FXFQ125M					0.9	15	0.120	0.7	121	125

### Symbols :

MCA : Min. Circuit Amps (A)  
 MFA : Max. Fuse Amps (See note 5)  
 kW : Fan Motor Rated Output(kW)  
 FLA : Full Load Amps(A)  
 IFM : Indoor Fan Motor

### Note :

#### 1. Voltage range

Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits,

#### 2. Maximum allowable voltage unbalance between phases is 2%.

#### 3. MCA/MFA

$$MCA = 1.25 \times FLA$$

$$MFA \leq 4 \times FLA$$

(Next lower standard fuse rating. Min.15A)

#### 4. Select wire size based on the MCA.

#### 5. Instead of fuse, use Circuit Breaker.

C : 4D034264B

## 7. Capacity Tables

## 7.1 Cooling Capacity

**FXFQ-M**

**[50Hz]**

3

Unit Size	Outdoor air temp. °C DB	Indoor air temp.												Cooling capacity kW										
		14.0°CWB 20°CDB				15.0°CWB 23°CDB				18.0°CWB 26°CDB					20.0°CWB 29°CDB				22.0°CWB 30°CDB				24.0°CWB 32°CDB	
		TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC		TC	SC	TC	SC	TC	SC	TC	SC		
63	10.0	4.8	4.2	5.7	4.6	6.6	5.1	7.1	5.2	7.6	5.3	8.5	5.5	9.3	5.3	5.6								
	12.0	4.8	4.2	5.7	4.6	6.6	5.1	7.1	5.2	7.6	5.3	8.5	5.5	9.2	5.5	5.5								
	14.0	4.8	4.2	5.7	4.6	6.6	5.1	7.1	5.2	7.6	5.3	8.5	5.5	9.1	5.4	5.4								
	16.0	4.8	4.2	5.7	4.6	6.6	5.1	7.1	5.2	7.6	5.3	8.5	5.5	9.0	5.3									
	18.0	4.8	4.2	5.7	4.6	6.6	5.1	7.1	5.2	7.6	5.3	8.5	5.5	8.8	5.3									
	20.0	4.8	4.2	5.7	4.6	6.6	5.1	7.1	5.2	7.6	5.3	8.5	5.5	8.7	5.2									
	22.0	4.8	4.2	5.7	4.6	6.6	5.1	7.1	5.2	7.6	5.3	8.5	5.5	8.6	5.1									
	23.0	4.8	4.2	5.7	4.6	6.6	5.1	7.1	5.2	7.6	5.3	8.5	5.5	8.5	5.2									
	24.0	4.8	4.2	5.7	4.6	6.6	5.1	7.1	5.2	7.6	5.3	8.5	5.5	8.4	5.1									
	25.0	4.8	4.2	5.7	4.6	6.6	5.1	7.1	5.2	7.6	5.3	8.3	5.3	8.3	5.4	5.1								
	27.0	4.8	4.2	5.7	4.6	6.6	5.1	7.1	5.2	7.6	5.3	8.1	5.3	8.3	5.0	5.0								
	29.0	4.8	4.2	5.7	4.6	6.6	5.1	7.1	5.2	7.6	5.3	8.0	5.2	8.2	5.0	5.2	8.2	5.0						
80	31.0	4.8	4.2	5.7	4.6	6.6	5.1	7.1	5.2	7.6	5.3	7.9	5.1	8.1	4.9	4.9								
	33.0	4.8	4.2	5.7	4.6	6.6	5.1	7.1	5.2	7.6	5.3	7.8	5.1	7.9	4.9	4.9								
	35.0	4.8	4.2	5.7	4.6	6.6	5.1	7.1	5.2	7.5	5.3	7.7	5.0	7.8	4.8									
	37.0	4.8	4.2	5.7	4.6	6.6	5.1	7.1	5.2	7.4	5.2	7.5	5.0	7.7	4.8									
	39.0	4.8	4.2	5.7	4.6	6.6	5.1	7.1	5.3	7.2	5.2	7.4	4.9	7.6	4.7									
	12.0	6.1	5.3	7.2	6.1	8.4	6.7	9.0	7.0	9.6	7.1	10.8	7.3	11.9	7.4									
	14.0	6.1	5.3	7.2	6.1	8.4	6.7	9.0	7.0	9.6	7.1	10.8	7.3	11.5	7.2									
	16.0	6.1	5.3	7.2	6.1	8.4	6.7	9.0	7.0	9.6	7.1	10.8	7.3	11.4	7.1									
	18.0	6.1	5.3	7.2	6.1	8.4	6.7	9.0	7.0	9.6	7.1	10.8	7.3	11.2	7.0									
	20.0	6.1	5.3	7.2	6.1	8.4	6.7	9.0	7.0	9.6	7.1	10.8	7.3	11.1	6.9									
	21.0	6.1	5.3	7.2	6.1	8.4	6.7	9.0	7.0	9.6	7.1	10.8	7.3	11.0	6.8									
	100	23.0	6.1	5.3	7.2	6.1	8.4	6.7	9.0	7.0	9.6	7.1	10.6	7.2	10.8	6.8								
25.0		6.1	5.3	7.2	6.1	8.4																		

Unit Size	Outdoor air temp. °C DB	14.0°CWB 20°CDB						18.0°CWB 25°CDB						20.0°CWB 28°CDB						22.0°CWB 30°CDB						24.0°CWB 32°CDB	
		TC			SC			TC			SC			TC			SC			TC			SC			TC	SC
		IC	OC	EC	IC	OC	EC	IC	OC	EC	IC	OC	EC	IC	OC	EC	IC	OC	EC	IC	OC	EC					
25	100	19	19	23	21	26	23	28	23	30	23	34	24	37	24												
	120	19	19	23	21	26	23	28	23	30	23	34	24	37	24												
	140	19	19	23	21	26	23	28	23	30	23	34	24	37	24												
	160	19	19	23	21	26	23	28	23	30	23	34	24	37	24												
	180	19	19	23	21	26	23	28	23	30	23	34	24	37	24												
	200	19	19	23	21	26	23	28	23	30	23	34	24	37	24												
	210	19	19	23	21	26	23	28	23	30	23	34	24	37	24												
	230	19	19	23	21	26	23	28	23	30	23	34	24	37	24												
	250	19	19	23	21	26	23	28	23	30	23	34	24	37	24												
32	100	24	24	29	26	34	28	36	29	38	29	43	29	47	30												
	120	24	24	29	26	34	28	36	29	38	29	43	29	47	30												
	140	24	24	29	26	34	28	36	29	38	29	43	29	47	30												
	160	24	24	29	26	34	28	36	29	38	29	43	29	47	30												
	180	24	24	29	26	34	28	36	29	38	29	43	29	47	30												
	200	24	24	29	26	34	28	36	29	38	29	43	29	47	30												
	210	24	24	29	26	34	28	36	29	38	29	43	29	47	30												
	230	24	24	29	26	34	28	36	29	38	29	43	29	47	30												
	250	24	24	29	26	34	28	36	29	38	29	43	29	47	30												
40	100	24	24	29	26	34	28	36	29	38	29	43	29	47	30												
	120	24	24	29	26	34	28	36	29	38	29	43	29	47	30												
	140	24	24	29	26	34	28	36	29	38	29	43	29	47	30												
	160	30	27	36	30	42	33	45	33	48	34	54	35	58	34												
	180	30	27	36	30	42	33	45	33	48	34	54	35	58	34												
	200	30	27	36	30	42	33	45	33	48	34	54	35	58	34												
	210	30	27	36	30	42	33	45	33	48	34	54	35	58	34												
	230	30	27	36	30	42	33	45	33	48	34	54	35	58	34												
	250	30	27	36	30	42	33	45	33	48	34	54	35	58	34												
50	100	30	27	36	30	42	33	45	33	48	34	54	35	58	34												
	120	30	27	36	30	42	33	45	33	48	34	54	35	58	34												
	140	30	27	36	30	42	33	45	33	48	34	54	35	58	34												
	160	30	27	36	30	42	33	45	33	48	34	54	35	58	34												
	180	30	27	36	30	42	33	45	33	48	34	54	35	58	34												
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	210	30	27	36	30	42	33	45	33	48	34	54	35	58	34												
	230	30	27	36	30	42	33	45	33	48	34	54	35	58	34												
	250	30	27	36	30	42	33	45	33	48	34	54	35	58	34												

Refer to Outdoor Unit Capacity Tables : on page 411 ~, 470~, for the actual performance data of each indoor and outdoor unit combination.

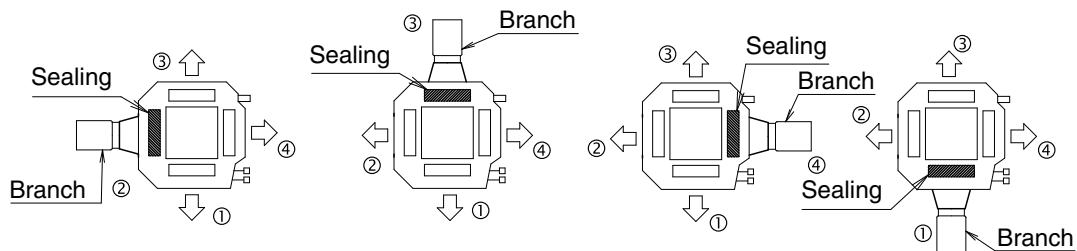


	39.0	9.5	7.7	1
Total capacity ; kW				
Sensible capacity ; kW				



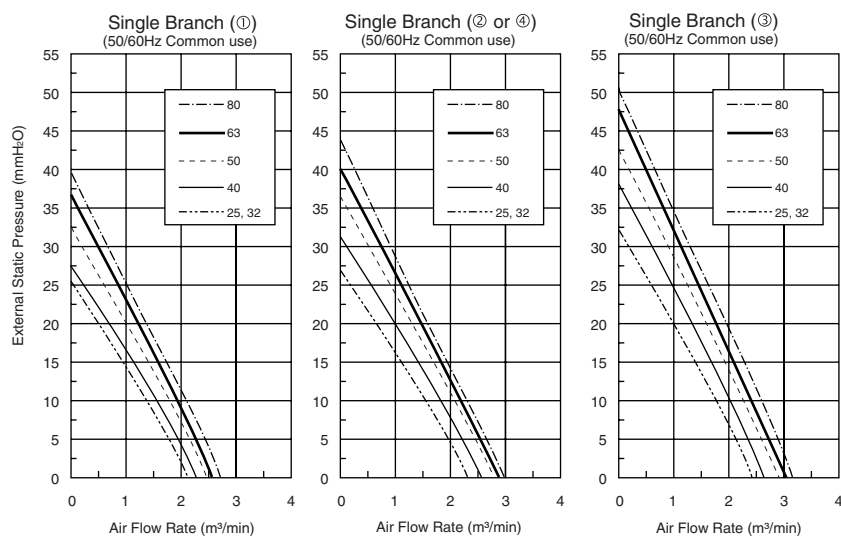
## 8. Fan Performance and Discharge Pattern in case of using Branch Duct

### Single Branch — 3 Way Discharge



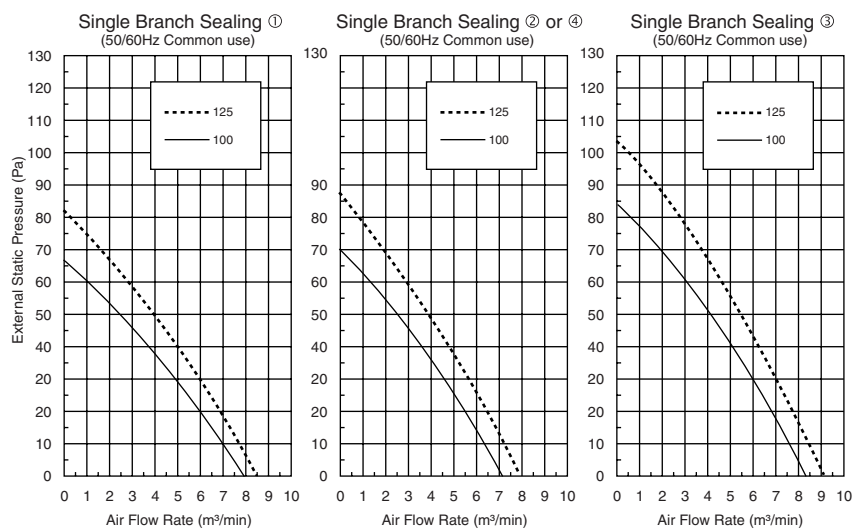
(V0690)

25~80



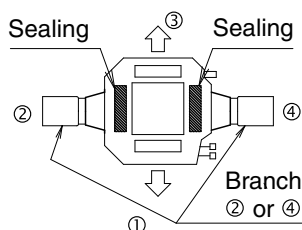
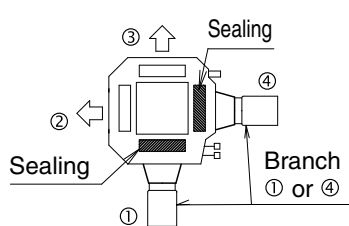
(V0691)

100 · 125



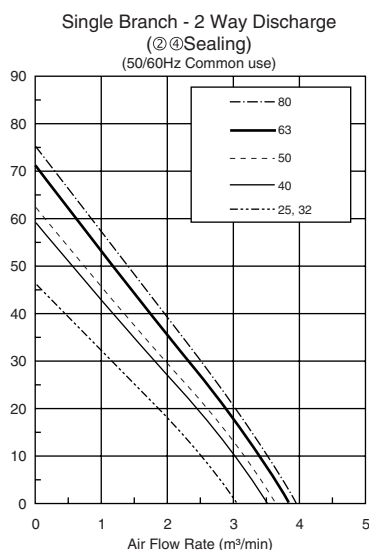
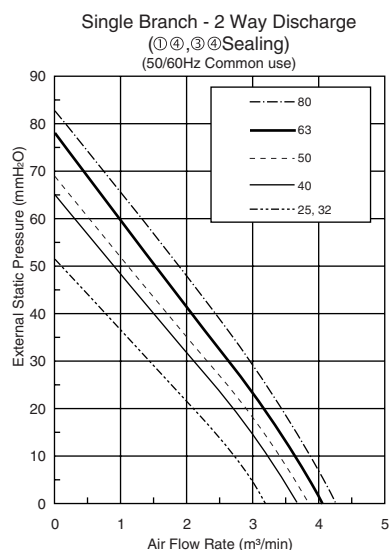
(V0692)

## Single Branch — 2 Way Discharge



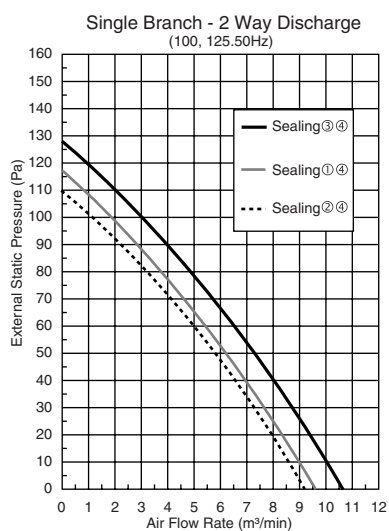
(V0693)

25~80



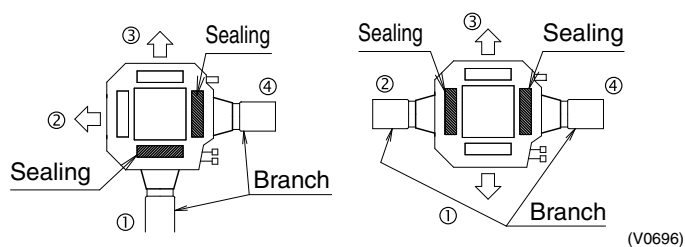
(V0694)

100 · 125

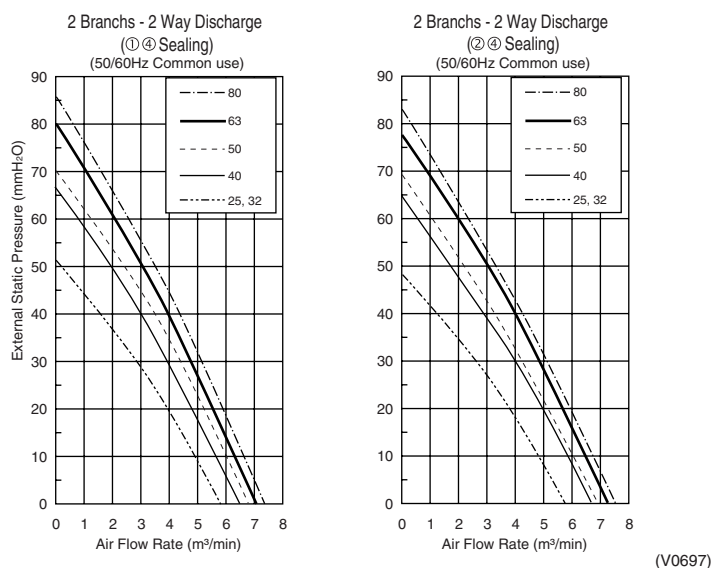


(V0695)

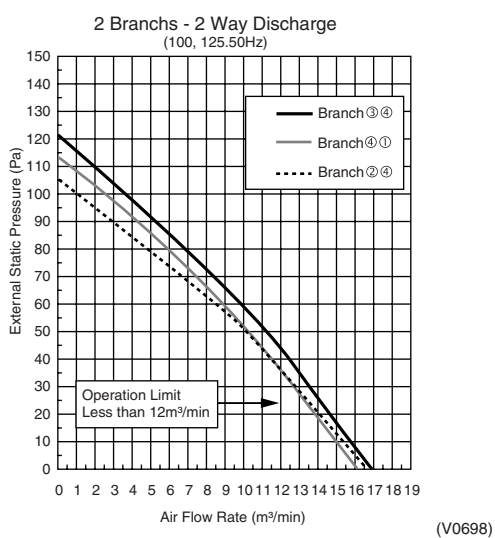
## 2 Branches — 2 Way Discharge



25~80



100 · 125



# 9. Sound Levels

Overall

■ Ceiling Mounted Cassette Type (Multi-Flow Type)  
- Super Cassette -

1.5 m

Microphone

4D034344

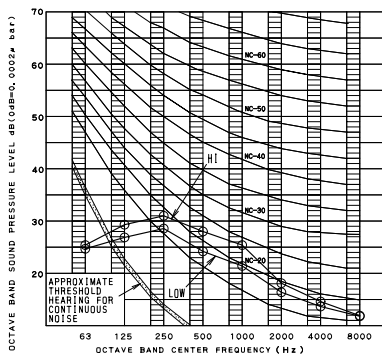
- Note:**
1. The operating conditions are assumed to be standard (JIS conditions).
  2. These operating values were obtained in a dead room (conversion values).  
Sound level will vary depending on a range of factors such as the construction (acoustic absorption coefficient) of the particular room in which the equipments installed.

Model	220~240V, 50Hz	
	H	L
FXFQ25M	30	27
FXFQ32M	30	27
FXFQ40M	31	27
FXFQ50M	32	27
FXFQ63M (C/H)	33/34	28
FXFQ80M	36	31
FXFQ100M	39	33
FXFQ125M (C/H)	42/43	36

## Octave Band Level

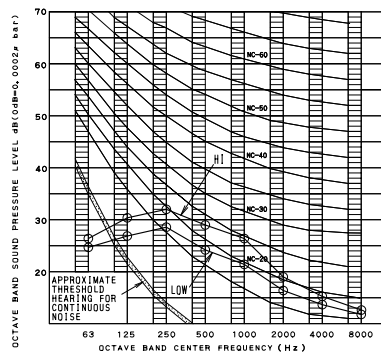
○ — ○ 220~240V 50Hz

FXFQ25 · 32MVE



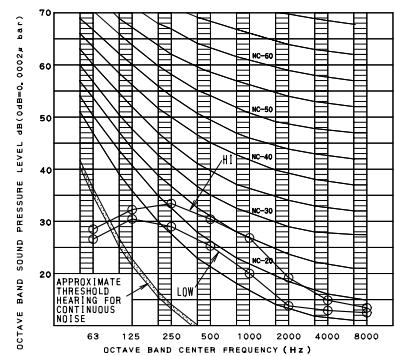
4D034344

FXFQ40MVE



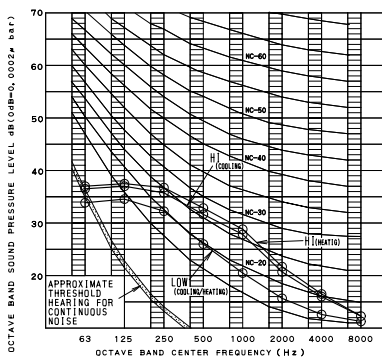
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FXFQ50MVE



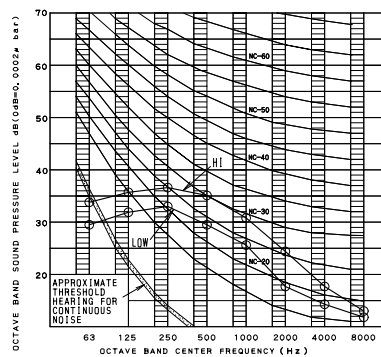
4D034346

FXFQ63MVE



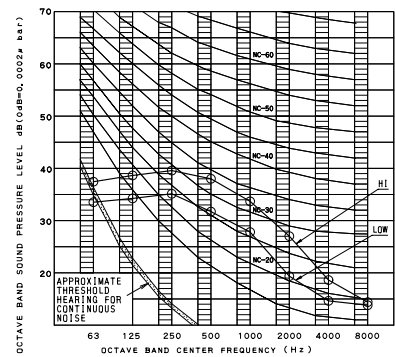
4D034347

FXFQ80MVE



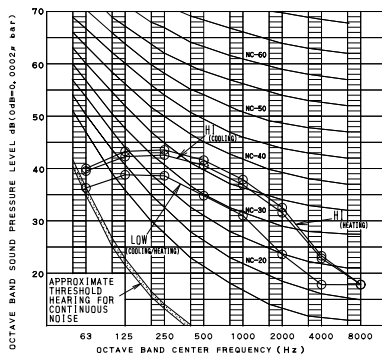
4D034348

FXFQ100MVE



4D034017

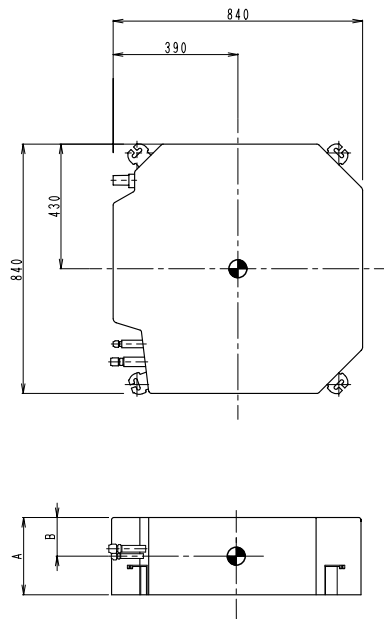
FXFQ125MVE



4D034349

# 10. Installation

## Center of Gravity



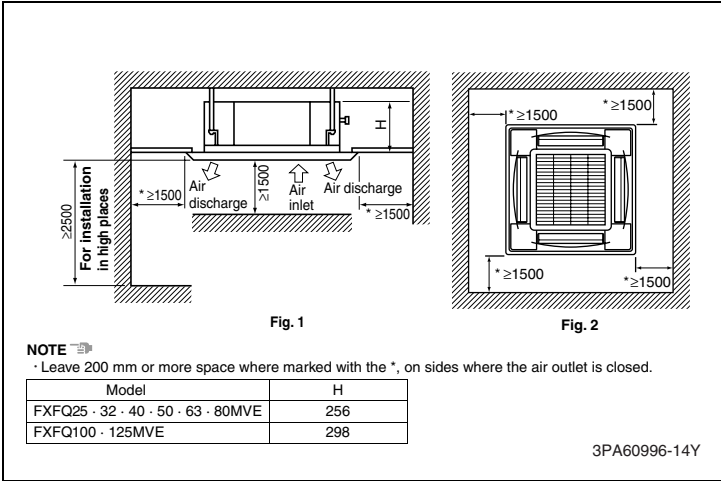
Unit (mm)

MODEL NAME	A	B
FXFQ25~80MVE	246	90
FXFQ100~125MVE	288	120

C : 4D033891B

## Service Space for Indoor Units

Unit (mm)



**Note:**  
Above figure means minimum value. Please these value at least.

## Bolt Pitch

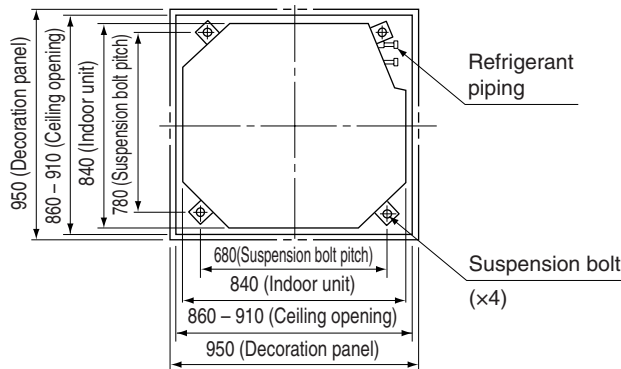


Fig. 3

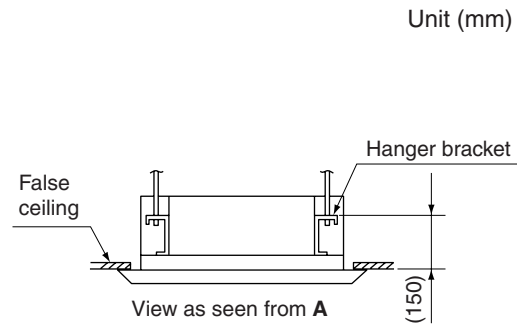


Fig. 4

3PA60996-14Y

## Drain Pump Kit

Indoor unit	Drain pump kit
FXFQ-M	Standard (Equipped with indoor unit)

## Drain Piping Work

### (1) Carry out the drain piping

- Lay pipes so as to ensure that drainage can occur with no problems.
- Employ a pipe with either the same diameter or with the diameter larger (excluding the raising section) than that of the connecting pipe (PVC pipe, nominal diameter 25 mm, outside diameter 32 mm).
- Keep the drain pipe short and sloping downwards at a gradient of at least 1 / 100 to prevent air pockets from forming.
- If the drain hose cannot be sufficiently set on a slope, execute the drain raising piping.
- To keep the drain hose from sagging, space hanging wires every 1 to 1.5 m.

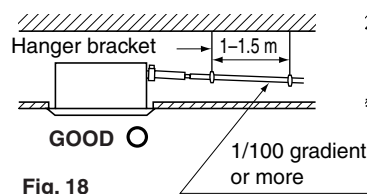


Fig. 18

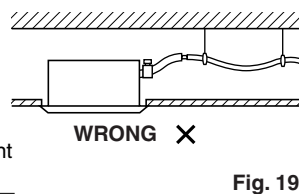


Fig. 19

- Use the drain hose (1) (accessory) and metal clamp (2).
- Insert the drain hose into the drain socket up to the base, and tighten the metal clamp securely within the portion of a white tape of the hose-inserted tip. Tighten the metal clamp until the screw head is less than 4 mm from the hose.
- Wrap the sealing pad (10) (accessory) over the metal clamp and drain hose to insulate.
- Make sure that heat insulation work is executed on the following 2 spots to prevent any possible water leakage due to dew condensation.
  - Indoor drain pipe
  - Drain socket

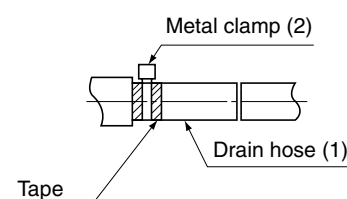


Fig. 20

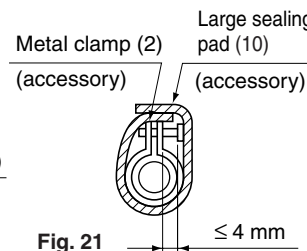


Fig. 21

3PA60996-14Y

## &lt;PRECAUTIONS FOR DRAIN RAISING PIPING&gt;

- Install the drain raising pipes at a height of less than 550 mm.
- Install the drain raising pipes at a right angle to the indoor unit and no more than 300 mm from the unit.

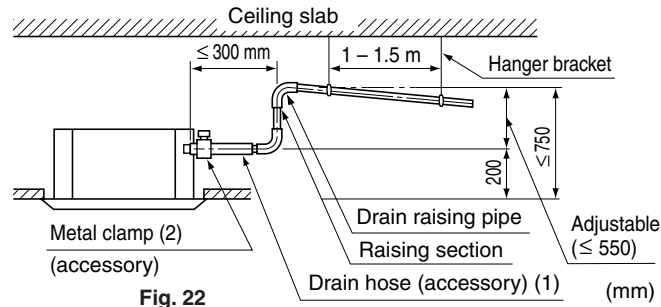


Fig. 22

**NOTE**

- To ensure no excessive pressure is applied to the included drain hose (1), do not bend or twist when installing. (This may cause leakage.)
- If converging multiple drain pipes, install according to the procedure shown below.

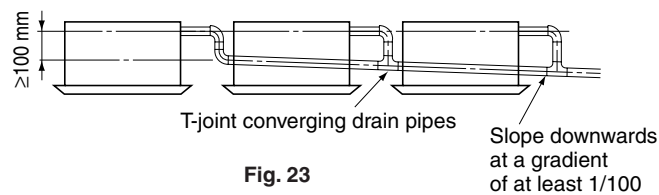


Fig. 23

Select converging drain pipes whose gauge is suitable for the operating capacity of the unit.

(2) After piping work is finished, check if drainage flows smoothly.

- Add approximately 2 liter of water slowly from the air outlet and check drainage flow.

**WHEN ELECTRIC WIRING WORK IS FINISHED**



- Check drainage flow during COOL running, explained under “TEST OPERATION”.

**WHEN ELECTRIC WIRING WORK IS NOT FINISHED**

- Remove the terminal box lid connect a power supply and remote controller to the terminals. (Refer to the “HOW TO CONNECT WIRINGS”)

Be sure to attach the terminal box lid before turning on the power.

Next, press the inspection / test operation button “” on the remote controller. The unit will engage the test operation mode. Press the operation mode selector button “” until selecting FAN OPERATION “”.

Then, press the ON / OFF button “”. The indoor unit fan and drain pump will start up. Check that the water has drained from the unit. Press “” to go back to the first mode.

- **Note that the fan also starts rotating.**
- Attach the terminal box lid as before.

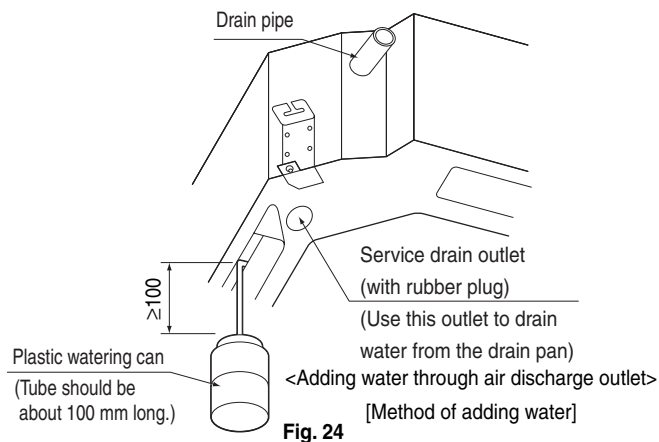


Fig. 24



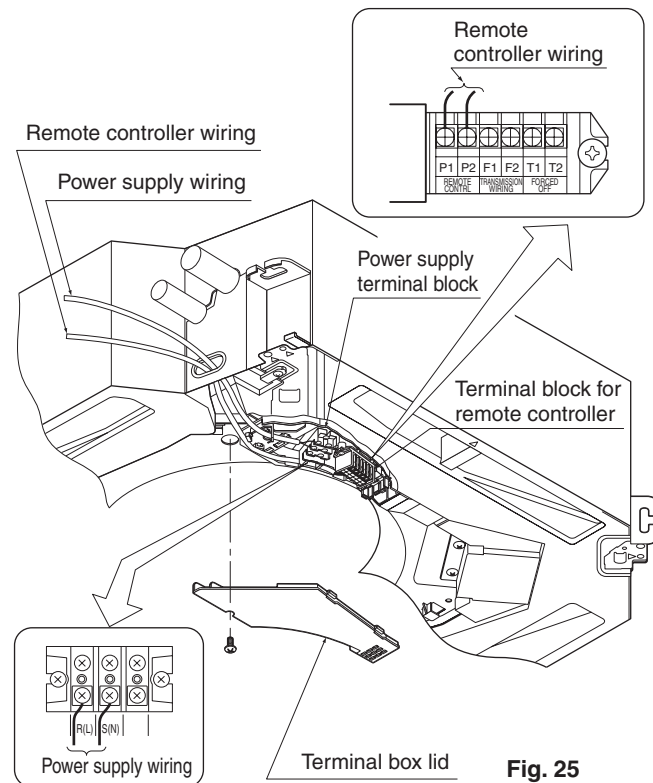


Fig. 25

**CAUTION**







- Drain piping connections  
Do not connect the drain piping directly to sewage pipes that smell of ammonia. The ammonia in the sewage might enter the indoor unit through the drain pipes and corrode the heat exchanger.
- Keep in mind that it will become the cause of getting drain pipe blocked if water collects on drain pipe.







3PA60996-14Y

# 11. Accessories

## Standard Accessories

### FXFQ25~125M

Name	(1) Drain hose	(2) Metal clamp	(3) Washer for hanging bracket	(4) Clamp	(5) Paper pattern for installation	(6) Screws (M5)
Quantity	1 pc.	1 pc.	8 pcs.	8 pcs.	1 pc.	4 pcs.
Shape					Also used as packing material 	For paper pattern for installation 

Name	(7) Washer fixing plate	Insulation for fitting	Sealing pad		(Other) • Installation manual • Operation manual
Quantity	4 pcs.	1 each	1 each	1 pc.	
Shape		(8) for gas pipe  (9) for liquid pipe 	(10) Large  (11) Medium 	(12) Small 	

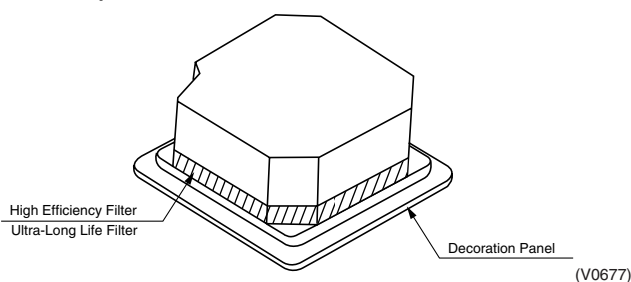
3PA60996-14Y

## Optional Accessories (For Unit)

Model			FXFQ25MVE	FXFQ32MVE	FXFQ40MVE	FXFQ50MVE	FXFQ63MVE	FXFQ80MVE	FXFQ100MVE	FXFQ125MVE
Item										
Decoration panel			BYCP125D-W1							
Sealing member of air discharge outlet			KDBH55D160W							
Panel spacer			KDBP55H160WA							
Filter related	High efficiency filter unit	65%	KAFP556D80						KAFP556D160	
		90%	KAFP557D80						KAFP557D160	
	Replacement high efficiency filter	65%	KAFP552H80						KAFP552H160	
		90%	KAFP553H80						KAFP553H160	
	Filter chamber		KDDFP55D160							
	Long life replacement filter	Non-woven type	KAFJ551C160							
	Ultra long-life filter		KAFP55D160							
	Replacement ultra long-life filter		KAFJ55K160H							
Fresh air intake kit	Chamber type	Without T shape pipe and fan	KDDP55D160							
		With T shape pipe without fan	KDDP55D160K							
	Direct installation type		KDDJ55X160							
Branch duct chamber			KDP55D80						KDP55D160	
Chamber connection kit			KKSJ55K160							
Insulation kit for high humidity			KDT-55D80						KDT-55D160	

3D034258B

## Optional Accessories (For Controls) : Refer to P.561



## BYCP125D-W1 – Decoration Panel

**1. BEFORE INSTALLATION****1. PRECAUTIONS**

- Refer also to the installation manual attached to the indoor unit.

**2. ACCESSORIES**

- Installation manual.

**3. NOTE TO INSTALLER**

- Be sure to instruct the customer how to properly operate the system showing him/her the attached operation manual.

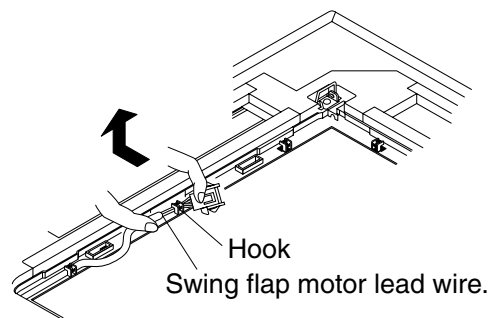
**2. PREPARATION OF DECORATION PANEL**

<<For this unit, you are able to select air flow directions. To discharge air in 2 or 3 directions, it is necessary to purchase optional blocking pad kit.>>

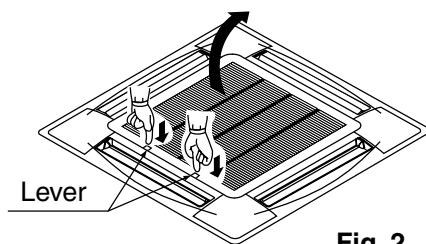
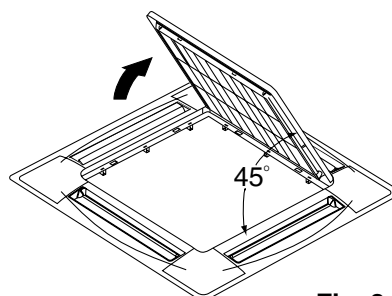
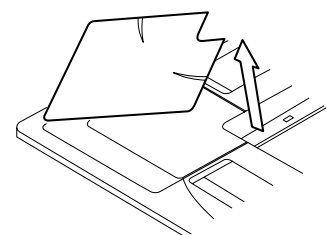
**HANDLING OF DECORATION PANELS**

- Never place the panel facing down nor lean it against a wall nor leave it on a projecting object.
  - Never touch or put pressure on the swing flap.
- (The swing flap may malfunction.)

- (1) Remove the swing flap motor lead wire on the back of the decoration panel from the hook.  
Push the wires outward to the frame surface and remove the wires from the hook in the middle.  
(Refer to Fig. 1)

**Fig. 1**

- (2) Remove the suction grille from the decoration panel.
  - 1 Push the suction grille lever inward and lift up the lever side. (Refer to Fig. 2)
  - 2 Detach the suction grille from the decoration panel by lifting the grille up approximately 45 degrees. (Refer to Fig. 3)
- (3) Remove the service cover on the corner.
  - Slide the service cover outward to remove. (Refer to Fig. 4)

**Fig. 2****Fig. 3****Fig. 4**

3PA64319-11M

### 3. INSTALLATION OF THE DECORATION PANEL TO THE INDOOR UNIT BODY

<<Refer to the installation manual attached to the indoor unit for the installation of the indoor unit.>>

- (1) Match the "PIPING SIDE" and "DRAIN SIDE" displays on the decoration panel with the position of the piping section and drain section on the indoor unit.
- (2) Install the decoration panel.
  - 1 Temporarily install the decoration panel to the indoor unit by hanging the latch on the opposite side of the swing flap motor of the decoration panel to the hook of the indoor unit body. (2 positions)
  - 2 Temporarily hang the remaining 2 latches to the hooks on the sides of the indoor unit. (Be careful not to let the swing motor lead wire get caught in the sealing material.)
  - 3 Screw all 4 hexagon head screws located right beneath the latches in approximately 5 mm. (Panel will rise.)
  - 4 Adjust the decoration panel by turning it to the arrowed direction in Fig. 5 so that the ceiling opening is completely covered.

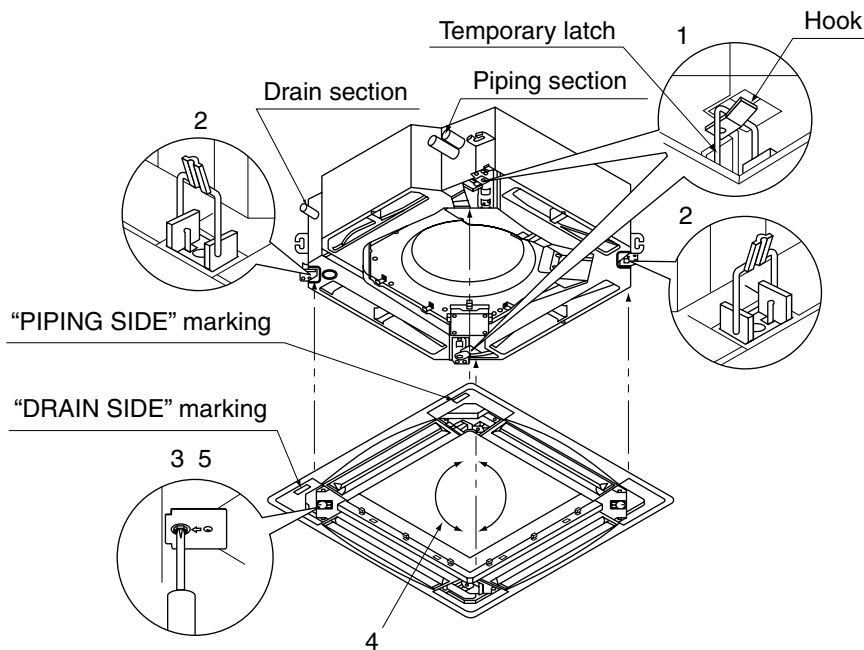
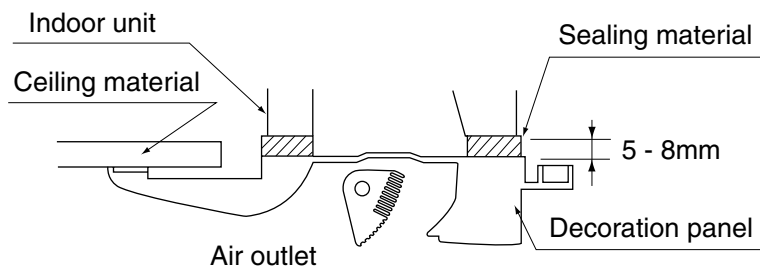


Fig. 5

- 5 Tighten the screws until the thickness of the sealing material between the decoration panel and the indoor unit body reduces to 5-8 mm.



#### [ PRECAUTIONS ]

- Improper screwing of the screws may cause the troubles shown in Fig. 6. Screw properly.

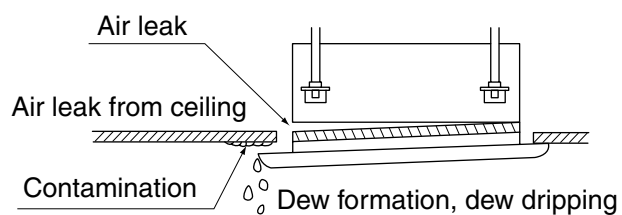


Fig. 6

- If gap is still left between the ceiling and the decoration panel after screwing the screws, readjust the indoor unit body height. (Refer to Fig. 7)

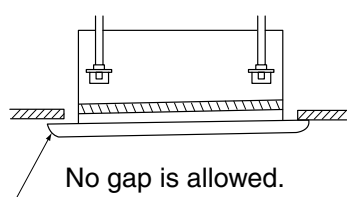
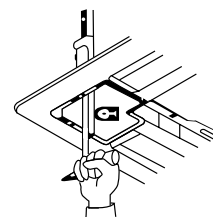


Fig. 7

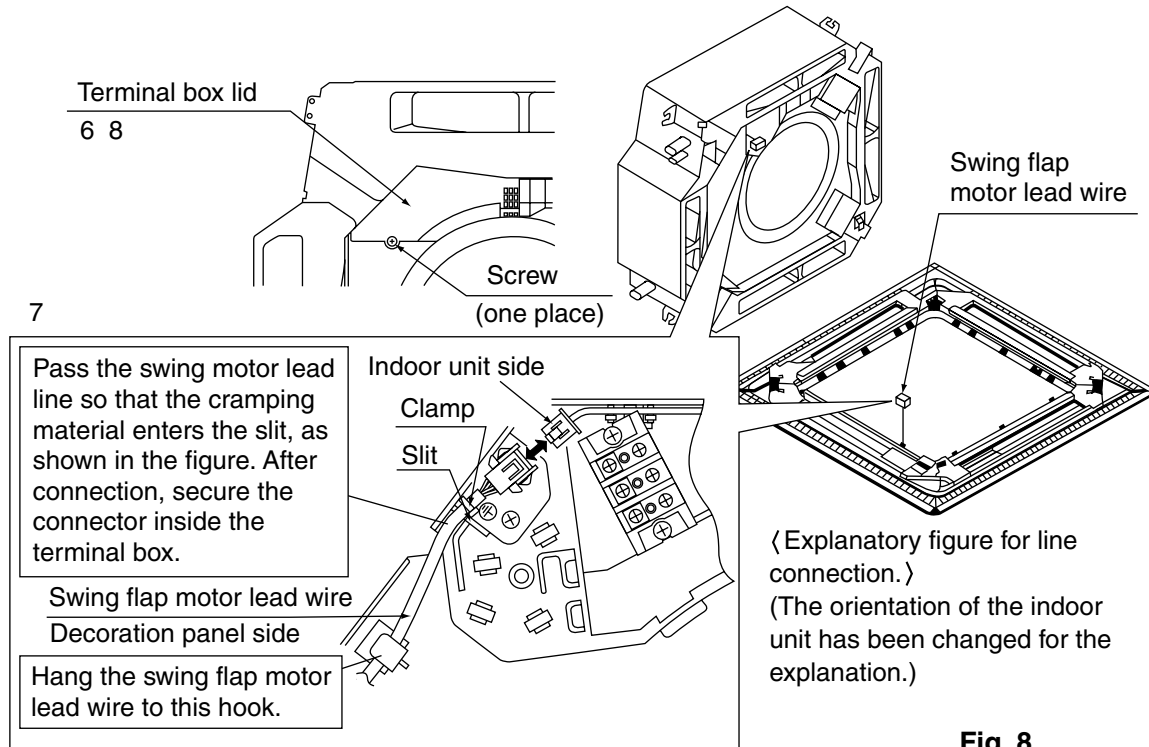
Adjustment of the indoor unit body height from the holes in the corner of the decoration panel is possible if the indoor unit is kept leveled and the drain piping, etc. is unaffected.



**(3) Wiring of the decoration panel (Refer to Fig. 8)**

- 6 Remove the terminal box lid.
- 7 Connect the connectors for swing flap motor lead wire installed on the decoration panel.
- 8 Replace the terminal box lid reversing the procedure to remove it.

Make sure that the swing flap motor lead wire is not caught between the indoor unit and the decoration panel.

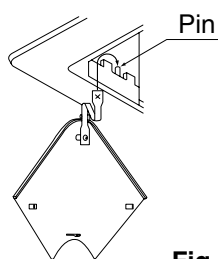
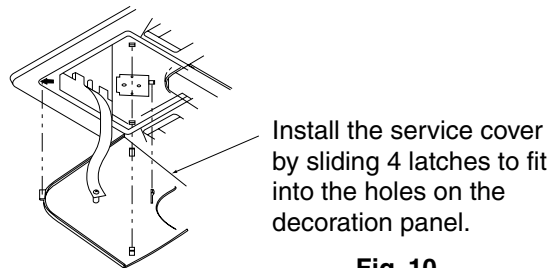
**Fig. 8****4. INSTALLATION OF SUCTION GRILLE AND SERVICE COVER**

- (1) Install the suction grille.  
Install by reversing the procedure shown in "PREPARATION OF DECORATION PANEL".  
It is possible to install the suction grille in 4 directions by turning the suction grille.  
Change the direction when adjusting the direction of the suction grille of multiple units or in meeting customers' demands.

**NOTE**

Be careful not to get swing flap motor lead wire caught when installing the suction grille.

- (2) Install the service cover on the corner.
  - 1 Attach the string of the service cover to the pin of the decoration panel. (Refer to Fig. 9)
  - 2 Install the service cover over the decoration panel. (Refer to Fig. 10)

**Fig. 9****Fig. 10**

3PA64319-11M

## KDBH55D160W – Sealing Member of Air Discharge Outlet

**Caution**

- Refer to the installation manual for both indoor unit and the decoration panel.
- When you install other optional kit, it may not be possible to select the 3-way or 2-way air discharge, (followed table)  
For details, refer to the manual for the optional kit or the catalogue.

Optional kit	4-way air discharge	3-way air discharge	2-way air discharge
Branch duct chamber	○	○	○
High efficiency filter chamber	○	× Not possible to install	× Not possible to install

**Contents of Kit**

Prior to installation make sure you have the complete of parts.

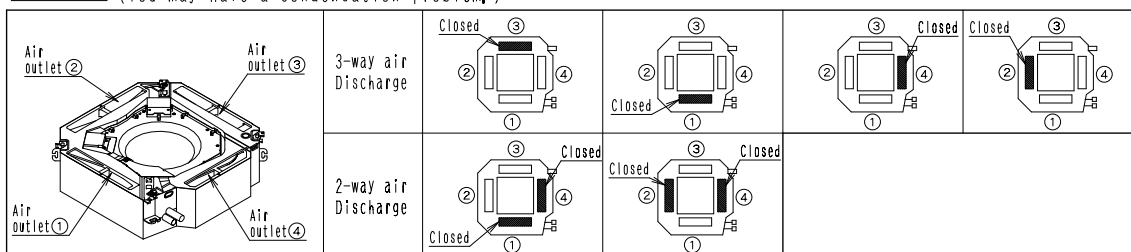
Name	Sealing Material	Tape for fixing the Sealing Material	Insulation for Side Plate	Moisture Absorber for Bell-Mouth	Moisture Absorber for Swing flap	Spacer	Spacer installation screw
Quantity	2 pieces	2 pieces	2 pieces	1 pieces	3 pieces	1 pieces	1 pieces
Shape・marking	①	②	③  100mm×1480mm	④  55mm×1055mm	⑤	⑥	⑦  (M3×10)

**1 The direction of air discharge and the positioning of sealing material**

## (1) Selection of the air outlet

- Select the direction of air discharge from the following table according to the location of the indoor unit.  
Refer to **② Setting of indoor unit** Setting of indoor unit for setting position number.  
Refer to the installation manual attached to the indoor unit for selection of installation location.

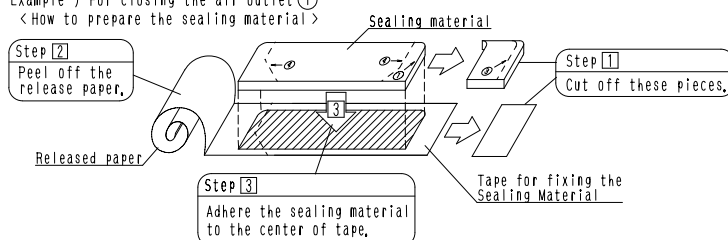
**Caution** Never select the direction of air discharge other than the following pattern.  
(You may have a condensation problem.)



## (2) Prepare the sealing material and the tape for fixing the sealing material according to the air outlet No. to be closed.

- Cut off the sealing material and the tape along the perforated lines (marked ---).
- Adhere the sealing material to tape. (Make sure that the sealing material is placed at the center of the tape.)

Example ) For closing the air outlet ①  
<How to prepare the sealing material>

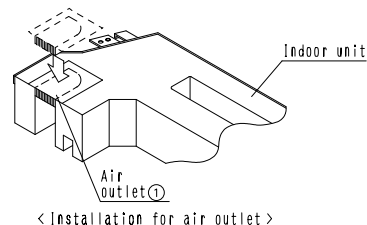


\*When closing the air outlet ②, it is not required to work on the sealing material.

## (3) Adhere the sealing material prepared according to the procedure (2) to the indoor unit air outlet.

**Caution**

The sealing material has directional characteristics.  
Make sure to adhere the sealing material fixing tape in the direction which the parts from ① to ④ can be seen as shown above.



1P088448A

## 2 Setting for indoor unit

It is required to make a field setting from the remote controller according to how the indoor units are installed. The direction of air discharge must also be set by the remote controller.

- The 3 different kinds of setting such as "Mode number", "The setting switch number" and "The setting position number" must be made by the remote controller.
  - Refer to the item of "Field setting" in the operation manual of the remote controller for the setting procedure.
- (1) Setting according to number of use of the air discharge,  
Check the setting position number corresponding to the direction of air discharge in a right table.

(Content of setting)

(Number of use of air outlets)	Mode number	The setting switch number	The setting position number
3-way air discharge	13(23)	1	02
2-way air discharge			03

Note) Refer to the table for height of the ceiling for each direction of air outlet. (The setting of the ceiling height is also required.)

- (2) Setting according to height of ceiling.

As for the ceiling height, see the left table below which shows the standard of ceiling height and number of air outlets to be used. Then, taking this standard into account, make a field setting of ceiling height from the remote controller according to the right table below.

(Standards of ceiling height and number of air outlets)

Indoor unit (FHYCP, FXF)	Number of use of air outlets					
	25~80 type			100~140 type		
	4-way air discharge	3-way air discharge	2-way air discharge	4-way air discharge	3-way air discharge	2-way air discharge
Ceiling height (m)						
Standard	~2,7	~3,0	~3,5	~3,2	~3,6	~4,2
Semi-high	2,7~3,0	3,0~3,3	3,5~3,8	3,2~3,6	3,6~4,0	~4,2
High	3,0~3,5	3,3~3,5	—	3,6~4,2	4,0~4,2	—

(Content of setting)

Ceiling height (m)		Mode number	The setting switch number	The setting position number
				01
				02
Standard	13(23)	1		03
Semi-high				
High				

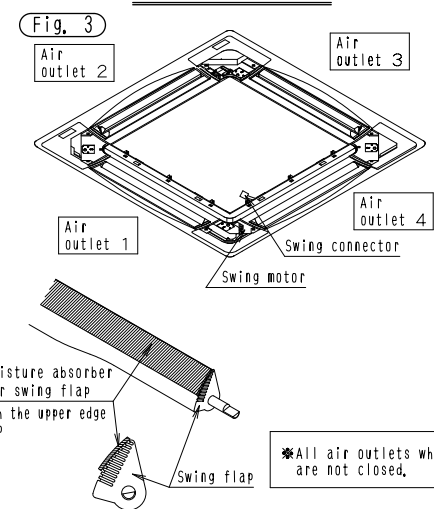
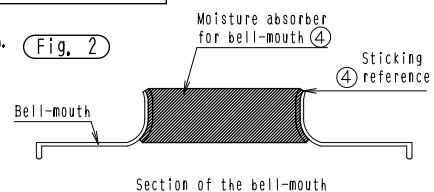
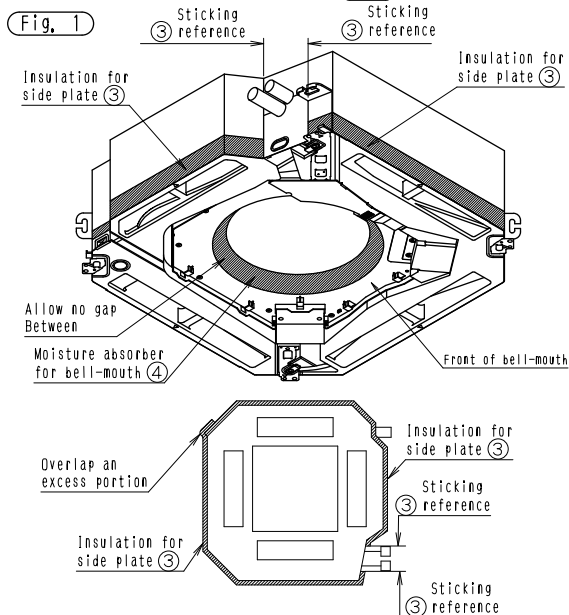
(Ceiling height is reference value)

3

## 3 Installation of the insulation

Please turn off the power supply for safety absolutely, before you do installation of the decoration panel and affixation of insulation and connected work of swing connector.

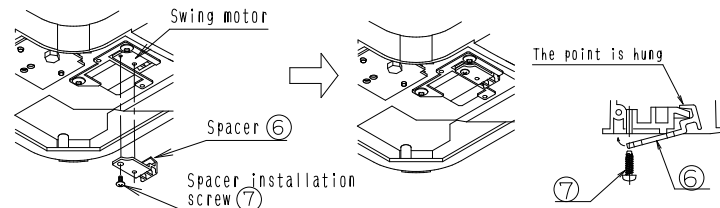
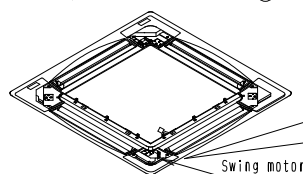
- (1) Adhere the insulations for side plate (3) in position, referring (Fig.1).  
(2) Adhere the moisture absorber for bell-mouth (4) on the inner surface of the bell-mouth. See (Fig.1) (Fig.2).  
(3) Adhere the moisture absorber for swing flap aligning with the upper edge of the swing flap on the air outlet. See (Fig.3).



\*All air outlets which are not closed.

## 4 Installation of the spacer

Please install spacer (6) on the swing motor with the spacer installation screw (7).



1P088448A



## KDBP55H160WA – Panel Spacer

**Combination table**





Panel spacer	KDBP55H160FA	KDBP55H160WA KDB55K160WA
Decoration panel	BYCP125K-W1	BYCP125D-W1 BYC125K-W1 BYC125KJW1




**Caution**

- When the Panel Spacer is installed, it is not possible to have 2-way air outlet.
- Refer to the installation manual for both indoor unit and the Panel spacer for its installation.

**Contents of kit**

Check if following parts are included with your kit.

Name	Panel spacer frame	Resin corner part	Fixing metal	Screw
Quantity	4 PCS,	4 PCS,	4 PCS,	28 PCS,
Shape・number	① 	② 	③ 	④   M4×10 Tapping screw (Class 2)

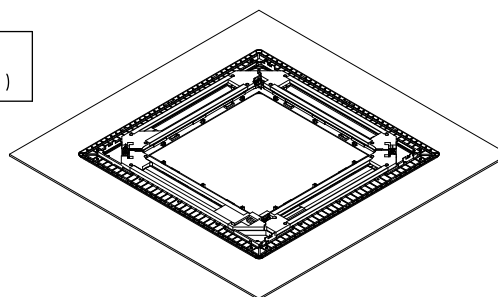
Name	Sealing material	Caution label	Others	
Quantity	2 PCS,	2 PCS,	1 PC,	
Shape・number	⑤ 	⑥ 	⑦ 	• This Installation Manual

### 1 Preparation of the Decoration panel

- Handle the decoration panel with care.

Never place the panel face down, or lean the panel against wall or place on the projective object.  
(It causes the dent or damage of the surface of the panel or damage of swing motor.)

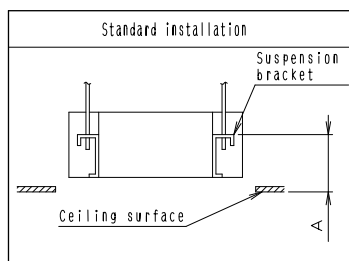
- (1) Remove the suction grill from the decoration panel.  
(Refer to the installation manual of the decoration panel how to remove,)
- (2) Place the panel face down on the corrugated board or the vinyl sheet to protect the surface of the panel.



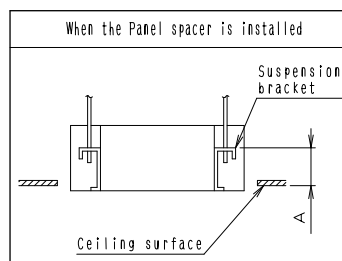
### 2 Installation of the indoor unit

Adjust the height of the indoor unit.

Be sure the piping will not contact with the ceiling joist etc, after adjusting the height.



Decoration panel	A(mm)
BYCP125D-W1 BYC125K-W1 BYC125KJW1	145~150
BYCP125K-W1	125~130



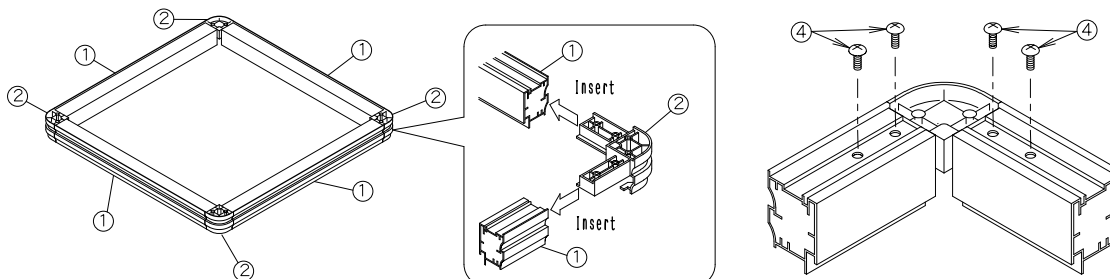
Decoration panel	A(mm)
BYCP125D-W1 BYC125K-W1 BYC125KJW1	105~110
BYCP125K-W1	85~90

1P136564E

### ③ Assembly of panel spacer

(1) Assemble the panel spacer frame ① and the plastic corner joint ② temporarily.

(2) Fix with the screws ④ from the top, (4 screws in each corner)



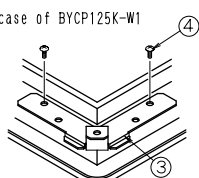
### ④ Fixing to the Decoration panel

(1) Set the fixing metal ③ on each corner with screws ④.  
(Screw positions change with decoration panels, as shown in the following figure,)

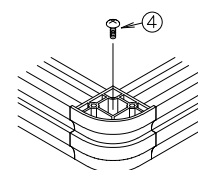
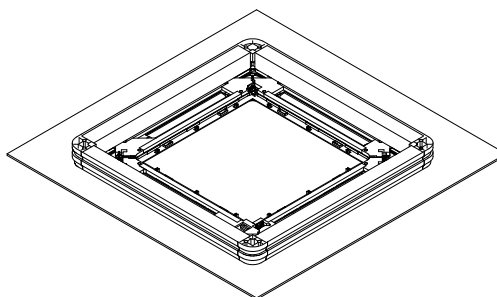
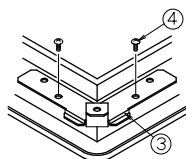
(2) Place the panel spacer assembled in item ③ Assembly of panel spacer of the above on the outer frame of the Decoration panel.

(3) Fix the panel spacer to the fixing metal ③ with screws ④ (4 portions).

• In the case of BYCP125K-W1

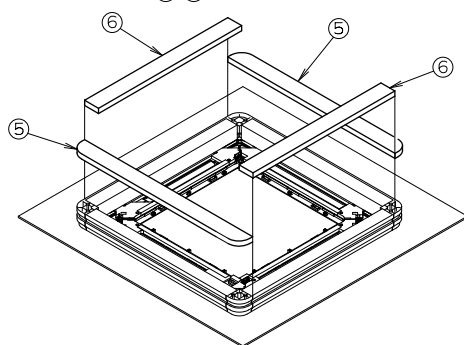


• In the cases of other than the above,

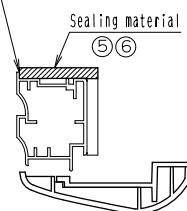


### ⑤ Adhesion of the sealing material

Adhere the sealing material ⑤ ⑥ on the upper face of the panel spacer in the order of ⑤ and ⑥.



Sticking reference  
(Adhere it along the inner rib,)

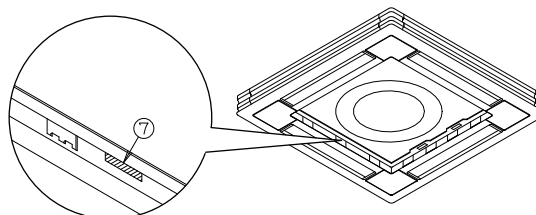


### ⑥ Installation of the Decoration panel

(1) Install the decoration panel to the indoor unit according to the installation manual of decoration panel.

The panel spacer is not firmly fixed to the decoration panel, so that never hold the panel spacer directly or lean the decoration panel extremely.

(2) After installation of the Decoration panel, adhere the caution sticker ⑦ next to the name plate of the indoor unit as shown on the right.



1P136564E

## KDDP55D160(K) – Fresh Air Intake Kit

**Caution**

Before starting the installation work, carefully read the following safety precautions and observe them to ensure safety during work.


- Make sure to use the attached or specified components to install the products. Otherwise, it may cause air leak or the product may fall.
- After installation, check whether there is no abnormality during the trial operation.

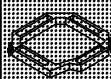








**REMARKS**

- This kit can be installed to the Ceiling Mounted Cassette Type Air Conditioner (Multi-flow type).
- Before installation, make sure the indoor unit number.
- Refer to the installation manuals for the indoor unit and the decoration panel.

**Combination table**

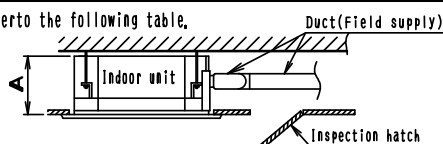
Kit name	Indoor unit model that party crowded is possible	
KDDP55D160	SPLIT	FHYCP50•60•71•100•125DVE
KDD55DA160		FHYCP71•100•125•140DVL
KDDP55D160K	VRV	FXFQ25•32•40•50•63•80•100•125LVE
KDD55DA160K		FXFQ25•32•40•50•63•80•100•125LVEC FXFQ25•32•40•50•63•80•100•125MVE

**Components** Check if the following parts are included with your kit.  
Shaded part  is separately packed.

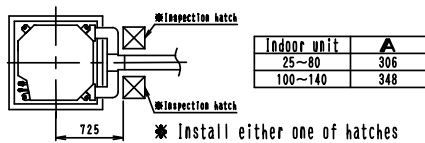
Name	① Suction Chamber	② Connecting Chamber (Right)	③ Connecting Chamber (Left)	④ Screw	⑤ Closing Material	⑥ T Joint	⑦ Flexible Duct	⑧ Clamp	⑨ Installation Manual
Shape									
Qty	KDDP55D160 KDD55DA160 KDDP55D160K KDD55DA160K	1 PC. 1 PC. 1 PC. 1 PC.	1 PC. 1 PC. 1 PC. 1 PC.	4 PCS. 4 PCS. 4 PCS. 4 PCS.	1 PC. — — —	— — 1 PC. —	— — 2 PCS. —	— — 4 PCS. —	1 PC. — 1 PC. —

**1 Selection of Location and Access Door**

1. Refer to the following table.



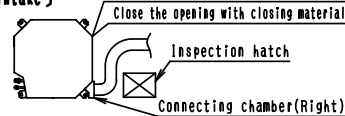
2. Inspection hatch (larger than 450 □)



\* Install either one of hatches

**In case of KDDP55D160**

- When the intake from both sides can not be obtained due to an obstacle, one side intake is acceptable. In this case, make sure to close the opening with the closing material ⑤.
- In case of one side intake, the noise will be larger than intake from both sides. (Example of one side intake)



\* When installing the wireless receiver kit on the indoor unit, the duct must be led from right side as shown. In this case, use KDDP55D160 or KDD55DA160.

**2 Installation of the Suction chamber**

1. Remove the decoration panel. (This is not required for the new installation)

- Remove the decoration panel in the reverse step when the panel is installed. (Refer to the installation manual of the decoration panel for the details.)

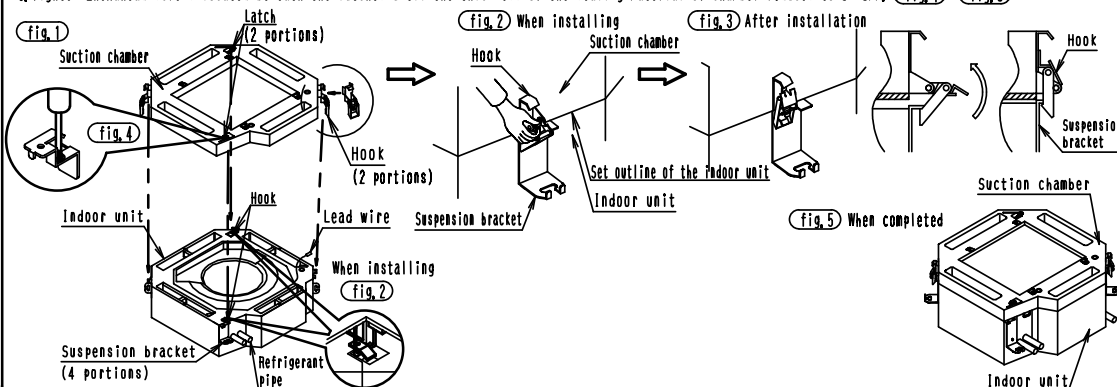
2. Temporarily install the suction chamber to the indoor unit by hanging the latch on the opposite side of the suction chamber to the hook of the indoor unit body. (2 portions)

Temporarily hang the remaining 2 hooks of the suction chamber to the hooks on the sides of the indoor unit. (fig.1 ~ fig.3)

(When the indoor unit is already installed, hang the hook to the suspension bracket temporarily and fix the hook.)

\* Installation set outline of the indoor unit

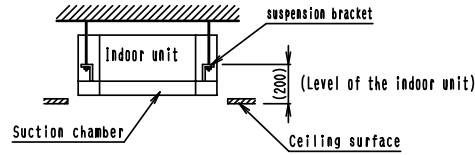
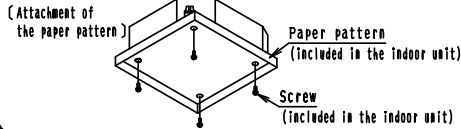
3. Tighten 2 hexahead screws located beneath the latches until the thickness of the sealing material of chamber reduces to 5~8mm. (fig.4 ~ fig.5)



3K011144A

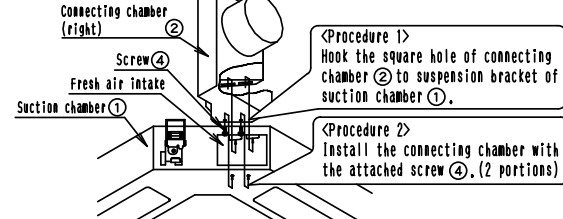
### 3 Installation of the Indoor Unit and the Suction Chamber

- Install the indoor unit and the suction chamber, Refer to the installation manual of the indoor unit, (For the height of the unit, refer to the drawing on the right.)
- Be complete installed refrigerant piping, and drain piping.
- Attach the paper pattern for installation to the indoor unit with screws to protect the indoor unit from dirt, [See below] (When the indoor unit is newly installed) (See below)
- In case of attaching the chamber after installed indoor unit, For the height of the unit, change the height shown on the right drawing.



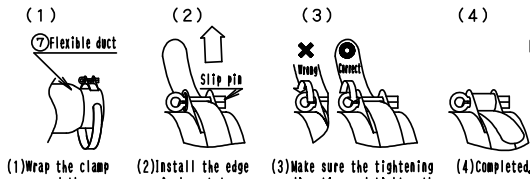
### 4 Installation of Connecting duct

1. Install the Connecting chamber(right & left) in accordance with the procedure shown in fig. 5.



(fig. 5) Installation of the connecting chamber(right)  
(Same as the left side)

#### <How to tighten the clamp>

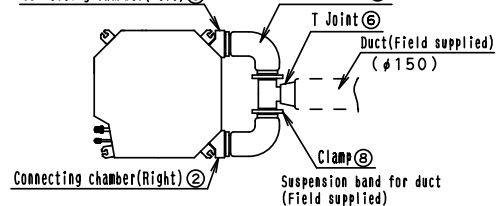


#### Caution

Do not turn the slit pin reversely.  
If turned reversely, ratchet part may break down.

#### In case of KDP55D160K

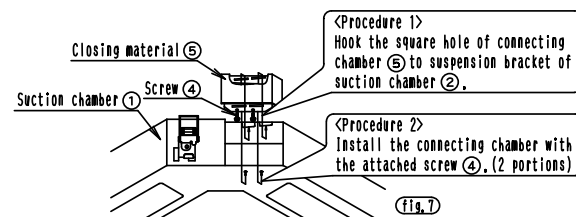
2. Connect the T Joint and Connecting chamber. (fig. 6)



(fig. 6)

(Installation of closing material in case of one side intake) (for KDP55D160 or KDP55DA160)

- Install the closing material in accordance with the following procedures, (fig. 7)



(fig. 7)

### 5 Duct connection <Duct: diameter φ 150>

- 1) Attach the duct to the outside of the Branch duct chamber,
  - Wrap the duct tape(Field supplied) around the connection to prevent air leak.
  - Insulate the duct to prevent condensate.
- 2) Do not perform the following duct work,

#### Caution

- follow the local code or regulation to install the duct,
- In case that metal duct is penetrated through wooden wall, make sure the duct and the wall are electrically insulated,
- Install the outdoor unit duct inclined downwardly so that the rain will not get into the duct, (Inclination 1/100 to 1/50)
- Where it contact the outside air, make sure to install screen to avoid birds, small animals or insects getting inside the duct,
- Where it contact the outside air, make sure to install air filter to protect heat exchanger for indoor unit,

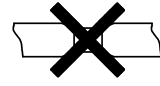
To bend excessively



To bend too many times

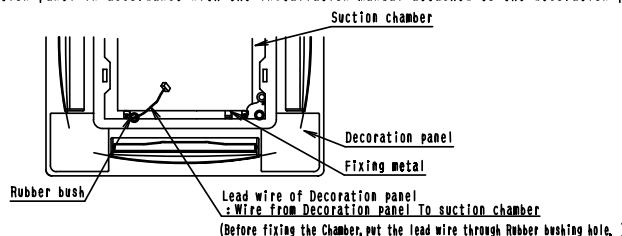


To reduce the diameter



### 6 Installation of Decoration panel

- Install the Decoration panel in accordance with the installation manual attached to the decoration panel,

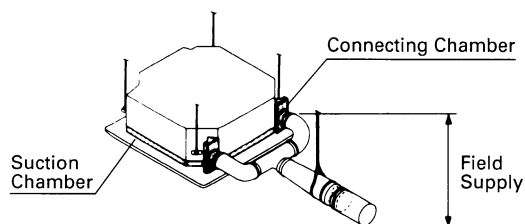


#### In case of the panel for Wireless remote controller

- Put the Connector for receiver lead wire through rubber bush and connect to the indoor PC board,
- Refer to the installation manual attached to the Wireless remote controller kit(optional) for the detail,

3K01144A

● KDDP55D160(Without T Joint, Duct Fan)



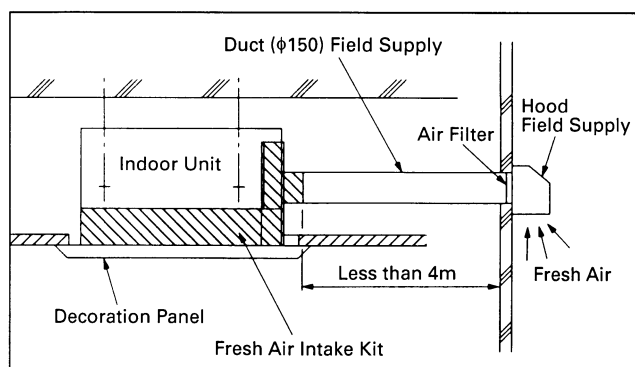
**Note:**

1. As the principle, the duct fan is unnecessary for 4 meters or less. When needing enough fresh air taking-in, use Kit with Duct Fan of optional, which is shown in the following.
2. The other part of Fresh air intake kit (Duct, T Joint, Air Filter, Hood, etc) is field supplied.
3. In wireless remote controller use, Flexible Duct in the right can not connect.

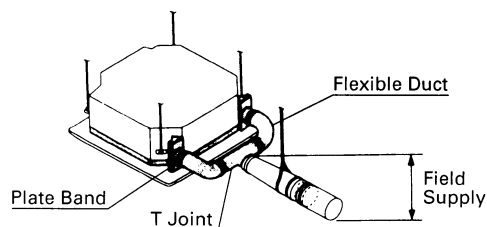
● Specifications

Kit Name	KDDP55D160
Item	
Method of Fresh Air Intake	Fresh Air Intake by The Indoor Unit Fan
Size of Connecting Duct	φ150
Applicable Models	For Indoor Unit

● Example of Installation



● KDDP55D160K(Attached T Joint, Without Duct Fan)



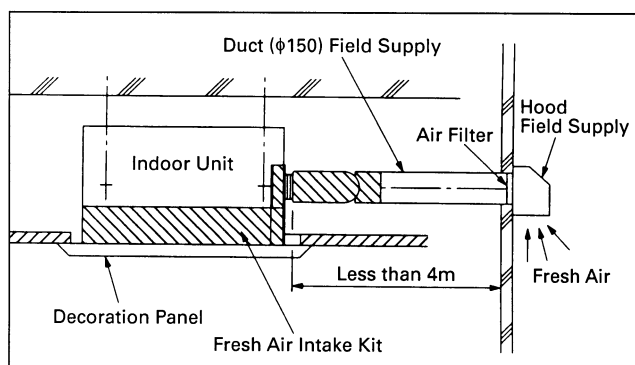
**Note:**

1. As the principle, the duct fan is unnecessary for 4 meters or less. When needing enough fresh air taking-in, use Kit with Duct Fan of optional, which is shown in the following.
2. The other part of Fresh air intake kit (Duct, T Joint, Air Filter, Hood, etc) is field supplied.
3. It isn't possible to do simultaneous use with wireless remote controller.

● Specifications

Kit Name	KDDP55D160K
Item	
Method of Fresh Air Intake	Fresh Air Intake by The Indoor Unit Fan
Size of Connecting Duct	φ150
Applicable Models	For Indoor Unit

● Example of Installation

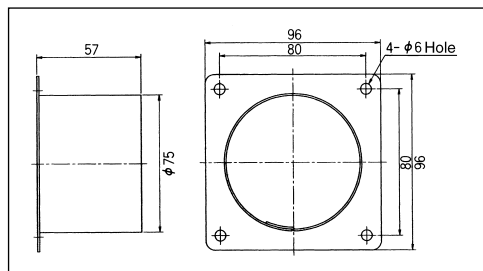


(B0418)

## KDDJ55X160 – Fresh Air Intake Kit

The fresh air is taken into the unit by the indoor unit fan or duct fan, which is field supplied. The location of fresh air intake port will be changeable by installing the duct fan.

### KDDJ55X160



J : D3K2175

#### Remarks:

1. This kit can be installed to the Ceiling mounted cassette type (Multi-flow).
2. When installing this kit, duct (Nominal dia. :  $\phi 75$ ) is required on site.

#### Contents

Prior to installation, make sure you have the complete kit of parts.

Name	① Duct Flange	② Screws	③ Insulation for Duct Flange	④ Insulation for Opening of Unit	⑤ Installation Manual
Q'ty	1 piece	4 pieces	1 piece	1 piece	1 piece
Shape		 M4×12			

#### Necessary tools

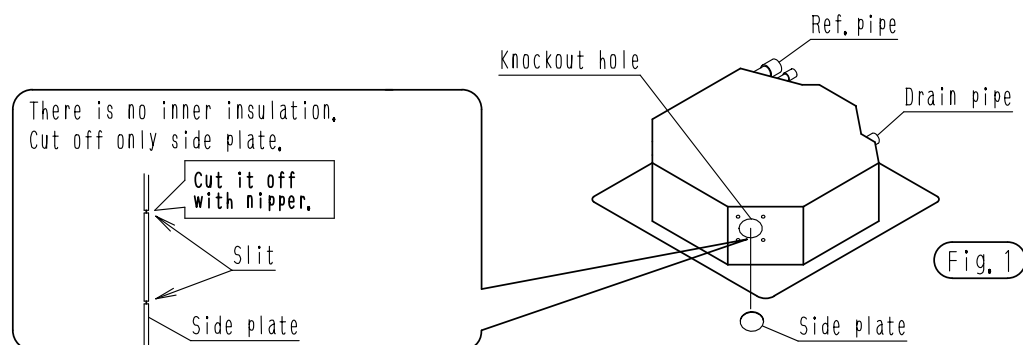
Philips head screw driver, nipper, cutter etc.

## 1 Installation procedures of Duct flange

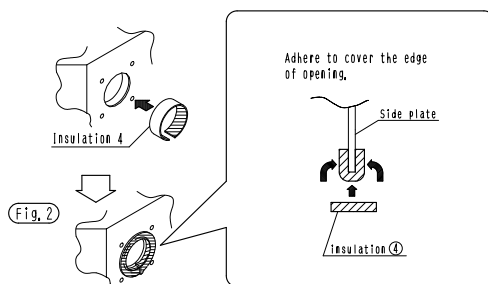
The method of installation varies with indoor unit type.

The unit type can be distinguished by the position of knockout hole.

1. Cut off the knockout hole on the side plate. (Fig. 1)



2. Adhere the insulation ④ for opening of unit to the opening. (Fig. 2)



C : 2P066796B

3. Install the duct flange① with screws② (M4×12, 4 screws) to the opening and adhere the insulation③ (Fig. 3)

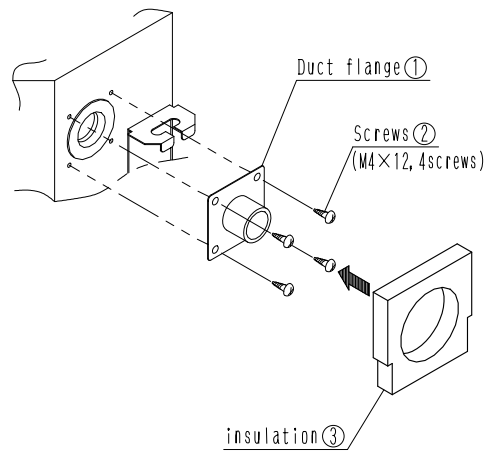


Fig. 3

## 2 Installation procedures of Duct<Nominal diameter of duct: $\phi 75$ >

1. Connect the duct to the duct flange. (Flange fits inside the duct.) (Fig. 4)
2. After connection, wrap vinyl tape (field supply) around the duct connection to prevent air leak.

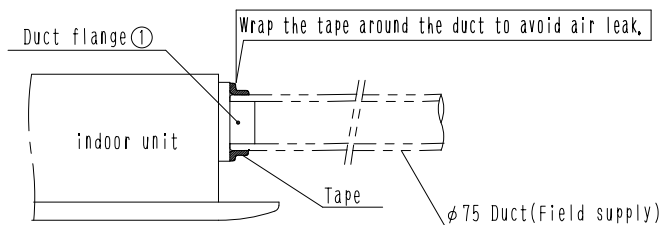


Fig. 4

### Precaution

1. ALL ducts must be completely insulated.
2. Do not do the followings when installing duct.

2-1) To bend the duct excessively



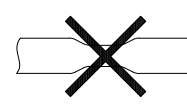
WRONG

2-2) To bend the duct too many times



WRONG

2-3) To reduce the duct diameter



WRONG

3. In case that metal duct is penetrated through wooden walls, make sure the duct and the wall electrically insulated.
4. Install the outdoor unit duct inclined downwardly so that the rain may not get into the duct. (Inclination 1/100 to 1/50)
5. To avoid birds, small animals or insects getting inside the duct, make sure to install net where it contacts the outside air.

C : 2P066796B

**KAFP556D80 · 160 – High Efficiency Filter Unit (Including Filter Chamber)****KAFP557D80 · 160 – High Efficiency Filter Unit (Including Filter Chamber)****Combination table**

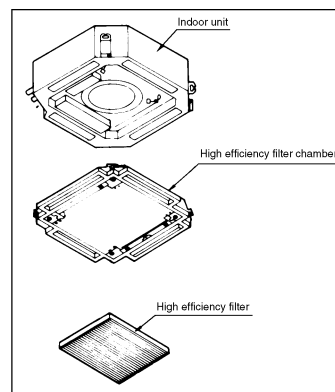
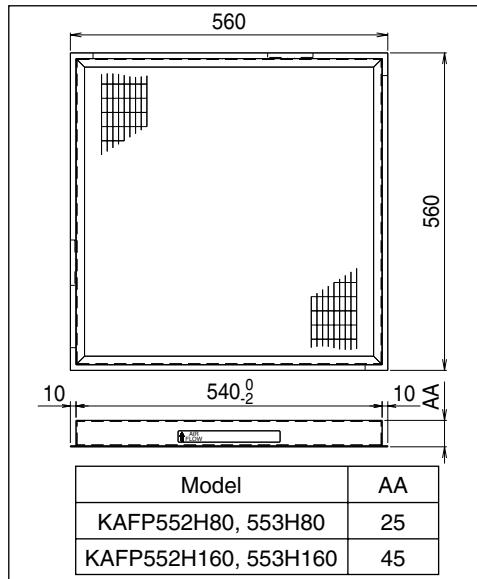
High Efficiency Filter Unit (Set)	Replacement High Efficiency Filter	Filter Chamber
KAFP556D80 KAFP557D80	KAFP552H80 KAFP553H80	KDDFP55D160
KAFP556D160 KAFP557D160	KAFP552H160 KAFP553H160	

**3****KAFP552H80 · 160 – Replacement High Efficiency Filter****KAFP553H80 · 160 – Replacement High Efficiency Filter****Specifications**

Replacement High Efficiency Filter	KAFP552H80	KAFP552H160	KAFP553H80	KAFP553H160
Filter Chamber	KDDFP55D160			
Collecting Efficiency (%)	65% (NBS Colorimetric method)		90% (NBS Colorimetric method)	
Initial Pressure Loss (Pa)	34 or less			
Final Pressure Loss (Pa)	98 or less			
Filter	Non-woven Fabric of Synthetic Fiber		Non-woven Fabric of Synthetic Fiber	
Life (h)	2,500 h (Dust Concentration 0.15 mg / m <sup>3</sup> )		1,800 h (Dust Concentration 0.15 mg / m <sup>3</sup> )	
Models to be Applied	25~80 Model	100 · 125 Model	25~80 Model	100 · 125 Model

**Precaution at use**

1. The high efficiency filter, and the other filter can not be installed together.
2. The unit should be operated with 4-way discharge when the high efficiency filter is installed.  
It can not be applied to the high ceiling room.
3. Field setting by remote controller is necessary when the high efficiency filter is installed.

**Dimension**

J : D3K04256A



## KRP1D98 – Installation Box for Adaptor PCB

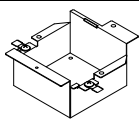
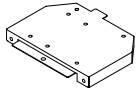




### Caution

- This box is mountable on the ceiling mounted cassette type (multi-flow type) unit. After confirming the indoor unit model name, mount this box on the unit listed in the table shown right.
- When mounting the box, see also the indoor unit installation manual and the adaptor PCB (Printed Circuit Board) mounting instruction.

Kit name	Indoor unit model that party crowded is possible	
KRP1D98	SPLIT	FHYCP50 • 60 • 71 • 100 • 125DVE FHYCP71 • 100 • 125 • 140DVL FCQ71 • 100 • 125 • 140D(A)V3B
	VRV	FXF25 • 32 • 40 • 50 • 63 • 80 • 100 • 125LVE FXF25 • 32 • 40 • 50 • 63 • 80 • 100 • 125LVEC FXFQ25 • 32 • 40 • 50 • 63 • 80 • 100 • 125MVE

### Accessories

Check if the following accessories are included with your kit.

Name	Adapter box	Adapter box cover	Clamp	Screw(1)	Screw(2)	Installation manual
Quantity	1PC.	1PC.	8PCS.	2PCS.	2PCS.	1PC.
Shape				 M4×12	 M4×8	

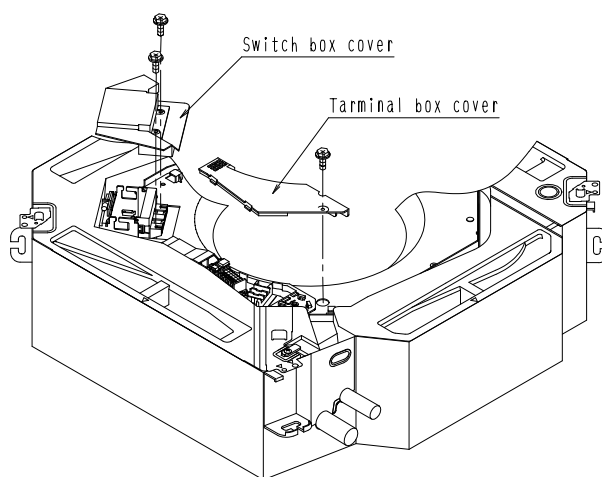
## 1 Mounting the adapter box

### <Preparation before wiring>

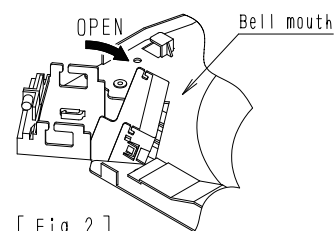
- ① Remove the switch box cover and the terminal cover, (Fig.1)
- ② Open the switch box until it almost touches the bell mouth, (Fig.2)

### <Mounting the adapter box>

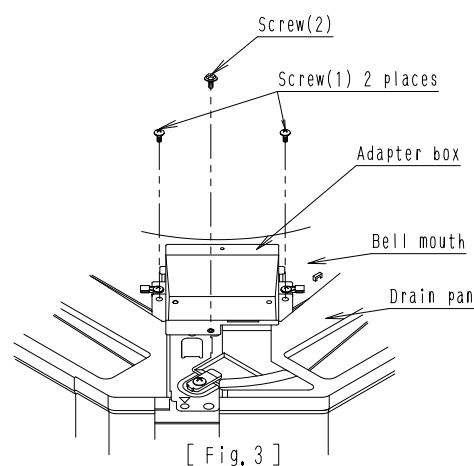
- ① Fix the box with the attached fixing screws (1) at two places and the fixing screw (2) at one place, (Fig.3)



[ Fig. 1 ]



[ Fig. 2 ]



[ Fig. 3 ]

1P086302B

## 2 Mounting the adapter PCB

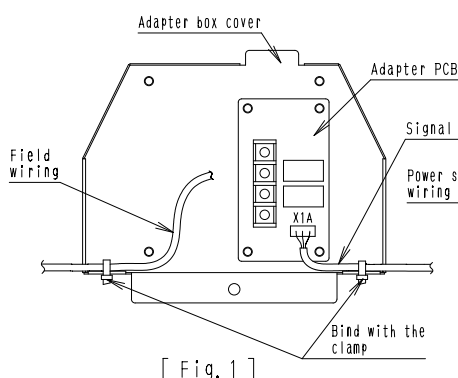
### 《How to mount the adapter PCB》

- ① Connect the wiring to the adapter PCB.  
(The work is easier if the wiring is connected to the PCB first.)
- See the instruction attached to the adapter PCB for where to connect the wiring.
- ② Mount the adapter PCB on the adapter box and the adapter box cover.

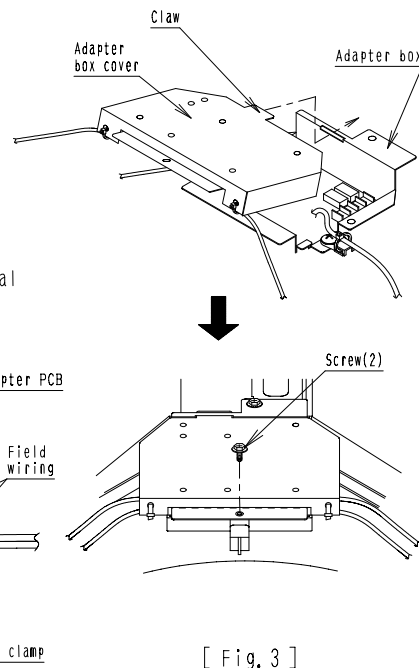
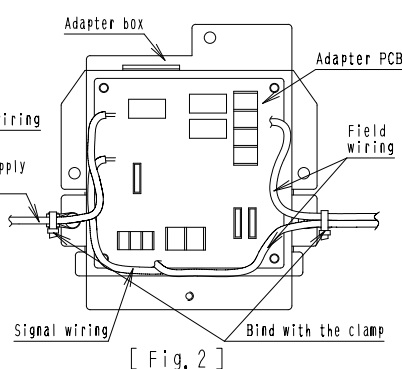
Adapter PCB	Place where to mount
Adapter for wiring	The PCB to be mounted on the adapter box cover, (Fig.1)
Wiring adapter for electrical appendices(1)(2)	The PCB to be mounted on the adapter box, (Fig.2)

- For the mounting position of the adapter PCB, see the instruction attached to the adapter PCB.
- ③ Bind the wiring from the adapter PCB (signal wires, power supply wires) with the attached clamp, (Fig.1) (Fig.2)
- ④ After putting the claw of the cover into the hole of the box, fix them with the attached screw (2), (Fig.3)
- Take precautions to prevent the wires from getting caught.

#### < Adapter for wiring >



#### < Wiring adapter for electrical appendices(1)(2) >



## 3 How to handle the wiring

### 《Wiring to the indoor unit》

Connect the wiring from the adapter PCB to the indoor unit, (signal wires, power supply wires)

- See the instruction attached to the adapter PCB for the place where to connect the wires on the indoor unit.

- ① Fix the internal wirings.
- Bind the wiring from the adapter box to the indoor unit switch box and to the terminal box according to the drawing shown on the right with the attached clamp.
- Bind the the surplus wires and the other wiring together with the clamp.
- ② Shut the switch box and secure firmly the switch box cover and the terminal box cover in place in opposite order of removing.
- Take precautions to prevent the wires from getting caught.

Bind the signal wires and the remote control wiring together with the clamp, (2 places)

Bind the power supply wires and the wiring between the units together with the clamp, (2 places)

Let the clamp go through the bell mouth hole and bind the signal wires and the field wiring together with this clamp.

Signal wiring  
Field wiring

Adapter for wiring,  
Wiring adapter for electrical appendices(1)(2)

Drain pump and float switch lead wire (transparent vinyl tube)

Signal wiring  
Power supply wiring

Bind the signal wires, the lead wires from the drain pump and the float switch and the field wiring together with the clamp.

1P086302B

## KDDFP55D160 – High Efficiency Filter Chamber

**Caution**

Before starting the installation work, carefully read the following, safety precautions and observe them to ensure safety during work.

- Make sure to use the attached or specified components to install the products. Otherwise, it may cause air leak or the product may fall.
- After installation, check whether there is no abnormality during the trial operation.

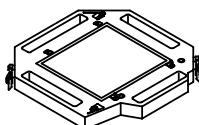
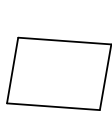
**REMARKS**

- This kit can be installed to the Ceiling Mounted Cassette Type Air Conditioner (Multi-flow type).
- Before installation, make sure the indoor unit model name.
- Refer to the installation manuals for the indoor unit and the decoration panel.

**Notes** (In case of using the Ultra-long life filter)

Ultra-long life filter can be reused by cleaning. After installation, instruct filter cleaning period and removing to customers.

**Components** Check if following parts are included with your kit.

Name	Filter chamber	Installation manual
Shape		
Quantity	1 PC.	1 PC.

**Combination table**

Kit name	High Efficiency filter	Ultra-long life filter	Indoor unit model that party crowd is possible	
KDDFP55D160	KAFP552H80 KAF552HA80 or KAFP553H80 KAF553HA80	KAFJ55K160H	SPLIT	FHYCP50 • 60 • 71DVE FHYCP71DVL
				FXF25 • 32 • 40 • 50 • 63 • 80LVE FXF25 • 32 • 40 • 50 • 63 • 80LVEC FXFQ25 • 32 • 40 • 50 • 63 • 80MVE
	KAFP552H160 KAF552HA160 or KAFP553H160 KAF553HA160	KAF55KA160H	SPLIT	FHYCP100 • 125DVE FHYCP100 • 125 • 140DVL
				FXF100 • 125LVE FXF100 • 125LVEC FXFQ100 • 125MVE
KDDFP55DA160	KAFP552H80 KAF552HA80 or KAFP553H80 KAF553HA80	KAFJ55K160H	VRV	FXF25 • 32 • 40 • 50 • 63 • 80LVE FXF25 • 32 • 40 • 50 • 63 • 80LVEC FXFQ25 • 32 • 40 • 50 • 63 • 80MVE
				FXF100 • 125LVE FXF100 • 125LVEC FXFQ100 • 125MVE

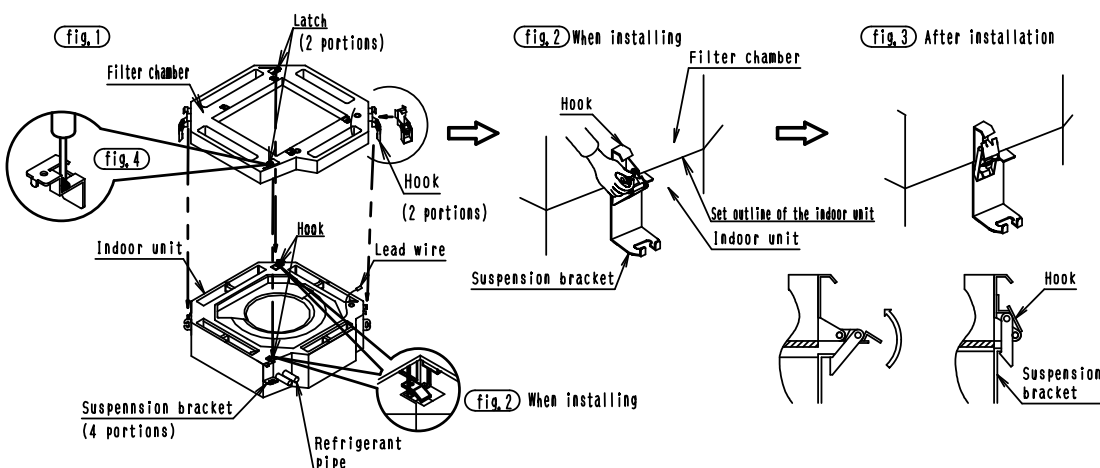
**1 Preparation of indoor unit**

- When you install the Ultra-long life filter, the setting by the remote controller is required. Set the remote controller at the field setting mode and change the setting position number as shown on the table. Refer to the operation manual of remote controller for the field setting.

Filter name		Mode No.	Setting switch No.	Setting position No.		Contents of setting
High Efficiency filter	Only 80	13 or 23	0	02		_____
	Both 80 and 160		1	02		
Ultra-long life filter		10 or 20	0	Less dusty place	01	Filter cleaning period :Every 10,000 hrs
				Dusty place	02	Filter cleaning period :Every 5,000 hrs
			1	02		Filter sign display-Ultra-long life filter

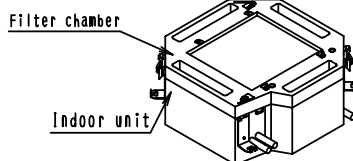
**2 Installation of Filter chamber**

- Remove the decoration panel. (This is not required for the new installation)
  - Remove the decoration panel in the reverse step when the panel is installed. (Refer to the installation manual of the decoration panel for the details.)
- Temporarily install the filter chamber to the indoor unit by hanging the latch on the opposite side of the filter chamber to the hook of the indoor unit body. (2 portions) Temporarily hang the remaining 2 hooks of the filter chamber to the hooks on the sides of the indoor unit. (fig.1) ~ (fig.3)
  - (When the indoor unit is already installed, hang the hook to the suspension bracket temporarily and fix the hook.)
  - ※ Installation set outline of the indoor unit (fig.2)
- Tighten 2 hexahead screws located beneath the latches until the thickness of the sealing material (fig.4) (fig.5) of chamber reduces to 5~8mm.



C : 3K011148B

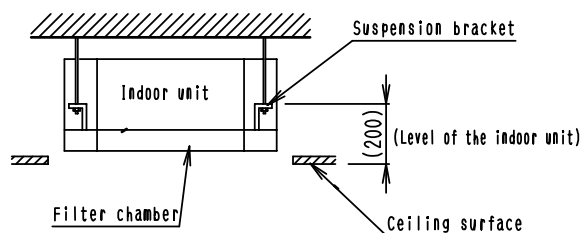
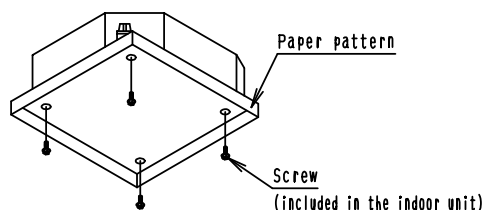
fig.5 When completed



### 3 Installation of the indoor unit and the Filter chamber

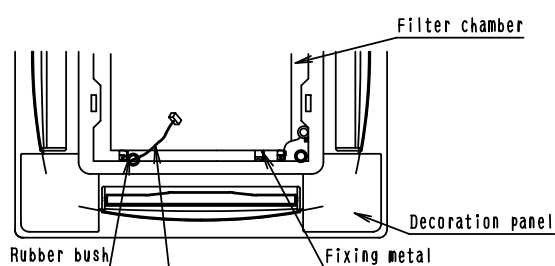
- Install the indoor unit and the filter chamber.  
Refer to the installation manual of the indoor unit.  
(For the height of the unit, refer to the drawing on the right.)
- Be complete installed refrigerant piping, and drain piping.
- Attach the paper pattern for installation to the indoor unit with screws to protect the indoor unit from dirt, [See below]  
(When the indoor unit is newly installed)  
(See below)
- In case of attaching the chamber after installed indoor unit,  
For the height of the unit, change the height shown on the right drawing.

(Attachment of the paper pattern)



### 4 Installation of Decoration panel and the Filter

- Install the Decoration panel in accordance with the installation manual attached to the decoration panel.



Lead wire of Decoration panel  
: Wire from Decoration panel to Filter chamber  
(Before fixing the Chamber, put the lead wire through Rubber bushing hole. )

- Installation of Filter  
After connecting, install the Filter chamber. (fig.6)

#### (In case of the panel for Wireless remote controller)

- Put the Connector for receiver lead wire through rubber bush and connect to the indoor PC board.
- Refer to the installation manual attached to the Wireless remote controller kit(optional) for the detail.

fig.6

Turn the fixing metal  
90° and fix the filter  
(4 portions)

Fixing metal  
High efficiency filter  
or  
Ultra-long life filter

3K011148B

## KAFJ551C160 – Long-Life Filter for Decoration Panel (Replacement)

### • Specifications

Life	5,000 h (Dust concentration 0.15 mg / m <sup>3</sup> )
Average collecting efficiency	65 % (Gravimetric method)
Filter material	Mildew proof resin net
Quantity per unit	1
Applicable models	25~125 model

(B0479)

## KAFP55D160 – Ultra Long-Life Filter

**⚠ Caution** Before starting the installation work, carefully read the following safety precautions and observe them to ensure safety during work.

- Make sure to use the attached or specified components to install the products. Otherwise, it may cause air leak or the product may fall.
- After installation, check whether there is no abnormality during the trial operation.

**Notes**

Ultra-long life filter can be reused by cleaning. After installation, instruct filter cleaning period and removing to customers.

**Components** Check if following parts are included with your kit.

Name	Ultra-long Life Filter Unit	Installation manual
Shape		
Quantity	1 PC.	1 PC.

**REMARKS**

- This kit can be installed to the Ceiling Mounted Cassette Type Air Conditioner (Multi-flow type).
- Before installation, make sure the indoor unit model name.
- Refer to the installation manuals for the indoor unit and the decoration panel.

**Combination table**

Kit name	Indoor unit model that party crowded is possible
KAFP55D160	SPLIT FHYCP50•60•71•100•125DVE FHYCP71•100•125•140DVL
KAF55DA160	VRV FXF25•32•40•50•63•80•100•125LVE FXF25•32•40•50•63•80•100•125LVEC FXFQ25•32•40•50•63•80•100•125MVE

### 1 Preparation of indoor unit

- When you install the Ultra-long life filter, the setting by the remote controller is required. Set the remote controller at the field setting mode and change the setting position number as shown on the table. Refer to the operation manual of remote controller for the field setting.

Mode No.	Setting switch No.	Setting position No.	Contents of setting
10 or 20	0	Less dusty place 01	Filter cleaning period : Every 10,000 hrs
		Dusty place 02	Filter cleaning period : Every 5,000 hrs
	1	02	Filter sign display: Ultra-long life filter

### 2 Installation of Ultra-long life filter Unit

- Remove the decoration panel. (This is not required for the new installation)
  - Remove the decoration panel in the reverse step when the panel is installed. (Refer to the installation manual of the decoration panel for the details.)

- Remove the Ultra-long life filter. (fig.1)

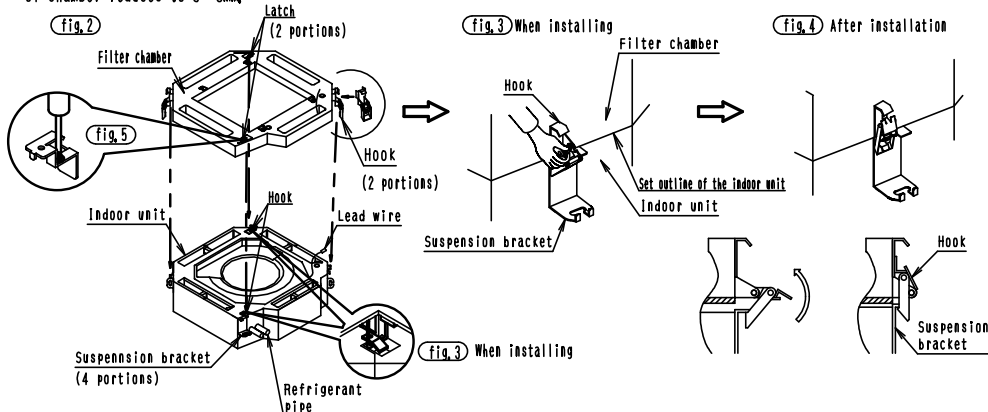
- Temporarily install the filter chamber to the indoor unit by hanging the latch on the opposite side of the filter chamber to the hook of the indoor unit body. (2 portions)

Temporarily hang the remaining 2 hooks of the filter chamber to the hooks on the sides of the indoor unit. (fig.2 ~ fig.4)

(When the indoor unit is already installed, hang the hook to the suspension bracket temporarily and fix the hook.)

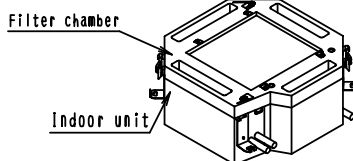
\*Installation set outline of the indoor unit (fig.3)

- Tighten hexahead screws located beneath the latches until the thickness of the sealing material (fig.5) (fig.6) of chamber reduces to 5~8mm.



3K011147B

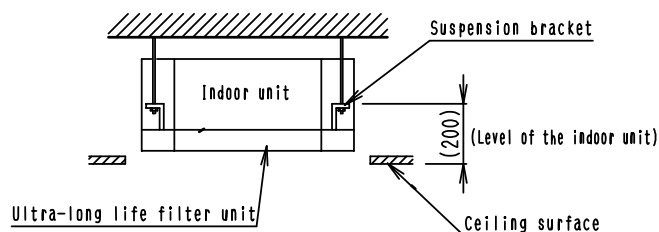
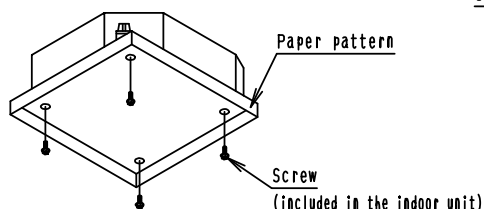
fig.6 When completed



### ③ Installation of the indoor unit and the Ultra-long life filter unit

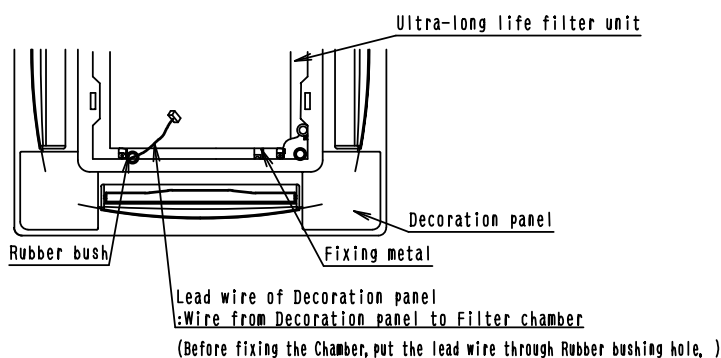
- Install the indoor unit and the Ultra-long life filter unit.  
Refer to the installation manual of the indoor unit.  
(For the height of the unit, refer to the drawing on the right.)
- Be complete installed refrigerant piping, and drain piping.
- Attach the paper pattern for installation to the indoor unit with screws to protect the indoor unit from dirt, [See below]  
(When the indoor unit is newly installed)  
(See below)
- In case of attaching the chamber after installed indoor unit,  
For the height of the unit, change the height shown on the right drawing.

(Attachment of the paper pattern)



### ④ Installation of the Decoration panel and the Ultra-long life filter

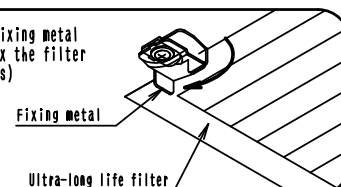
- Install the Decoration panel in accordance with the installation manual attached to the decoration panel.



- Installation of the Ultra-long life filter  
After connecting, install the Filter chamber. (fig.7)

fig.7

Turn the fixing metal  
90° and fix the filter  
(4 portions)



#### (In case of the panel for Wireless remote controller)

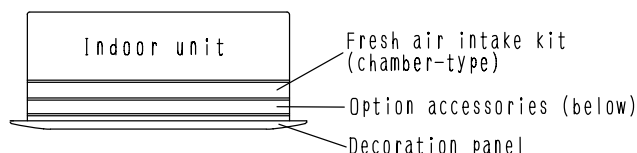
- Put the Connector for receiver lead wire through rubber bush and connect to the indoor PC board.
- Refer to the installation manual attached to the Wireless remote controller kit(optional)for the detail.

3K011147B

## KKSJ55K160 – Chamber Connection Kit

## Combining with option accessories (chamber-type)

- This chamber connection kit is for use with the multi-flow set. Refer to the catalog, etc. for details on the separately sold items (chamber-type) to be connected.
- Refer to the table at right for combinations of this kit and other option accessories(chamber-type). Also, be sure to install the fresh air intake (chamber-type) kit above.



## Contents of parts

Check the following parts

Name	Relay harness	Clamping material
Shape	①	②
Quantity	1 PC.	2 PCS.

	Option accessories (chamber-type)	Fresh air intake kit
below	Air purification unit	○
	High Efficiency filter unit	○
	Ultra-long life filter unit	○
	Fresh air intake kit	

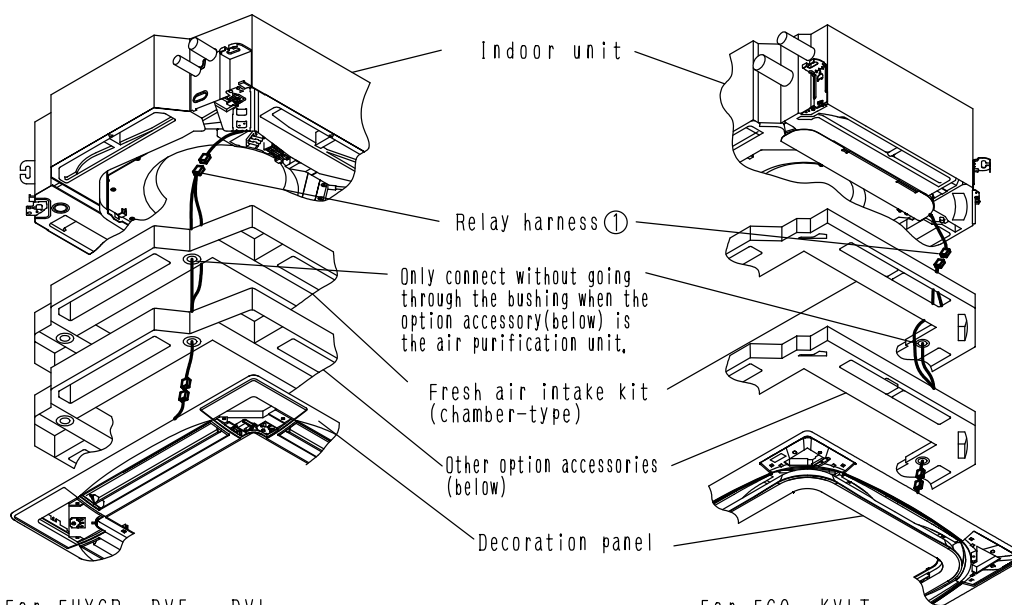
Combinations not listed in this table should not be attempted as they will cause malfunctions.

## Installation of the Chamber connection kit.

Refer to the installation (attachment) manuals included with the indoor unit, the option accessories (chamber-type), and Decoration panel for details on installation (attachment).

## Caution

Extend the Decoration panel's swing motor lead wire using the included relay harness ① and connect it to the indoor unit. When doing this, use the included clamping material ② to tie the lead wire so it does not droop.



For FHYCP~DVE, ~DVL  
FXF~LVE, FXFQ~MVE, ~LVEC

For FCQ~KVLT

3P089651C


















## KDP55D80 · KDP55D160 – Branch Duct Chamber

## REMARKS

- This kit can be installed to the Ceiling Mounted Cassette Type Air Conditioner (Multi-flow type).
- Before installation, make sure the indoor unit model name.
- Refer to the installation manuals for the indoor unit and the decoration panel.

**Contents of kit** Check if the following parts are included with this kit.

NAME	Branch Duct Chamber	Screw	Installation Manual	Sealing Material	Tape for fixing the Sealing Material
Shape + Number					
Q'ty	1 PC.	10 PCS.	1 PC.	2 PCS.	2 PCS.

NAME	Indoor unit insulation material				Indoor unit opening seal material			Moisture Absorber for Swing flap	Spacer	Spacer installation screw
Shape + Number										
Q'ty	1 PC.	1 PC.	1 PC.	1 PC.	2 PCS.	2 PCS.	1 PC.	3 PCS. (5 types)	1 PC.	1 PC.

## Combination table

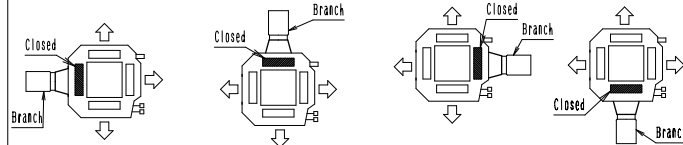
Kit name	Indoor unit model that party crowd is possible	
KDP55D80	SPLIT	FHYCP50 · 60 · 71DVE FHYCP71DVL FCQ71D(A)V3B
	VRV	FXF25 · 32 · 40 · 50 · 63 · 80LVE FXFQ25 · 32 · 40 · 50 · 63 · 80MVE FXF25 · 32 · 40 · 50 · 63 · 80LVEC
KDP55D160	SPLIT	FHYCP100 · 125DVE FHYCP100 · 125 · 140DVL FCQ100 · 125 · 140D(A)V3B
	VRV	FXF100 · 125LVE FXFQ100 · 125MVE FXF100 · 125LVEC

## 1 Pre-installation preparations

This branch duct can be used for 4 directions independently or 2 directions at once.

- You may choose the following outlet directions for this branch duct chamber. Select the outlet direction that best fits the shape of the room or the installation location. (Outlet directions other than the below cannot be selected)
- Select the duct length and outlet vent according to the external static sound pressure and fan strength characteristics (refer to the technical guide).

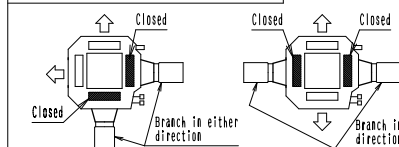
## 1-direction branch, indoor unit 3-way air discharge



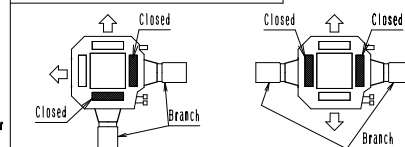
## Caution

- Be sure to completely seal off the air outlet on the indoor unit to which the branch duct chamber is attached. If the seal is imperfect, this may cause water splattering and condensation.  
(Refer to **4 Installation of the sealing material to the indoor unit**)
- When attaching the Branch Duct Chamber, be sure to perform the setting for indoor unit.  
(Refer to **6 Setting for indoor unit**)

## 1-direction branch, indoor unit 2-way air discharge



## 2-direction branch, indoor unit 2-way air discharge



## 2 Installation of the Branch Duct Chamber

When installing the indoor unit after attaching the Branch Duct Chamber (for a new installation), avoid applying undue pressure on the Branch Duct Chamber. (This may damage it.)

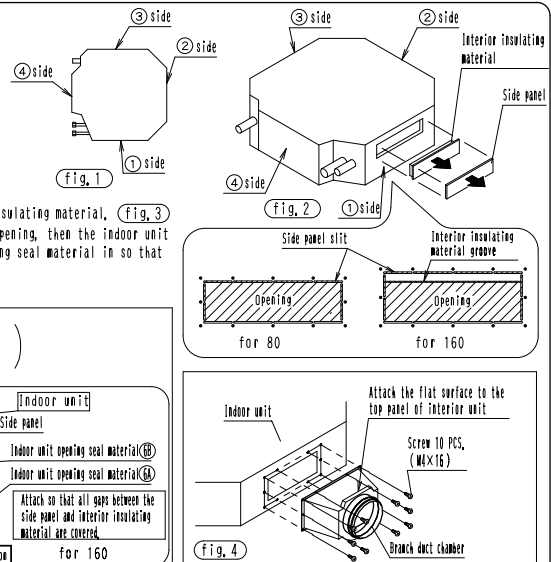
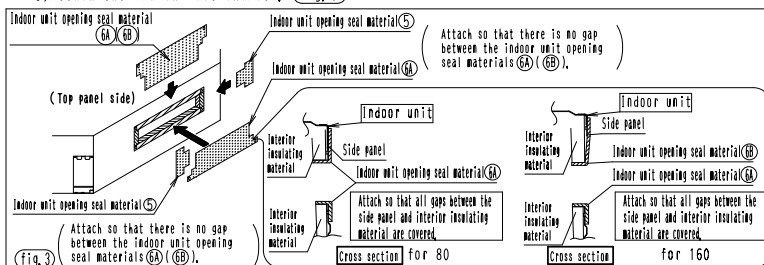
- (1) Select the position to attach the Branch Duct Chamber. (fig. 1)
- (2) Attach the Branch duct chamber to the indoor unit following the steps below. (the fig. shows the ① side.)

- 1) Cut off the indoor unit side panel to which the Branch duct chamber will be attached along the slit. Next, cut off the interior insulating material along the groove. (Cut off the slit part using nippers, and the groove part using cutters.) (fig. 2)

- 2) Attach the sealing material so that it hides the gap between the side panel and interior insulating material. (fig. 3)

- First attach the indoor unit opening seal material (small) ⑤ to right and left of the opening, then the indoor unit opening seal material (large) ⑥ above and below. At this time, fold the indoor unit opening seal material in so that the gap between the side panel and interior insulating material is hidden.

- 3) Attach the Branch duct chamber. (fig. 4)



1P089650C

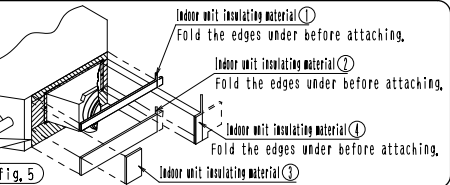


(3) Attach the indoor unit insulating material to the indoor unit. (The fig. shows the ① side.) (fig. 5)

Attach aligning the left edges of indoor unit insulating material ① ② ③.

Be sure to attach the indoor unit insulating material from above the Branch duct chamber flange (metal plate). This may cause condensation.

(fig. 5)



### ③ Duct connection

《 Duct: KDP55D80 • KDP55DA80 ...diameter  $\phi$  150  
KDP55D160 • KDP55DA160 ...diameter  $\phi$  200 》

- 1) Attach the duct to the outside of the Branch duct chamber. (fig. 6)
  - Wrap the duct tape (Field supplied) around the connection to prevent air leak.
  - Insulate the duct to prevent condensate.
- 2) Do not perform the following duct work.

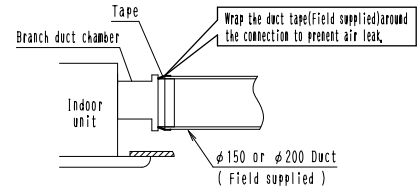
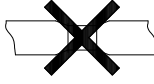
To bend excessively



To bend too many times



To reduce the diameter



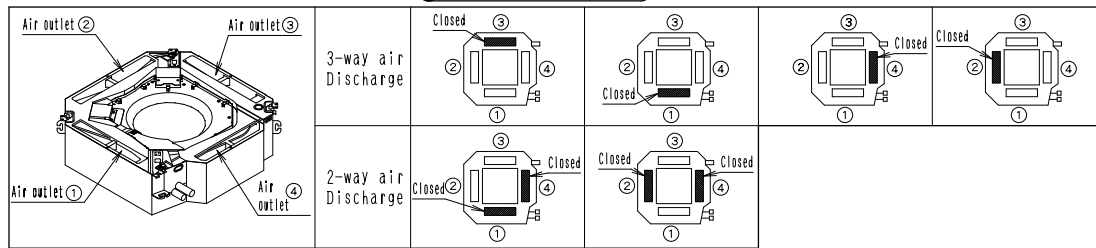
(fig. 6)

#### Caution

- follow the local code or regulation to install the duct.
- In case that metal duct is penetrated through wooden wall, make sure the duct and the wall are electrically insulated.

### ④ Installation of the sealing material to the indoor unit 《The sealing material included in this kit is enough for two air outlets,》

- Select which air outlet to be closed off referring to ① Pre-installation preparations. Be sure to close off the branch duct attachment side.



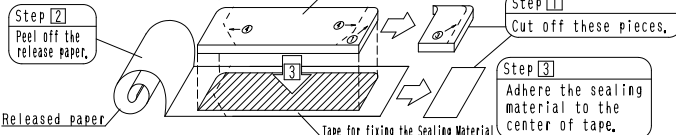
- (1) Prepare the sealing material and the tape for fixing the sealing material according to the air outlet No. To be closed.

- Cut off the sealing material and the tape along the perforated lines (marked ---).
- Adhere the sealing material to tape. (Make sure that the sealing material is placed at the center of the tape.)

- (2) Adhere the sealing material prepared according to the procedure (1) to the indoor unit air outlet.

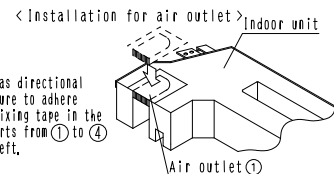
Example) For closing the air outlet ①

<How to prepare the sealing material>



#### Caution

The sealing material has directional characteristics. Make sure to adhere the sealing material fixing tape in the direction which the parts from ① to ④ can be seen as shown left.



\*When closing the air outlet ②, it is not required to work on the sealing material.

### ⑤ Setting for indoor unit

- When you install the Branch duct chamber, the setting by the remote controller is required. Set the remote controller at the field setting mode and change the setting position number as shown on the table. Refer to the operation manual of remote controller for the field setting.

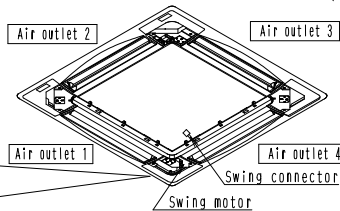
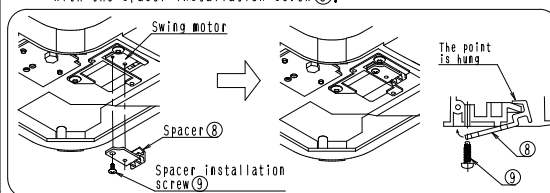
Branch and air discharge patterns	Mode No.	Setting switch No.	Setting position No.
1-direction branch, 3-way air Discharge	13 or 23	1	02
1-direction branch, 2-way air Discharge			03
2-direction branch, 2-way air Discharge			

### ⑥ Installation of Decoration panel

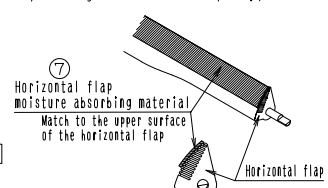
Please turn off the power supply for safety absolutely, before you do affixation of insulation and connected work of swing connector.

Refer to the installation manual for the decoration panel. After installing the decoration panel, make sure there are no gaps between it and the indoor unit.

- Please install spacer ⑧ on the swing motor with the spacer installation screw ⑨.



- Attach the horizontal flap moisture absorbing material to the horizontal flaps on the Air outlet as per the figure at bottom. (Attach, matching the color of the panel.)



\*All air outlets which have not been closed off.

1P089650C

# **FXKQ-MA**

## **Ceiling Mounted Cassette**

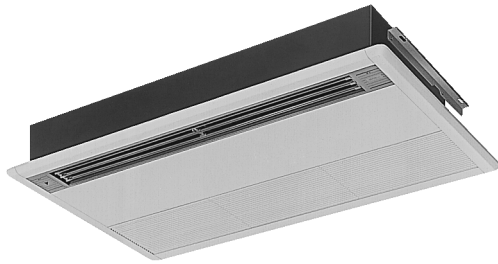
### **Corner Type**

**4**

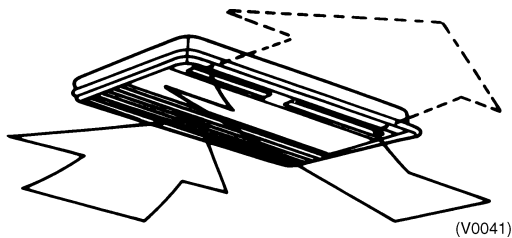
1. Features .....	112
2. Specifications .....	113
3. Dimensions .....	114
4. Piping Diagrams .....	116
5. Wiring Diagrams .....	117
6. Electric Characteristics .....	118
7. Capacity Tables .....	119
7.1 Cooling Capacity .....	119
8. Sound Levels .....	120
9. Installation .....	121
10. Accessories .....	124

# 1. Features

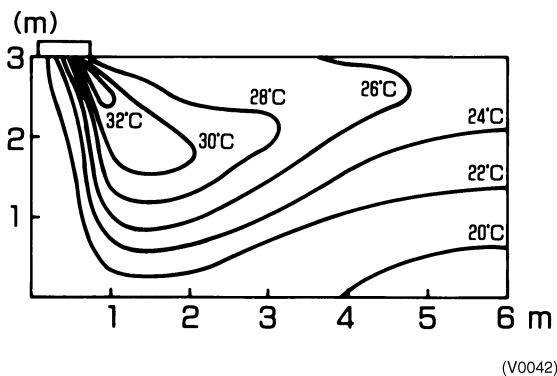
215 mm-thick body features discreet, slim design and offers a wide variety of discharge methods and mounting such as in corners or in suspended ceilings, etc.



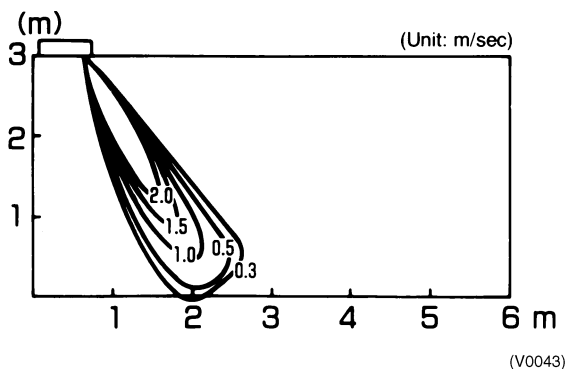
- Single-flow type offers effective air discharge from corners or from a suspended ceiling.



- Thin, discreet design enables mounting when the ceiling pocket is as shallow as 22 cm
- Temperature Distribution (FXKQ63MA : downward discharge angle 65° in heating.).

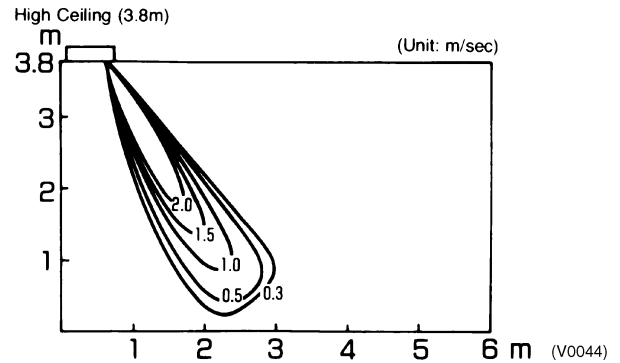


- Air velocity Distribution (FXKQ63MA : downward discharge angle 65° in heating.)

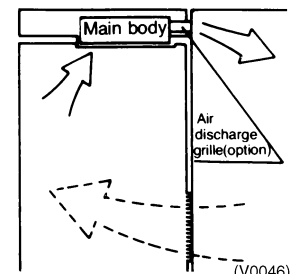
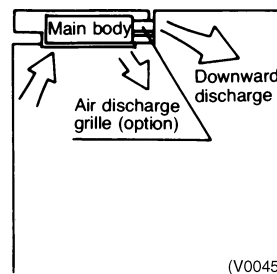


- Air volume switch built into the main body allows

mounting in ceilings as high as 3.8 m. This unit is even able to handle spaces with a split level ceiling by accurately adjusting air volume in accordance with the ceiling height.



- The 63 class (equivalent to 2.5 HP) features extremely quiet operation, only 42 dBA of sound level.
- In addition to downward discharge, front discharge (straight discharge, neither angled upward nor downward) can be provided by mounting an air discharge unit (optional) to the front of the body; can be mounted even with difficult elements such as suspended ceilings and sagging walls. A combination of front and downward discharge is also possible. (Auto-swing cannot be used with front discharge.)



- \* Set for front discharge using a suspended ceiling
- Downward discharge is shut off and air is blown straight out (front discharge)

- Equipped with a programmed drying mechanism that dehumidifies while inhibiting changes in room temperature.
- Includes as standard equipment a long-life filter that is maintenance-free for approximately one year. (Treated to mold resistant.)
- Equipped with drain pump kit that makes possible draining in the upward direction up to 500 mm from the ceiling surface.
- Decoration panel is thin and unimposing, doesn't clash with interior design and provides an excellent finishing touch for the ceiling. (Available in white.)
- If the ceiling pocket is shallow and the main body will not fit, a thick panel that provides aesthetically appealing cover for the exposed portion (up to 20 mm) is available as an option.

## 2. Specifications

### Ceiling Mounted Cassette Corner Type

Model			FXKQ25MAVE	FXKQ32MAVE	FXKQ40MAVE	FXKQ63MAVE	
*1 Cooling Capacity (19.5°CWB)		kcal/h	2,500	3,200	4,000	6,300	
		Btu/h	9,900	12,600	16,000	24,900	
		kW	2.9	3.7	4.7	7.3	
*2 Cooling Capacity (19.0°CWB)		kW	2.8	3.6	4.5	7.1	
Casing			Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate	
Dimensions: (HxWxD)		mm	215x1,110x710	215x1,110x710	215x1,110x710	215x1,310x710	
Coil (Cross Fin Coil)	RowsxStagesxFin Pitch	mm	2x11x1.75	2x11x1.75	2x11x1.75	3x11x1.75	
	Face Area	m²	0.180	0.180	0.180	0.226	
Fan	Model		3D12H1AN1V1	3D12H1AN1V1	3D12H1AP1V1	4D12H1AJ1V1	
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan	
	Motor Output x Number of Units		W	15x1	15x1	20x1	45x1
	Air Flow Rate (H/L)	50 Hz	m³/min	11/9	11/9	13/10	18/15
			cfm	388/318	388/318	459/353	635/530
	Drive		Direct Drive	Direct Drive	Direct Drive	Direct Drive	
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	
Sound Absorbing Thermal Insulation Material			Polyethylene Foam	Polyethylene Foam	Polyethylene Foam	Polyethylene Foam	
Piping Connections	Liquid Pipes	mm	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ9.5 (Flare Connection)	
	Gas Pipes	mm	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ15.9 (Flare Connection)	
	Drain Pipe	mm	VP25 ( External Dia. 32 Internal Dia. 25 )	VP25 ( External Dia. 32 Internal Dia. 25 )	VP25 ( External Dia. 32 Internal Dia. 25 )	VP25 ( External Dia. 32 Internal Dia. 25 )	
Machine Weight (Mass)		kg	31	31	31	34	
*4 Sound Level (H/L) (220V)		dBA	38/33	38/33	40/34	42/37	
Safety Devices			Fuse. Thermal Fuse for Fan Motor.	Fuse. Thermal Fuse for Fan Motor.	Fuse. Thermal Fuse for Fan Motor.	Fuse. Thermal Fuse for Fan Motor.	
Refrigerant Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	
Connectable Outdoor Units			R-410A P Series	R-410A P Series	R-410A P Series	R-410A P Series	
Decoration Panels (Option)	Model		BYK45FJW1	BYK45FJW1	BYK45FJW1	BYK71FJW1	
	Panel Color		White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)	
	Dimensions: (HxWxD)	mm	70x1,240x800	70x1,240x800	70x1,240x800	70x1,440x800	
	Air Filter		Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	
	Weight		kg	8.5	8.5	8.5	9.5
Standard Accessories			Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Insulation for Fitting. Sealing Pads. Clamps. Screws. Washers. Positioning Jig for Installation. Insulation for Hanger Bracket. Air Outlet Blocking Pad.	Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Insulation for Fitting. Sealing Pads. Clamps. Screws. Washers. Positioning Jig for Installation. Insulation for Hanger Bracket. Air Outlet Blocking Pad.	Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Insulation for Fitting. Sealing Pads. Clamps. Screws. Washers. Positioning Jig for Installation. Insulation for Hanger Bracket. Air Outlet Blocking Pad.	Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Insulation for Fitting. Sealing Pads. Clamps. Screws. Washers. Positioning Jig for Installation. Insulation for Hanger Bracket. Air Outlet Blocking Pad.	
Drawing No.			C : 3D038813A				

#### Note:

- \*1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.
- \*2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.
- \*3 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- \*4 Anechoic chamber conversion value, measured at a point 1 m in front of the unit and 1m downward. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
- 5 Refer to page 118 for Fan Motor Input.

#### Conversion Formulae

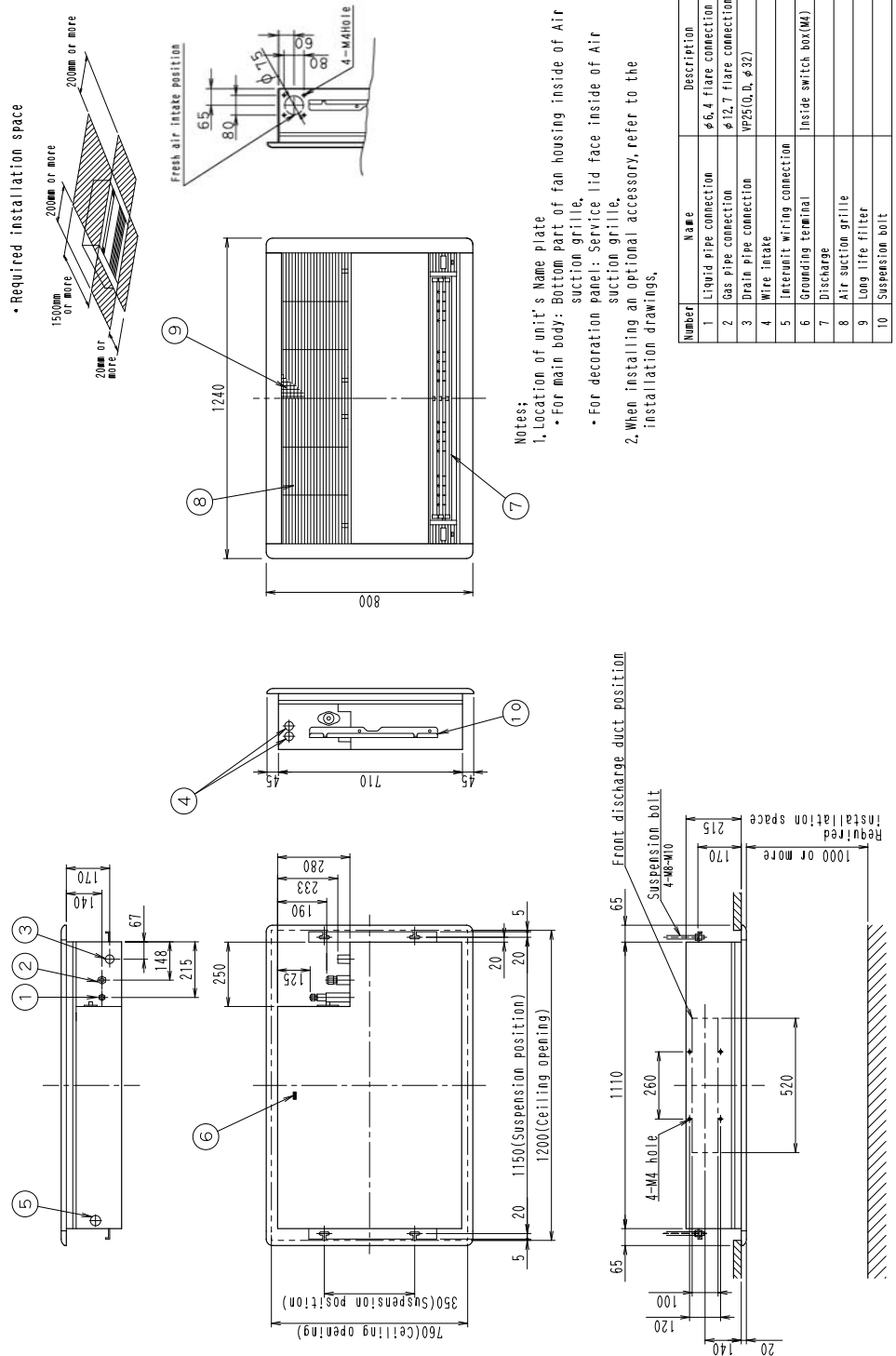
kcal/h=kW×860  
Btu/h=kW×3412  
cfm=m<sup>3</sup>/min×35.3

### 3. Dimensions

**FXKQ25MA + BYK45FJW1 (Decoration Panel)**

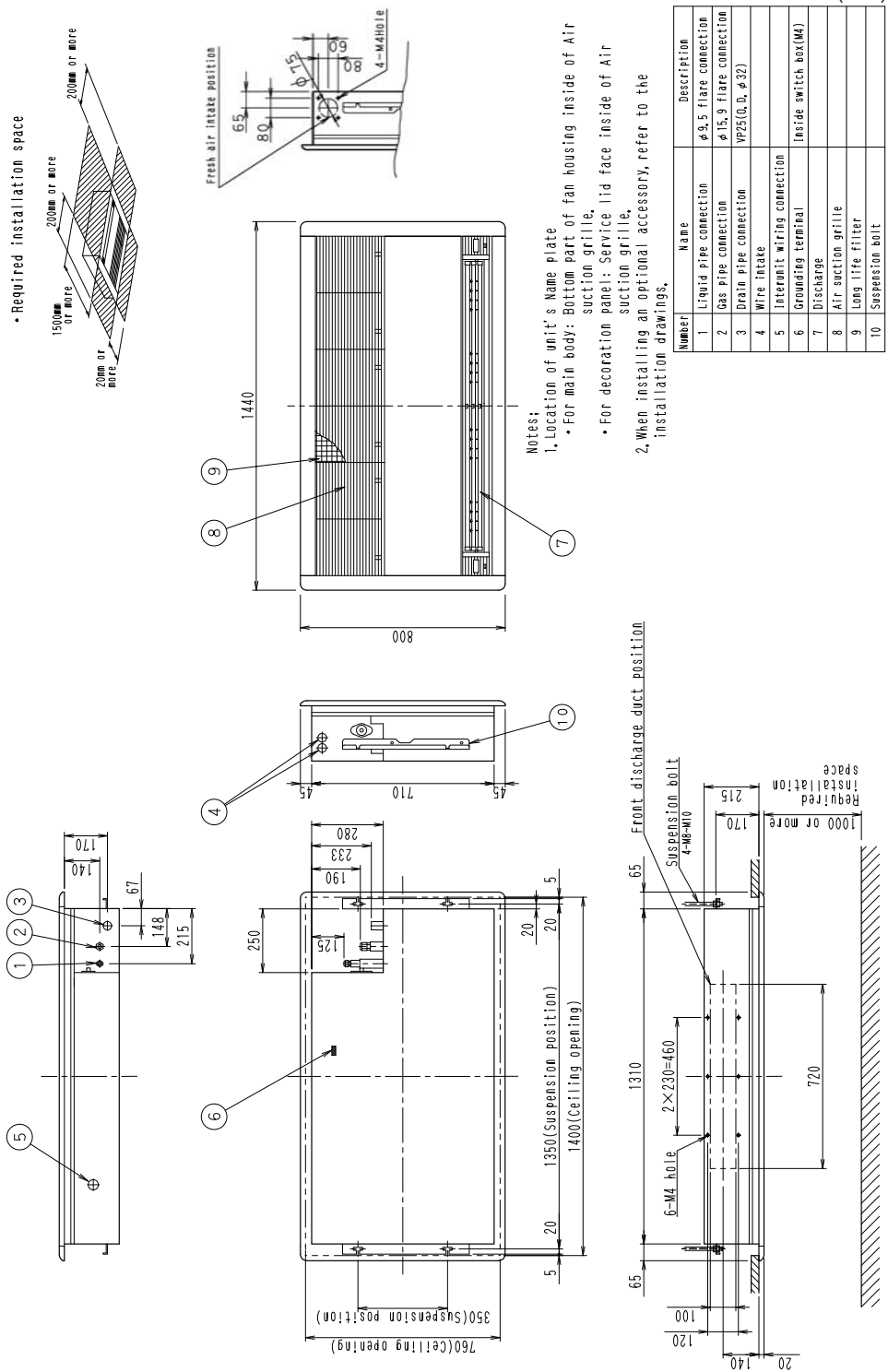
**FXKQ32MA + BYK45FJW1 (Decoration Panel)**

**FXKQ40MA + BYK45FJW1 (Decoration Panel)**

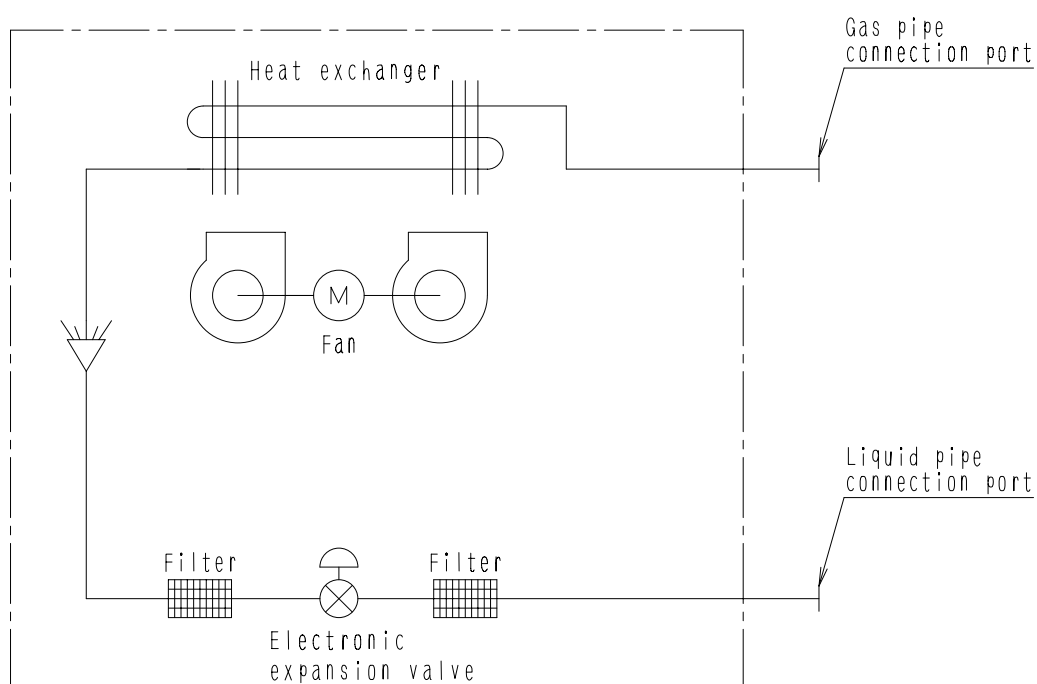


C : 3D038840

FXKQ63MA + BYK71FJW1 (Decoration Panel)



## 4. Piping Diagrams



4D034245B

### ■ Refrigerant pipe connection port diameters

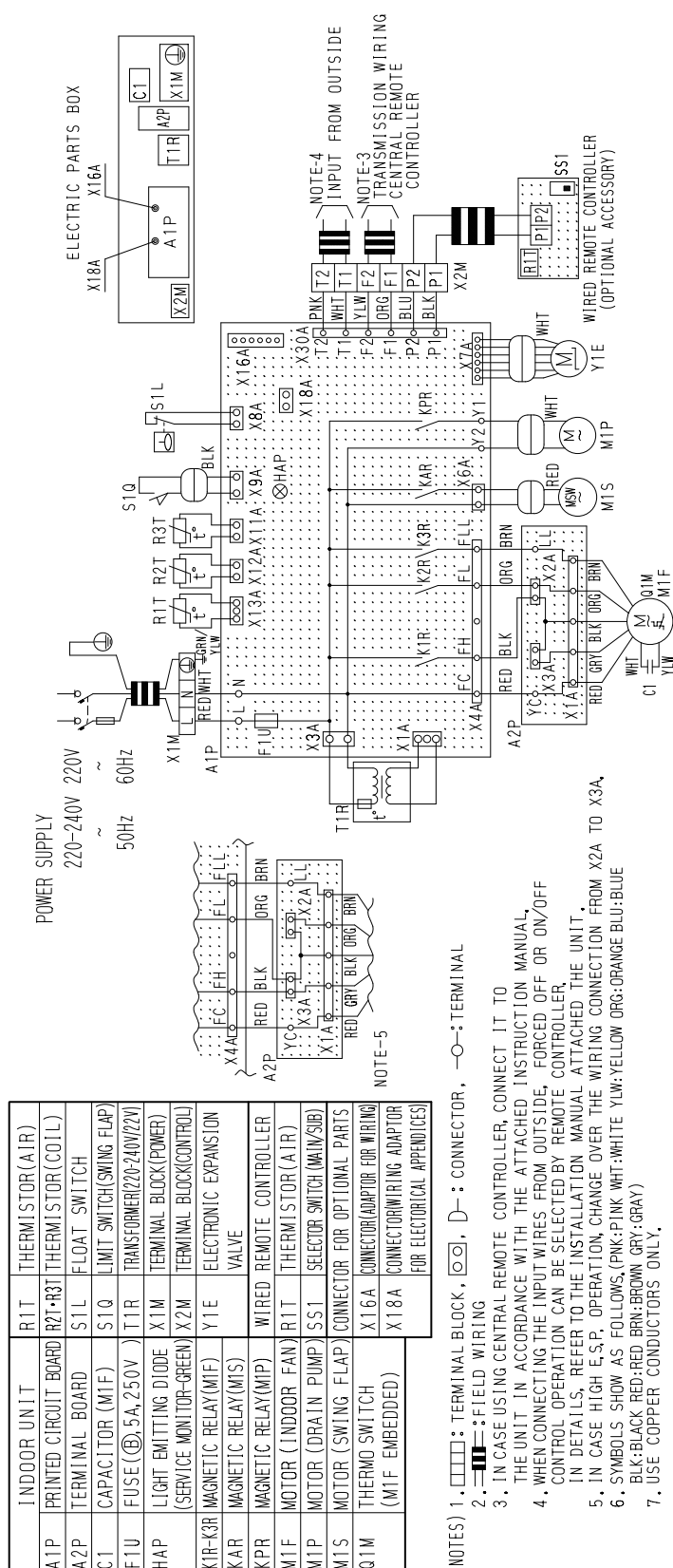
Model	(mm)	
	Gas	Liquid
FXKQ25 · 32 · 40MA	φ12.7	φ6.4
FXKQ63MA	φ15.9	φ9.5

## 5. Wiring Diagrams

**FXKQ25 · 32 · 40 · 63MAVE**

3D039564C

4



(NOTES) 1. : TERMINAL BLOCK, : CONNECTOR, : TERMINAL

## 2. FIELD WIRING

### 3. IN CASE USING CENTRAL REMOTE CONTROLLER, CONNECT IT TO

THE UNIT IN ACCORDANCE WITH THE ATTACHED INSTRUCTION MANUAL,

#### 4. WHEN CONNECTING THE INPUT WIRES FROM OUTSIDE, FORCED OFF

CONTROL OPERATION CAN BE SELECTED BY REMOTE CONTROLLER,

IN DETAILS, REFER TO THE INSTALLATION MANUAL ATTACHED THE UNIT.  
IN CASE WITH E-CB OPERATION, OUNCE OVER THE WIRING CONNECTION

5. IN CASE HIGH E.S.P. OPERATION, CHANGE OVER THE WIRING CONNECTION FROM X2A TO X3A, SYMBOLIC COLUMN IS FOLLOWING (PINK PINK UNIT WHITE VIEW YELLOW ORG. ORANGE BLUE)

FIG. 1. SYMBOLS SHOW AS FOLLOWS. (PNK: PINK WHITE; BLK: BLACK; RED: RED; GRN: GREEN; GRAY: GRAY)

7 USE COPPER CONDUCTORS ONLY



## 6. Electric Characteristics

Units					Power supply		IFM		Input(W)	
Model	Type	Hz	Volts	Voltage range	MCA	MFA	KW	FLA	Cooling	Heating
FXKQ25MA	VE	50	220-240	MAX. 264 Min. 198	0.3	15	0.015	0.2	66	46
FXKQ32MA					0.3	15	0.015	0.2	66	46
FXKQ40MA					0.3	15	0.020	0.2	76	56
FXKQ63MA					0.5	15	0.045	0.4	105	85

Symbols :

MCA : Min. Circuit Amps (A)  
 MFA : Max. Fuse Amps (See note 5)  
 KW : Fan Motor Rated Output(KW)  
 FLA : Full Load Amps(A)  
 IFM : Indoor Fan Motor

Note :

1. Voltage range

Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits,

2. Maximum allowable voltage unbalance between phases is 2%.

3. MCA/MFA

$$MCA = 1.25 \times FLA$$

$$MFA \leq 4 \times FLA$$

(Next lower standard fuse rating. Min. 15A)

4. Select wire size based on the MCA.

5. Instead of fuse, use Circuit Breaker.

C : 4D037076B


## 7. Capacity Tables

## 7.1 Cooling Capacity

**FXKQ-MA**

**[50Hz]**

[illegible]

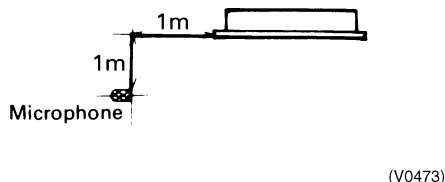
 Refer to Outdoor Unit Capacity Tables : on page 411 ~, 470~, for the actual performance data of each indoor and outdoor unit combination.



## 8. Sound Levels

### Overall

#### ■ Ceiling Mounted Cassette Corner Type



dBA

Model	220V, 50Hz		240V, 50Hz	
	H	L	H	L
FXKQ25MA	38	33	40	35
FXKQ32MA				
FXKQ40MA	40	34	42	36
FXKQ63MA	42	37	44	39

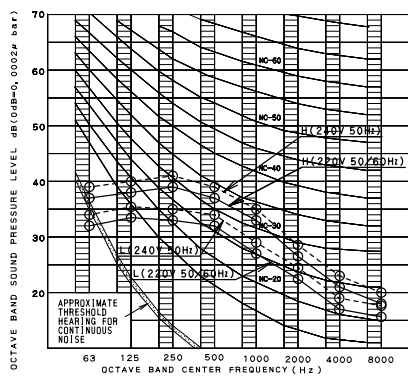
#### Note:

1. The operating conditions are assumed to be standard (JIS conditions).
2. These operating values were obtained in a dead room (conversion values).  
Sound level will vary depending on a range of factors such as the construction (acoustic absorption coefficient) of the particular room in which the equipments installed.

### Octave Band Level

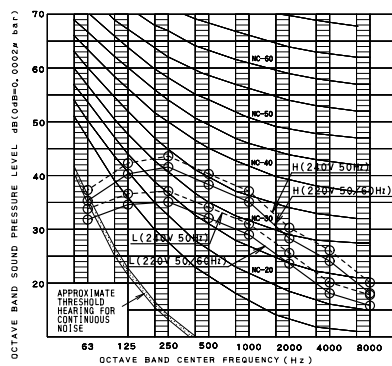
- — ○ 220V 50Hz  
○ - - - ○ 240V 50Hz

#### FXKQ25 · 32MAVE



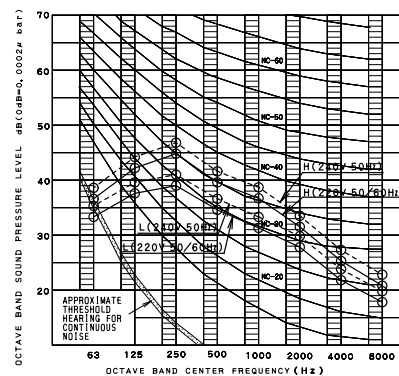
4D037071

#### FXKQ40MAVE



4D037072

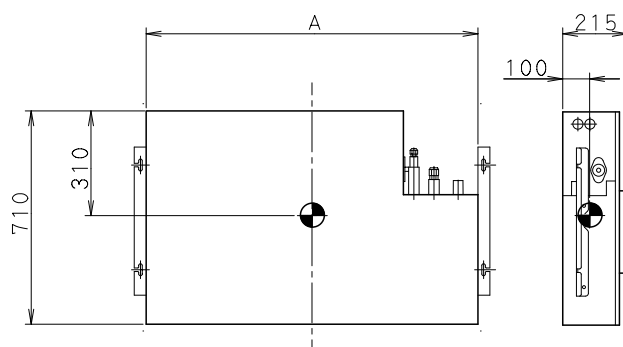
#### FXKQ63MAVE



4D037073

## 9. Installation

### Center of Gravity



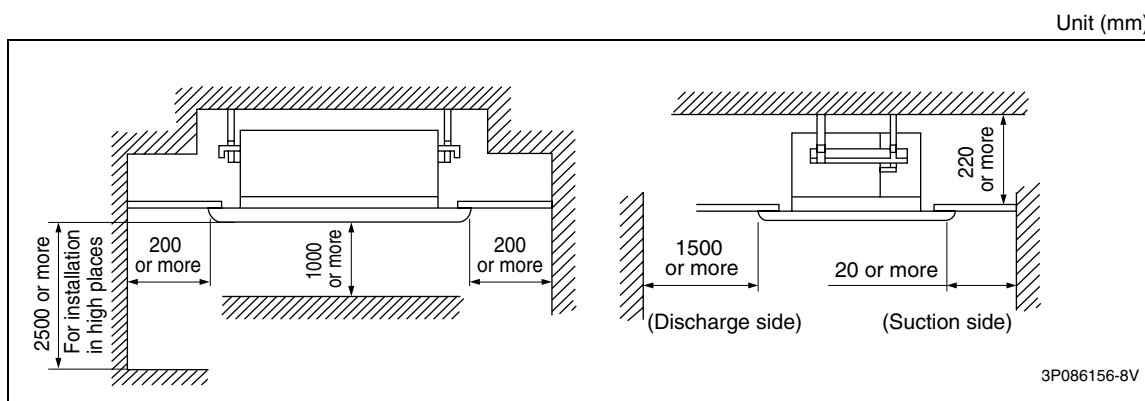
Unit (mm)

MODEL	A
FXKQ25・32・40MAVE	1110
FXKQ63MAVE	1310

C : 4D037079A

4

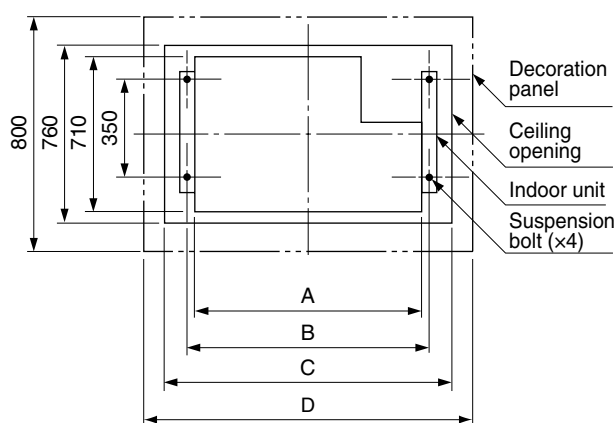
### Service Space



**Note:**

Above figure means minimum value. Please keep these value at least.

### Bolt Pitch



Model	A	B	C	D
FXKQ25・32・40MAVE	1110	1150	1200	1240
FXKQ63MAVE	1310	1350	1400	1440

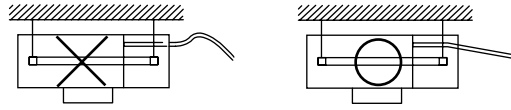
3P086156-8V

### Drain Pump Kit

Indoor unit	Drain pump kit
FXKQ-MA	Standard (Equipped with indoor unit)

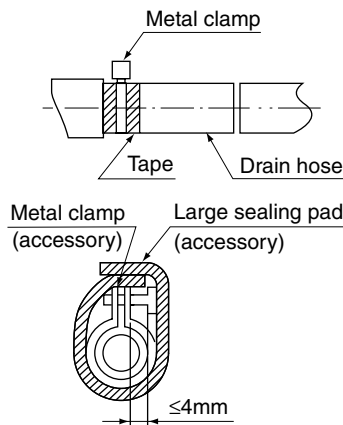
## Drain Piping Work

«Rig the drain pipe as shown below and take measures against condensation. Improperly rigged piping could lead to leaks and eventually wet furniture and belongings.»



(1) Carry out the drain piping.

- Keep piping as short as possible and slope it downwards so that air may not remain trapped inside the pipe.
- The diameter of the drain pipe should be greater than or equal to the diameter of the connecting pipe (vinyl tube; pipe size : 25 mm ; outer dimension : 32 mm).
- Use the drain hose and metal clamp. Insert the drain hose into the drain socket, up to the white tape. Tighten the metal clamp until the screw head is less than 4 mm from the hose.



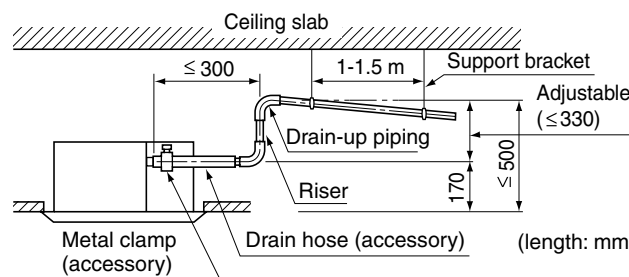
### CAUTION

Setting the unit at an angle opposite to the drain piping might cause leaks.

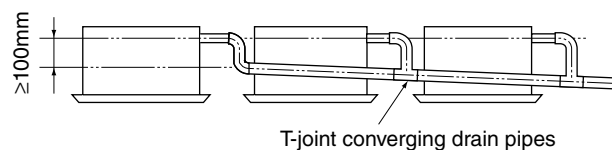
- Wrap the sealing pad over the clamp and drain hose to insulate.
- Insulate the drain hose inside the building.  
While referring to the figure on the right, insulate the clamp and drain hose with the large sealing pad.
- If the drain hose cannot be sufficiently set on a slope, execute the drain raising piping.
- Secure a downward gradient of 1 / 100 or more for the drain pipe. To accomplish this, mount supporting brackets at an interval of 1 - 1.5 m.

### «Precautions when doing drain-up piping work.»

- Make sure the drain-up piping is at most 330 mm high.
- Stand the drain-up piping horizontally, and make sure it is not further than 300 mm from the base of the drain socket.



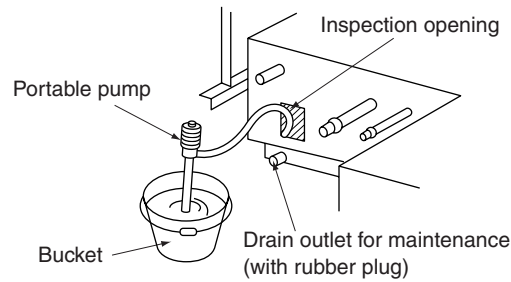
- Use the following outline if laying concentrated drain piping.
- If converging multiple drain pipes, install according to the procedure shown below.



Select converging drain pipes whose gauge is suitable for the operating capacity of the unit.

(2) After piping work is finished, check drainage flows smoothly.

- Open the inspection opening, add approximately 1 liter of water slowly into the drain pan and check drainage flow.



**NOTE**

- Use the drain outlet for maintenance to drain water from the drain pan.






**WHEN ELECTRIC WIRING WORK IS FINISHED**

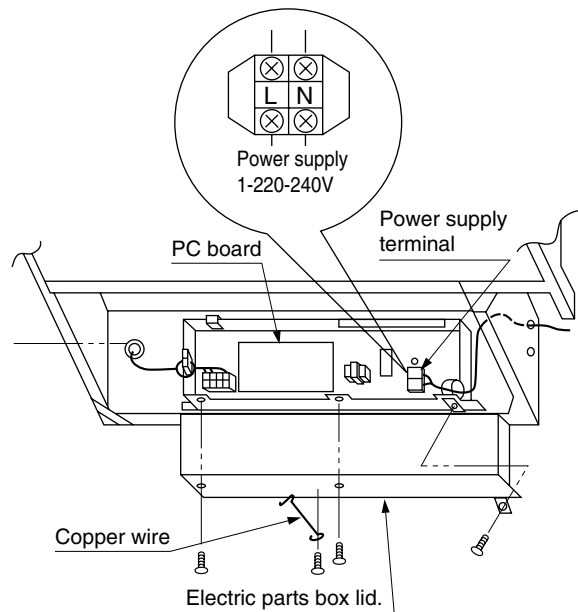
- Check drainage flow during COOL running, explained under “TEST OPERATION”.

**WHEN ELECTRIC WIRING WORK IS NOT FINISHED**

- Remove the electric parts box lid, connect a power supply and remote controller to the terminals.  
(Refer to the **HOW TO CONNECT WIRINGS**)

Be sure attach the electric parts box lid before turning on the power.

Next, press the inspection/test operation button “” on the remote controller. The unit will engage the test operation mode. Press the operation mode selector button “” until selecting FAN OPERATION “”. Then, press the ON/OFF button “”. The indoor unit fan and drain pump will start up. Check that the water has drained from the unit. Press “” to go back to the first mode.



**CAUTION**


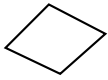

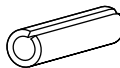


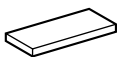
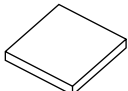
- Drain piping connections  
Do not connect the drain piping directly to sewage pipes that smell of ammonia. The ammonia in the sewage might enter the indoor unit through the drain pipes and corrode the heat exchanger.
- Keep in mind that it will become the cause of getting drain pipe blocked if water collects on drain pipe.



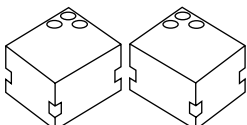
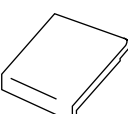
3P086156-8V

## 10. Accessories

### Standard Accessories

#### FXKQ25~63MA

Name	Metal clamp	Paper pattern for installation	Drain hose	Insulation for fitting	Sealing pad	Insulation for hanger bracket
Quantity	1pc.	1 pc.	1 pc.	1 each.	1 each.	4 pcs.
Shape		 Corrugated cardboard		For gas pipe  For liquid pipe 	Large  Small 	

Name	Washer for hanging bracket	Clamp	Positioning jig for installation	Air outlet blocking pad	(Other) • Operation manual • Installation manual
Quantity	8 pcs.	8 pcs.	2 each.	1 pc.	
Shape			 4 screws		

- Screws for fixing panels are attached to decoration panel.

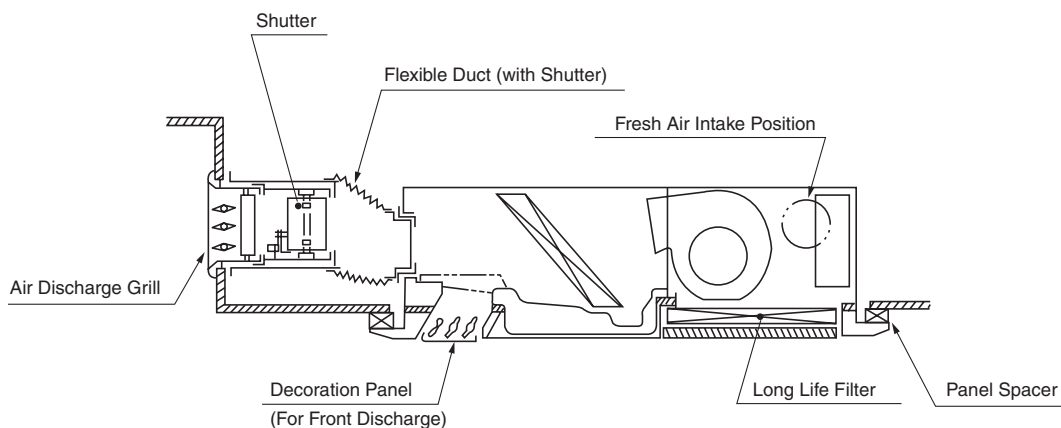
3P086156-8V

### Optional Accessories (For Unit)

Item		Type	FXKQ25MA FXKQ32MA FXKQ40MA	FXKQ63MA
Panel related	Decoration panel		BYK45FJW1	BYK71FJW1
	Long life replacement filter		KAFJ521F56	KAFJ521F80
Air inlet and air discharge outlet related	Air discharge grill		K-HV7AW	K-HV9AW
	Air discharge blind panel		KDBJ52F56W	KDBJ52F80W
	Panel spacer		KPBJ52F56W	KPBJ52F80W
	Flexible duct (with shutter)		KFDJ52FA56	KFDJ52FA80

C : 3D037081A

### Optional Accessories (For Controls) : Refer to P.561



(V0678)

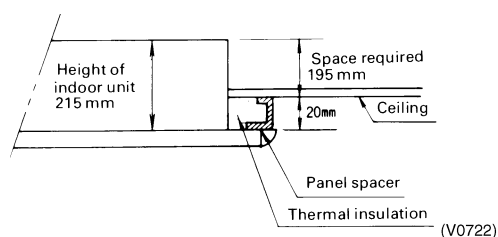
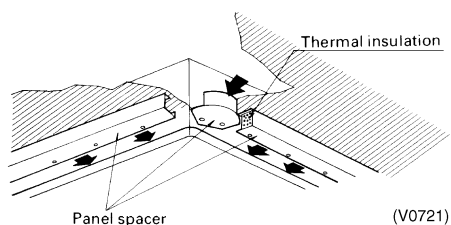
## Panel Spacer

If the space above the ceiling is not available for more than 220 mm, use the panel spacer, which enables to install the unit in 200 mm space.

### Specifications

Item	Model	KPBJ52F56W	KPBJ52F80W
Color		White	
Dimensions (mm)	Height	20	
	Width	1,240	1,440
	Depth	800	
Materials		Outer Frame : Resin Molding Thermal Insulation : Foam Polyethylene	
Contents		Panel Spacer(1)(2)(3) Thermal Insulation (1)(2), Screws	
Applicable Decoration Panel		BYK45FJW1	BYK71FJW1
Applicable Model		For Indoor Unit 25~40 Class	For Indoor Unit 63 Class

### Installation



### Precaution at use

1. Be sure to stick insulators on the panel spacer after the panel spacer is assembled.
2. Secure 20 cm height in the space above ceiling.

### Contents of Kit

Prior to installation check whether you have the complete kit of parts as shown below including the installation manual.

Name	Panel spacer (1)	Panel spacer (2)	Panel spacer (3)	Thermal insulation (1)
Quantity	2 pieces	2 pieces	4 pieces	2 pieces
Shape				
Name	Thermal insulation (2)	Screws	Installation manual	
Quantity	2 pieces	18 pieces	1 piece	
Shape		 M4 x12		

(V0920)

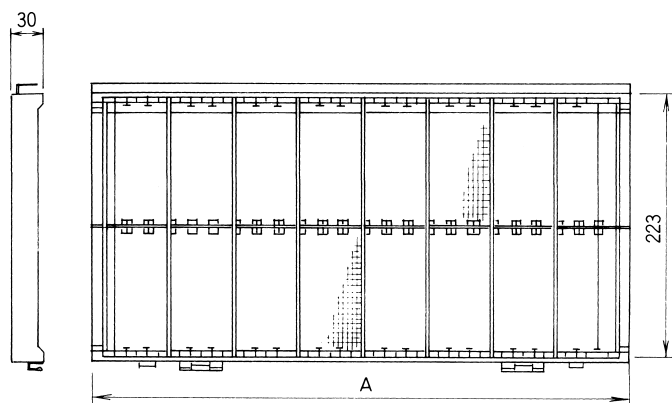


## Long Life Replacement Filter

### Specifications

Items	Model	KAFJ521F56	KAFJ521F80
Life Time, Average Efficiency		2,500 hours (dust density 0.15 mg/m <sup>3</sup> ), 45% (Gravity method)	
Filter		Mildew Proof Resin Net	Mildew Proof Resin Net
Required Quantity (for One Unit)		Two pieces	Two pieces
Applicable Models		25 · 32 · 40 Class	63 Class

### Dimensions



Model	A
KAFJ521F56	403
KAFJ521F80	503

JC : D3K1145A

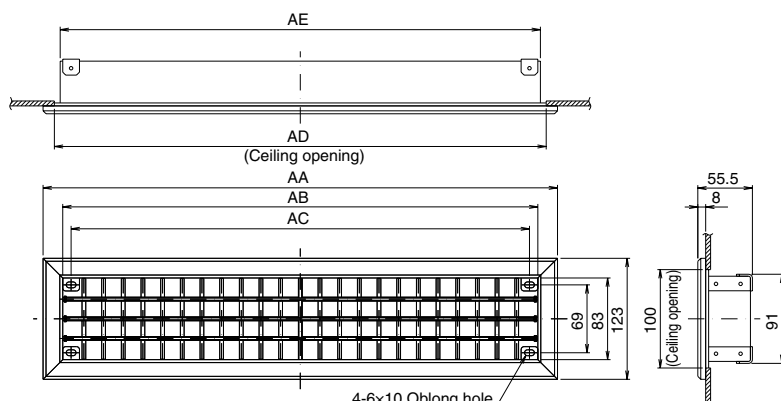
## Discharge Grille

This optional kit is used when the unit is installed with front air discharge. The direction of air can be adjusted flexibly. This discharge grille should be installed with the following flexible duct.

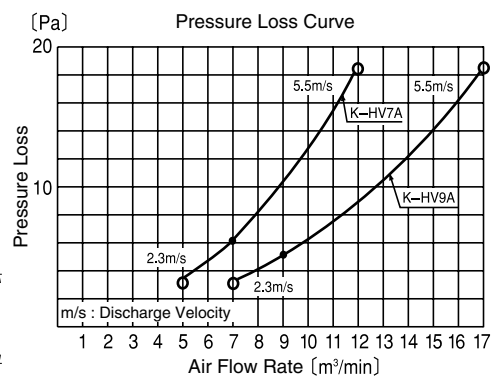
### Specifications

Items	Model	K-HV7AW	K-HV9AW
Air Flow Rate (m <sup>3</sup> /min)		5~12	7~17
Type		HV type (Horizontal blade and vertical blade movable)	
External Color		White	White
Materials		Steel plate (A cryptomeria only at the tip of the outlet + nylon flocking)	
Structural Parts		Discharge grille, Screws, Blade control tool	
Applicable Flexible Duct		KFDJ52F56	KFDJ52F80
Applicable Models		25 · 32 · 40 Class	63 Class

## Dimension



Model	AA	AB	AC	AD	AE
K-HV7AW	523	483	466	500	488
K-HV9AW	723	683	666	700	688



JC : D3K1972C

## Flexible Duct (with Shutter)

The built-in shutter's Open/Shut action makes it possible to regulate the air flow rate. Besides, the flexible duct helps the connection to the main unit to give more flexibility.

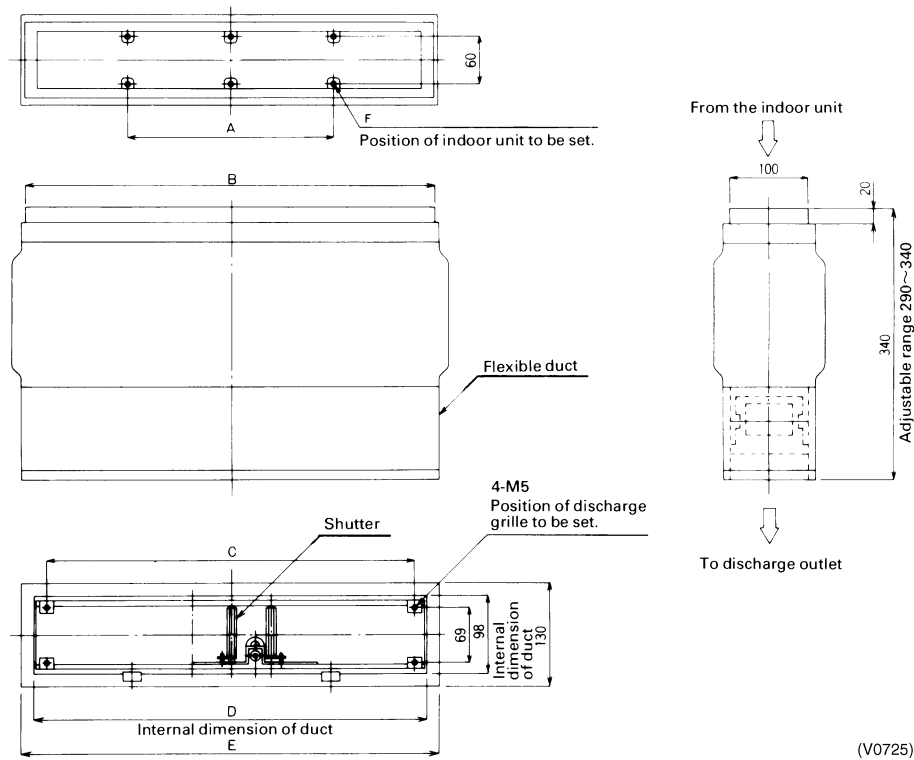
## Specifications

Items	Model	KFDJ52FA56	KFDJ52FA80
External Dimension (mm)	H	132	
	W	532	732
	D	Max. 353	
Materials		Outer frame : Steel plate Flexible Duct : Glass wool, Vinyl chloride sheet	
Contents		Flexible duct, Shutter, Duct's set plate, Insulator, Outlet seal pad, Set screw, Shutter Open/shut tool, Blade adjusting tool	
Applicable Models		25 · 32 · 40 Class	63 Class

## Precaution at use

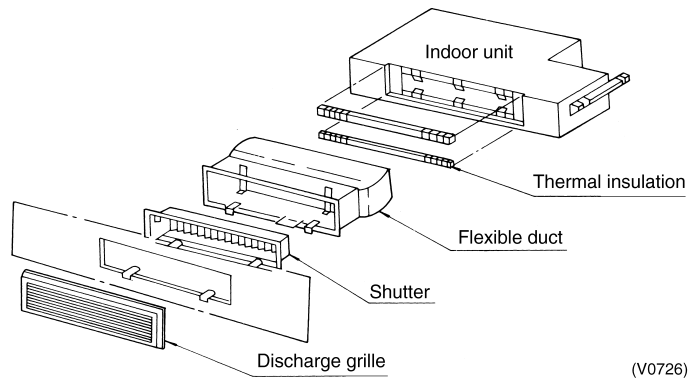
Be sure to seal out the opening of the drain pan with drain outlet seal materials after the front panel of the indoor unit is removed away.

Dimension



Model	Applicable Model	A	B	C	D	E	F
KFDJ52FA56	For Indoor Unit 25~40 Class	260	520	466	498	530	4- $\phi$ Hole
KFDJ52FA80	For Indoor Unit 63 Class	460	720	666	698	730	6- $\phi$ 7 Hole

Installation



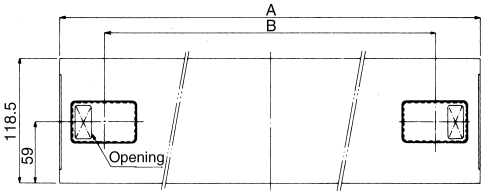
Air Discharge Blind Panel

This is the parts which closes the lower discharge outlet when the unit is used as a front discharge style.

Specifications

Items		Model	KDBJ52F56W	KDBJ52F80W
External color			White	White
External Dimension (mm)	T		18	
	W		1,126	1,326
	D		119	
Materials			Steel plate	
Contents			Outlet decoration panel assembly, Decoration panel suspension plate, Name Plate, Caution plate set board	
Applied Decoration Panel			BYK45FJW1	BYK71FJW1
Applicable Models			25 · 32 · 40 Class	63 Class

External dimension



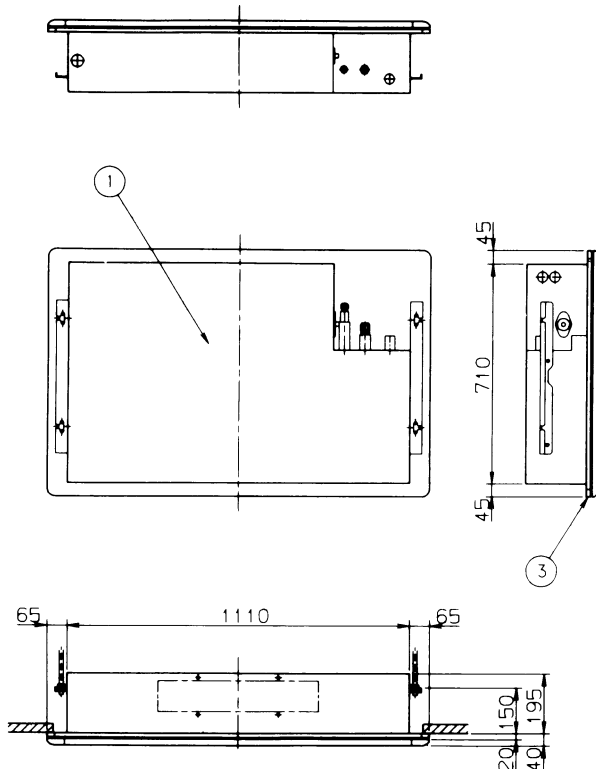
(V0727)

Model	A	B
KDBJ52F56	1125.5	1040
KDBJ52F80	1325.5	1240

Dimensions with the Optional Accessories

Panel Spacer

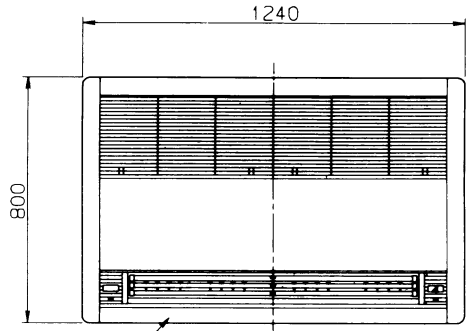
■ FXKQ25~40MA



Optional panel spacer

KPBJ52F56W White 10Y 9/0.5

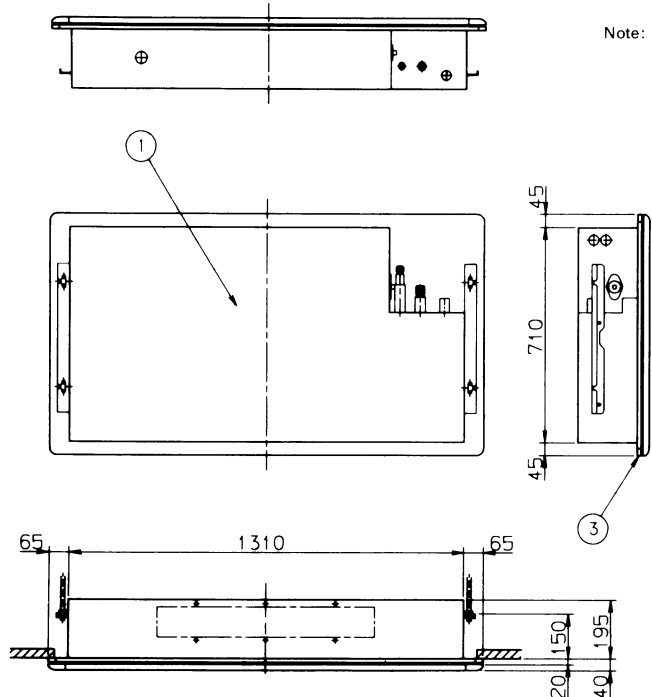
Note: When other optional kit is installed, refer to the installation drawing of its optional kit.



Number	Name	Description
3	Panel spacer	
2	Decoration panel	
1	Indoor unit	

JC : DU825-219A

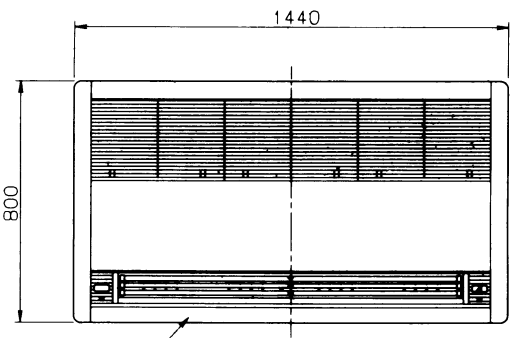
■ FXKQ63MA



Optional panel spacer

KPBJ52F80W White 10Y 9/0.5

Note: When other optional kit is installed, refer to the installation drawing of its optional kit.



Number	Name	Description
3	Panel spacer	
2	Decoration panel	
1	Indoor unit	

JC : DU827-242A

# FXDQ-P, FXDQ-N(A)

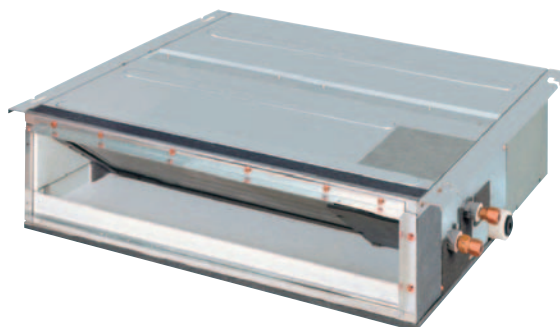
## Slim Ceiling Mounted Duct Type

1. Features .....	132
1.1 FXDQ-P .....	132
1.2 FXDQ-N(A) .....	133
2. Specifications .....	134
2.1 FXDQ-P .....	134
2.2 FXDQ-N(A) .....	135
3. Dimensions .....	139
3.1 FXDQ-P .....	139
3.2 FXDQ-N(A) .....	141
4. Piping Diagrams .....	145
4.1 FXDQ-P .....	145
4.2 FXDQ-N(A) .....	146
5. Wiring Diagrams .....	147
5.1 FXDQ-P .....	147
5.2 FXDQ-N(A) .....	149
6. Electric Characteristics .....	151
6.1 FXDQ-P .....	151
6.2 FXDQ-N(A) .....	152
7. Capacity Tables .....	153
7.1 FXDQ-P .....	153
7.2 FXDQ-N(A) .....	154
8. Fan Performances .....	155
8.1 FXDQ-P .....	155
8.2 FXDQ-N(A) .....	156
9. Sound Levels .....	158
9.1 FXDQ-P .....	158
9.2 FXDQ-N(A) .....	159
10. Installation .....	160
10.1 FXDQ-P .....	160
10.2 FXDQ-N(A) .....	161
11. Accessories .....	170

# 1. Features

## 1.1 FXDQ-P

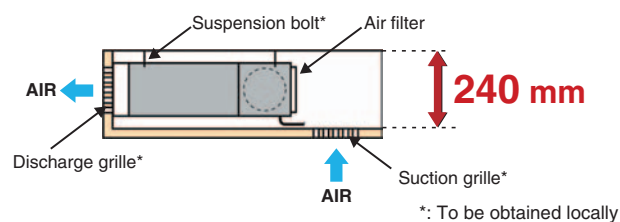
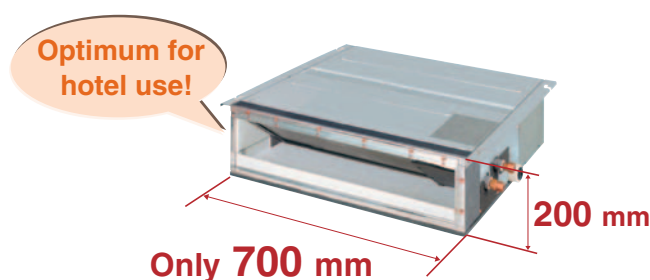
### Slim design, quietness and static pressure switching



**The best to use in drop-ceilings!**

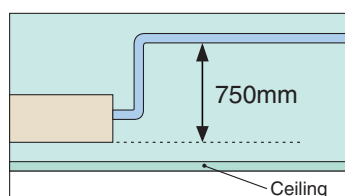
**FXDQ20P/ FXDQ25P/ FXDQ32P**

- Only 700 mm in width and 23 kg in weight, this model is optimum to install in limited spaces like drop-ceilings in hotels.



- External static pressure selectable by remote controller switching make this indoor unit a very comfortable and flexible model.  
10 Pa-30 Pa/factory set: 10 Pa for FXDQ-P models.

- FXDQ-P models are available in two types depending on installation conditions.  
FXDQ-PVE: with a drain-up pump (750 mm lift) as a standard accessory  
FXDQ-PVET: without a drain-up pump



- Low operating sound (dB(A))

Class	20	25	32
Operating sound (H/L)	33/29	33/29	33/29

\*The values of operation sound level represent those for rear-suction operation. Sound level values for bottom-suction operation can be obtained by adding 5 dB.

\*Values are based on the following conditions:  
FXDQ-P: external static pressure of 10 Pa

## 1.2 FXDQ-N(A)

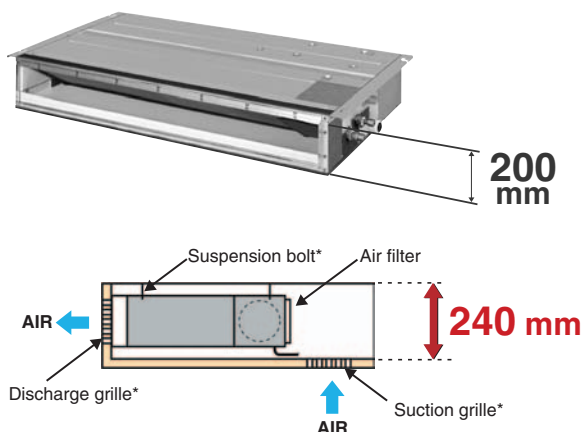
FXDQ20N(A)/FXDQ25N(A)/FXDQ32N(A)  
FXDQ40N(A)/FXDQ50N(A)/FXDQ63N(A)



5

### Slim design, quietness and static pressure switching

- Only 200 mm in height, this new model can be installed in rooms with as little as 240 mm depth between the drop ceiling and ceiling slab.



\*: To be obtained locally

- Low operating sound

Class	20	25	32	40	50	63
Operating sound (H/L)	33/29	33/29	33/29	34/30	35/31	36/32

\*The values of operation sound level represent those for rear-suction operation. Sound level values for bottom-suction operation can be obtained by adding 5 dB. (When 15Pa)

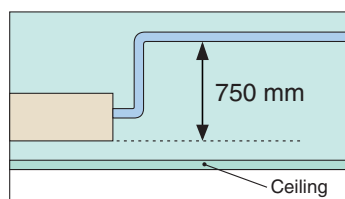
- External static pressure selectable by remote controller (15Pa-44Pa / factory set : 15Pa) switching make this indoor unit a very comfortable and flexible model.



- FXDQ-N models are available in two types depending on installation conditions.

FXDQ-NAVE: with a drain-up pump (750 mm lift) as a standard accessory

FXDQ-NVET: without a drain-up pump





## 2. Specifications

### 2.1 FXDQ-P

#### Slim Ceiling Mounted Duct Type (VE: with Drain Pump, VET without Drain Pump)

Model			FXDQ20PVE (T)	FXDQ25PVE (T)	FXDQ32PVE (T)
★1 Cooling Capacity (19.5°CWB)		kcal/h	2,000	2,500	3,200
		Btu/h	7,800	9,900	12,600
		kW	2.3	2.9	3.7
★2 Cooling Capacity (19.0°CWB)		kW	2.2	2.8	3.6
Casing			Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
Dimensions: (H×W×D)		mm	200×700×620	200×700×620	200×700×620
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	2×12×1.5	2×12×1.5	3×12×1.5
	Face Area	m²	0.126	0.126	0.126
Fan	Model		—	—	—
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	62×1	62×1	62×1
	Air Flow Rate (H/L)	m³/min	8.0/6.4	8.0/6.4	8.0/6.4
	External Static Pressure	Pa	30-10 ★4	30-10 ★4	30-10 ★4
	Drive		Direct Drive	Direct Drive	Direct Drive
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material			Foamed Polyethylene	Foamed Polyethylene	Foamed Polyethylene
Air Filter			Removal / Washable / Mildew Proof	Removal / Washable / Mildew Proof	Removal / Washable / Mildew Proof
Piping Connections	Liquid Pipes	mm	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)
	Gas Pipes	mm	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)
	Drain Pipe	mm	VP20 (External Dia. 26 Internal Dia. 20)	VP20 (External Dia. 26 Internal Dia. 20)	VP20 (External Dia. 26 Internal Dia. 20)
Machine Weight (Mass)		kg	23	23	23
★5 Sound Level (H/L)		dBA	33/29	33/29	33/29
Safety Devices			Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor
Refrigerant Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Standard Accessories			Operation Manual, Installation Manual, Drain Hose, Sealing Pads, Clamps, Washers, Insulation for Fitting, Clamp Metal, Washer Fixing Plate, Screws for Duct Flanges, Air Filter	Operation Manual, Installation Manual, Drain Hose, Sealing Pads, Clamps, Washers, Insulation for Fitting, Clamp Metal, Washer Fixing Plate, Screws for Duct Flanges, Air Filter	Operation Manual, Installation Manual, Drain Hose, Sealing Pads, Clamps, Washers, Insulation for Fitting, Clamp Metal, Washer Fixing Plate, Screws for Duct Flanges, Air Filter
Drawing No.			C:3D052136		

#### Notes:

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp; 35°CDB / Equivalent piping length: 7.5m, level difference: 0m.
- ★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp; 35°CDB / Equivalent piping length: 7.5m, level difference: 0m.
- 3 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★4 External static pressure is changeable to set by the remote controller this pressure means "High static pressure - Standard static pressure".
- ★5 The operation sound levels are the conversion values in anechoic chamber. In practice, the sound tend to be larger than the specified values due to ambient noise or reflections.  
When the place of suction is changed to the bottom suction, the sound level will increase by approx. 5dBA.
- 6 Refer to page 151 for Fan Motor Input.

#### Conversion Formulae

$$\begin{aligned} \text{kcal/h} &= \text{kW} \times 860 \\ \text{Btu/h} &= \text{kW} \times 3412 \\ \text{cfm} &= \text{m}^3/\text{min} \times 35.3 \end{aligned}$$

## 2.2 FXDQ-N(A)

### Slim Ceiling Mounted Duct Type (with Drain Pump)

Model			FXDQ20NAVE	FXDQ25NAVE	FXDQ32NAVE
★1 Cooling Capacity (19.5°CWB)		kcal/h	2,000	2,500	3,200
		Btu/h	7,800	9,900	12,600
		kW	2.3	2.9	3.7
★2 Cooling Capacity (19.0°CWB)		kW	2.2	2.8	3.6
Casing			Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
Dimensions: (H×W×D)		mm	200×900×620	200×900×620	200×900×620
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	2×12×1.5	2×12×1.5	2×12×1.5
	Face Area	m²	0.176	0.176	0.176
Fan	Model		—	—	—
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	62×1	62×1	62×1
	Air Flow Rate (H/L)	m³/min	9.5/7.5	9.5/7.5	10.5/8.5
	External Static Pressure	Pa	44-15 ★4	44-15 ★4	44-15 ★4
	Drive		Direct Drive	Direct Drive	Direct Drive
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material			Foamed Polyethylene	Foamed Polyethylene	Foamed Polyethylene
Air Filter			Removal / Washable / Mildew Proof	Removal / Washable / Mildew Proof	Removal / Washable / Mildew Proof
Piping Connections	Liquid Pipes	mm	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)
	Gas Pipes	mm	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)
	Drain Pipe	mm	VP20 (External Dia. 26 Internal Dia. 20)	VP20 (External Dia. 26 Internal Dia. 20)	VP20 (External Dia. 26 Internal Dia. 20)
Machine Weight (Mass)		kg	26	26	26
★5 Sound Level (H/L)		dBA	33/29	33/29	33/29
Safety Devices			Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor
Refrigerant Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Standard Accessories			Operation Manual, Installation Manual, Warranty, Drain Hose, Sealing Pads, Clamps, Washers, Insulation for Fitting, Clamp Metal, Washer Fixing Plate, Screws for Duct Flanges, Air Filter	Operation Manual, Installation Manual, Warranty, Drain Hose, Sealing Pads, Clamps, Washers, Insulation for Fitting, Clamp Metal, Washer Fixing Plate, Screws for Duct Flanges, Air Filter	Operation Manual, Installation Manual, Warranty, Drain Hose, Sealing Pads, Clamps, Washers, Insulation for Fitting, Clamp Metal, Washer Fixing Plate, Screws for Duct Flanges, Air Filter
Drawing No.			C : 3D045744		

#### Notes:

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp; 35°CDB / Equivalent piping length: 7.5m, level difference: 0m.
- ★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp; 35°CDB / Equivalent piping length: 7.5m, level difference: 0m.
- 3 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★4 External static pressure is changeable to set by the remote controller this pressure means "High static pressure - Standard static pressure".
- ★5 The operation sound levels are the conversion values in anechoic chamber. In practice, the sound tend to be larger than the specified values due to ambient noise or reflections.  
When the place of suction is changed to the bottom suction, the sound level will increase by approx. 5dBA.
- 6 Refer to page 152 for Fan Motor Input.

#### Conversion Formulae

kcal/h=kW×860  
 Btu/h=kW×3412  
 cfm=m<sup>3</sup>/min×35.3

## Slim Ceiling Mounted Duct Type (with Drain Pump)

Model			FXDQ40NAVE	FXDQ50NAVE	FXDQ63NAVE
★1 Cooling Capacity (19.5°CWB)		kcal/h	4,000	5,000	6,300
		Btu/h	16,000	19,800	24,900
		kW	4.7	5.8	7.3
★2 Cooling Capacity (19.0°CWB)		kW	4.5	5.6	7.1
Casing Color			Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
Dimensions: (H×W×D)		mm	200×900×620	200×900×620	200×1100×620
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	3×12×1.5	3×12×1.5	3×12×1.5
	Face Area	m²	0.176	0.176	0.227
Fan	Model		—	—	—
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	62×1	130×1	130×1
	Air Flow Rate (H/L)	m³/min	10.5/8.5	12.5/10.0	16.5/13.0
	External Static Pressure	Pa	44-15 ★4	44-15 ★4	44-15 ★4
	Drive		Direct Drive	Direct Drive	Direct Drive
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material			Foamed Polyethylene	Foamed Polyethylene	Foamed Polyethylene
Air Filter			Removal / Washable / Mildew Proof	Removal / Washable / Mildew Proof	Removal / Washable / Mildew Proof
Piping Connections	Liquid Pipes	mm	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ9.5 (Flare Connection)
	Gas Pipes	mm	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ15.9 (Flare Connection)
	Drain Pipe	mm	VP20 (External Dia. 26 Internal Dia. 20)	VP20 (External Dia. 26 Internal Dia. 20)	VP20 (External Dia. 26 Internal Dia. 20)
Machine Weight (Mass)		kg	27	28	31
★5 Sound Level (H/L)		dBA	34/30	35/31	36/32
Safety Devices			Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor
Refrigerant Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Standard Accessories			Operation Manual, Installation Manual, Warranty, Drain Hose, Sealing Pads, Clamps, Washers, Insulation for Fitting, Clamp Metal, Washer Fixing Plate, Screws for Duct Flanges, Air Filter	Operation Manual, Installation Manual, Warranty, Drain Hose, Sealing Pads, Clamps, Washers, Insulation for Fitting, Clamp Metal, Washer Fixing Plate, Screws for Duct Flanges, Air Filter	Operation Manual, Installation Manual, Warranty, Drain Hose, Sealing Pads, Clamps, Washers, Insulation for Fitting, Clamp Metal, Washer Fixing Plate, Screws for Duct Flanges, Air Filter
Drawing No.			C : 3D045744		

## Notes:

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp; 35°CDB / Equivalent piping length: 7.5m, level difference: 0m.
- ★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp; 35°CDB / Equivalent piping length: 7.5m, level difference: 0m.
- 3 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★4 External static pressure is changeable to set by the remote controller this pressure means "High static pressure - Standard static pressure".
- ★5 The operation sound levels are the conversion values in anechoic chamber. In practice, the sound tend to be larger than the specified values due to ambient noise or reflections.  
When the place of suction is changed to the bottom suction, the sound level will increase by approx. 5dBA.
- 6 Refer to page 152 for Fan Motor Input.

## Conversion Formulae

kcal/h=kW×860  
 Btu/h=kW×3412  
 cfm=m<sup>3</sup>/min×35.3

## Slim Ceiling Mounted Duct Type (without Drain Pump)

Model			FXDQ20NVET	FXDQ25NVET	FXDQ32NVET
★1 Cooling Capacity (19.5°CWB)		kcal/h	2,000	2,500	3,200
		Btu/h	7,800	9,900	12,600
		kW	2.3	2.9	3.7
★2 Cooling Capacity (19.0°CWB)		kW	2.2	2.8	3.6
Casing			Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
Dimensions: (H×W×D)		mm	200×900×620	200×900×620	200×900×620
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	2×12×1.5	2×12×1.5	2×12×1.5
	Face Area	m²	0.176	0.176	0.176
Fan	Model		—	—	—
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	62×1	62×1	62×1
	Air Flow Rate (H/L)	m³/min	9.5/7.5	9.5/7.5	10.5/8.5
	External Static Pressure	Pa	44-15 ★4	44-15 ★4	44-15 ★4
	Drive		Direct Drive	Direct Drive	Direct Drive
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material			Foamed Polyethylene	Foamed Polyethylene	Foamed Polyethylene
Air Filter			Removal / Washable / Mildew Proof	Removal / Washable / Mildew Proof	Removal / Washable / Mildew Proof
Piping Connections	Liquid Pipes	mm	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)
	Gas Pipes	mm	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)
	Drain Pipe	mm	VP20 (External Dia. 26 Internal Dia. 20)	VP20 (External Dia. 26 Internal Dia. 20)	VP20 (External Dia. 26 Internal Dia. 20)
Machine Weight (Mass)		kg	26	26	26
★5 Sound Level (H/L)		dBA	33/29	33/29	33/29
Safety Devices			Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor
Refrigerant Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Standard Accessories			Operation Manual, Installation Manual, Drain Hose, Sealing Pads, Clamps, Washers, Insulation for Fitting, Clamp Metal, Washer Fixing Plate, Screws for Duct Flanges, Air Filter	Operation Manual, Installation Manual, Drain Hose, Sealing Pads, Clamps, Washers, Insulation for Fitting, Clamp Metal, Washer Fixing Plate, Screws for Duct Flanges, Air Filter	Operation Manual, Installation Manual, Drain Hose, Sealing Pads, Clamps, Washers, Insulation for Fitting, Clamp Metal, Washer Fixing Plate, Screws for Duct Flanges, Air Filter
Drawing No.			C : 3D049693		

## Notes:

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp; 35°CDB / Equivalent piping length: 7.5m, level difference: 0m.
- ★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp; 35°CDB / Equivalent piping length: 7.5m, level difference: 0m.
- 3 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★4 External static pressure is changeable to set by the remote controller this pressure means "High static pressure - Standard static pressure".
- ★5 The operation sound levels are the conversion values in anechoic chamber. In practice, the sound tend to be larger than the specified values due to ambient noise or reflections.  
When the place of suction is changed to the bottom suction, the sound level will increase by approx. 5dBA.
- 6 Refer to page 152 for Fan Motor Input.

Conversion Formulae	
kcal/h=kW×860	
Btu/h=kW×3412	
cfm=m <sup>3</sup> /min×35.3	

## Slim Ceiling Mounted Duct Type (without Drain Pump)

Model			FXDQ40NVET	FXDQ50NVET	FXDQ63NVET
★1 Cooling Capacity (19.5°CWB)		kcal/h	4,000	5,000	6,300
		Btu/h	16,000	19,800	24,900
		kW	4.7	5.8	7.3
★2 Cooling Capacity (19.0°CWB)		kW	4.5	5.6	7.1
Casing Color			Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
Dimensions: (H×W×D)		mm	200×900×620	200×900×620	200×1100×620
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	3×12×1.5	3×12×1.5	3×12×1.5
	Face Area	m²	0.176	0.176	0.227
Fan	Model		—	—	—
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	62×1	130×1	130×1
	Air Flow Rate (H/L)	m³/min	10.5/8.5	12.5/10.0	16.5/13.0
	External Static Pressure	Pa	44-15 ★4	44-15 ★4	44-15 ★4
	Drive		Direct Drive	Direct Drive	Direct Drive
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material			Foamed Polyethylene	Foamed Polyethylene	Foamed Polyethylene
Air Filter			Removal / Washable / Mildew Proof	Removal / Washable / Mildew Proof	Removal / Washable / Mildew Proof
Piping Connections	Liquid Pipes	mm	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ9.5 (Flare Connection)
	Gas Pipes	mm	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ15.9 (Flare Connection)
	Drain Pipe	mm	VP20 (External Dia. 26 Internal Dia. 20)	VP20 (External Dia. 26 Internal Dia. 20)	VP20 (External Dia. 26 Internal Dia. 20)
Machine Weight (Mass)		kg	27	28	31
★5 Sound Level (H/L)		dBA	34/30	35/31	36/32
Safety Devices			Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor	Fuse, Thermal Protector for Fan Motor
Refrigerant Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Standard Accessories			Operation Manual, Installation Manual, Drain Hose, Sealing Pads, Clamps, Washers, Insulation for Fitting, Clamp Metal, Washer Fixing Plate, Screws for Duct Flanges, Air Filter	Operation Manual, Installation Manual, Drain Hose, Sealing Pads, Clamps, Washers, Insulation for Fitting, Clamp Metal, Washer Fixing Plate, Screws for Duct Flanges, Air Filter	Operation Manual, Installation Manual, Drain Hose, Sealing Pads, Clamps, Washers, Insulation for Fitting, Clamp Metal, Washer Fixing Plate, Screws for Duct Flanges, Air Filter
Drawing No.			C : 3D049693		

## Notes:

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp; 35°CDB / Equivalent piping length: 7.5m, level difference: 0m.
- ★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp; 35°CDB / Equivalent piping length: 7.5m, level difference: 0m.
- 3 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★4 External static pressure is changeable to set by the remote controller this pressure means "High static pressure - Standard static pressure".
- ★5 The operation sound levels are the conversion values in anechoic chamber. In practice, the sound tend to be larger than the specified values due to ambient noise or reflections.  
When the place of suction is changed to the bottom suction, the sound level will increase by approx. 5dBA.
- 6 Refer to page 152 for Fan Motor Input.

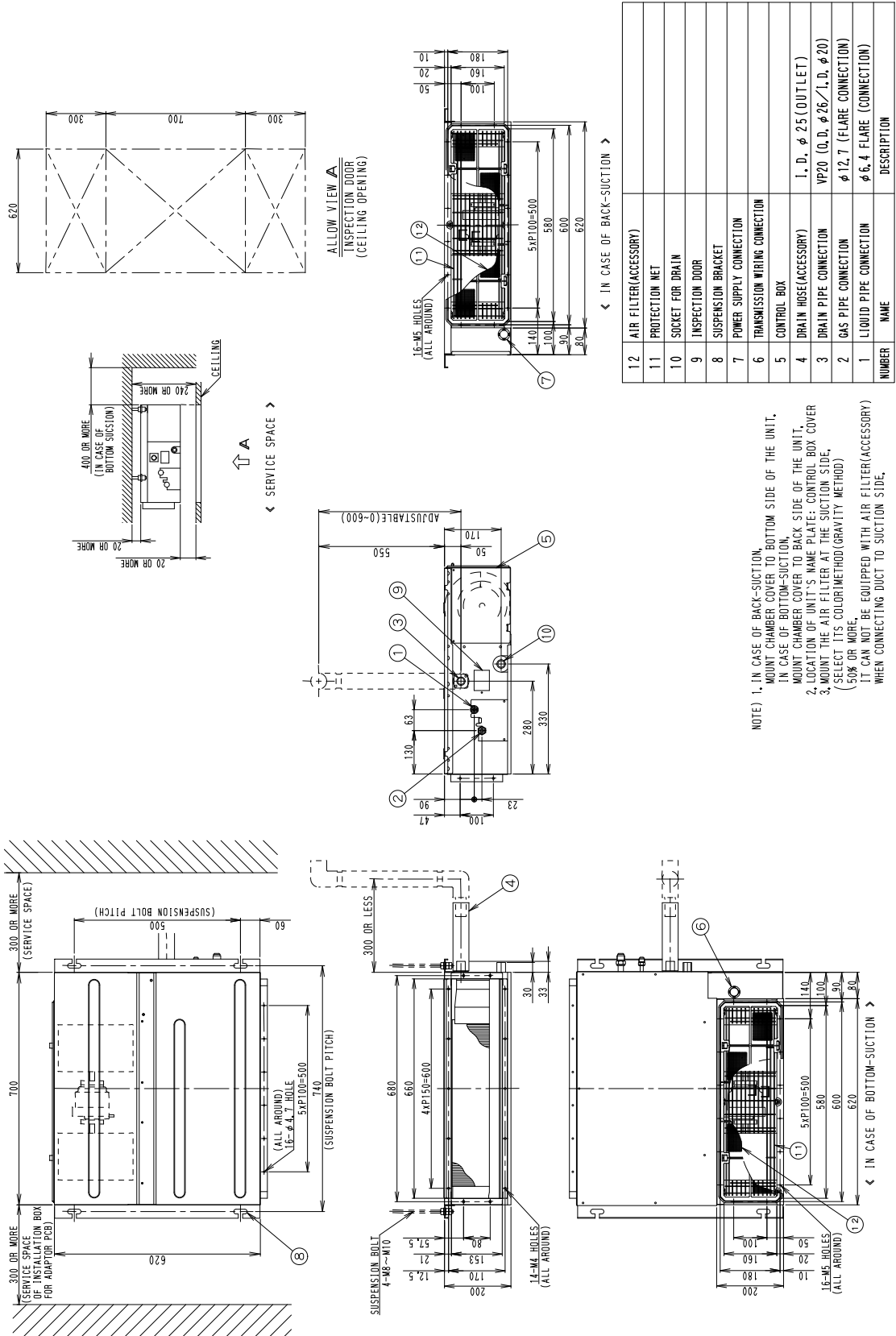
Conversion Formulae	
kcal/h=kW×860	
Btu/h=kW×3412	
cfm=m <sup>3</sup> /min×35.3	

3. Dimensions

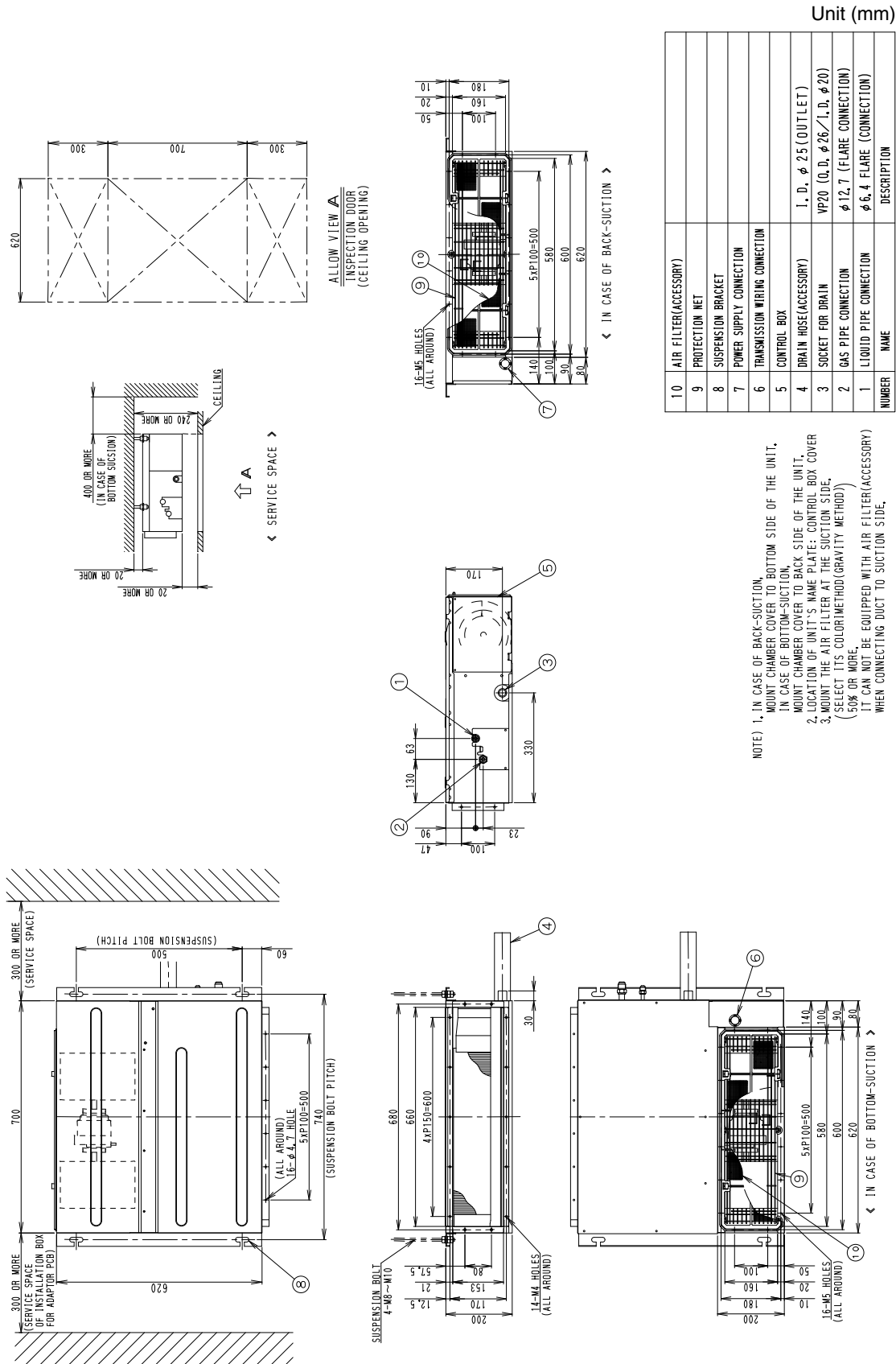
3.1 FXDQ-P

FXDQ20P / 25P / 32PVE (with Drain Pump)

Unit (mm)



FXDQ20P / 25P / 32PVET (without Drain Pump)

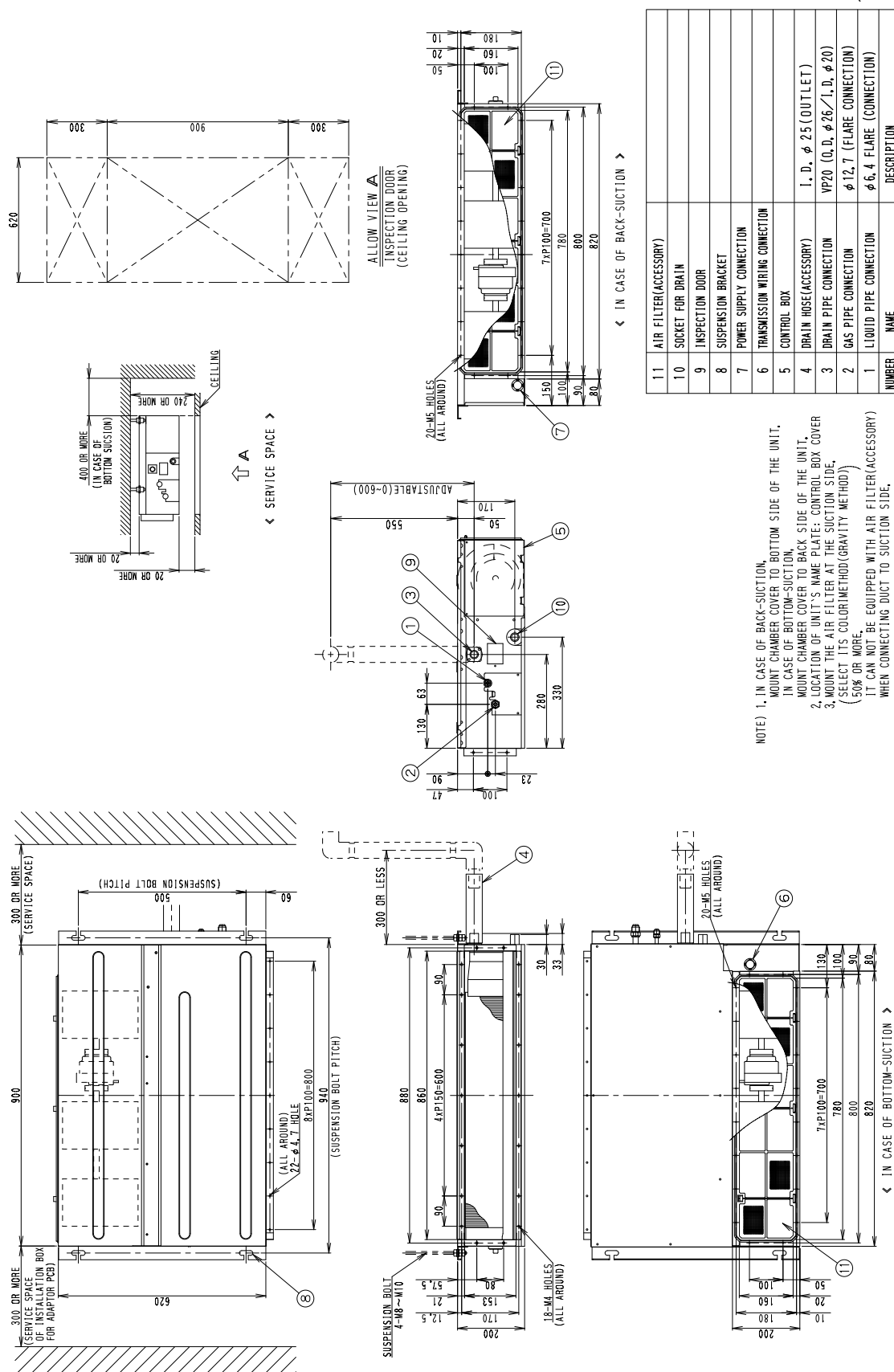


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## 3.2 FXDQ-N(A)

### FXDQ20NA / 25NA / 32NA / 40NA / 50NAVE (with Drain Pump)

Unit (mm)

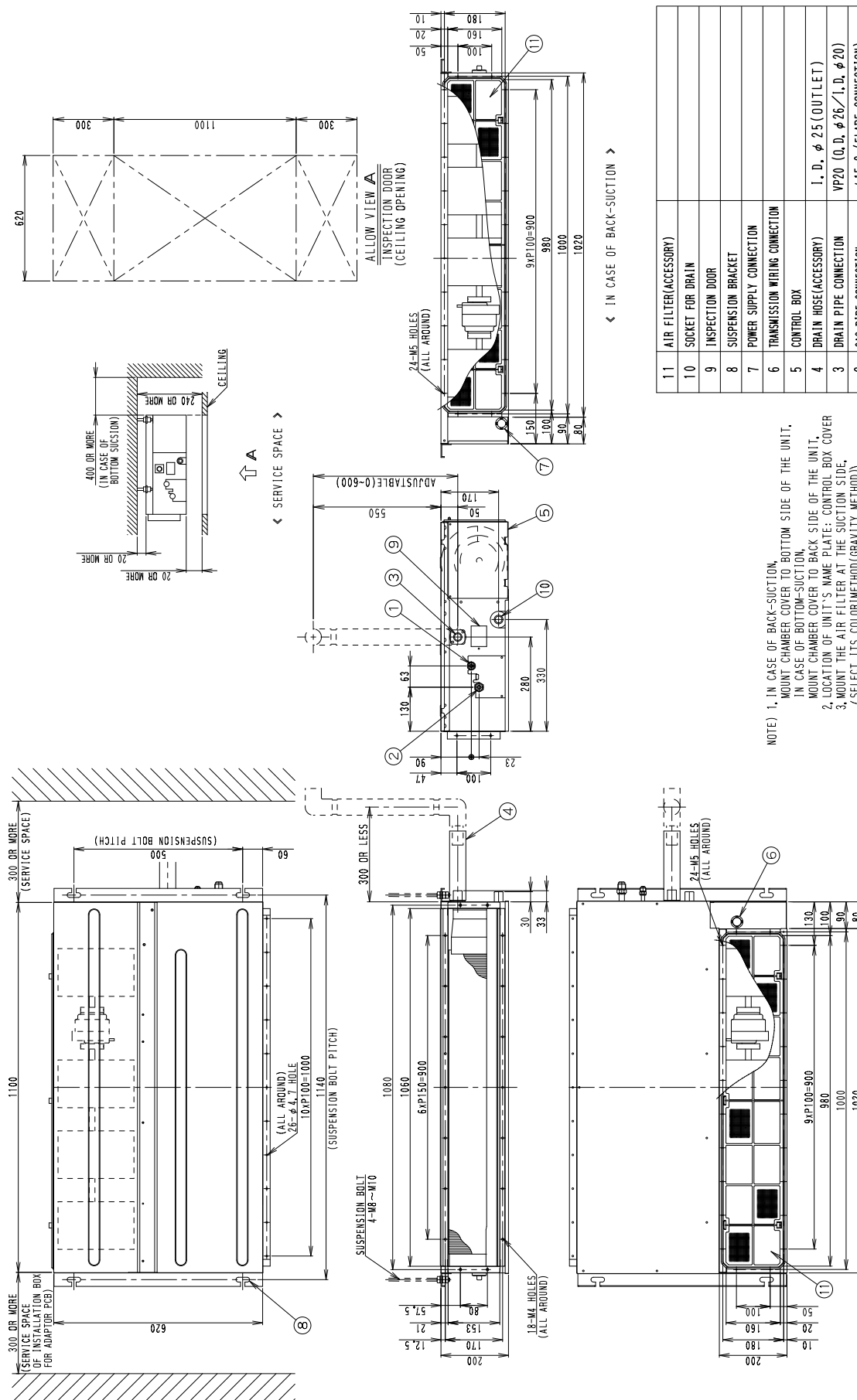


3D045494A



FXDQ63NAVE (with Drain Pump)

Unit (mm)



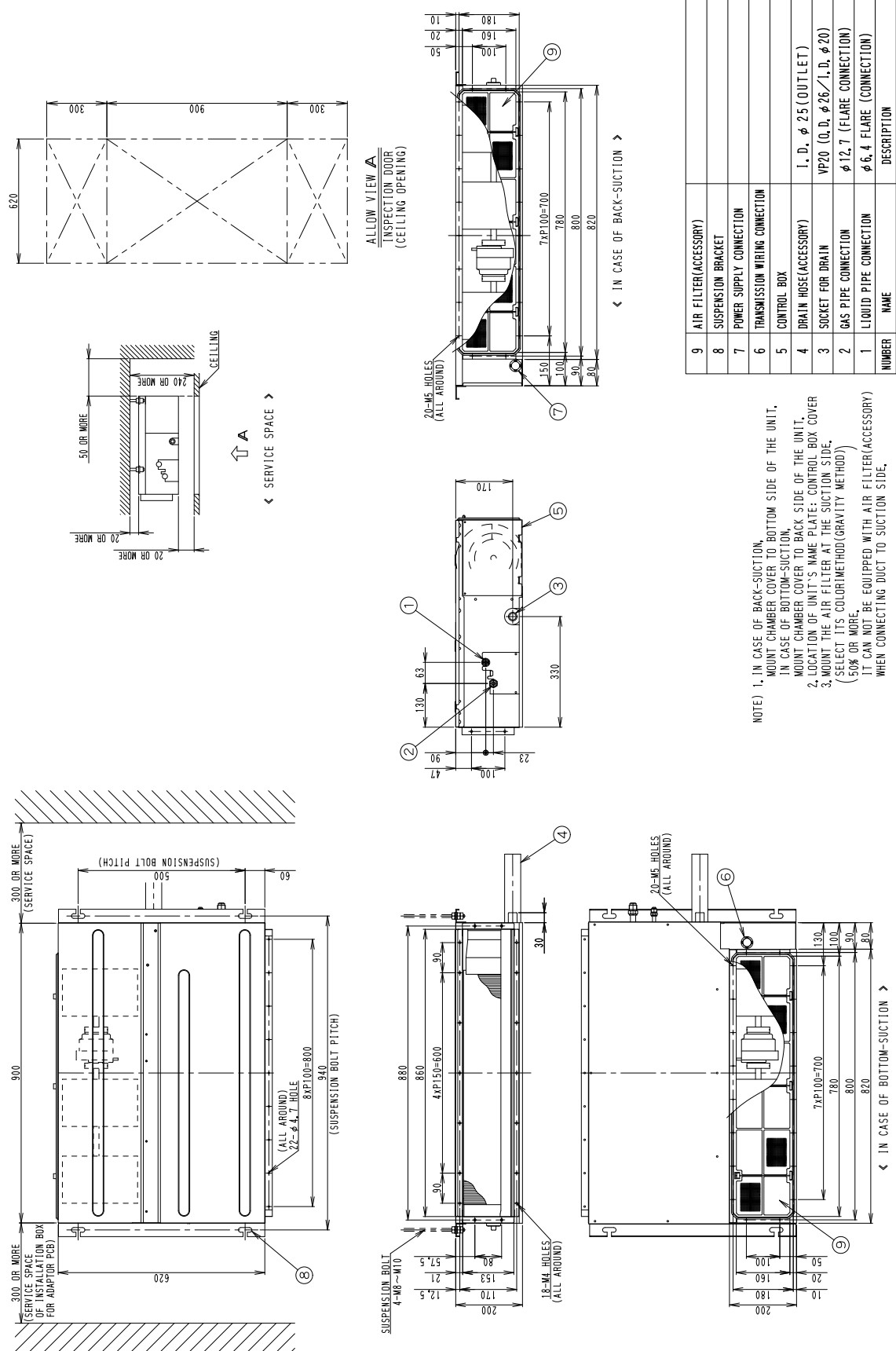
NUMBER	NAME	DESCRIPTION
11	AIR FILTER(ACCESSORY)	
10	SOCKET FOR DRAIN	
9	INSPECTION DOOR	
8	SUSPENSION BRACKET	
7	POWER SUPPLY CONNECTION	
6	TRANSMISSION WIRING CONNECTION	
5	CONTROL BOX	
4	DRAIN HOSE(ACCESSORY)	I. D. $\phi$ 25 (OUTLET)
3	DRAIN PIPE CONNECTION	VP20 (O. D. $\phi$ 26 / I. D. $\phi$ 20)
2	GAS PIPE CONNECTION	$\phi$ 15.9 (FLARE CONNECTION)
1	LIQUID PIPE CONNECTION	$\phi$ 9.5 FLARE (CONNECTION)

NOTE) 1. IN CASE OF BACK-SUCTION,  
MOUNT CHAMBER COVER TO BOTTOM SIDE OF THE UNIT.  
IN CASE OF BOTTOM-SUCTION,  
MOUNT CHAMBER COVER TO BACK SIDE OF THE UNIT.  
2. LOCATION OF UNIT'S NAME PLATE: CONTROL BOX COVER  
3. MOUNT THE AIR FILTER AT THE SUCTION SIDE,  
(SELECT ITS COLOR/METHOD(GRAVITY METHOD))  
(50% OR MORE,  
IT CAN NOT BE EQUIPPED WITH AIR FILTER(ACCESSORY)  
WHEN CONNECTING DUCT TO SUCTION SIDE.

3D045496B

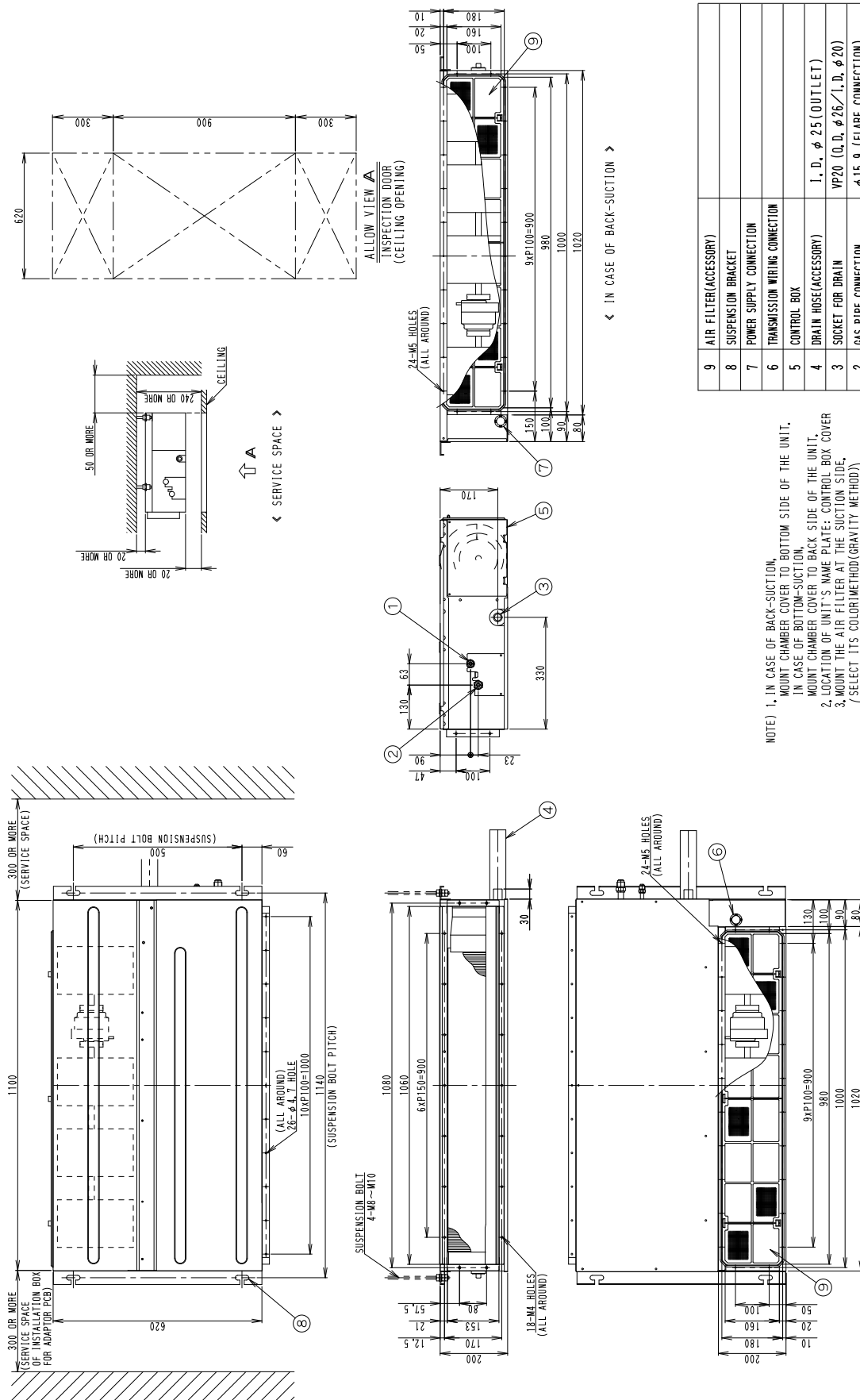
## FXDQ20N / 25N / 32N / 40N / 50NVET (without Drain Pump)

Unit (mm)



FXDQ63NVET (without Drain Pump)

Unit (mm)



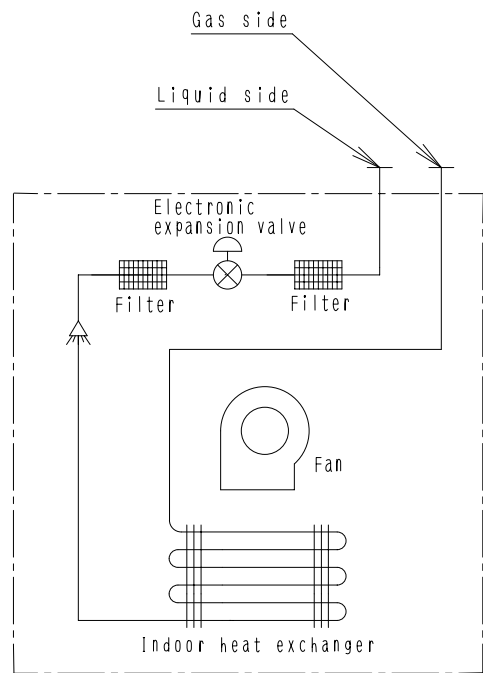
NOTE) 1. IN CASE OF BACK-SUCTION, MOUNT CHAMBER COVER TO BOTTOM SIDE OF THE UNIT.  
IN CASE OF BOTTOM-SUCTION, MOUNT CHAMBER COVER TO BACK SIDE OF THE UNIT.  
2. LOCATION OF UNIT'S NAME PLATE: CONTROL BOX COVER  
3. MOUNT THE AIR FILTER AT THE SUCTION SIDE.  
(SELECT ITS COLOR/METHOD(GRAVITY METHOD))  
(50% OR MORE)  
IT CAN NOT BE EQUIPPED WITH AIR FILTER(ACCESSORY) WHEN CONNECTING DUCT TO SUCTION SIDE.

NUMBER	NAME	DESCRIPTION
9	AIR FILTER(ACCESSORY)	
8	SUSPENSION BRACKET	
7	POWER SUPPLY CONNECTION	
6	TRANSMISSION WIRING CONNECTION	
5	CONTROL BOX	
4	DRAIN HOSE(ACCESSORY)	1. D. $\phi$ 25 (OUTLET)
3	SOCKET FOR DRAIN	VP20 (D. D. $\phi$ 26/1. D. $\phi$ 20)
2	GAS PIPE CONNECTION	$\phi$ 15.9 (FLARE CONNECTION)
1	LIQUID PIPE CONNECTION	$\phi$ 9.5 FLARE (CONNECTION)

3D049702

4. Piping Diagrams

4.1 FXDQ-P

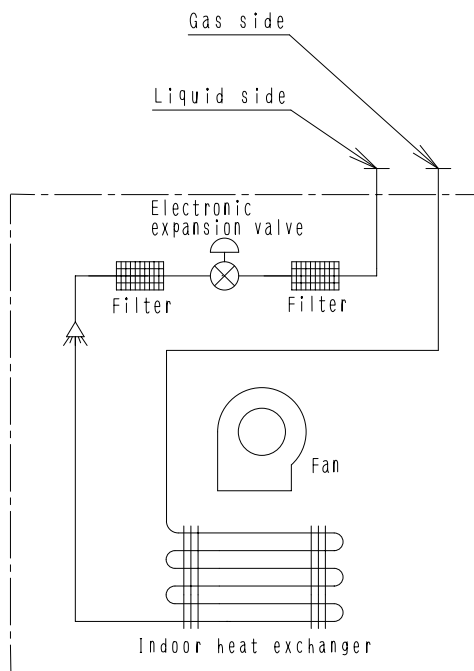


4D043864G

■ Refrigerant pipe connection port diameters

Model	(mm)	
	Gas	Liquid
FXDQ20P / 25P / 32PVE(T)	φ12.7	φ6.4

## 4.2 FXDQ-N(A)



4D043864H

### ■ Refrigerant pipe connection port diameters

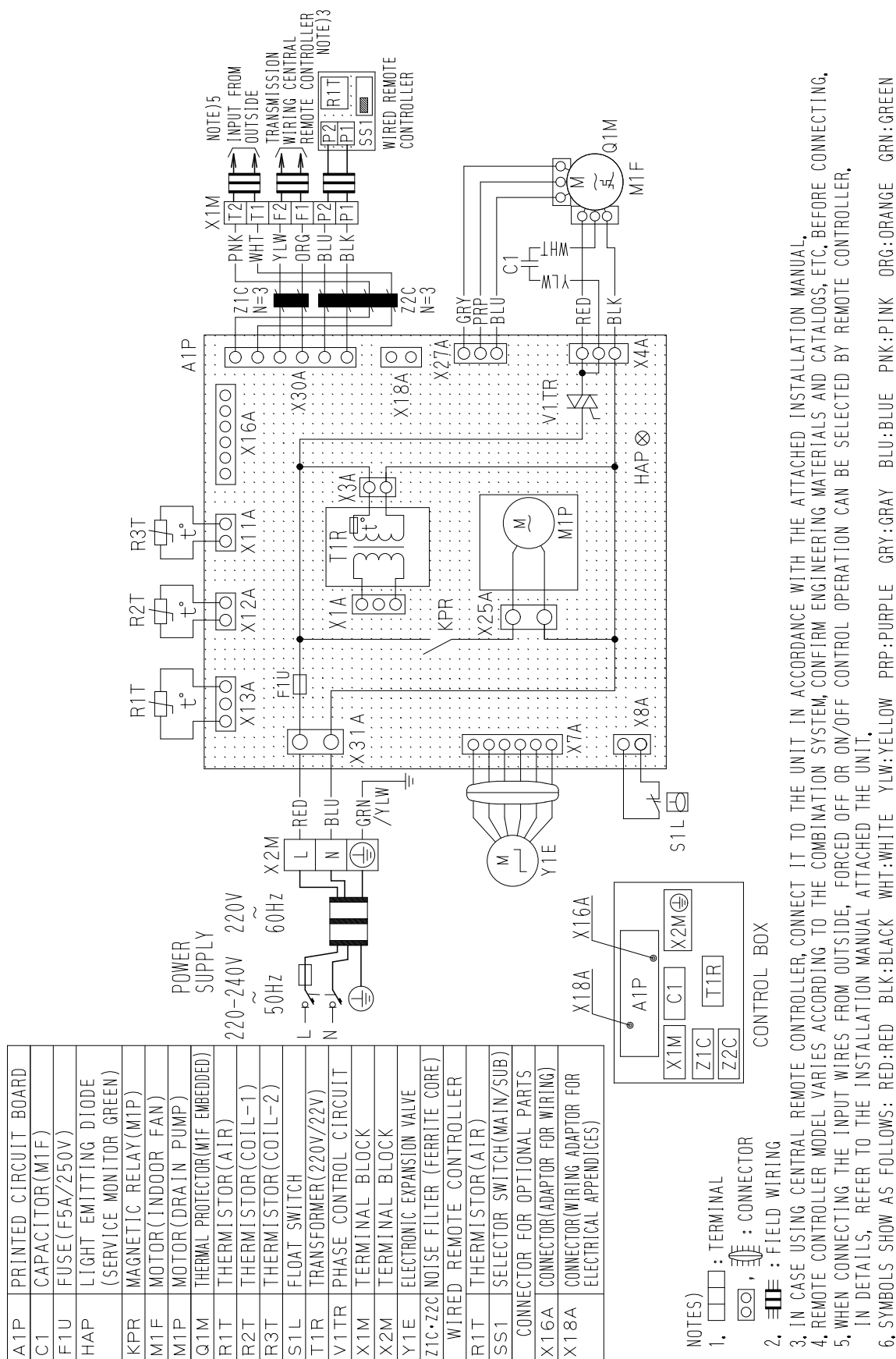
(mm)

Model	Gas	Liquid
FXDQ20N(A) / 25N(A) / 32N(A) / 40N(A) / 50N(A)VE(T)	φ12.7	φ6.4
FXDQ63N(A)VE(T)	φ15.9	φ9.5

## 5. Wiring Diagrams

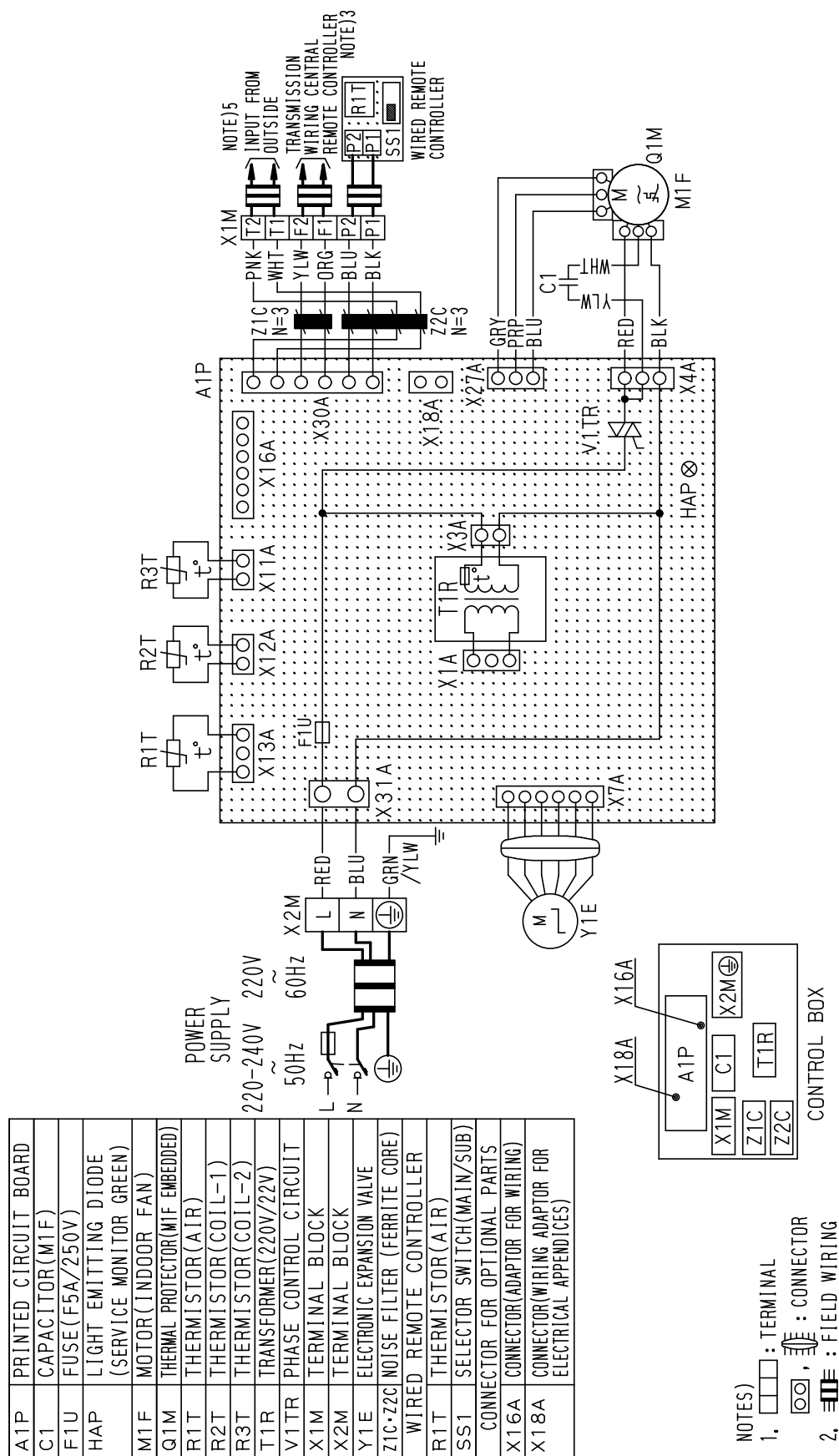
## 5.1 FXDQ-P

### FXDQ20P / 25P / 32PVE (with Drain Pump)



3D045500C

### FXDQ20P / 25P / 32PVET (without Drain Pump)



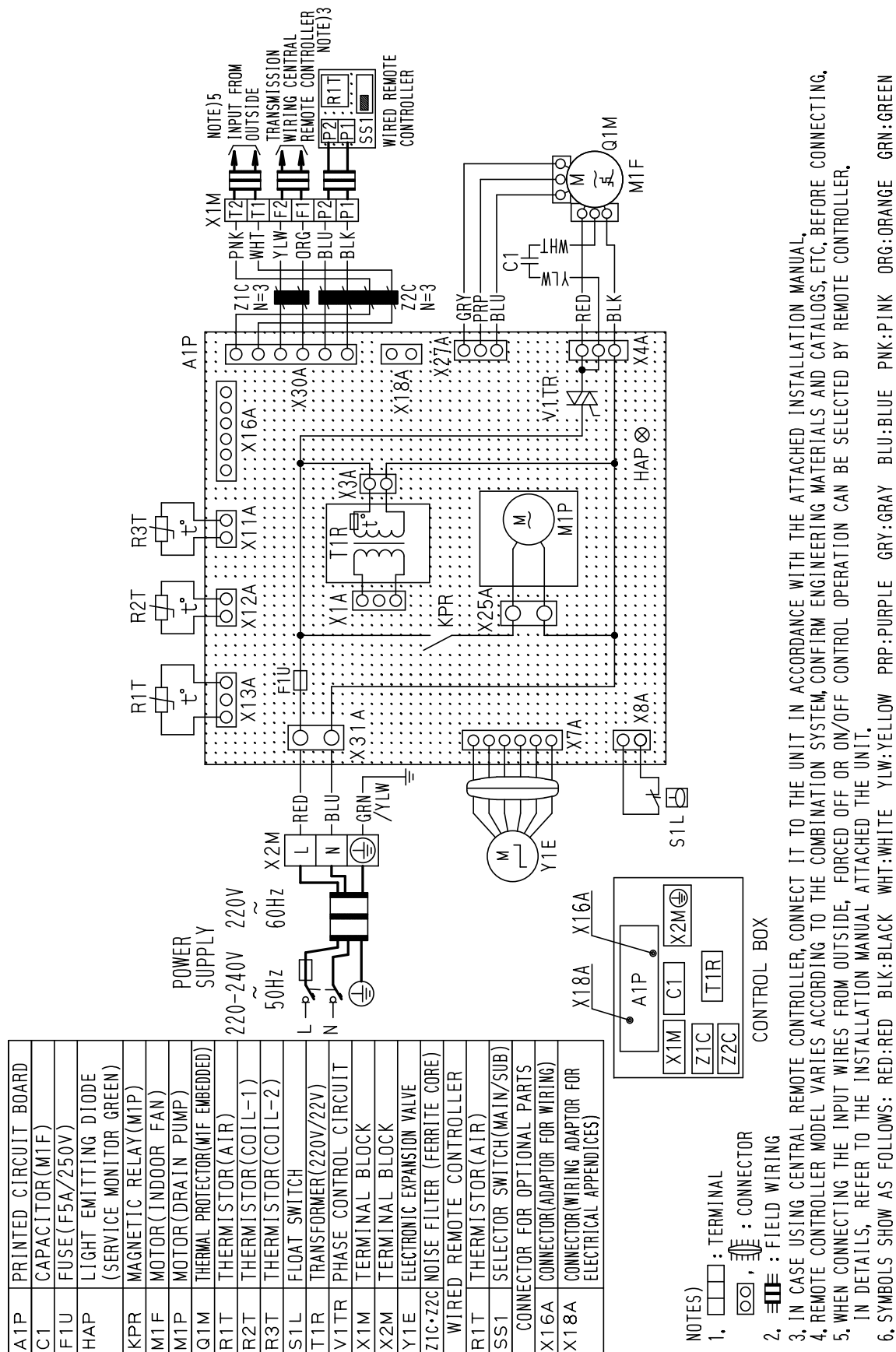
3. IN CASE USING CENTRAL REMOTE CONTROLLER, CONNECT IT TO THE UNIT IN ACCORDANCE WITH THE ATTACHED INSTALLATION MANUAL.
4. REMOTE CONTROLLER MODEL VARIES ACCORDING TO THE COMBINATION SYSTEM, CONFIRM ENGINEERING MATERIALS AND CATALOGS, ETC., BEFORE CONNECTING.
5. WHEN CONNECTING THE INPUT WIRES FROM OUTSIDE, FORCED OFF OR ON/OFF CONTROL OPERATION CAN BE SELECTED BY REMOTE CONTROLLER. IN DETAILS, REFER TO THE INSTALLATION MANUAL ATTACHED THE UNIT.

6. SYMBOLS SHOW AS FOLLOWS: RED:RED BLK:BLACK WHT:WHITE YLW:YELLOW PRP:PURPLE GRV:GRAY BLU:BLUE PNK:PINK ORG:ORANGE GRN:GREEN

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## 5.2 FXDQ-N(A)

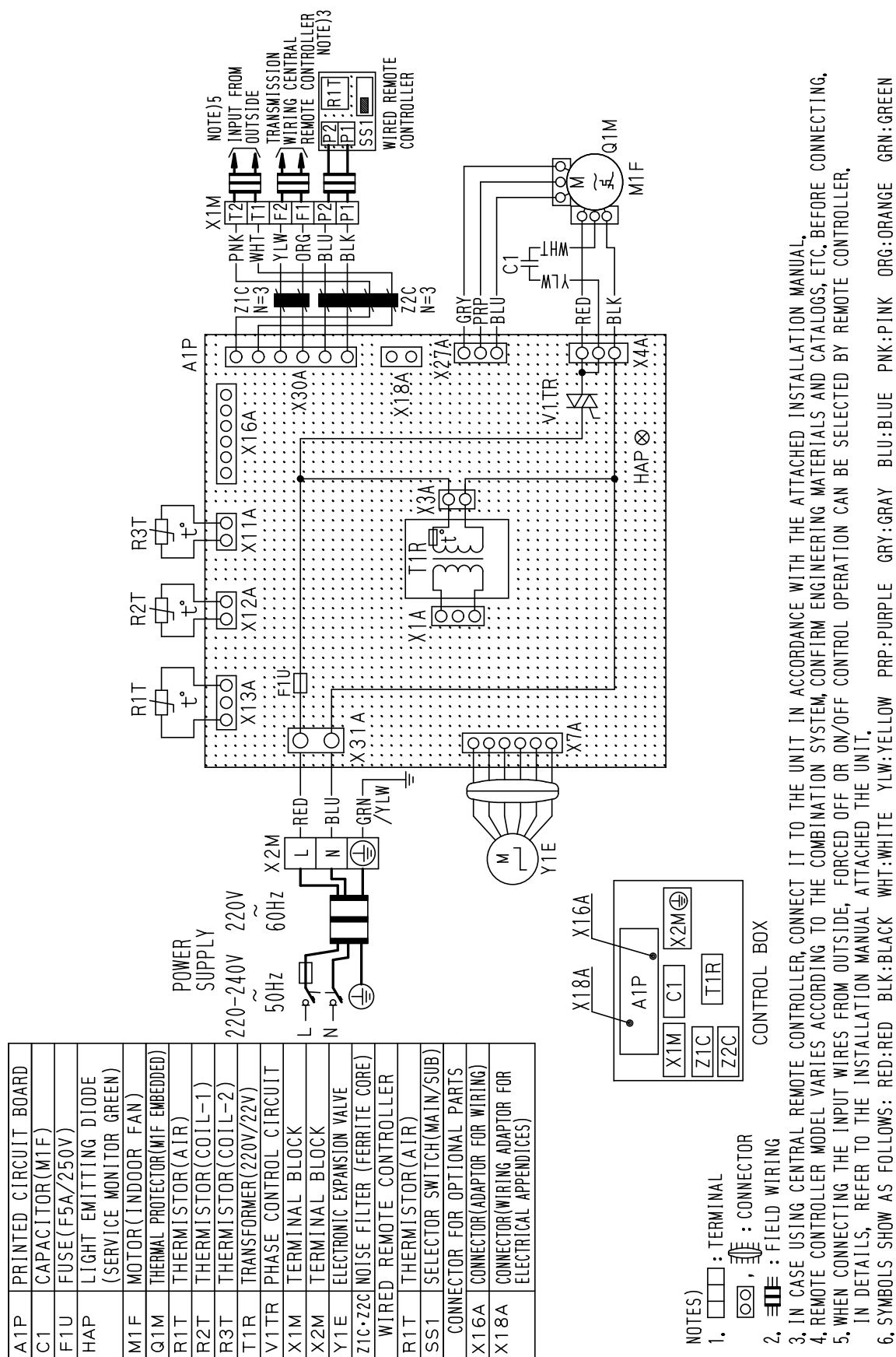
**FXDQ20NA / 25NA / 32NA / 40NA / 50NA / 63NAVE (with Drain Pump)**



3D045500C



**FXDQ20N / 25N / 32N / 40N / 50N / 63NVET (without Drain Pump)**



3D049604A

## 6. Electric Characteristics

### 6.1 FXDQ-P

Model	Power supply					IFM		Input(W)	
	Hz	Volts	Voltage range	MCA	MFA	KW	FLA	Cooling	Heating
FXDQ20PVE	50	220-240V	Max. 264V Min. 198V	0.8	15	0.062	0.6	86	67
FXDQ25PVE				0.8	15	0.062	0.6	86	67
FXDQ32PVE				0.8	15	0.062	0.6	89	70
FXDQ20PVET	50	220-240V	Max. 264V Min. 198V	0.7	15	0.062	0.6	67	67
FXDQ25PVET				0.7	15	0.062	0.6	67	67
FXDQ32PVET				0.7	15	0.062	0.6	70	70

#### Symbols :

MCA : Min. Circuit Amps (A)  
 MFA : Max. Fuse Amps (See note 5)  
 KW : Fan Motor Rated Output(kW)  
 FLA : Full Load Amps(A)  
 IFM : Indoor Fan Motor

#### Note :

- Voltage range  
Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.
- Maximum allowable voltage unbalance between phases is 2%.
- MCA/MFA  
 $MCA = 1.25 \times FLA$   
 $MFA \leq 4 \times FLA$   
 (Next lower standard fuse rating. Min. 15A)
- Select wire size based on the MCA.
- Instead of fuse, use circuit breaker.

C: 4D052138

## 6.2 FXDQ-N(A)

Model	Power supply					IFM		Input(W)	
	Hz	Volts	Voltage range	MCA	MFA	KW	FLA	Cooling	Heating
FXDQ20NVET	50	220~240V	Max. 264V Min. 198V	0.9	15	0.062	0.7	137	137
FXDQ25NVET				0.9	15	0.062	0.7	137	137
FXDQ32NVET				0.9	15	0.062	0.7	137	137
FXDQ40NVET				1.0	15	0.062	0.8	147	147
FXDQ50NVET				1.0	15	0.13	0.8	152	152
FXDQ63NVET				1.1	15	0.13	0.9	168	168
FXDQ20NAVE	50	220~240V	Max. 264V Min. 198V	0.9	15	0.062	0.7	150	137
FXDQ25NAVE				0.9	15	0.062	0.7	150	137
FXDQ32NAVE				0.9	15	0.062	0.7	150	137
FXDQ40NAVE				1.0	15	0.062	0.8	160	147
FXDQ50NAVE				1.0	15	0.13	0.8	165	152
FXDQ63NAVE				1.1	15	0.13	0.9	181	168

### Symbols :

MCA : Min. Circuit Amps (A)  
 MFA : Max. Fuse Amps (See note 5)  
 KW : Fan Motor Rated Output(kW)  
 FLA : Full Load Amps(A)  
 IFM : Indoor Fan Motor

### Note :

- Voltage range  
Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.
- Maximum allowable voltage unbalance between phases is 2%.
- MCA/MFA  
 $MCA = 1.25 \times FLA$   
 $MFA \leq 4 \times FLA$   
 (Next lower standard fuse rating. Min. 15A)
- Select wire size based on the MCA.
- Instead of fuse, use circuit breaker.

C : 4D045743B

## 7. Capacity Tables

### 7.1 FXDQ-P

#### Cooling Capacity [50Hz]

Unit Size	Outdoor air temp. °CDB	Indoor air temp.													
		14.0°CWB		16.0°CWB		18.0°CWB		19.0°CWB		20.0°CWB		22.0°CWB		24.0°CWB	
		20°CDB		23°CDB		26°CDB		27°CDB		28°CDB		30°CDB		32°CDB	
		TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
20	10.0	1.5	1.4	1.8	1.6	2.1	1.8	2.2	1.9	2.3	1.9	2.6	1.8	2.9	2.0
	12.0	1.5	1.4	1.8	1.6	2.1	1.8	2.2	1.9	2.3	1.9	2.6	1.8	2.9	2.0
	14.0	1.5	1.4	1.8	1.6	2.1	1.8	2.2	1.9	2.3	1.9	2.6	1.8	2.8	1.9
	16.0	1.5	1.4	1.8	1.6	2.1	1.8	2.2	1.9	2.3	1.9	2.6	1.8	2.8	1.9
	18.0	1.5	1.4	1.8	1.6	2.1	1.8	2.2	1.9	2.3	1.9	2.6	1.8	2.7	1.9
	20.0	1.5	1.4	1.8	1.6	2.1	1.8	2.2	1.9	2.3	1.9	2.6	1.8	2.7	1.9
	21.0	1.5	1.4	1.8	1.6	2.1	1.8	2.2	1.9	2.3	1.9	2.6	1.8	2.7	1.9
	23.0	1.5	1.4	1.8	1.6	2.1	1.8	2.2	1.9	2.3	1.9	2.6	1.8	2.6	1.9
	25.0	1.5	1.4	1.8	1.6	2.1	1.8	2.2	1.9	2.3	1.9	2.6	1.8	2.6	1.9
	27.0	1.5	1.4	1.8	1.6	2.1	1.8	2.2	1.9	2.3	1.9	2.5	1.8	2.6	1.9
	29.0	1.5	1.4	1.8	1.6	2.1	1.8	2.2	1.9	2.3	1.9	2.5	1.8	2.5	1.8
	31.0	1.5	1.4	1.8	1.6	2.1	1.8	2.2	1.9	2.3	1.9	2.4	1.7	2.5	1.8
	33.0	1.5	1.4	1.8	1.6	2.1	1.8	2.2	1.9	2.3	1.9	2.4	1.7	2.5	1.8
	35.0	1.5	1.4	1.8	1.6	2.1	1.8	2.2	1.9	2.3	1.9	2.4	1.7	2.4	1.8
25	37.0	1.5	1.4	1.8	1.6	2.1	1.8	2.2	1.9	2.3	1.9	2.3	1.7	2.4	1.8
	39.0	1.5	1.4	1.8	1.6	2.1	1.8	2.2	1.9	2.2	1.9	2.3	1.6	2.3	1.8
	10.0	1.9	1.6	2.3	1.9	2.6	2.1	2.8	2.1	3.0	2.2	3.4	2.2	3.7	2.3
	12.0	1.9	1.6	2.3	1.9	2.6	2.1	2.8	2.1	3.0	2.2	3.4	2.2	3.6	2.2
	14.0	1.9	1.6	2.3	1.9	2.6	2.1	2.8	2.1	3.0	2.2	3.4	2.2	3.6	2.2
	16.0	1.9	1.6	2.3	1.9	2.6	2.1	2.8	2.1	3.0	2.2	3.4	2.2	3.5	2.2
	18.0	1.9	1.6	2.3	1.9	2.6	2.1	2.8	2.1	3.0	2.2	3.4	2.2	3.5	2.2
	20.0	1.9	1.6	2.3	1.9	2.6	2.1	2.8	2.1	3.0	2.2	3.4	2.2	3.4	2.2
	21.0	1.9	1.6	2.3	1.9	2.6	2.1	2.8	2.1	3.0	2.2	3.4	2.2	3.4	2.2
	23.0	1.9	1.6	2.3	1.9	2.6	2.1	2.8	2.1	3.0	2.2	3.3	2.2	3.4	2.1
	25.0	1.9	1.6	2.3	1.9	2.6	2.1	2.8	2.1	3.0	2.2	3.3	2.2	3.3	2.1
	27.0	1.9	1.6	2.3	1.9	2.6	2.1	2.8	2.1	3.0	2.2	3.2	2.2	3.3	2.1
	29.0	1.9	1.6	2.3	1.9	2.6	2.1	2.8	2.1	3.0	2.2	3.2	2.1	3.2	2.1
	31.0	1.9	1.6	2.3	1.9	2.6	2.1	2.8	2.1	3.0	2.2	3.1	2.1	3.2	2.1
32	33.0	1.9	1.6	2.3	1.9	2.6	2.1	2.8	2.1	3.0	2.2	3.1	2.1	3.1	2.1
	35.0	1.9	1.6	2.3	1.9	2.6	2.1	2.8	2.1	3.0	2.2	3.0	2.1	3.1	2.0
	37.0	1.9	1.6	2.3	1.9	2.6	2.1	2.8	2.1	2.9	2.2	3.0	2.0	3.0	2.0
	39.0	1.9	1.6	2.3	1.9	2.6	2.1	2.8	2.1	2.9	2.1	2.9	2.0	3.0	2.0
	10.0	2.4	2.0	2.9	2.3	3.4	2.4	3.6	2.6	3.8	2.7	4.3	2.8	4.7	2.9
	12.0	2.4	2.0	2.9	2.3	3.4	2.4	3.6	2.6	3.8	2.7	4.3	2.8	4.7	2.9
	14.0	2.4	2.0	2.9	2.3	3.4	2.4	3.6	2.6	3.8	2.7	4.3	2.8	4.6	2.8
	16.0	2.4	2.0	2.9	2.3	3.4	2.4	3.6	2.6	3.8	2.7	4.3	2.8	4.6	2.8
	18.0	2.4	2.0	2.9	2.3	3.4	2.4	3.6	2.6	3.8	2.7	4.3	2.8	4.5	2.8
	20.0	2.4	2.0	2.9	2.3	3.4	2.4	3.6	2.6	3.8	2.7	4.3	2.8	4.4	2.8
	21.0	2.4	2.0	2.9	2.3	3.4	2.4	3.6	2.6	3.8	2.7	4.3	2.8	4.4	2.7
	23.0	2.4	2.0	2.9	2.3	3.4	2.4	3.6	2.6	3.8	2.7	4.2	2.8	4.3	2.7
	25.0	2.4	2.0	2.9	2.3	3.4	2.4	3.6	2.6	3.8	2.7	4.2	2.7	4.3	2.7
	27.0	2.4	2.0	2.9	2.3	3.4	2.4	3.6	2.6	3.8	2.7	4.1	2.7	4.2	2.7
	29.0	2.4	2.0	2.9	2.3	3.4	2.4	3.6	2.6	3.8	2.7	4.1	2.7	4.2	2.6
	31.0	2.4	2.0	2.9	2.3	3.4	2.4	3.6	2.6	3.8	2.7	4.0	2.6	4.1	2.6
	33.0	2.4	2.0	2.9	2.3	3.4	2.4	3.6	2.6	3.8	2.7	3.9	2.6	4.0	2.6
	35.0	2.4	2.0	2.9	2.3	3.4	2.4	3.6	2.6	3.8	2.7	3.9	2.6	4.0	2.5
	37.0	2.4	2.0	2.9	2.3	3.4	2.4	3.6	2.6	3.7	2.6	3.8	2.6	3.9	2.5
	39.0	2.4	2.0	2.9	2.3	3.4	2.4	3.6	2.6	3.7	2.6	3.8	2.5	3.8	2.5

TC : Total capacity ; kW  
SC : Sensible capacity ; kW



Refer to Outdoor Unit Capacity Tables : on page 411~, 470~, for the actual performance data of each indoor and outdoor unit combination.

## 7.2 FXDQ-N(A)

## Cooling Capacity

[50Hz]

Unit Size	Outdoor air temp. °CDB	Indoor air temp.												Cooling capacity							
		14.0°CWB 20.0°CDB				16.0°CWB 23.0°CDB				18.0°CWB 26.0°CDB				20.0°CWB 28.0°CDB				22.0°CWB 30.0°CDB		24.0°CWB 32.0°CDB	
		TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC		
40	10.0	3.0	2.5	3.6	2.8	4.2	3.3	4.5	3.3	4.8	3.2	5.4	3.3	5.9	3.5	6.5	3.5	7.1	3.5	7.7	3.5
	12.0	3.0	2.5	3.6	2.8	4.2	3.3	4.5	3.3	4.8	3.2	5.4	3.3	5.9	3.5	6.5	3.5	7.1	3.5	7.7	3.5
	14.0	3.0	2.5	3.6	2.8	4.2	3.3	4.5	3.3	4.8	3.2	5.4	3.3	5.9	3.5	6.5	3.5	7.1	3.5	7.7	3.5
	16.0	3.0	2.5	3.6	2.8	4.2	3.3	4.5	3.3	4.8	3.2	5.4	3.3	5.9	3.5	6.5	3.5	7.1	3.5	7.7	3.5
	18.0	3.0	2.5	3.6	2.8	4.2	3.3	4.5	3.3	4.8	3.2	5.4	3.3	5.9	3.5	6.5	3.5	7.1	3.5	7.7	3.5
	20.0	3.0	2.5	3.6	2.8	4.2	3.3	4.5	3.3	4.8	3.2	5.4	3.3	5.9	3.5	6.5	3.5	7.1	3.5	7.7	3.5
	21.0	3.0	2.5	3.6	2.8	4.2	3.3	4.5	3.3	4.8	3.2	5.4	3.3	5.9	3.5	6.5	3.5	7.1	3.5	7.7	3.5
	23.0	3.0	2.5	3.6	2.8	4.2	3.3	4.5	3.3	4.8	3.2	5.4	3.3	5.9	3.5	6.5	3.5	7.1	3.5	7.7	3.5
	25.0	3.0	2.5	3.6	2.8	4.2	3.3	4.5	3.3	4.8	3.2	5.4	3.3	5.9	3.5	6.5	3.5	7.1	3.5	7.7	3.5
	27.0	3.0	2.5	3.6	2.8	4.2	3.3	4.5	3.3	4.8	3.2	5.4	3.3	5.9	3.5	6.5	3.5	7.1	3.5	7.7	3.5
50	10.0	3.8	3.1	4.5	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.7	4.2	7.4	4.1	8.1	4.1	8.7	4.1	9.3	4.1
	12.0	3.8	3.1	4.5	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.7	4.2	7.4	4.1	8.1	4.1	8.7	4.1	9.3	4.1
	14.0	3.8	3.1	4.5	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.7	4.2	7.4	4.1	8.1	4.1	8.7	4.1	9.3	4.1
	16.0	3.8	3.1	4.5	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.7	4.2	7.4	4.1	8.1	4.1	8.7	4.1	9.3	4.1
	18.0	3.8	3.1	4.5	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.7	4.2	7.4	4.1	8.1	4.1	8.7	4.1	9.3	4.1
	20.0	3.8	3.1	4.5	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.7	4.2	7.4	4.1	8.1	4.1	8.7	4.1	9.3	4.1
	21.0	3.8	3.1	4.5	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.7	4.2	7.4	4.1	8.1	4.1	8.7	4.1	9.3	4.1
	23.0	3.8	3.1	4.5	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.7	4.2	7.4	4.1	8.1	4.1	8.7	4.1	9.3	4.1
	25.0	3.8	3.1	4.5	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.7	4.2	7.4	4.1	8.1	4.1	8.7	4.1	9.3	4.1
	27.0	3.8	3.1	4.5	3.5	5.2	3.9	5.6	4.0	6.0	4.0	6.7	4.2	7.4	4.1	8.1	4.1	8.7	4.1	9.3	4.1
63	10.0	4.8	3.8	5.7	4.3	6.6	4.8	7.1	4.9	7.6	4.9	8.5	5.1	9.3	5.7	10.1	5.7	10.7	5.7	11.3	5.7
	12.0	4.8	3.8	5.7	4.3	6.6	4.8	7.1	4.9	7.6	4.9	8.5	5.1	9.3	5.7	10.1	5.7	10.7	5.7	11.3	5.7
	14.0	4.8	3.8	5.7	4.3	6.6	4.8	7.1	4.9	7.6	4.9	8.5	5.1	9.3	5.7	10.1	5.7	10.7	5.7	11.3	5.7
	16.0	4.8	3.8	5.7	4.3	6.6	4.8	7.1	4.9	7.6	4.9	8.5	5.1	9.3	5.7	10.1	5.7	10.7	5.7	11.3	5.7
	18.0	4.8	3.8	5.7	4.3	6.6	4.8	7.1	4.9	7.6	4.9	8.5	5.1	9.3	5.7	10.1	5.7	10.7	5.7	11.3	5.7
	20.0	4.8	3.8	5.7	4.3	6.6	4.8	7.1	4.9	7.6	4.9	8.5	5.1	9.3	5.7	10.1	5.7	10.7	5.7	11.3	5.7
	21.0	4.8	3.8	5.7	4.3	6.6	4.8	7.1	4.9	7.6	4.9	8.5	5.1	9.3	5.7	10.1	5.7	10.7	5.7	11.3	5.7
	23.0	4.8	3.8	5.7	4.3	6.6	4.8	7.1	4.9	7.6	4.9	8.5	5.1	9.3	5.7	10.1	5.7	10.7	5.7	11.3	5.7
	25.0	4.8	3.8	5.7	4.3	6.6	4.8	7.1	4.9	7.6	4.9	8.5	5.1	9.3	5.7	10.1	5.7	10.7	5.7	11.3	5.7
	27.0	4.8	3.8	5.7	4.3	6.6	4.8	7.1	4.9	7.6	4.9	8.5	5.1	9.3	5.7	10.1	5.7	10.7	5.7	11.3	5.7
80	10.0	5.8	4.8	6.7	5.1	7.8	5.8	8.1	6.1	9.0	6.1	10.0	7.1	11.1	8.1	12.1	8.1	12.7	8.1	13.3	8.1
	12.0	5.8	4.8	6.7	5.1	7.8	5.8	8.1	6.1	9.0	6.1	10.0	7.1	11.1	8.1	12.1	8.1	12.7	8.1	13.3	8.1
	14.0	5.8	4.8	6.7	5.1	7.8	5.8	8.1	6.1	9.0	6.1	10.0	7.1	11.1	8.1	12.1	8.1	12.7	8.1	13.3	8.1
	16.0	5.8	4.8	6.7	5.1	7.8	5.8	8.1	6.1	9.0	6.1	10.0	7.1	11.1	8.1	12.1	8.1	12.7	8.1	13.3	8.1
	18.0	5.8	4.8	6.7	5.1	7.8	5.8	8.1	6.1	9.0	6.1	10.0	7.1	11.1	8.1	12.1	8.1	12.7	8.1	13.3	8.1
	20.0	5.8	4.8	6.7	5.1	7.8	5.8	8.1	6.1	9.0	6.1	10.0	7.1	11.1	8.1	12.1	8.1	12.7	8.1	13.3	8.1
	21.0	5.8	4.8	6.7	5.1	7.8	5.8	8.1	6.1	9.0	6.1	10.0	7.1	11.1	8.1	12.1	8.1	12.7	8.1	13.3	8.1
	23.0	5.8	4.8	6.7	5.1	7.8	5.8	8.1	6.1	9.0	6.1	10.0	7.1	11.1	8.1	12.1	8.1	12.7	8.1	13.3	8.1
	25.0	5.8	4.8	6.7	5.1	7.8	5.8	8.1	6.1	9.0	6.1	10.0	7.1	11.1	8.1	12.1	8.1	12.7	8.1	13.3	8.1
	27.0	5.8	4.8	6.7	5.1	7.8	5.8	8.1	6.1	9.0	6.1	10.0	7.1	11.1	8.1	12.1	8.1	12.7	8.1	13.3	8.1
TC SC	Total capacity : kW																				
	Sensible capacity : kW																				

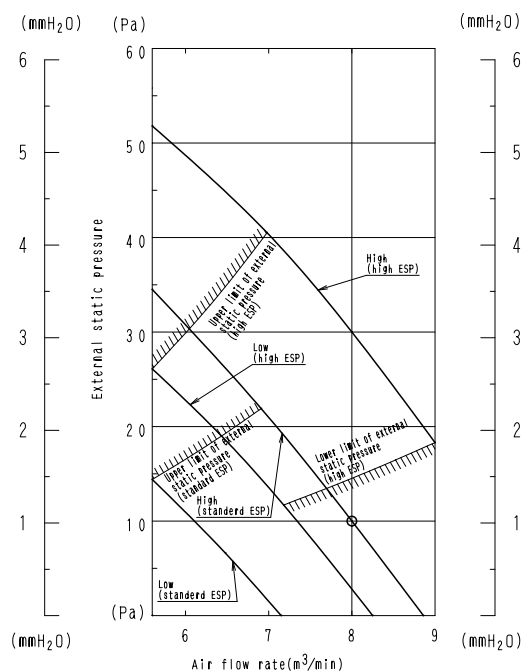
Refer to Outdoor Unit Capacity Tables : on page 411 ~, 470 ~, for the actual performance data of each indoor and outdoor unit combination.



## 8. Fan Performances

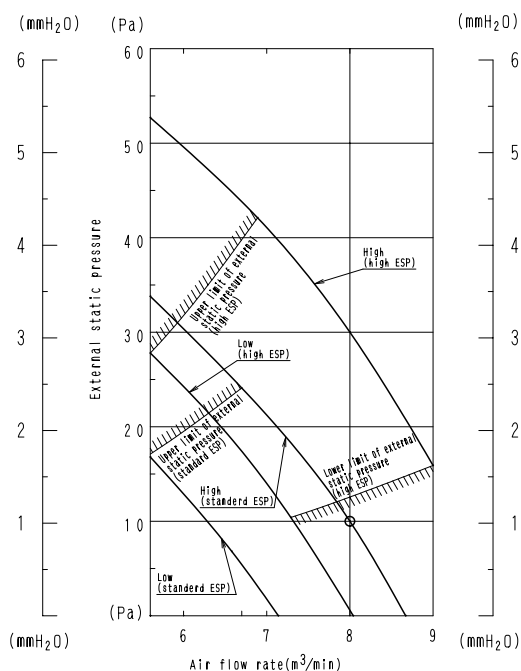
### 8.1 FXDQ-P

FXDQ20P / 25PVE(T)



3D052156

FXDQ32PVE(T)



3D052157

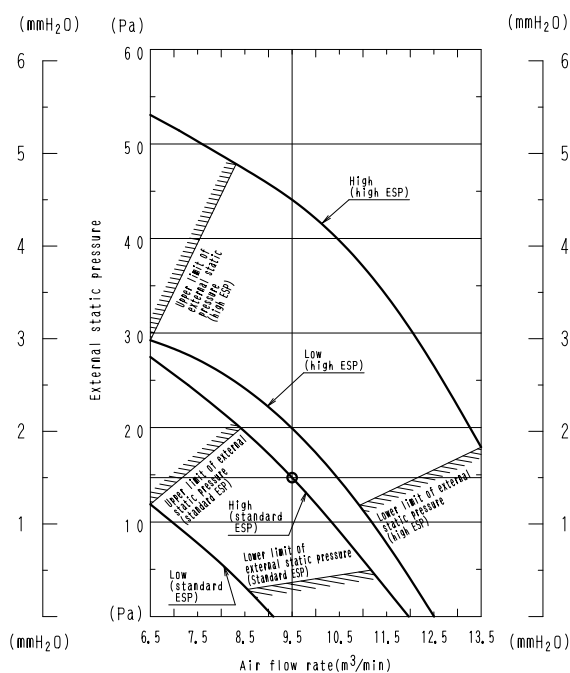
#### Notes:

1. The remote controller can be used to switch between "high" and "low".
2. The air flow is set to "standard" before leaving the factory.

It is possible to switch between "standard ESP" and "high ESP" by the remote controller.

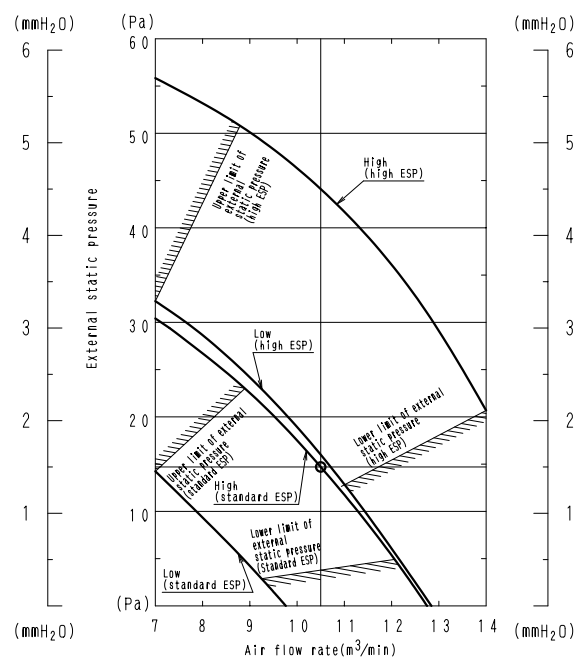
## 8.2 FXDQ-N(A)

FXDQ20 · 25N(A)VE(T)



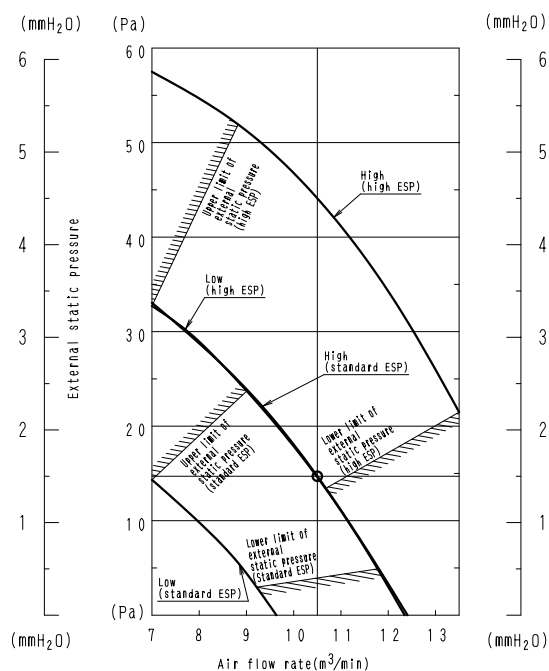
3D046296B

FXDQ32N(A)VE(T)



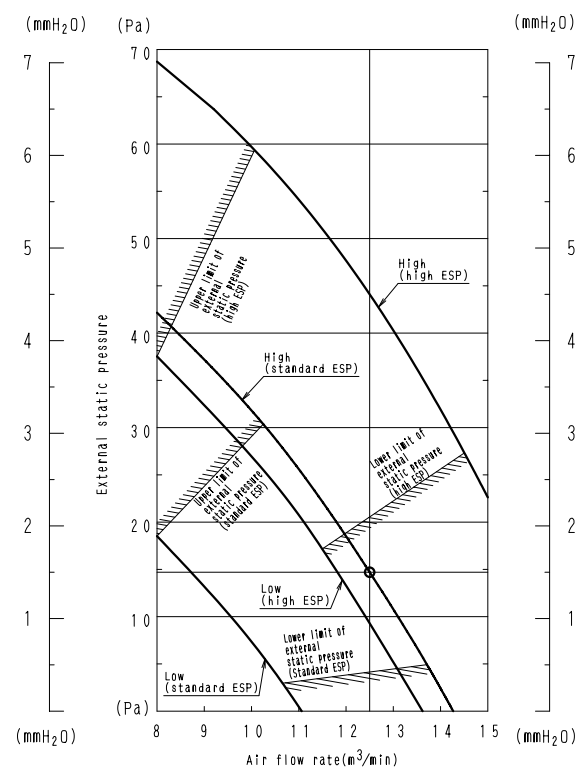
3D046298B

FXDQ40N(A)VE(T)



3D046299B

FXDQ50N(A)VE(T)

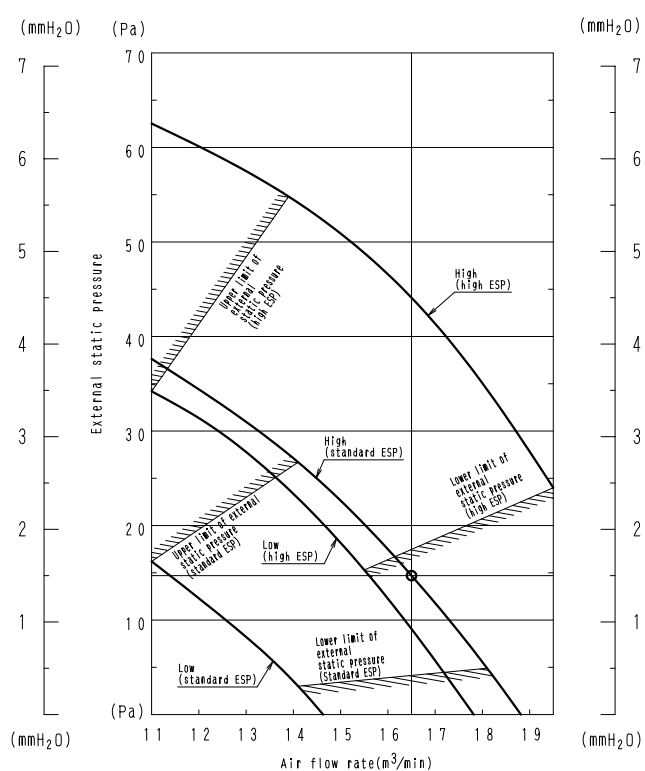


3D046300B

### Note:

1. The remote controller can be used to switch between "high" and "low".
2. The air flow is set to "standard" before leaving the factory.  
It is possible to switch between "standard ESP" and "high ESP" by the remote controller.

## FXDQ63N(A)VE(T)



3D046301B

**Note:**

1. The remote controller can be used to switch between "high" and "low".
2. The air flow is set to "standard" before leaving the factory.  
It is possible to switch between "standard ESP" and "high ESP" by the remote controller.

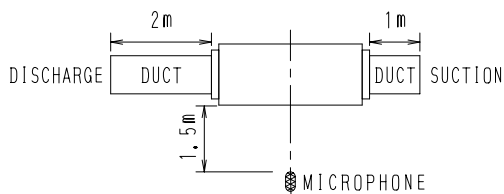


## 9. Sound Levels

### 9.1 FXDQ-P

#### Overall

##### ■ Slim Ceiling Mounted Duct Type



dBA

Model	220~240V, 50Hz	
	H	L
FXDQ20PVE(T)	33	29
FXDQ25PVE(T)	33	29
FXDQ32PVE(T)	33	29

##### Notes:

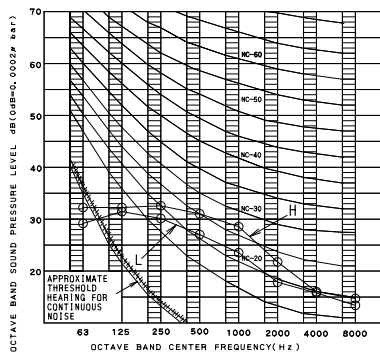
1. The operating conditions are assumed to be standard (JIS conditions)
2. These operating values were obtained in a dead room (conversion values).

Sound level will vary depending on a range of factors such as the construction (acoustic absorption coefficient) of the particular room in which the equipments installed.

#### Octave Band Level

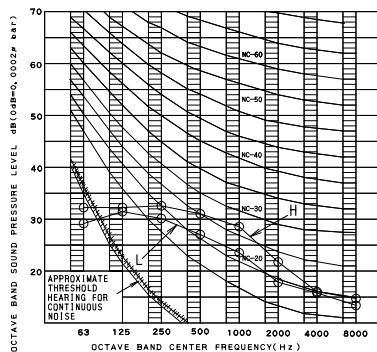
○ — ○ 220V~240V 50Hz

##### FXDQ20PVE(T)



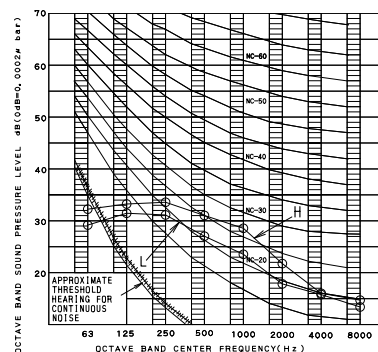
4D052164

##### FXDQ25PVE(T)



4D052165

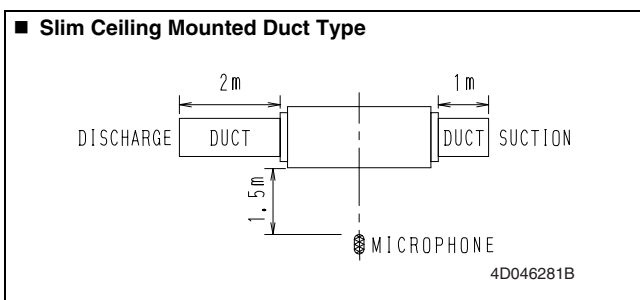
##### FXDQ32PVE(T)



4D052166

## 9.2 FXDQ-N(A)

### Overall



#### Note:

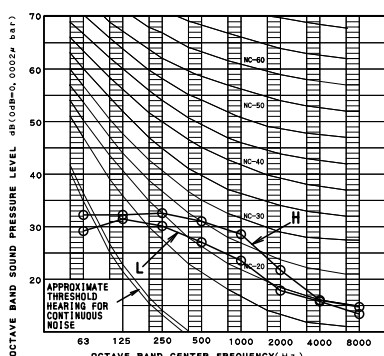
1. The operating conditions are assumed to be standard (JIS conditions).
2. These operating values were obtained in a dead room (conversion values).  
Sound level will vary depending on a range of factors such as the construction (acoustic absorption coefficient) of the particular room in which the equipments installed.

Model	220~240V, 50Hz	
	H	L
FXDQ20N(A)VE(T)	33	29
FXDQ25N(A)VE(T)	33	29
FXDQ32N(A)VE(T)	33	29
FXDQ40N(A)VE(T)	34	30
FXDQ50N(A)VE(T)	35	31
FXDQ63N(A)VE(T)	36	32

### Octave Band Level

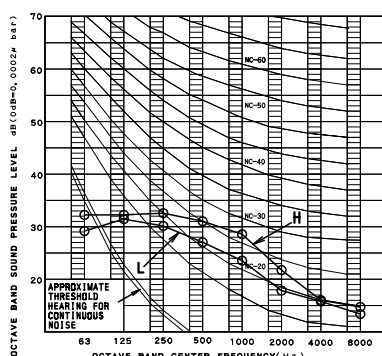
○ — ○ 220V~240V 50Hz

FXDQ20N(A)VE(T)



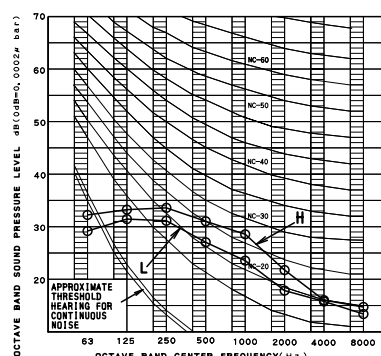
4D046281B

FXDQ25N(A)VE(T)



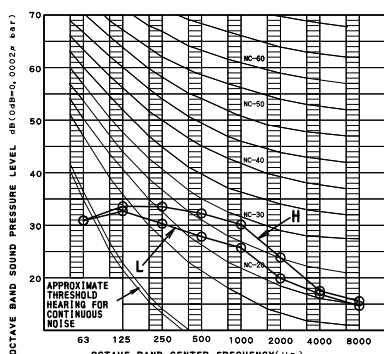
4D046282B

FXDQ32N(A)VE(T)



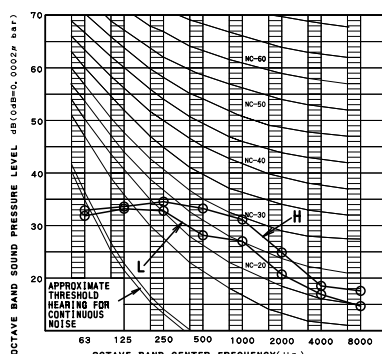
4D046283B

FXDQ40N(A)VE(T)



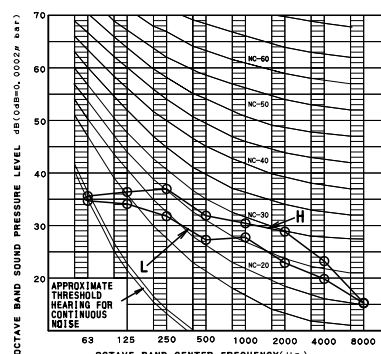
4D046284B

FXDQ50N(A)VE(T)



4D046285B

FXDQ63N(A)VE(T)



4D046286B

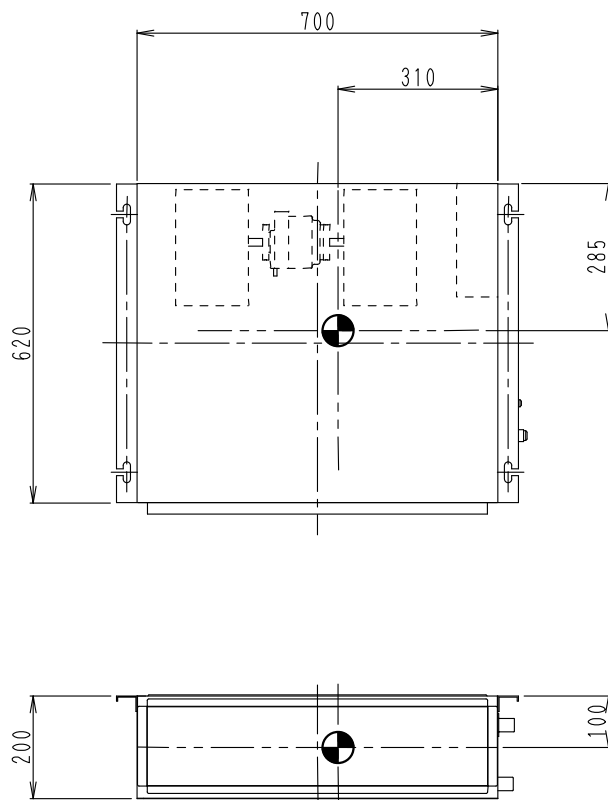
## 10. Installation

### 10.1 FXDQ-P

#### Center of Gravity

FXDQ20P / 25P / 32PVE(T)

Unit (mm)

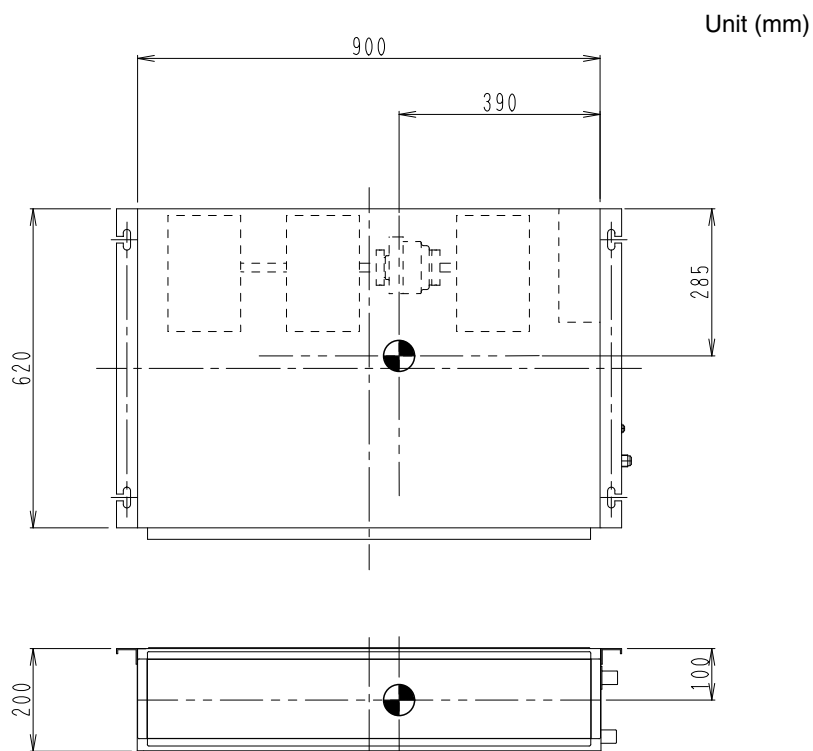


4D049300A

## 10.2 FXDQ-N(A)

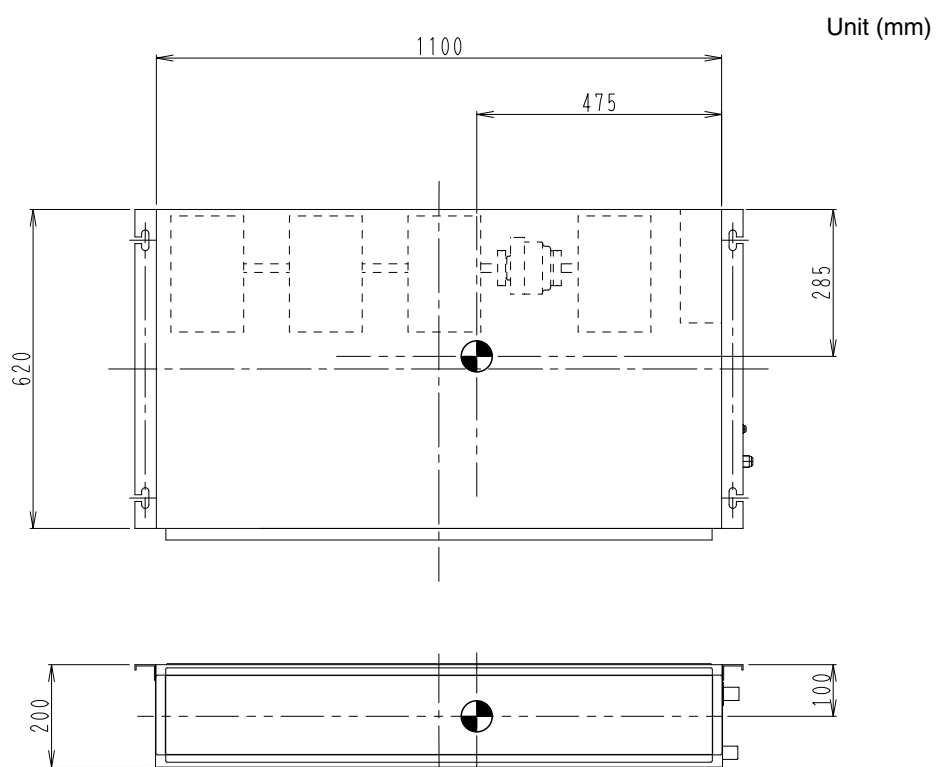
### Center of Gravity

FXDQ20 · 25 · 32 · 40 · 50N(A)VE(T)



4D043886G

### FXDQ63N(A)VE(T)



4D043887G

## Service Space

1. Select an installation site where the following conditions are fulfilled and that meets with your customer's approval.
  - Where optimum air distribution can be ensured.
  - Where nothing blocks air passage.
  - Where condensate can be properly drained.
  - Where the ceiling is strong enough to bear the indoor unit weight.
  - Where the false ceiling is not noticeably on an incline.
  - Where there is no risk of flammable gas leakage.
  - Where sufficient clearance for maintenance and service can be ensured. **(Refer to Fig. 1)**
  - Where piping between indoor and outdoor units is possible within the allowable limit. (Refer to the installation manual for the outdoor unit.)

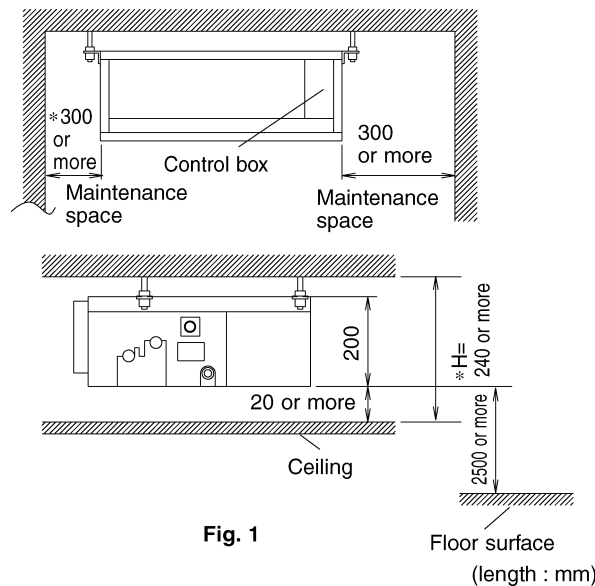


Fig. 1

- Select the \*H dimension such that a downward slope of at least 1/100 is ensured as indicated in “**DRAIN PIPING WORK**”.
- The maintenance space marked with “\*” is required when the installation box for adaptor PC board (KRP1B101) sold separately is used.

### [ PRECAUTION ]

- Install the indoor and outdoor units, power supply wiring and connecting wires at least 1 meter away from televisions or radios in order to prevent image interference or noise. (Depending on the radio waves, a distance of 1 meter may not be sufficient enough to eliminate the noise.)
  - If installing the wireless kit in a room with electronic fluorescent lighting (inverter or rapid start type), the remote controller's transmission distance may be shortened. Indoor units should be installed as far away from fluorescent lighting as possible.
2. Use suspension bolts for installation. Check whether the ceiling is strong enough to support the weight of the unit or not. If there is a risk, reinforce the ceiling before installing the unit.  
(Installation pitch is marked on the carton box for installation. Refer to it to check for points requiring reinforcing.)

3PN05141-4S

## Bolt Pitch

### 1. Confirm the positional relationship between the unit and suspension bolts. (Refer to Fig. 2)

- Install the inspection opening on the control box side where maintenance and inspection of the control box and drain pump are easy. Install the inspection opening also in the lower part of the unit.

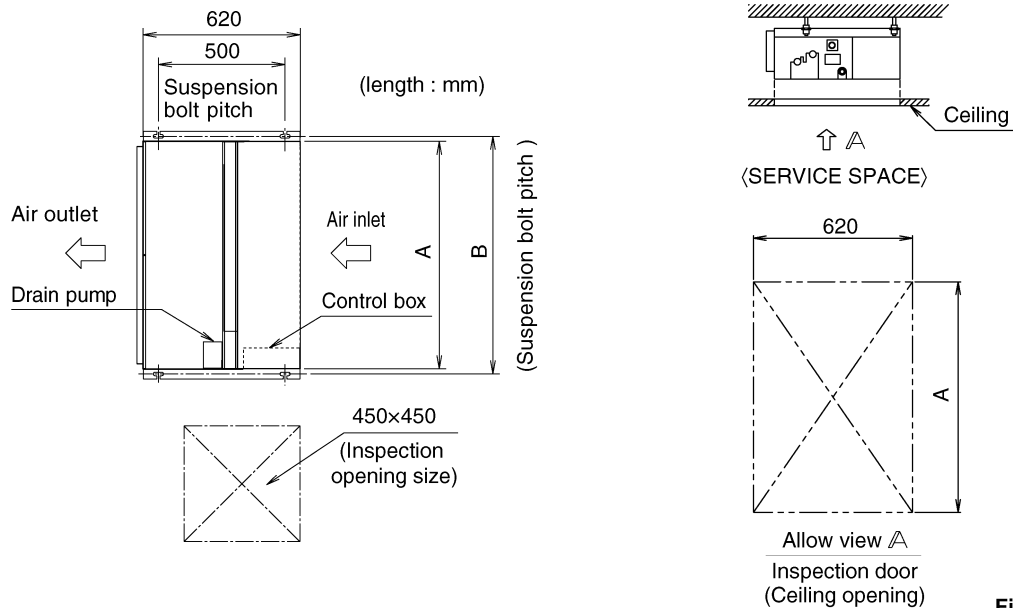


Fig. 2

(length: mm)

Model	A	B
20 · 25 · 32PVE type	700	740
20 · 25 · 32 · 40 · 50N(A) type	900	940
63N(A) type	1100	1140

### 2. Make sure the range of the unit's external static pressure is not exceeded.

(See the technical documentation for the range of the external static pressure setting.)

### 3. Open the installation hole. (Pre-set ceilings)

- Once the installation hole is opened in the ceiling where the unit is to be installed, pass refrigerant piping, drain piping, transmission wiring, and remote controller wiring (It is not necessary if using a wireless remote controller) to the unit's piping and wiring holes.

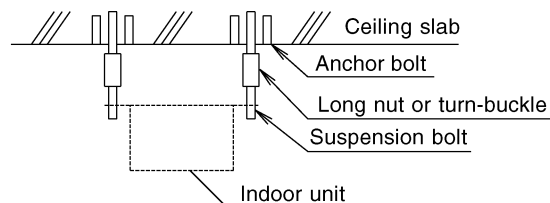
See "DRAIN PIPING WORK".

- After opening the ceiling hole, make sure ceiling is level if needed. It might be necessary to reinforce the ceiling frame to prevent shaking. Consult an architect or carpenter for details.

### 4. Install the suspension bolts.

(Use W3/8 to M10 suspension bolts.)

Use a hole-in-anchor for existing ceilings, and a sunken insert, sunken anchor or other part to be procured in the field to reinforce the ceiling to bearing the weight of the unit for new ceiling. (Refer to Fig. 3)



Note: All the above parts are field supplied.

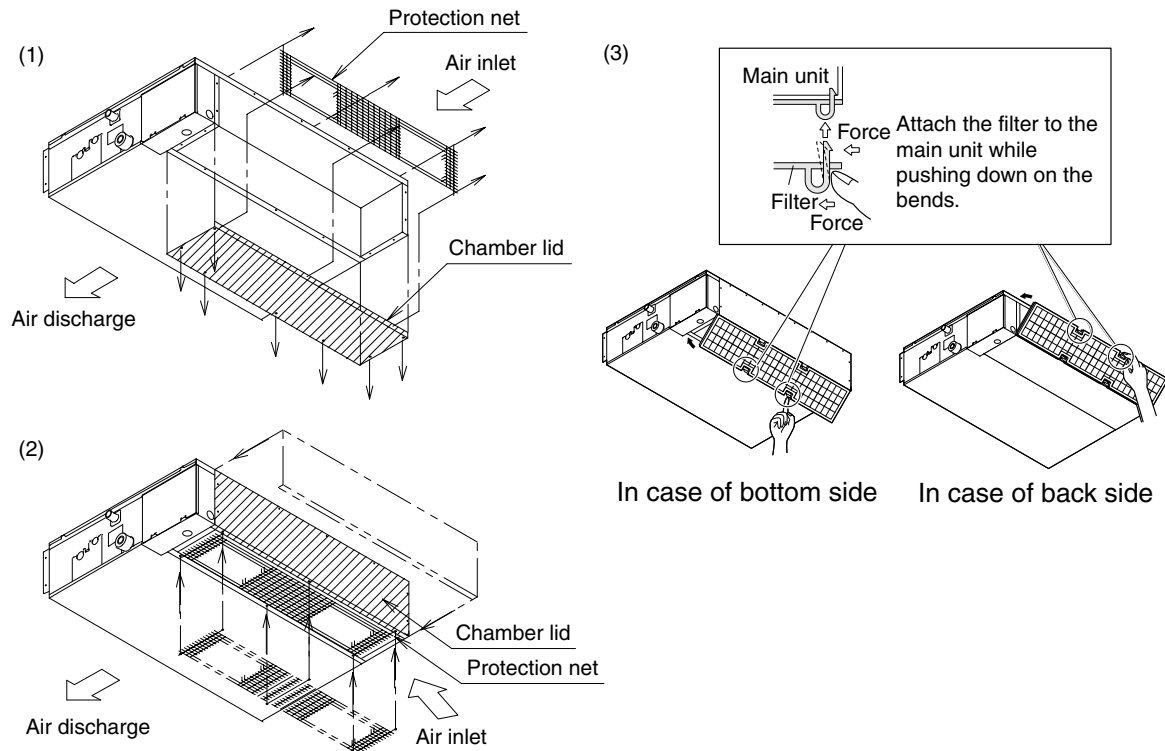
Fig. 3

5. For bottom intake, replace the chamber lid in the procedure listed in Fig. 4.

**FXDQ-P**

For bottom intake, replace the chamber lid and protection net in the procedure listed in Fig. 4.

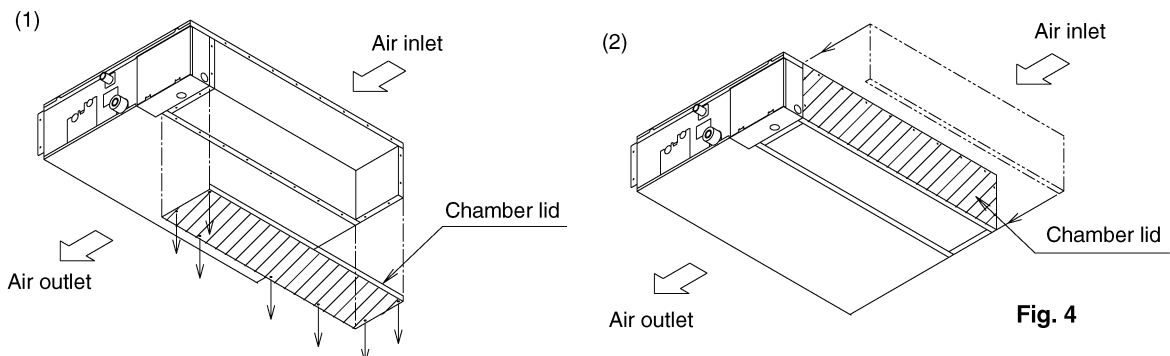
- (1) Remove the protection net. (6 locations)  
Remove the chamber lid. (7 locations)
- (2) Refer to Fig. 4 for the direction of the chamber lid. (7 locations)  
Refer to Fig. 4 for the direction of the protection net. (6 locations)
- (3) Attach the air filter (accessory) in the manner shown in the diagram.  
The four holes which cannot be covered by the air filter should be covered with commercially available tape.



**Fig. 4**

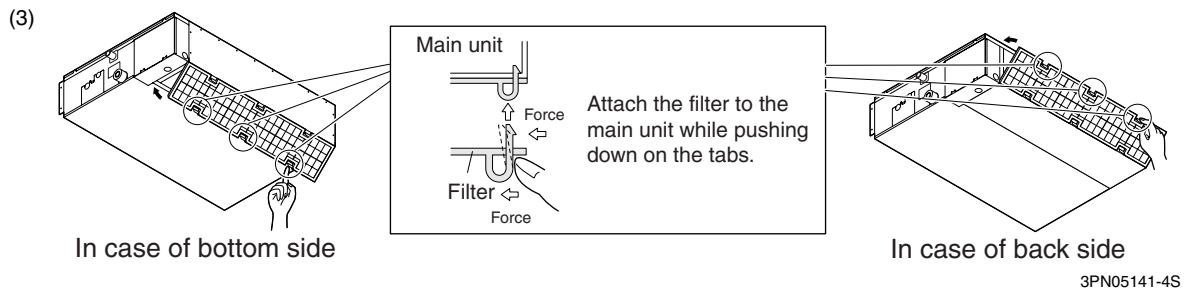
**FXDQ-N(A)**

- (1) Remove the chamber lid. (7 locations)
- (2) Reattached the removed chamber lid in the orientation shown in Fig. 4. (7 locations)



**Fig. 4**

- (3) Attach the air filter (accessory) in the manner shown in the diagram. The four holes which cannot be covered by the air filter should be covered with commercially available tape.



5

## Indoor Unit Installation

<<As for the parts to be used for installation work, be sure to use the provided accessories and specified parts designated by our company.>>

### 1. Install the indoor unit temporarily.

- Attach the hanger bracket to the suspension bolt. Be sure to fix it securely by using a nut and washer from the upper and lower sides of the hanger bracket. (Refer to Fig. 5)

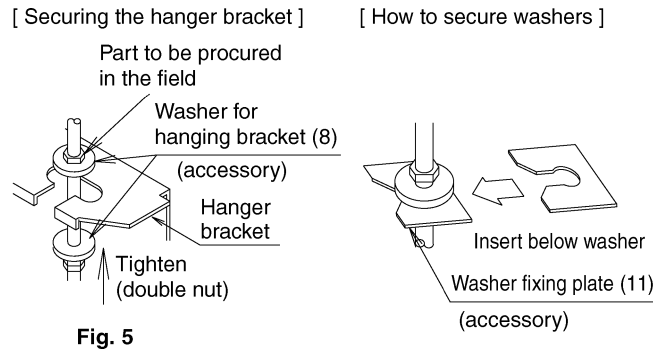
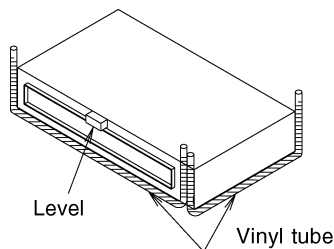


Fig. 5

### [ PRECAUTION ]

Since the unit uses a plastic drain pan, prevent welding spatter and other foreign substances from entering the air outlet during installation.

2. Adjust the height of the unit.
3. Check the unit is level.



### CAUTION

- Make sure the unit is installed level using a level or a plastic tube filled with water. In using a plastic tube instead of a level, adjust the top surface of the unit to the surface of the water at both ends of the plastic tube and adjust the unit horizontally. (One thing to watch out for in particular is if the unit is installed so that the slope is not in the direction of the drain piping, this might cause leaking.)

4. Tighten the upper nut.

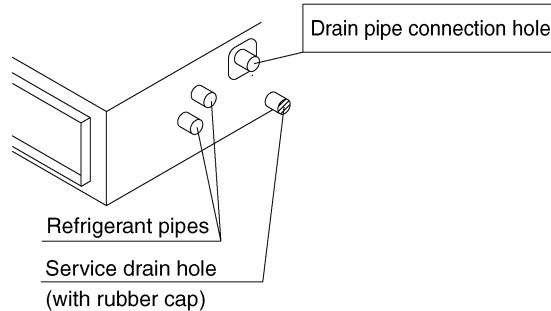
3PN05141-4S



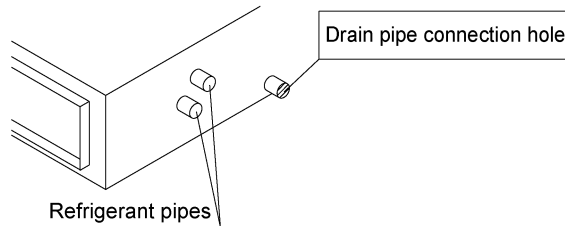
## Drain Piping Work

### 1. Install the drain piping.

#### In case of PVE, NAVE (with Drain Pump) Type



#### In case of PVET, NVET (without Drain Pump) Type



Connect the drain pipe after removing the rubber cap and insulation tubing attached to the connection hole.

- Make sure the drain works properly.
- The diameter of the drain piping should be greater than or equal to the diameter of the connecting pipe (vinyl tube; pipe size: 20 mm; outer dimension: 26 mm). (not including the riser)
- Keep the drain pipe short and sloping downwards at a gradient of at least 1/100 to prevent air pockets from forming. (Refer to Fig. 10)

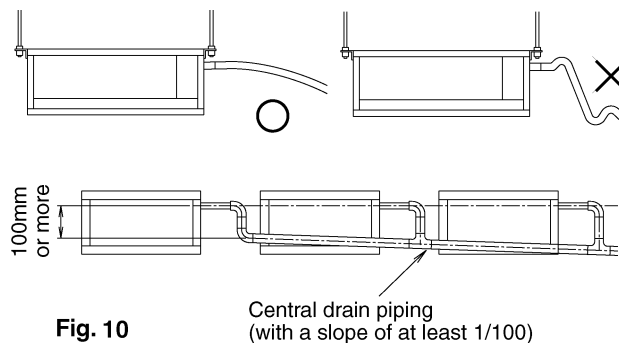


Fig. 10

Central drain piping  
(with a slope of at least 1/100)



### CAUTION

**Water accumulating in the drain piping can cause the drain to clog.**

- To keep the drain piping from sagging, space hanging bracket every 1 to 1.5 m.
- Use the drain hose (2) and the metal clamp (1). Insert the drain hose (2) fully into the drain pipe connection hole and firmly tighten the metal clamp (1) with the upper part of the tape on the hose end. Tighten the metal clamp (1) until the screw head is less than 4 mm from the hose. (Refer to Fig. 11, 12)
- The two areas below should be insulated because condensation may form there causing water to leak.
  - Drain piping passing indoors
  - Drain pipe connection hole
 Referring the figure below, insulate the metal clamp (1) and drain hose (2) using the included large sealing pad (5). (Refer to Fig. 12)

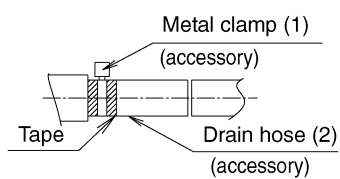


Fig. 11

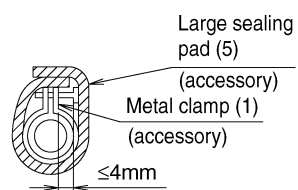


Fig. 12

3PN05141-4S

5

### In case of PVE · N(A)VE (with Drain Pump) Type

#### <PRECAUTIONS FOR DRAIN RAISING PIPE>

- Make sure the drain raising pipe height is no higher than 600mm.
- Place the drain raising pipe vertically and make sure it is no further than 300mm from the unit. **(Refer to Fig. 13)**

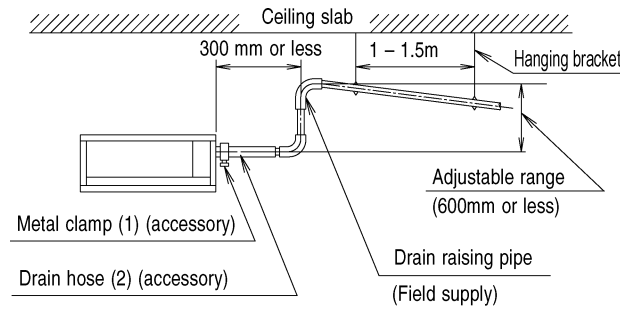


Fig. 13

#### <PRECAUTIONS>

##### Drain piping connections

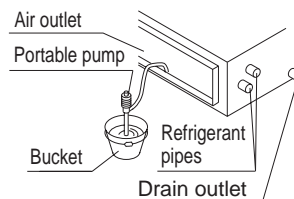
- Do not connect the drain piping directly to sewage pipes that smell of ammonia. The ammonia in the sewage might enter the indoor unit through the drain piping and corrode the heat exchanger.
- Do not twist or bend the drain hose (2), so that excessive force is not applied to it. (This type of treatment may cause leaking.)
- If you are using central drain piping, follow the procedure outlined in the figure 10.
- Select central drain piping of proper size according to the capacity of the connected unit.

3PN05141-4S

### 2. After piping work is finished, check drainage flows smoothly.

- Gradually insert approximately 1L of water into the drain pan to check drainage in the manner described below

#### In case of PVET · NVET (without Drain Pump) Type



- Gradually pour approximately 1L of water from the outlet hole into the drain pan to check drainage.
- Check the drainage

## In case of PVE · N(A)VE (with Drain Pump) Type

**CAUTION**

- The electric wiring work shall be performed by qualified electricians.
- If workers not having the electrician qualification have performed the electric wiring work, the steps 3 to 7 shall be performed after the **TEST RUN**.

1. Remove the lid of the control box. Connect the remote controller and power supply (single-phase, 50 Hz 220-240 V or single-phase, 60Hz 220V) respectively to the terminal block and securely connect the ground also (as shown in the figure below).

**CAUTION**

Securely clamp the cables with the clamps (9)(10) offered as accessories as shown in Fig. 14 so that tension will not be applied on the cable connection areas.

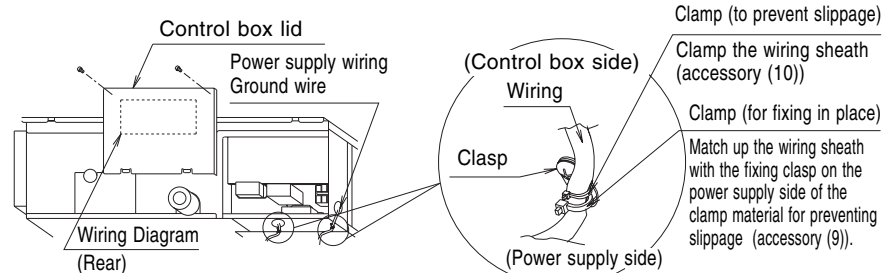






Fig. 14

2. Confirm that the lid of the control box is closed before turning on the power.
3. Remove the inspection lid.
4. Gradually pour approximately 1,000 cc of water from the water inlet into the drain pan to check drainage.

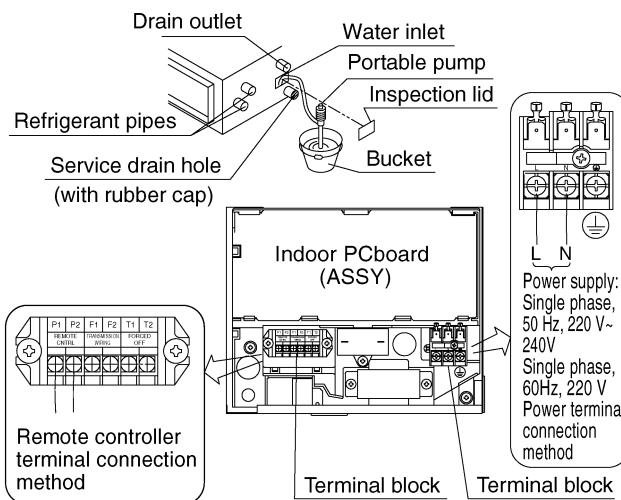
**CAUTION**

Be sure to prevent an external force from being exerted on the float switch.  
(This may cause breakage.)

5. Attach the inspection lid.
6. Perform the following operation using the remote controller, and check drainage.
  - Select the inspection/test operation button " " using the remote controller. The unit will engage the test operation. Press the operation selector button " ", and select FAN OPERATION " ".
  - Press the ON/OFF button " ". (The indoor fan and drain pump will operate.)

**CAUTION**

The fan will turn also at the same time. Take due care.









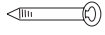





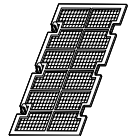
7. Make sure to use the remote controller in finishing the operation.

# 11. Accessories

## Standard Accessories

### FXDQ20~63P · N(A)

Name	Metal clamp (1)	Drain hose (2)	Insulation for fitting	Sealing pad	Screws for duct flanges (7)	Washer for hanging bracket (8)	Clamp
Quantity	1 pc.	1 pc.	1 each	1 each	1 set	8 pcs.	1 set
Shape			 for liquid pipe (3)  for gas pipe (4)	 Large (5)  mid. (6)	 24 pcs.		 Large (9) 8 pcs.  small (10) 4 pcs.

Name	Washer fixing plate (11)	Sealing material (12)	Air filter (13)	(Other) • Operation manual • Declaration of conformity • Product quality certificate (Only for with Drain Pump type) • Installation manual
Quantity	4 pcs.	2 pcs.	1 pc.	
Shape				

C : 3PN06583-3B  
 C : 3PN06583-4D  
 C : 3PN06588-2C  
 C : 3PN06583-2B

## Optional Accessories (For Unit)

No.	Type	FXDQ20PVET FXDQ25PVET FXDQ32PVET	FXDQ20NVET FXDQ25NVET FXDQ32NVET FXDQ40NVET FXDQ50NVET	FXDQ63NVET
1	Insulation Kit for high humidity	KDT25N32	KDT25N50	KDT25N63

C : 4D051851

## Optional Accessories (For Controls) Refer to P.561

### KDT25N32 · 50 · 63-Insulation Kit for High Humidity

Dimensions

Unit: mm

THERMAL INSULATION FOR TOP(1)(2) AND CHAMBER(110)  
1 SHEET EACH FOR TOP AND CHAMBER

THERMAL INSULATION FOR BOTTOM PLATE(110) 1 SHEET

THERMAL INSULATION(2) FOR SIDE PLATE (110) 1 SHEET

THERMAL INSULATION FOR HUNG PLATE(RIGHT) (15) 1 SHEET

THERMAL INSULATION(1) FOR SIDE PLATE (110) 2 SHEETS

THERMAL INSULATION FOR HUNG PLATE(LEFT) (15) 1 SHEET

Model	Part Name	AA	AB	AA
KDT25N32	FOR TOP PLATE1	700	350	380
	FOR TOP PLATE2	700	350	240
	FOR BOTTOM PLATE	704	352	420
	FOR CHAMBER	621	310	200
KDT25N50	FOR TOP PLATE1	900	450	380
	FOR TOP PLATE2	900	450	240
	FOR BOTTOM PLATE	904	452	420
	FOR CHAMBER	821	410	200
KDT25N63	FOR TOP PLATE1	1100	550	380
	FOR TOP PLATE2	1100	550	240
	FOR BOTTOM PLATE	1104	552	420
	FOR CHAMBER	1021	510	200

Model	KDT25N32	KDT25N50	KDT25N63
Item	Foam polyethylene (with Japanese paper)		
Material	Installation manual		
Accessories			

# FXSQ-M

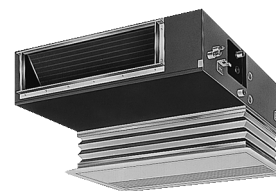
## Ceiling Mounted Built-In Type

1. Features .....	172
2. Specifications .....	175
3. Dimensions .....	178
4. Piping Diagrams .....	186
5. Wiring Diagrams .....	187
6. Electric Characteristics .....	188
7. Capacity Tables .....	189
7.1 Cooling Capacity .....	189
8. Fan Performances .....	190
8.1 50Hz .....	190
9. Sound Levels .....	191
10. Installation .....	193
11. Accessories .....	196

# 1. Features

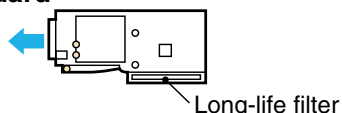
A highly flexible air-conditioning system that is adaptable to a wide range of needs, and is designed to facilitate maintenance while providing a high-quality environment.

- Offers freedom of development for the body, outlets and inlets, and wide variety of optional functions, and gives you the freedom to choose the best set-up according to conditions and needs such as interior and layout design, maintenance, etc.

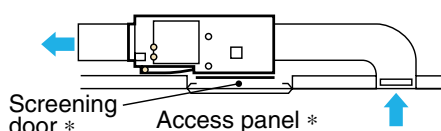


Installation Examples (\*Optional Parts)

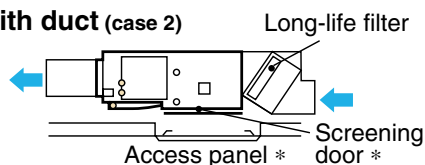
## ●Standard



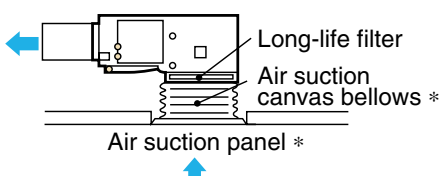
## ●With duct (case 1)



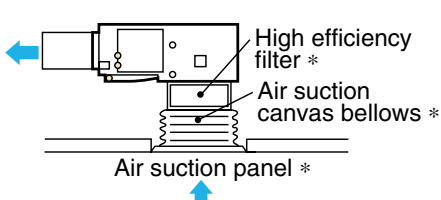
## ●With duct (case 2)



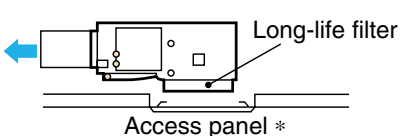
## ●Cassette style (standard filter)



## ●Cassette style (high efficiency filter)

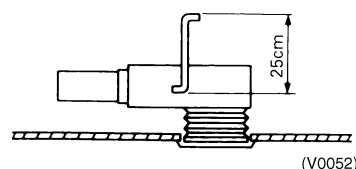


## ●Ceiling return



- In addition to regular ducts, layout is unrestricted and design is easy. You can also use flexible ducts that do not require the duct work of regular ducts.
- Offers a selection of nine models ranging from 20 class (equivalent to 0.8 HP) to Maximum 125 class (equivalent to 5 HP).

- All models feature thin design (350 mm height) making them applicable to ceiling pockets that tend to be shallow.
- Set external static pressure in three stages ranging from max. 10 to min. 2 mm H<sub>2</sub>O (2 stages, min. 4 mm H<sub>2</sub>O for 80 class) according to conditions such as duct height or whether a high-efficiency filter is used, etc.
- Equipped with a programmed drying mechanism that dehumidifies while inhibiting changes in room temperature
- Includes as standard equipment a long-life filter that is maintenance-free for approximately one year. (Treated to mold resistant.)
- Includes as standard equipment drain pump kit that makes possible draining in the upward direction up to 250 mm from the drain pipe opening.



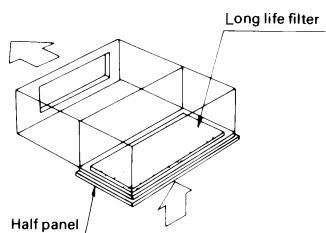
- Quiet-type air-conditioner doesn't destroy the quiet mood of your office.

Capacity	20 type	25 type	32 type	40 type	50 type	63 type	80 type	100 type	125 type
Operating sound (dBA)	37/32	37/32	38/32	38/32	41/36	42/35	43/37	43/37	46/41

- Two types of high-efficiency filters, 65% and 90% (colorimetric method) are available. (Cannot be used if using rear suction type.)
- Suction half panel is thin and unimposing. Ceiling materials adhere to its surface and it provides an excellent finishing touch for the ceiling.
- A wide variety of optional accessories are available such as an auxiliary electric heater (except cooling only).
- If using duct air mounting, please consult with the local fire department for auxiliary heater installation.

## Example of Installation (Built-In)

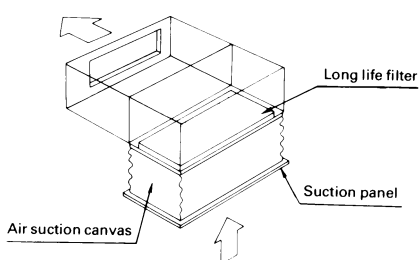
### ■ Direct installation of half panel



(V0082)

Model		FXSQ20M FXSQ25M FXSQ32M	FXSQ40M FXSQ50M	FXSQ63M	FXSQ80M FXSQ100M FXSQ125M
Necessary Options	Remote Controller	BRC1C62			
	Half Panel	BYBS32DJW1	BYBS45DJW1	BYBS71DJW1	BYBS125DJW1

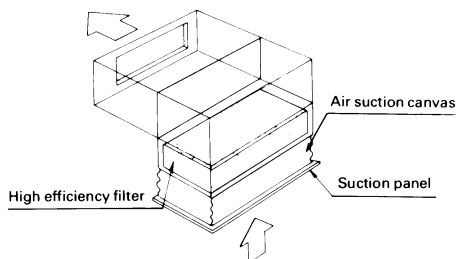
### ■ Installation of Half panel and suction canvas



(V0083)

Model		FXSQ20M FXSQ25M FXSQ32M	FXSQ40M FXSQ50M	FXSQ63M	FXSQ80M FXSQ100M FXSQ125M
Necessary Options	Remote Controller	BRC1C62			
	Half Panel	BYBS32DJW1	BYBS45DJW1	BYBS71DJW1	BYBS125DJW1
	Air Suction Canvas	KSA-25K36	KSA-25K56	KSA-25K80	KSA-25L160

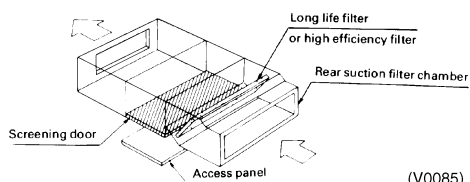
### ■ Installation like ceiling mounted cassette type with High efficiency filter



(V0084)

Model		FXSQ20M FXSQ25M FXSQ32M	FXSQ40M FXSQ50M	FXSQ63M	FXSQ80M FXSQ100M FXSQ125M
Necessary Options	Remote Controller	BRC1C62			
	Half Panel	BYBS32DJW1	BYBS45DJW1	BYBS71DJW1	BYBS125DJW1
	High Efficiency Filter	NBS65%	KAFJ252L36	KAFJ252L56	KAFJ252L80
		NBS90%	KAFJ253L36	KAFJ253L56	KAFJ253L80
	Air Suction Canvas	KSA-25K36	KSA-25K56	KSA-25K80	KSA-25L160
	Bottom Suction Filter Chamber	KAJ25L36D	KAJ25L56D	KAJ25L80D	KAJ25L160D

### ■ Installation with duct (A)



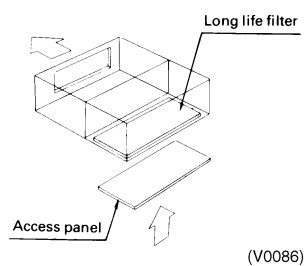
(V0085)

The access panel should be fitted beneath the main body of the unit.

Model		FXSQ20M FXSQ25M FXSQ32M	FXSQ40M FXSQ50M	FXSQ63M	FXSQ80M FXSQ100M FXSQ125M
Necessary Options	Remote Controller	BRC1C62			
	Access Panel	KTBJ25K36W	KTBJ25K56W	KTBJ25K80W	KTBJ25K160W
	Rear Suction Filter Chamber	KAJ25L36B	KAJ25L56B	KAJ25L80B	KAJ25L160B
	Screening Door	KBBJ25K36	KBBJ25K56	KBBJ25K80	KBBJ25K160
	High Efficiency Filter (If Necessary)	NBS65%	KAFJ252L36	KAFJ252L56	KAFJ252L80
		NBS90%	KAFJ253L36	KAFJ253L56	KAFJ253L80



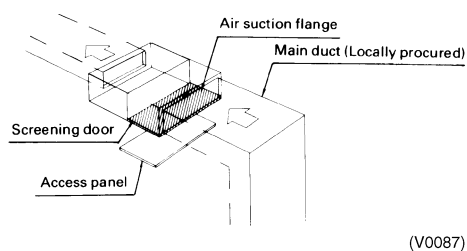
## ■ Ceiling return



The access panel should be fitted beneath the main body of the unit.

Model		FXSQ20M FXSQ25M FXSQ32M	FXSQ40M FXSQ50M	FXSQ63M	FXSQ80M FXSQ100M FXSQ125M
Necessary Options	Remote Controller	BRC1C62			
	Access Panel	KTBJ25K36W	KTBJ25K56W	KTBJ25K80W	KTBJ25K160W

## ■ Installation with duct (B)



The access panel should be fitted beneath the main body of the unit.

Model		FXSQ20M FXSQ25M FXSQ32M	FXSQ40M FXSQ50M	FXSQ63M	FXSQ80M FXSQ100M FXSQ125M
Necessary Options	Remote Controller	BRC1C62			
	Access Panel	KTBJ25K36W	KTBJ25K56W	KTBJ25K80W	KTBJ25K160W
	Screening Door	KBBJ25K36	KBBJ25K56	KBBJ25K80	KBBJ25K160
	Air Suction Flange	KDJ2507K36	KDJ2507K56	KDJ2507K80	KDJ2507K160

## 2. Specifications

### Ceiling Mounted Built-In Type

Model			FXSQ20MVE	FXSQ25MVE	FXSQ32MVE
*1 Cooling Capacity (19.5°CWB)		kcal/h	2,000	2,500	3,200
		Btu/h	7,800	9,900	12,600
		kW	2.3	2.9	3.7
*2 Cooling Capacity (19.0°CWB)		kW	2.2	2.8	3.6
Casing			Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
Dimensions: (H×W×D)			mm	300×550×800	300×550×800
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	3×14×1.75	3×14×1.75	3×14×1.75
	Face Area	m <sup>2</sup>	0.088	0.088	0.088
Fan	Model		D18H3A	D18H3A	D18H3A
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	50×1	50×1	50×1
	Air Flow Rate (H/L)	50 Hz	m <sup>3</sup> /min	9/6.5	9.5/7
			cfm	318/230	335/247
	*3 External Static Pressure	50 Hz	Pa	88-39-20	64-39-15
	Drive		Direct Drive	Direct Drive	Direct Drive
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material			Glass Fiber	Glass Fiber	Glass Fiber
Air Filter			Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)
Piping Connections	Liquid Pipes	mm	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)
	Gas Pipes	mm	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)
	Drain Pipe	mm	VP25 (External Dia. 32 Internal Dia. 25)	VP25 (External Dia. 32 Internal Dia. 25)	VP25 (External Dia. 32 Internal Dia. 25)
Machine Weight (Mass)			kg	30	30
*5 Sound Level (H/L) (220V)			dBA	37/32	38/32
Safety Devices			Fuse. Thermal Protector for Fan Motor.	Fuse. Thermal Protector for Fan Motor.	Fuse. Thermal Protector for Fan Motor.
Refrigerant Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Connectable Outdoor Unit			R-410A P Series	R-410A P Series	R-410A P Series
Decoration Panel (Option)	Model		BYBS32DJW1	BYBS32DJW1	BYBS32DJW1
	Panel Color		White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)
	Dimensions: (H×W×D)	mm	55×650×500	55×650×500	55×650×500
	Weight	kg	3	3	3
Standard Accessories			Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Insulation for Fitting. Sealing Pads. Clamps. Screws. Washers.	Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Insulation for Fitting. Sealing Pads. Clamps. Screws. Washers.	Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Insulation for Fitting. Sealing Pads. Clamps. Screws. Washers.
Drawing No.			C : 3D039431		

#### Note:

- \*1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.  
 \*2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.  
 \*3 External static pressure is changeable to change over the connectors inside electrical box, this pressure means "High static pressure-Standard-Low static pressure".  
 4 Capacities are net, including a deduction for cooling (an additional for heating) for indoor fan motor heat.  
 \*5 Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit center. These values are normally somewhat higher during actual operation as a result of ambient conditions.  
 6 Refer to page 188 for Fan Motor Input.

Conversion Formulae	
kcal/h=kW×860	
Btu/h=kW×3412	
cfm=m <sup>3</sup> /min×35.3	

## Ceiling Mounted Built-In Type

Model				FXSQ40MVE	FXSQ50MVE	FXSQ63MVE
*1 Cooling Capacity (19.5°CWB)			kcal/h	4,000	5,000	6,300
			Btu/h	16,000	19,800	24,900
			kW	4.7	5.8	7.3
*2 Cooling Capacity (19.0°CWB)			kW	4.5	5.6	7.1
Casing				Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
Dimensions: (H×W×D)			mm	300×700×800	300×700×800	300×1,000×800
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch		mm	3×14×1.75	3×14×1.75	3×14×1.75
	Face Area		m²	0.132	0.132	0.221
Fan	Model			D18H2A	D18H2A	2D18H2A
	Type			Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units		W	65×1	85×1	125×1
	Air Flow Rate (H/L)	50 Hz	m³/min	11.5/9	15/11	21/15.5
			cfm	406/318	530/388	741/547
	*3 External Static Pressure	50 Hz	Pa	88-49-20	88-59-29	88-49-20
	Drive			Direct Drive	Direct Drive	Direct Drive
Temperature Control				Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material				Glass Fiber	Glass Fiber	Glass Fiber
Air Filter				Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)
Piping Connections	Liquid Pipes		mm	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ9.5 (Flare Connection)
	Gas Pipes		mm	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ15.9 (Flare Connection)
	Drain Pipe		mm	VP25 (External Dia. 32 Internal Dia. 25)	VP25 (External Dia. 32 Internal Dia. 25)	VP25 (External Dia. 32 Internal Dia. 25)
Machine Weight (Mass)			kg	30	31	41
*5 Sound Level (H/L) (220V)			dBA	38/32	41/36	42/35
Safety Devices				Fuse. Thermal Protector for Fan Motor.	Fuse. Thermal Protector for Fan Motor.	Fuse. Thermal Protector for Fan Motor.
Refrigerant Control				Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Connectable Outdoor Unit				R-410A P Series	R-410A P Series	R-410A P Series
Decoration Panel (Option)	Model			BYBS45DJW1	BYBS45DJW1	BYBS71DJW1
	Panel Color			White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)
	Dimensions: (H×W×D)		mm	55×800×500	55×800×500	55×1,100×500
	Weight		kg	3.5	3.5	4.5
Standard Accessories				Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Insulation for Fitting. Sealing Pads. Clamps. Screws. Washers.	Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Insulation for Fitting. Sealing Pads. Clamps. Screws. Washers.	Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Insulation for Fitting. Sealing Pads. Clamps. Screws. Washers.
Drawing No.				C : 3D039431		

## Note:

\*1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.

\*2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.

\*3 External static pressure is changeable to change over the connectors inside electrical box, this pressure means "High static pressure-Standard -Low static pressure".

4 Capacities are net, including a deduction for cooling (an additional for heating) for indoor fan motor heat.

\*5 Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit center. These values are normally somewhat higher during actual operation as a result of ambient conditions.

6 Refer to page 188 for Fan Motor Input.

## Conversion Formulae

kcal/h=kW×860  
Btu/h=kW×3412  
cfm=m<sup>3</sup>/min×35.3

## Ceiling Mounted Built-In Type

Model				FXSQ80MVE		FXSQ100MVE		FXSQ125MVE			
※1 Cooling Capacity (19.5°CWB)				kcal/h		8,000		10,000		12,500	
				Btu/h		31,700		39,600		49,500	
				kW		9.3		11.6		14.5	
※2 Cooling Capacity (19.0°CWB)				kW		9.0		11.2		14.0	
Casing				Galvanized Steel Plate		Galvanized Steel Plate		Galvanized Steel Plate		Galvanized Steel Plate	
Dimensions: (H×W×D)				mm		300×1,400×800		300×1,400×800		300×1,400×800	
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch			mm		3×14×1.75		3×14×1.75		3×14×1.75	
	Face Area			m <sup>2</sup>		0.338		0.338		0.338	
Fan	Model			3D18H2A		3D18H2A		3D18H2A		3D18H2A	
	Type			Sirocco Fan		Sirocco Fan		Sirocco Fan		Sirocco Fan	
	Motor Output × Number of Units			W		225×1		225×1		225×1	
	Air Flow Rate (H/L)		50 Hz	m <sup>3</sup> /min		27/21.5		28/22		38/28	
				cfm		953/759		988/777		1,341/988	
	※3 External Static Pressure		50 Hz	Pa		113-82		107-75		78-39	
	Drive			Direct Drive		Direct Drive		Direct Drive		Direct Drive	
Temperature Control				Microprocessor Thermostat for Cooling and Heating		Microprocessor Thermostat for Cooling and Heating		Microprocessor Thermostat for Cooling and Heating		Microprocessor Thermostat for Cooling and Heating	
Sound Absorbing Thermal Insulation Material				Glass Fiber		Glass Fiber		Glass Fiber		Glass Fiber	
Air Filter				Resin Net (with Mold Resistant)		Resin Net (with Mold Resistant)		Resin Net (with Mold Resistant)		Resin Net (with Mold Resistant)	
Piping Connections	Liquid Pipes		mm		φ9.5 (Flare Connection)		φ9.5 (Flare Connection)		φ9.5 (Flare Connection)		
	Gas Pipes		mm		φ15.9 (Flare Connection)		φ15.9 (Flare Connection)		φ15.9 (Flare Connection)		
	Drain Pipe		mm		VP25 (External Dia. 32 Internal Dia. 25)		VP25 (External Dia. 32 Internal Dia. 25)		VP25 (External Dia. 32 Internal Dia. 25)		
Machine Weight (Mass)				kg		51		51		52	
※5 Sound Level (H/L) (220V)				dBA		43/37		43/37		46/41	
Safety Devices				Fuse. Thermal Protector for Fan Motor.		Fuse. Thermal Protector for Fan Motor.		Fuse. Thermal Protector for Fan Motor.		Fuse. Thermal Protector for Fan Motor.	
Refrigerant Control				Electronic Expansion Valve		Electronic Expansion Valve		Electronic Expansion Valve		Electronic Expansion Valve	
Connectable Outdoor Unit				R-410A P Series		R-410A P Series		R-410A P Series		R-410A P Series	
Decoration Panel (Option)	Model			BYBS125DJW1		BYBS125DJW1		BYBS125DJW1		BYBS125DJW1	
	Panel Color			White (10Y9/0.5)		White (10Y9/0.5)		White (10Y9/0.5)		White (10Y9/0.5)	
	Dimensions: (H×W×D)		mm	55×1,500×500		55×1,500×500		55×1,500×500		55×1,500×500	
	Weight			kg	6.5		6.5		6.5		6.5
Standard Accessories				Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Insulation for Fitting. Sealing Pads. Clamps. Screws. Washers.		Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Insulation for Fitting. Sealing Pads. Clamps. Screws. Washers.		Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Insulation for Fitting. Sealing Pads. Clamps. Screws. Washers.		Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Insulation for Fitting. Sealing Pads. Clamps. Screws. Washers.	
Drawing No.						C : 3D039431					

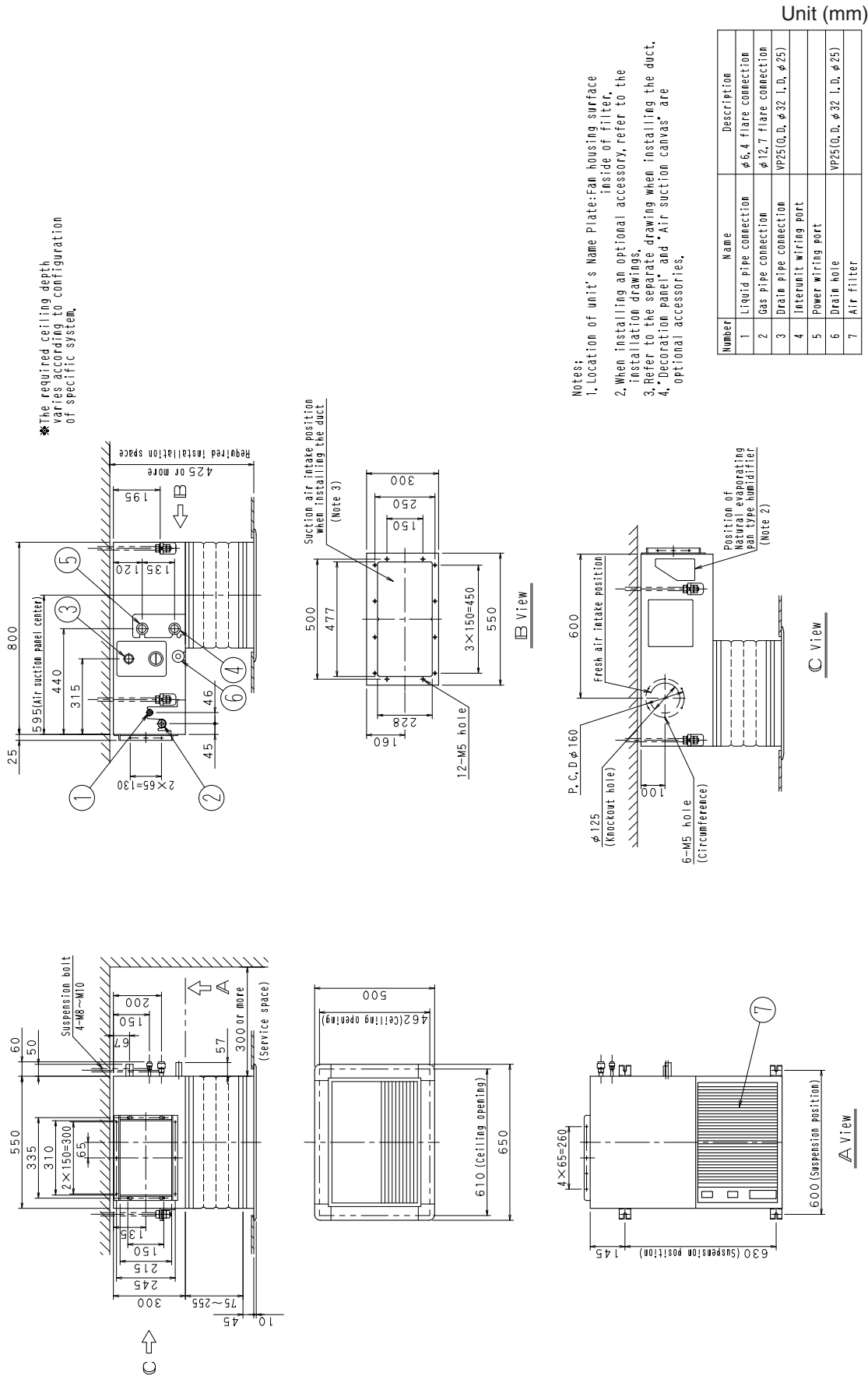
## Note:

- \*1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.
- \*2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.
- \*3 External static pressure is changeable to change over the connectors inside electrical box, this pressure means "High static pressure-Standard".
- 4 Capacities are net, including a deduction for cooling (an additional for heating) for indoor fan motor heat.
- \*5 Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit center. These values are normally somewhat higher during actual operation as a result of ambient conditions.
- 6 Refer to page 188 for Fan Motor Input.

Conversion Formulae	
kcal/h=kW×860	
Btu/h=kW×3412	
cfm=m <sup>3</sup> /min×35.3	

3. Dimensions

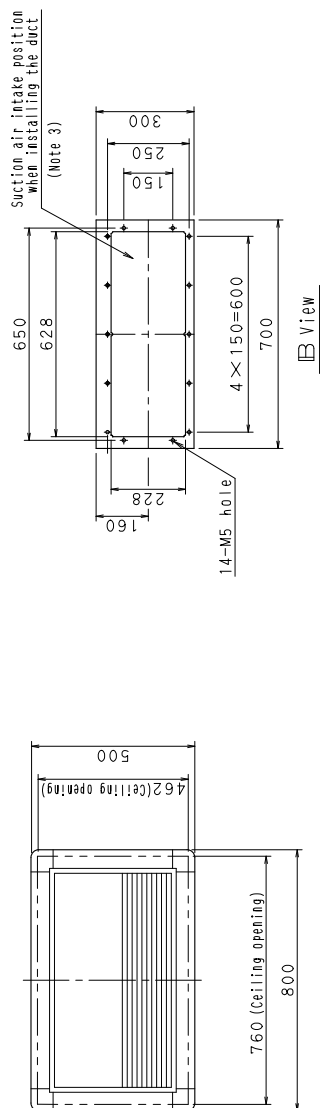
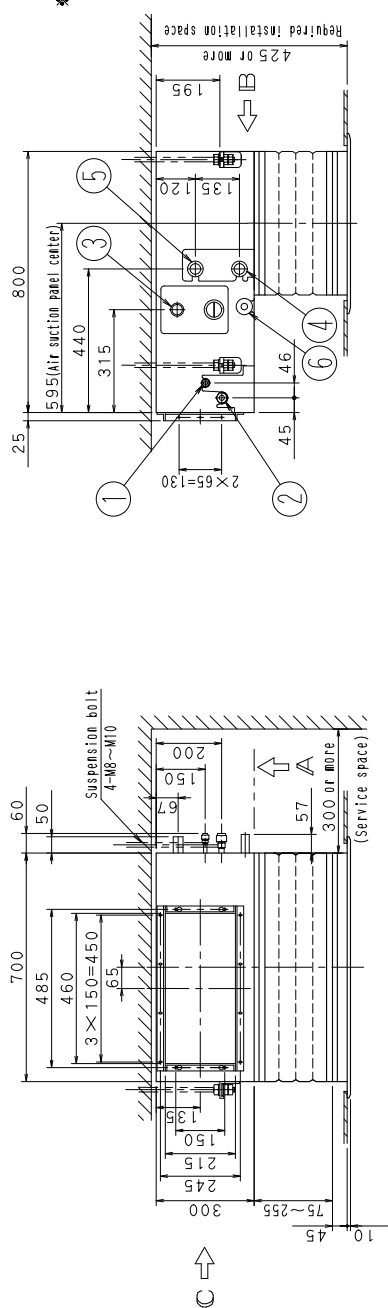
FXSQ20M + BYBS32DJW1 (With Canvas Duct)  
FXSQ25M + BYBS32DJW1 (With Canvas Duct)  
FXSQ32M + BYBS32DJW1 (With Canvas Duct)



### FXSQ40M + BYBS45DJW1 (With Canvas Duct)

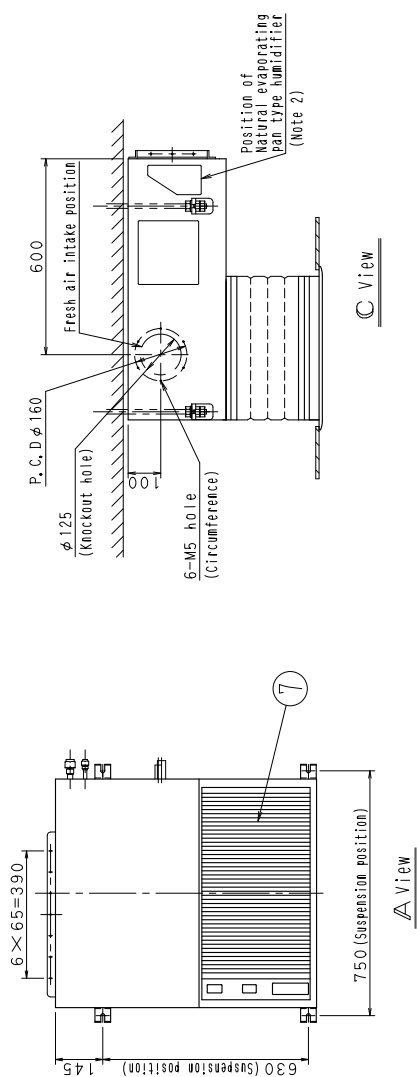
### FXSQ50M + BYBS45DJW1 (With Canvas Duct)

✿ The required ceiling depth varies according to configuration of specific system.



Notes;

1. Location of unit's Name Plate: Fan housing surface inside of filter.
2. When installing an optional accessory, refer to the installation drawings.
3. Refer to the separate drawing when installing the duct, 4. "Decorative panel" and "Air suction canvas" are optional accessories.



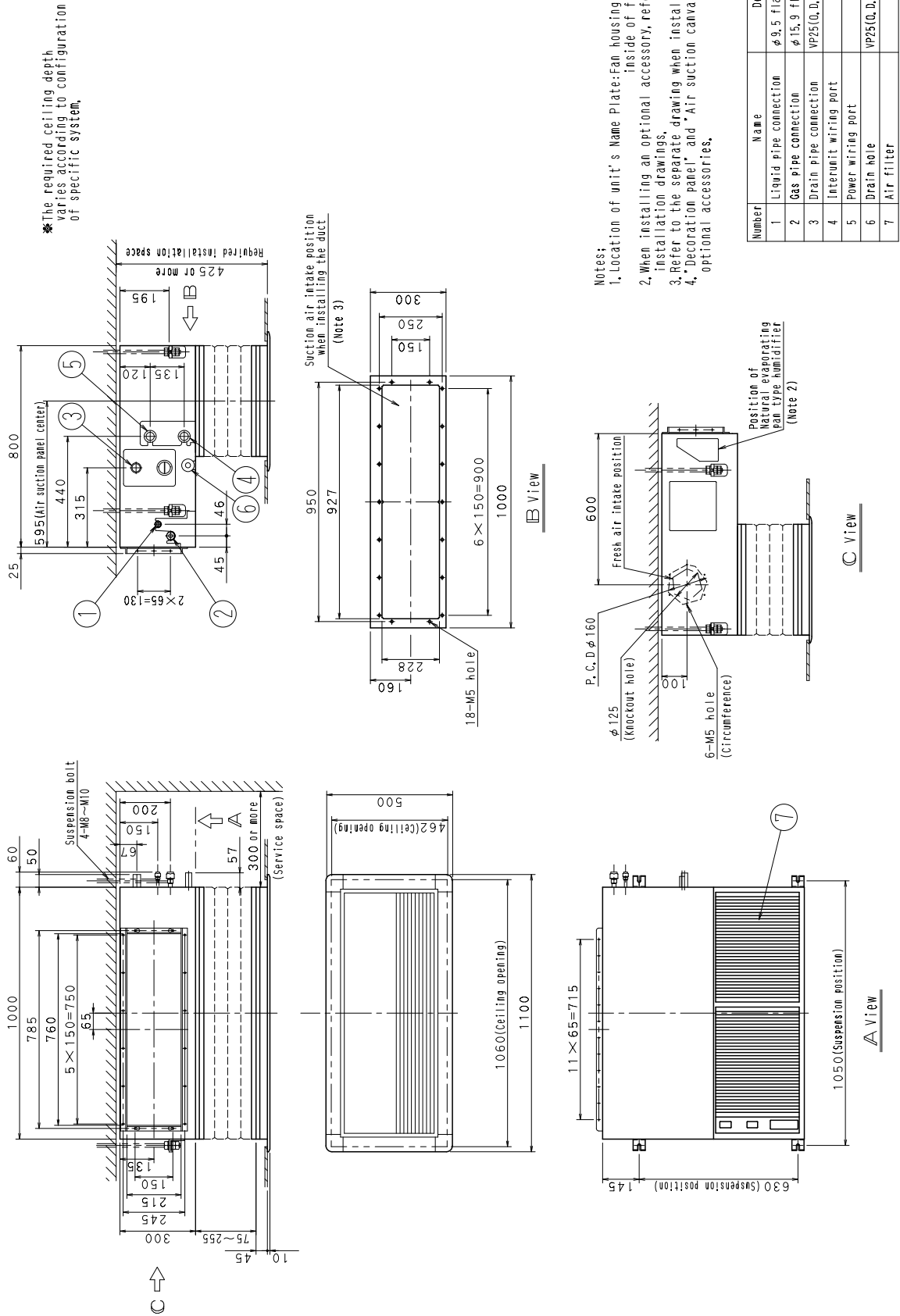
Unit (mm)

Number	Name	Description
1	Liquid pipe connection	$\phi 6,4$ flare connection
2	Gas pipe connection	$\phi 12,7$ flare connection
3	Drain pipe connection	VP25(0, D, $\phi 32$ I, D, $\phi 25$ )
4	Interunit wiring port	
5	Power wiring port	
6	Drain mole	VP25(0, D, $\phi 32$ I, D, $\phi 25$ )
7	Air filter	

3D039438

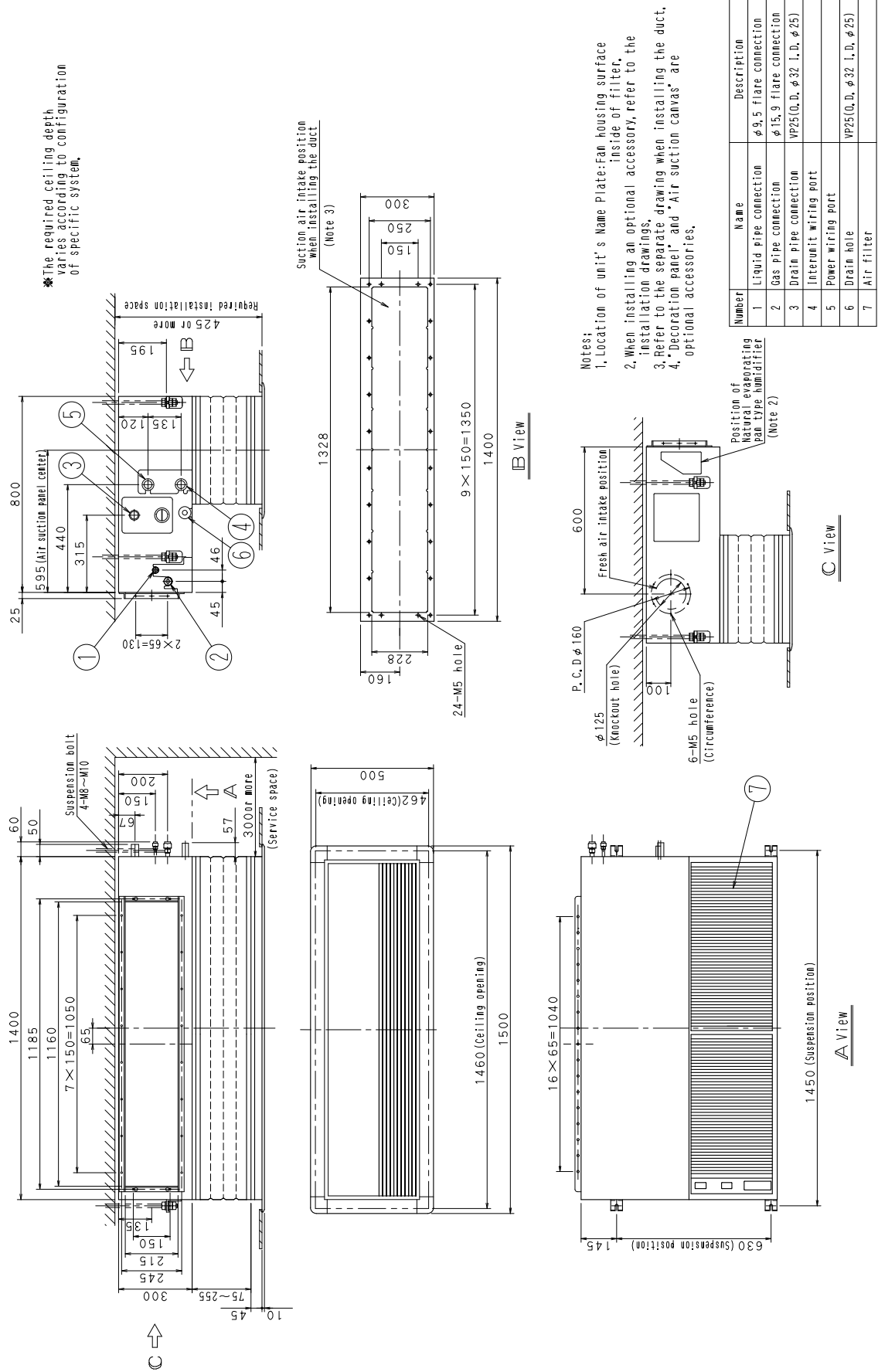
FXSQ63M + BYBS71DJW1 (With Canvas Duct)

Unit (mm)



FXSQ80M + BYBS125DJW1 (With Canvas Duct)  
FXSQ100M + BYBS125DJW1 (With Canvas Duct)  
FXSQ125M + BYBS125DJW1 (With Canvas Duct)

Unit (mm)



3D039440

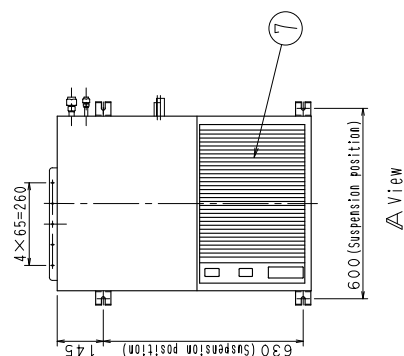
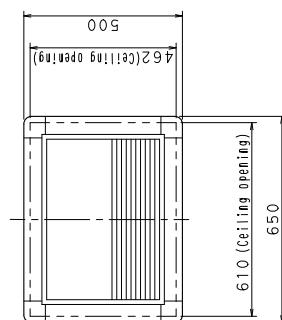
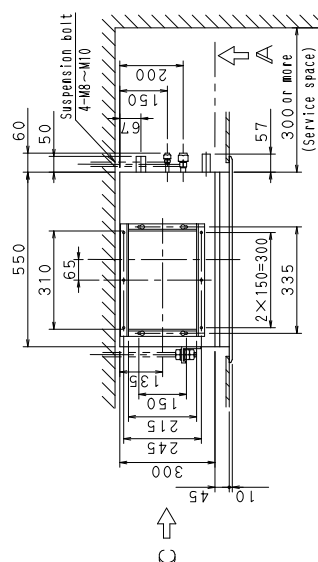
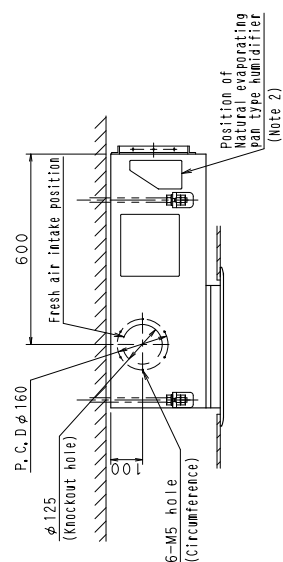
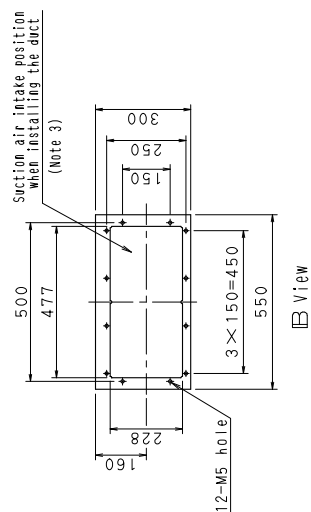
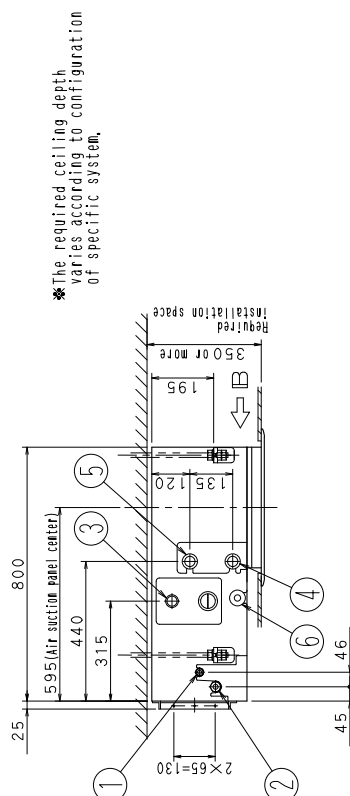


FXSQ20M + BYBS32DJW1 (Without Canvas Duct)

FXSQ25M + BYBS32DJW1 (Without Canvas Duct)

FXSQ32M + BYBS32DJW1 (Without Canvas Duct)

Unit (mm)



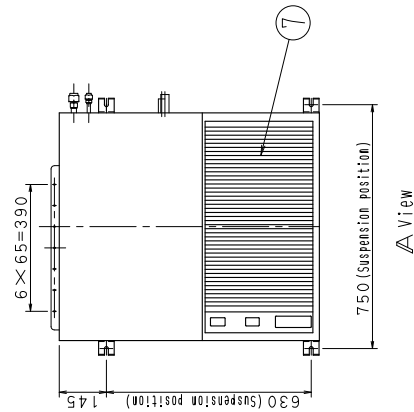
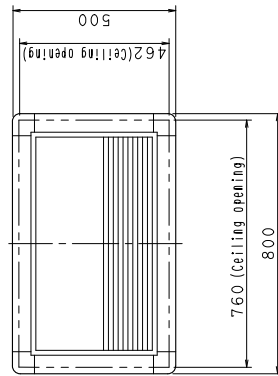
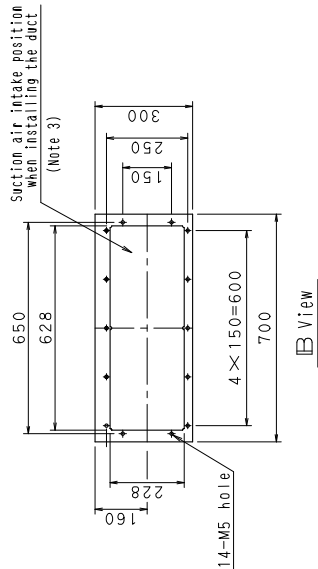
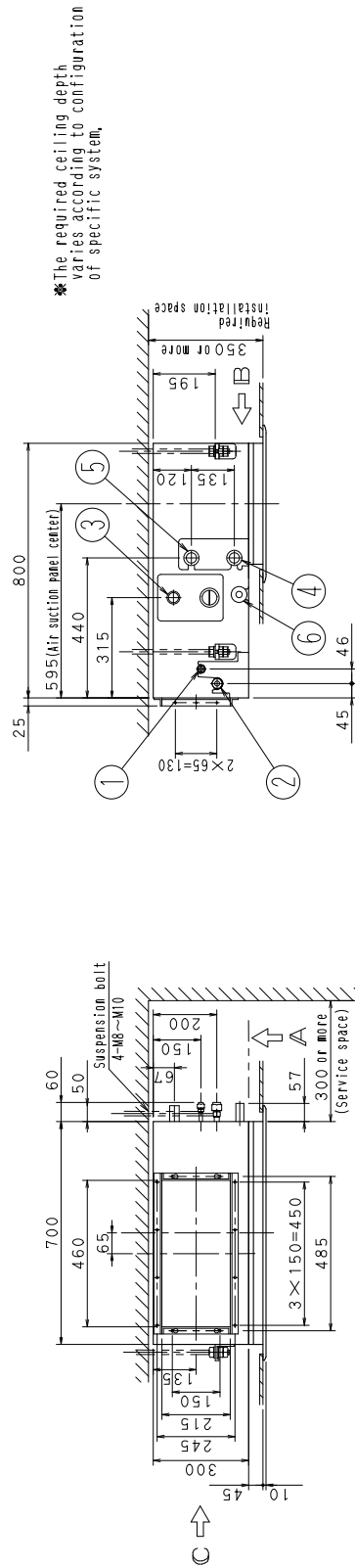
- Notes:
1. Location of unit's Name Plate: Fan housing surface inside of filter.
  2. When installing an optional accessory, refer to the installation drawings.
  3. Refer to the separate drawing when installing the duct.
  4. "Decoration panel" and "Air suction canvas" are optional accessories.

Number	Name	Description
1	Liquid pipe connection	φ6.4 flare connection
2	Gas pipe connection	φ12.7 flare connection
3	Drain pipe connection	VP25(O.D. φ32 I.D. φ25)
4	Interunit wiring port	
5	Power wiring port	
6	Drain hole	VP25(O.D. φ32 I.D. φ25)
7	Air filter	

3D039433

**FXSQ40M + BYBS45DJW1 (Without Canvas Duct)**  
**FXSQ50M + BYBS45DJW1 (Without Canvas Duct)**

Unit (mm)

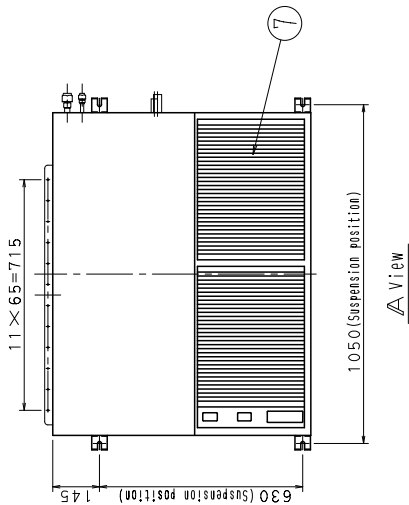
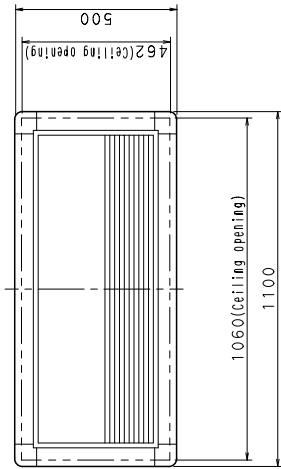
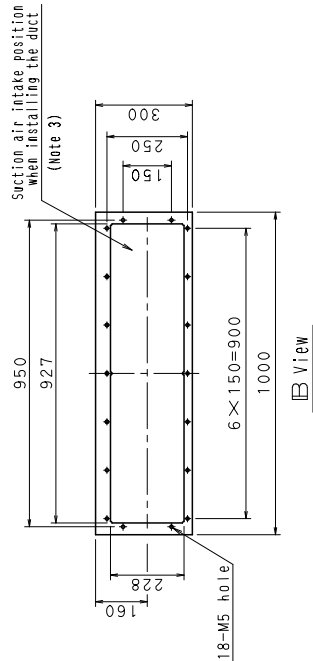
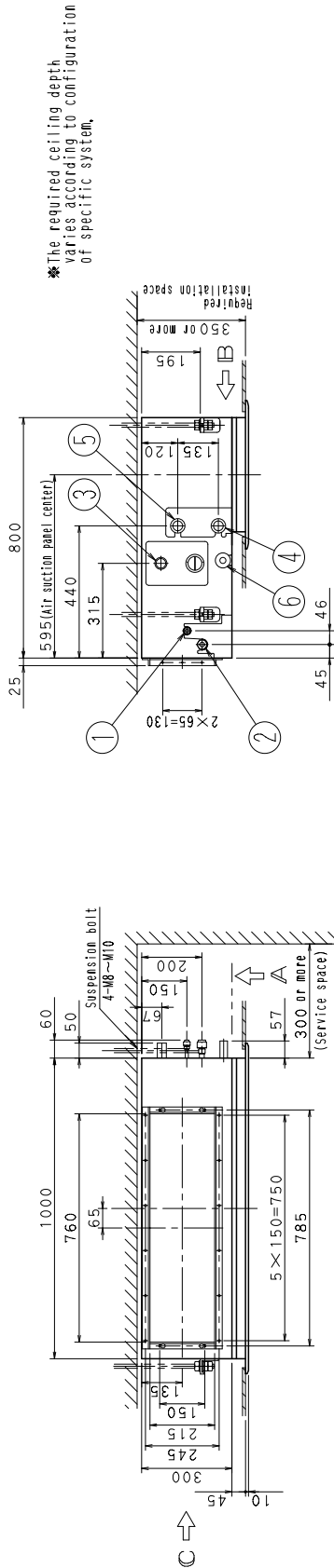


- Notes;
1. Location of unit's Name Plate: Fan housing surface inside of filter.
  2. When installing an optional accessory, refer to the installation drawings, drawing when 'installing the duct, 3. Refer to the separate drawing when 'installing the duct, 4. "Decoration panel" and "Air suction canvas" are optional accessories.

Number	Name	Description
1	Liquid pipe connection	φ 6, 4 flare connection
2	Gas pipe connection	φ 12, 7 flare connection
3	Drain pipe connection	VP25 (O.D. φ 32 I.D. φ 25)
4	Interunit wiring port	
5	Power wiring port	
6	Drain hole	VP25 (O.D. φ 32 I.D. φ 25)
7	Air filter	

3D039434

FXSQ63M + BYBS71DJW1 (Without Canvas Duct)



- Notes:
1. Location of unit's Name Plate: Fan housing surface inside of filter.
  2. When installing an optional accessory, refer to the installation drawings.
  3. Refer to the separate drawing when installing the duct, "Decoration panel" and "Air suction canvas" are optional accessories.

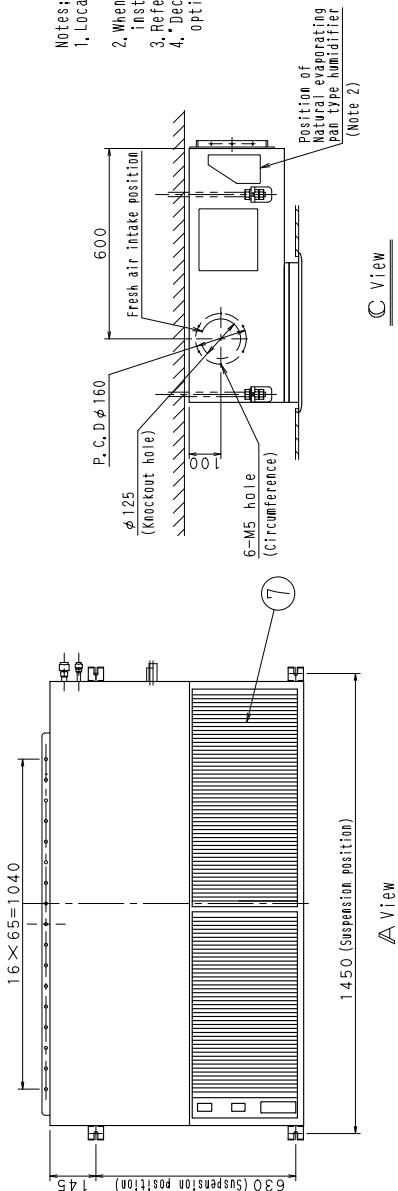
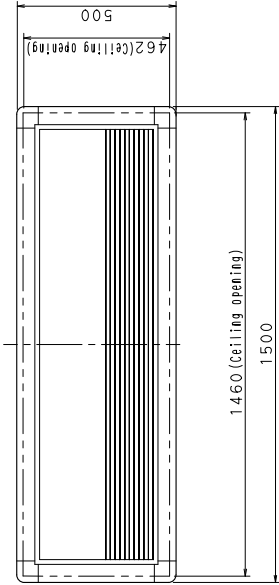
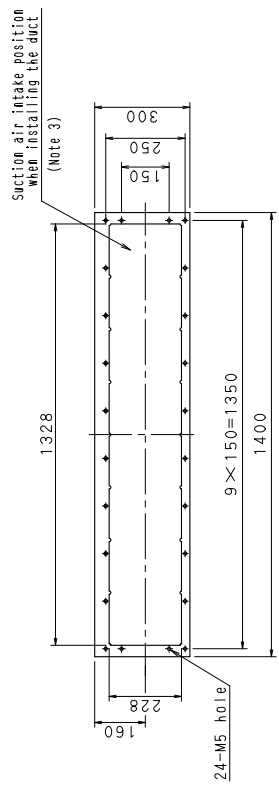
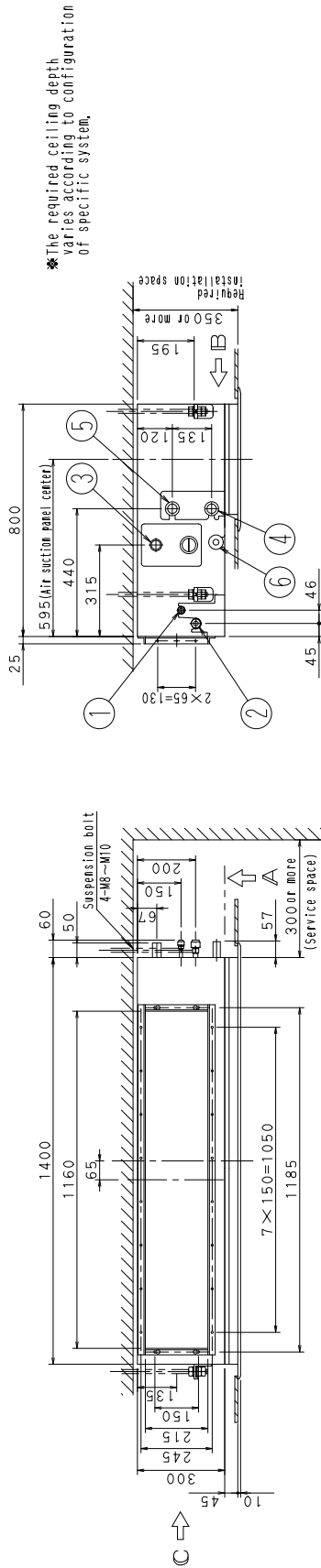
Number	Name	Description
1	Liquid pipe connection	φ9.5 flare connection
2	Gas pipe connection	φ15.9 flare connection
3	Drain pipe connection	VP25(O.D. φ32 I.D. φ25)
4	Interunit wiring port	
5	Power wiring port	
6	Drain hole	VP25(O.D. φ32 I.D. φ25)
7	Air filter	

Unit (mm)

3D039435A

FXSQ80M + BYBS125DJW1 (Without Canvas Duct)  
FXSQ100M + BYBS125DJW1 (Without Canvas Duct)  
FXSQ125M + BYBS125DJW1 (Without Canvas Duct)

Unit (mm)

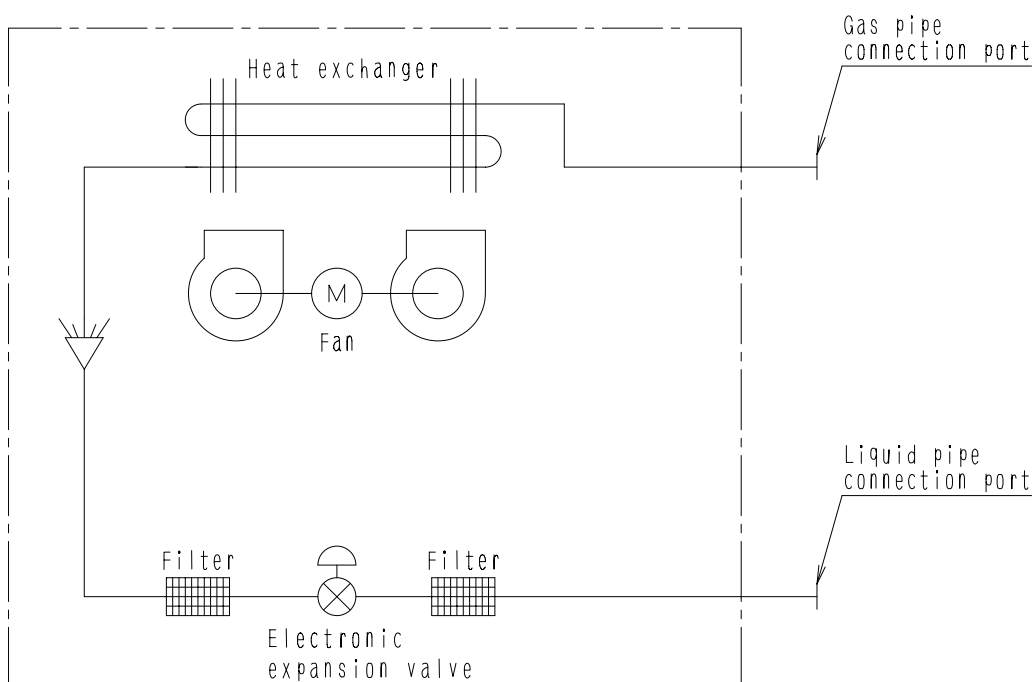


- Notes:
- 1. Location of unit's Name Plate: Fan housing surface inside of filter.
  - 2. When installing an optional accessory, refer to the installation drawings.
  - 3. Refer to the separate drawing when installing the duct, "Decoration panel" and "Air suction canvas" are optional accessories.

Number	Name	Description
1	Liquid pipe connection	φ9.5 flare connection
2	Gas pipe connection	φ15.9 flare connection
3	Drain pipe connection	VP25(O.D. φ32 I.D. φ25)
4	Interunit wiring port	
5	Power wiring port	
6	Drain hole	VP25(O.D. φ32 I.D. φ25)
7	Air filter	

3D039436

## 4. Piping Diagrams



4D034245C

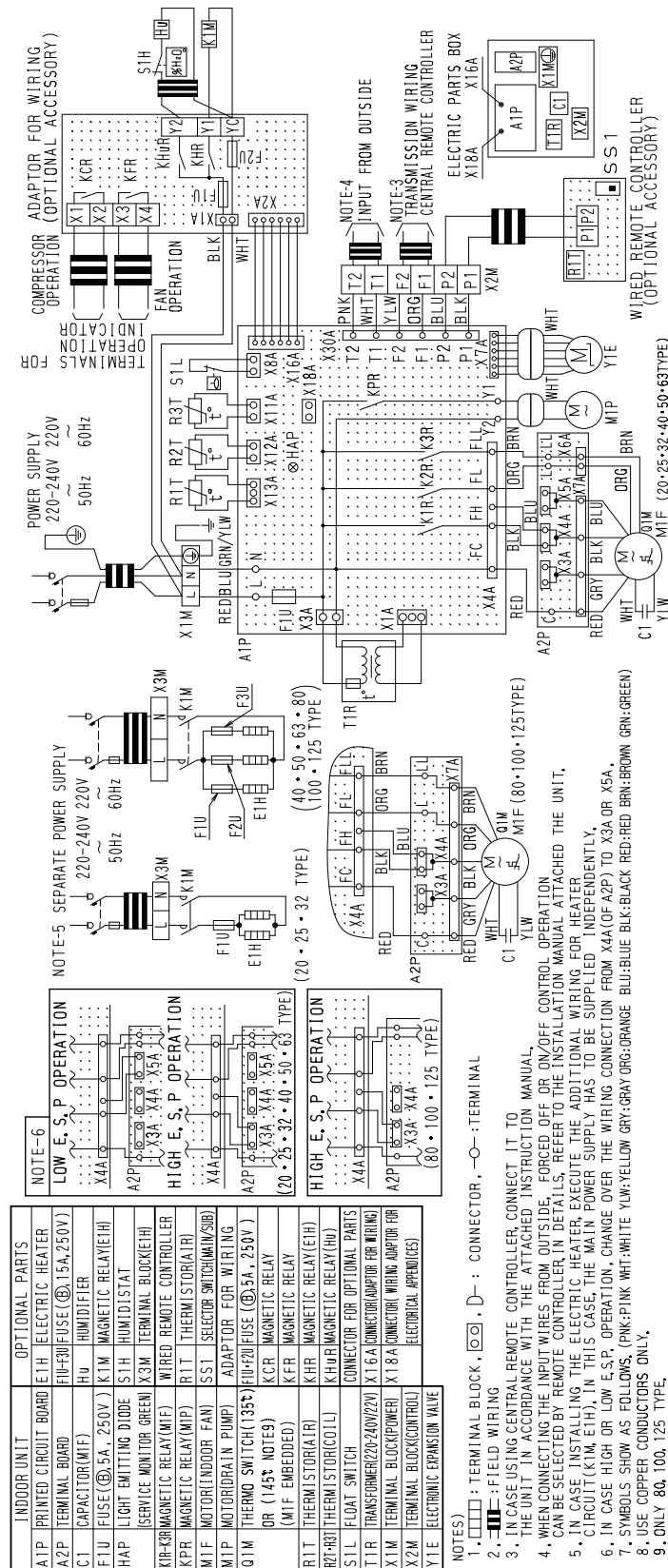
### ■ Refrigerant pipe connection port diameters

(mm)

Model	Gas	Liquid
FXSQ20 · 25 · 32 · 40 · 50M	φ12.7	φ6.4
FXSQ63 · 80 · 100 · 125M	φ15.9	φ9.5

## 5. Wiring Diagrams

FXSQ20 · 25 · 32 · 40 · 50 · 63 · 80 · 100 · 125MVE



3D039561B

## 6. Electric Characteristics

Units					Power supply		IFM		Input(W)	
Model	Type	Hz	Volts	Voltage range	MCA	MFA	KW	FLA	Cooling	Heating
FXSQ20M	VE	50	220-240	MAX. 264 Min. 198	0.5	15	0.05	0.4	110	90
FXSQ25M					0.5	15	0.05	0.4	110	90
FXSQ32M					0.5	15	0.05	0.4	114	94
FXSQ40M					0.6	15	0.065	0.5	127	107
FXSQ50M					0.9	15	0.085	0.7	143	123
FXSQ63M					1.1	15	0.125	0.9	189	169
FXSQ80M					1.4	15	0.225	1.1	234	214
FXSQ100M					1.5	15	0.225	1.2	242	222
FXSQ125M					2.0	15	0.225	1.6	321	301

Symbols :

MCA : Min. Circuit Amps (A)  
 MFA : Max. Fuse Amps (See note 5)  
 KW : Fan Motor Rated Output(KW)  
 FLA : Full Load Amps(A)  
 IFM : Indoor Fan Motor

Note :

1. Voltage range

Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits,

2. Maximum allowable voltage unbalance between phases is 2%.

3. MCA/MFA

$$MCA = 1.25 \times FLA$$

$$MFA \leq 4 \times FLA$$

(Next lower standard fuse rating. Min.15A)

4. Select wire size based on the MCA.

5. Instead of fuse, use Circuit Breaker.

C : 4D036936A

## 7. Capacity Tables

## 7.1 Cooling Capacity

**FXSQ-M**

**[50Hz]**

Unit Size	Outdoor air temp. °C DB		14.0°CWB 20.0°CDB		16.0°CWB 22.0°CDB		18.0°CWB 24.0°CDB		19.0°CWB 25.0°CDB		20.0°CWB 26.0°CDB		22.0°CWB 28.0°CDB		24.0°CWB 32.0°CDB		Cooling capacity
	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	
63	10.0	4.8	4.1	5.7	4.7	6.6	4.9	7.1	5.2	7.6	5.5	8.5	5.6	9.3	5.6	9.3	24.0 CVRB 32.0 CDB
	12.0	4.8	4.1	5.7	4.7	6.6	4.9	7.1	5.2	7.6	5.5	8.5	5.6	9.3	5.6	9.3	
	14.0	4.8	4.1	5.7	4.7	6.6	4.9	7.1	5.2	7.6	5.5	8.5	5.6	9.3	5.6	9.3	
	16.0	4.8	4.1	5.7	4.7	6.6	4.9	7.1	5.2	7.6	5.5	8.5	5.6	9.3	5.6	9.3	
	18.0	4.8	4.1	5.7	4.7	6.6	4.9	7.1	5.2	7.6	5.5	8.5	5.6	9.3	5.6	9.3	
	20.0	4.8	4.1	5.7	4.7	6.6	4.9	7.1	5.2	7.6	5.5	8.5	5.6	9.3	5.6	9.3	
	21.0	4.8	4.1	5.7	4.7	6.6	4.9	7.1	5.2	7.6	5.5	8.5	5.6	9.3	5.6	9.3	
	22.0	4.8	4.1	5.7	4.7	6.6	4.9	7.1	5.2	7.6	5.5	8.5	5.6	9.3	5.6	9.3	
	23.0	4.8	4.1	5.7	4.7	6.6	4.9	7.1	5.2	7.6	5.5	8.5	5.6	9.3	5.6	9.3	
	24.0	4.8	4.1	5.7	4.7	6.6	4.9	7.1	5.2	7.6	5.5	8.5	5.6	9.3	5.6	9.3	
	27.0	4.8	4.1	5.7	4.7	6.6	4.9	7.1	5.2	7.6	5.5	8.1	5.4	8.3	5.1	8.3	
	29.0	4.8	4.1	5.7	4.7	6.6	4.9	7.1	5.2	7.6	5.5	8.0	5.3	8.2	5.1	8.2	
80	31.0	4.8	4.1	5.7	4.7	6.6	4.9	7.1	5.2	7.6	5.5	7.9	5.3	8.1	5.0	5.0	24.0 CVRB 32.0 CDB
	33.0	4.8	4.1	5.7	4.7	6.6	4.9	7.1	5.2	7.6	5.5	7.8	5.2	7.9	5.0	4.9	
	35.0	4.8	4.1	5.7	4.7	6.6	4.9	7.1	5.2	7.6	5.5	7.7	5.2	7.8	4.9	4.9	
	37.0	4.8	4.1	5.7	4.7	6.6	4.9	7.1	5.2	7.6	5.4	7.5	5.2	7.7	4.9	4.9	
	39.0	4.8	4.1	5.7	4.7	6.6	4.9	7.1	5.2	7.6	5.4	7.4	5.1	7.6	4.9	4.9	
	10.0	6.1	5.0	7.2	5.7	8.4	6.1	9.0	6.3	9.6	6.6	10.8	6.8	11.2	6.9	6.9	
	12.0	6.1	5.0	7.2	5.7	8.4	6.1	9.0	6.3	9.6	6.6	10.8	6.8	11.2	6.9	6.9	
	14.0	6.1	5.0	7.2	5.7	8.4	6.1	9.0	6.3	9.6	6.6	10.8	6.8	11.2	6.9	6.9	
	16.0	6.1	5.0	7.2	5.7	8.4	6.1	9.0	6.3	9.6	6.6	10.8	6.8	11.2	6.9	6.9	
	18.0	6.1	5.0	7.2	5.7	8.4	6.1	9.0	6.3	9.6	6.6	10.8	6.8	11.2	6.9	6.9	
	20.0	6.1	5.0	7.2	5.7	8.4	6.1	9.0	6.3	9.6	6.6	10.8	6.8	11.2	6.9	6.9	
	100	21.0	6.1	5.0	7.2	5.7	8.4	6.1	9.0	6.3	9.6	6.6	10.8	6.8	11.0	6.4	
23.0		6.1	5.0	7.2	5.7	8.4	6.1	9.0	6.3	9.6	6.6	10.6	6.7	10.8	6.3	6.3	
25.0		6.1	5.0	7.2	5.7	8.4	6.1	9.0	6.3	9.6	6.6	10.5	6.6	10.7	6.2	6.2	
27.0		6.1	5.0	7.2	5.7	8.4	6.1	9.0	6.3	9.6	6.6	10.3	6.5	10.5	6.2	6.2	
29.0		6.1	5.0	7.2	5.7	8.4	6.1	9.0	6.3	9.6	6.6	10.2	6.5	10.4	6.1	6.1	
31.0		6.1	5.0	7.2	5.7	8.4	6.1	9.0	6.3	9.6	6.6	10.1	6.4	10.3	6.1	6.1	
33.0		6.1	5.0	7.2	5.7	8.4	6.1	9.0	6.3	9.6	6.6	9.9	6.3	10.2	6.1	6.1	
35.0		6.1	5.0	7.2	5.7	8.4	6.1	9.0	6.3	9.5	6.6	9.7	6.3	10.1	6.0	6.0	
37.0		6.1	5.0	7.2	5.7	8.4	6.1	9.0	6.3	9.4	6.5	9.6	6.2	9.8	6.0	6.0	
39.0		6.1	5.0	7.2	5.7	8.4	6.1	9.0	6.2	9.2	6.5	9.4	6.2	9.6	5.9	5.9	
10.0		7.6	6.2	9.0	7.1	10.5	7.6	11.2	7.9	11.9	8.3	13.4	8.5	14.7	8.5	8.5	
125		12.0	7.6	6.2	9.0	7.1	10.5	7.6	11.2	7.9	11.9	8.3	13.4	8.5	14.5	8.4	8.4
	14.0	7.6	6.2	9.0	7.1	10.5	7.6	11.2	7.9	11.9	8.3	13.4	8.5	14.4	8.3	8.3	
	16.0	7.6	6.2	9.0	7.1	10.5	7.6	11.2	7.9	11.9	8.3	13.4	8.5	14.2	8.2	8.2	
	18.0	7.6	6.2	9.0	7.1	10.5	7.6	11.2	7.9	11.9	8.3	13.4	8.5	14.0	8.1	8.1	
	20.0	7.6	6.2	9.0	7.1	10.5	7.6	11.2	7.9	11.9	8.3	13.4	8.5	13.7	7.9	7.9	
	21.0	7.6	6.2	9.0	7.1	10.5	7.6	11.2	7.9	11.9	8.3	13.2	8.4	13.5	7.8	7.8	
	23.0	7.6	6.2	9.0	7.1	10.5	7.6	11.2	7.9	11.9	8.3	13.0	8.3	13.3	7.7	7.7	
	25.0	7.6	6.2	9.0	7.1	10.5	7.6	11.2	7.9	11.9	8.3	12.8	8.1	13.1	7.7	7.7	
	27.0	7.6	6.2	9.0	7.1	10.5	7.6	11.2	7.9	11.9	8.3	12.6	8.0	12.9	7.6	7.6	
	29.0	7.6	6.2	9.0	7.1	10.5	7.6	11.2	7.9	11.9	8.3	12.4	8.0	12.7	7.5	7.5	
	31.0	7.6	6.2	9.0	7.1	10.5	7.6	11.2	7.9	11.9	8.3	12.2	7.9	12.5	7.5	7.5	
	33.0	7.6	6.2	9.0	7.1	10.5	7.6	11.2	7.9	11.8	8.2	12.1	7.8	12.3	7.5	7.5	
35.0	7.6	6.2	9.0	7.1	10.5	7.6	11.2	7.9	11.6	8.1	11.9	7.7	12.2	7.4	7.4		
37.0	7.6	6.2	9.0	7.1	10.5	7.6	11.2	7.9	11.5	8.1	11.7	7.6	12.1	7.4	7.4		
39.0	7.6	6.2	9.0	7.1	10.5	7.6	11.2	7.9	11.4	8.1	11.5	7.6	12.0	7.4	7.4		
160	10.0	9.5	7.8	11.3	8.9	13.1	9.6	14.0	9.9	14.9	10.3	16.8	10.7	18.2	10.9	10.9	24.0 CVRB 32.0 CDB
	12.0	9.5	7.8	11.3	8.9	13.1	9.6	14.0	9.9	14.9	10.3	16.8	10.7	18.0	10.7	10.7	
	14.0	9.5	7.8	11.3	8.9	13.1	9.6	14.0	9.9	14.9	10.3	16.8	10.7	17.7	10.6	10.6	
	16.0	9.5	7.8	11.3	8.9	13.1	9.6	14.0	9.9	14.9	10.3	16.8	10.7	17.5	10.4	10.4	
	18.0	9.5	7.8	11.3	8.9	13.1	9.6	14.0	9.9	14.9	10.3	16.8	10.7	17.2	10.3	10.3	
	20.0	9.5	7.8	11.3	8.9	13.1	9.6	14.0	9.9	14.9	10.3	16.8	10.7	17.1	10.2	10.2	
	21.0	9.5	7.8	11.3	8.9	13.1	9.6	14.0	9.9	14.9	10.3	16.5	10.6	16.9	10.1	10.1	
	23.0	9.5	7.8	11.3	8.9	13.1	9.6	14.0	9.9	14.9	10.3	16.3	10.4	16.6	10.0	10.0	
	25.0	9.5	7.8	11.3	8.9	13.1	9.6	14.0	9.9	14.9	10.3	16.1	10.3	16.4	9.9	9.9	
	27.0	9.5	7.8	11.3	8.9	13.1	9.6	14.0	9.9	14.9	10.3	15.9	10.1	16.2	9.8	9.8	
	29.0	9.5	7.8	11.3	8.9	13.1	9.6	14.0	9.9	14.9	10.3	15.6	10.0	15.9	9.6	9.6	
	31.0	9.5	7.8	11.3	8.9	13.1	9.6	14.0	9.9	14.9	10.3	15.3	9.9	15.7	9.5	9.5	
33.0	9.5	7.8	11.3	8.9	13.1	9.6	14.0	9.9	14.8	10.2	15.1	9.8	15.4	9.4	9.4		
35.0	9.5	7.8	11.3	8.9	13.1	9.6	14.0	9.9	14.8	10.1	14.9	9.7	15.2	9.3	9.3		
37.0	9.5	7.8	11.3	8.9	13.1	9.6	14.0	9.9	14.7	10.1	14.9	9.6	15.0	9.2	9.2		
39.0	9.5	7.8	11.3	8.9	13.1	9.6	14.0	10.0	14.6	10.1	14.5	9.9	14.6	9.6	9.6		
TC	Total capacity : kW																
SC	Sensible capacity : kW																

	39.0	9.5	7.8	1.1
Total capacity ; kW				
Sensible capacity ; kW				

 Refer to Outdoor Unit Capacity Tables : on page 411 ~ 470, for the actual performance data of each indoor and outdoor unit combination.



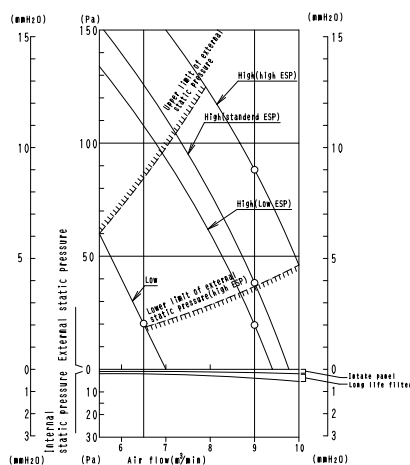
Unit Size	Outdoor air temp. °CDB	14.0 CWB 20.0 DB		16.0 CWB 22.0 DB		18.0 CWB 24.0 DB		19.0 CWB 25.0 DB		20.0 CWB 26.0 DB		22.0 CWB 28.0 DB		24.0 CWB 30.0 DB		Cooling capacity
		TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	
20	10.0	15	14	18	16	21	17	22	18	23	19	26	19	29	19	
	12.0	15	14	18	16	21	17	22	18	23	19	26	19	29	19	
	14.0	15	14	18	16	21	17	22	18	23	19	26	19	28	19	
	16.0	15	14	18	16	21	17	22	18	23	19	26	19	28	18	
	18.0	15	14	18	16	21	17	22	18	23	19	26	19	27	18	
	20.0	15	14	18	16	21	17	22	18	23	19	26	19	27	18	
	21.0	15	14	18	16	21	17	22	18	23	19	26	19	27	18	
	23.0	15	14	18	16	21	17	22	18	23	19	26	19	26	17	
	25.0	15	14	18	16	21	17	22	18	23	19	25	18	26	17	
	27.0	15	14	18	16	21	17	22	18	23	19	25	18	26	17	
25	29.0	15	14	18	16	21	17	22	18	23	19	25	18	25	17	
	31.0	15	14	18	16	21	17	22	18	23	19	24	18	25	17	
	33.0	15	14	18	16	21	17	22	18	23	18	24	18	24	17	
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32	20.0	19	17	23	19	26	20	28	21	30	22	34	23	34	21	
	21.0	19	17	23	19	26	20	28	21	30	22	34	23	34	21	
	23.0	19	17	23	19	26	20	28	21	30	22	34	23	34	21	
	25.0	19	17	23	19	26	20	28	21	30	22	34	23	34	21	
	27.0	19	17	23	19	26	20	28	21	30	22	34	23	34	21	
	29.0	19	17	23	19	26	20	28	21	30	22	34	23	34	21	
	31.0	19	17	23	19	26	20	28	21	30	22	34	23	34	21	
	33.0	19	17	23	19	26	20	28	21	30	22	34	23	34	21	
	35.0	19	17	23	19	26	20	28	21	30	22	34	23	34	21	
	37.0	19	17	23	19	26	20	28	21	29	22	30	21	31	20	
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	10.0	24	20	29	23	34	25	36	25	38	27	43	28	47	28	
	12.0	24	20	29	23	34	25	36	25	38	27	43	28	46	27	
	14.0	24	20	29	23	34	25	36	25	38	27	43	28	46	27	
	16.0	24	20	29	23	34	25	36	25	38	27	43	28	46	27	
	18.0	24	20	29	23	34	25	36	25	38	27	43	28	46	27	
	20.0	24	20	29	23	34	25	36	25	38	27	43	28	46	27	
	22.0	24	20	29	23	34	25	36	25	38	27	43	28	46	27	
	24.0	24	20	29	23	34	25	36	25	38	27	42	27	44	26	
	26.0	24	20	29	23	34	25	36	25	38	27	42	27	43	25	
40	28.0	24	20	29	23	34	25	36	25	38	27	42	27	43	25	
	30.0	24	20	29	23	34	25	36	25	38	27	41	26	42	25	
	32.0	24	20	29	23	34	25	36	25	38	27	41	26	42	25	
	34.0	24	20	29	23	34	25	36	25	38	27	40	26	41	25	
	36.0	24	20	29	23	34	25	36	25	38	27	39	26	40	24	
	38.0	24	20	29	23	34	25	36	25	38	27	39	26	40	24	
	40.0	24	20	29	23	34	25	36	25	38	27	38	25	39	24	
	42.0	24	20	29	23	34	25	36	26	37	27	38	25	38	24	
	44.0	30	26	36	30	42	32	45	33	48	36	54	33	58	36	
	46.0	30	26	36	30	42	32	45	33	48	36	54	33	58	35	
50	48.0	30	26	36	30	42	32	45	33	48	36	54	33	57	35	
	50.0	30	26	36	30	42	32	45	33	48	36	54	33	56	35	
	52.0	30	26	36	30	42	32	45	33	48	36	54	33	55	34	
	54.0	30	26	36	30	42	32	45	33	48	36	54	33	55	34	
	56.0	30	26	36	30	42	32	45	33	48	36	54	33	54	34	
	58.0	30	26	36	30	42	32	45	33	48	36	52	32	53	33	
	60.0	30	26	36	30	42	32	45	33	48	36	52	32	53	33	
	62.0	30	26	36	30	42	32	45	33	48	36	50	31	51	32	
	64.0	30	26	36	30	42	32	45	33	48	36	49	31	50	32	
	66.0	30	26	36	30	42	32	45	33	47	36	49	31	50	32	



## 8. Fan Performances

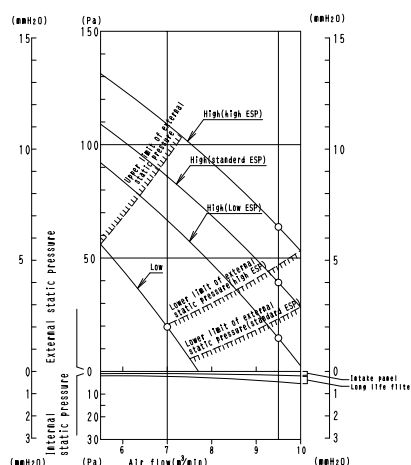
### 8.1 50Hz

FXSQ20 - 25M



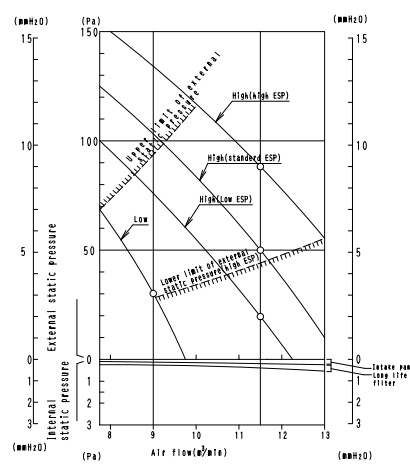
C : 3D036959-5

FXSQ32M



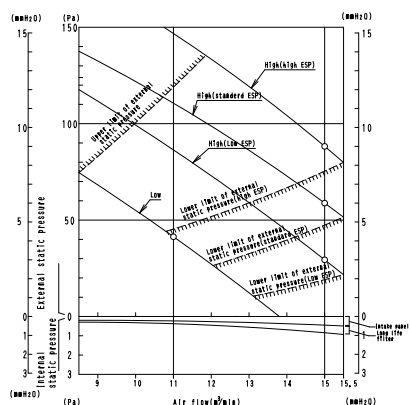
C : 3D036960-5

FXSQ40M



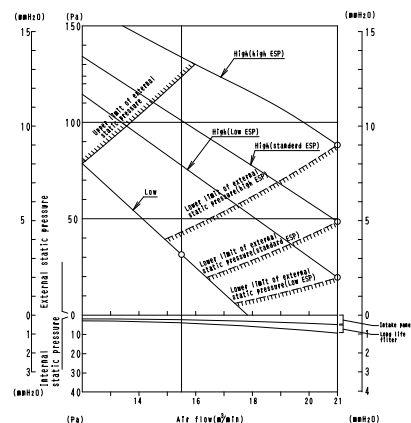
C : 3D036961-5

FXSQ50M



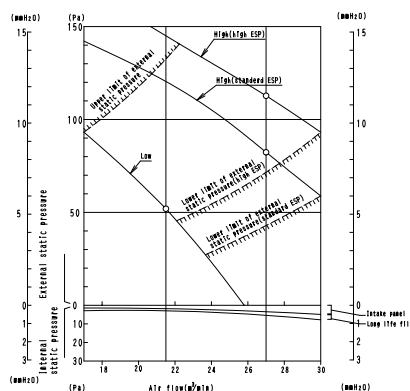
C : 3D036962-5

FXSQ63M



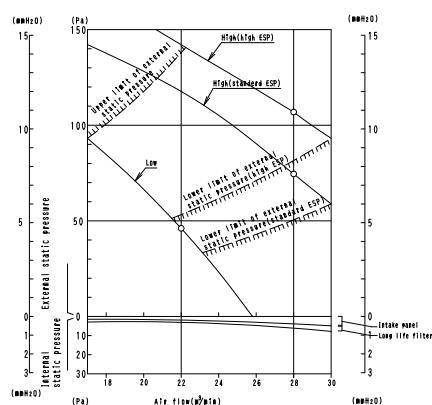
C : 3D036963-5

FXSQ80M



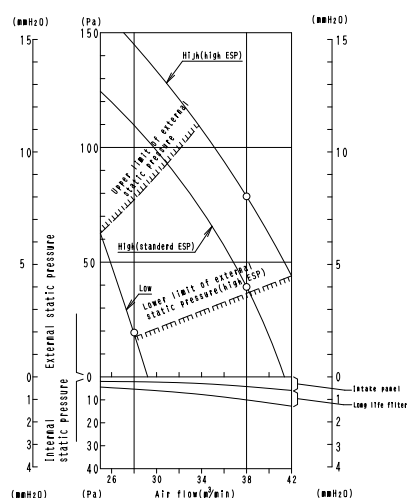
C : 3D036964-5

FXSQ100M



C : 3D036965-5

FXSQ125M



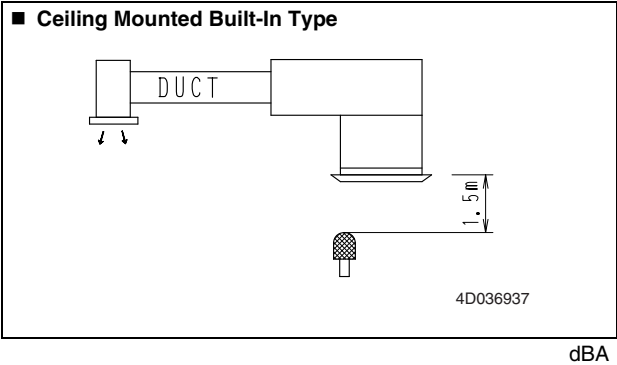
C : 3D036966-5

#### Note:

1. The remote controller can be used to switch between "high" and "low".
2. The air flow is set to "standard" before leaving the factory. It is possible to switch between "standard ESP" and "high ESP" by changing the terminals in the indoor unit electrical box.
3. The external static pressure indicates the characteristics of the fan when a suction panel (optional accessory) and a canvas for the suction panel (optional accessory) are incorporated into the main unit (with a long-life filter).

# 9. Sound Levels

Overall



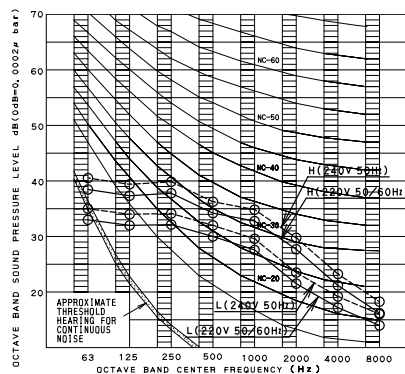
- Note:**
1. The operating conditions are assumed to be standard (JIS conditions).
  2. These operating values were obtained in a dead room (conversion values).  
Sound level will vary depending on a range of factors such as the construction (acoustic absorption coefficient) of the particular room in which the equipments installed.

Model	220V, 50Hz		240V, 50Hz	
	H	L	H	L
FXSQ20M FXSQ25M	37	32	39	34
FXSQ32M FXSQ40M	38	32	40	34
FXSQ50M	41	36	43	38
FXSQ63M	42	35	44	37
FXSQ80M FXSQ100M	43	37	45	39
FXSQ125M	46	41	48	43

## Octave Band Level

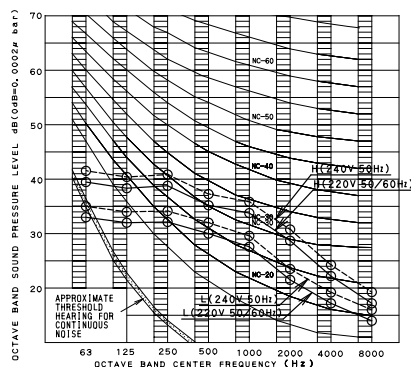
- — ○ 220V 50Hz  
○ - - - ○ 240V 50Hz

FXSQ20 · 25MVE



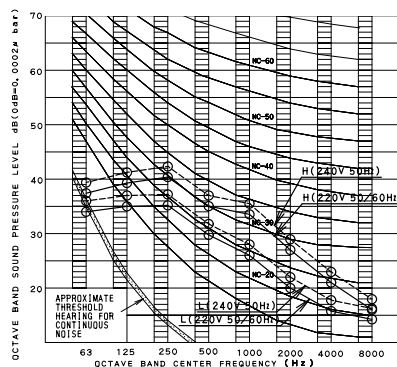
4D036937

FXSQ32MVE



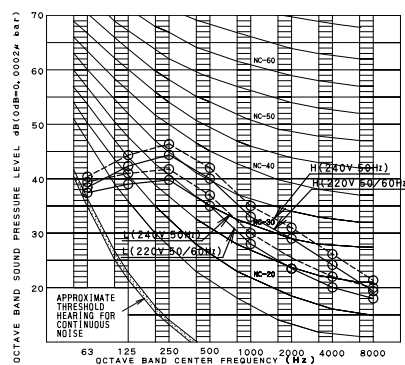
4D036938

FXSQ40MVE



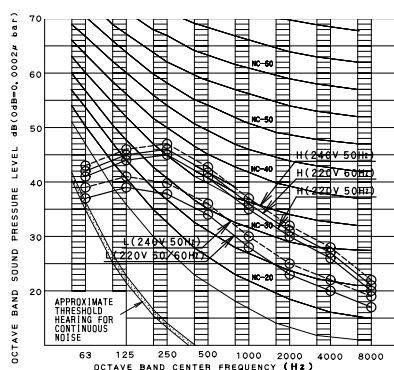
4D036939

FXSQ50MVE



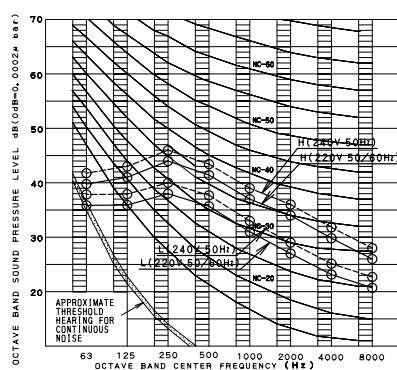
4D036940

FXSQ63MVE



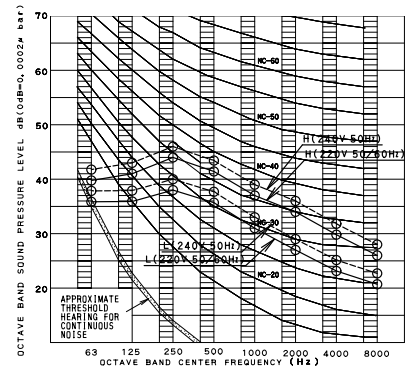
4D036941

FXSQ80MVE



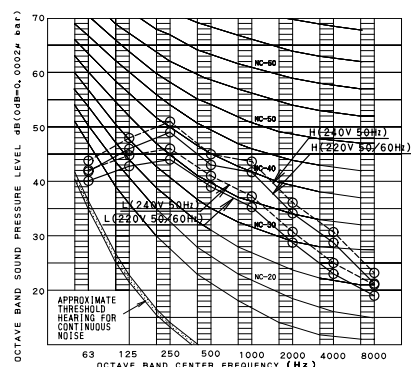
4D036942

FXSQ100MVE



4D036943

FXSQ125MVE

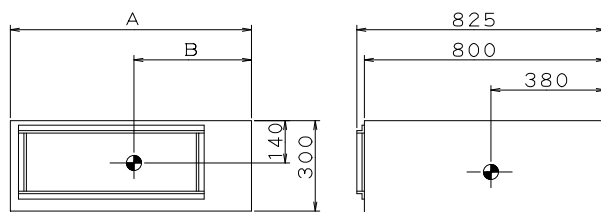


4D036944

## 10. Installation

### Center of Gravity

Unit (mm)



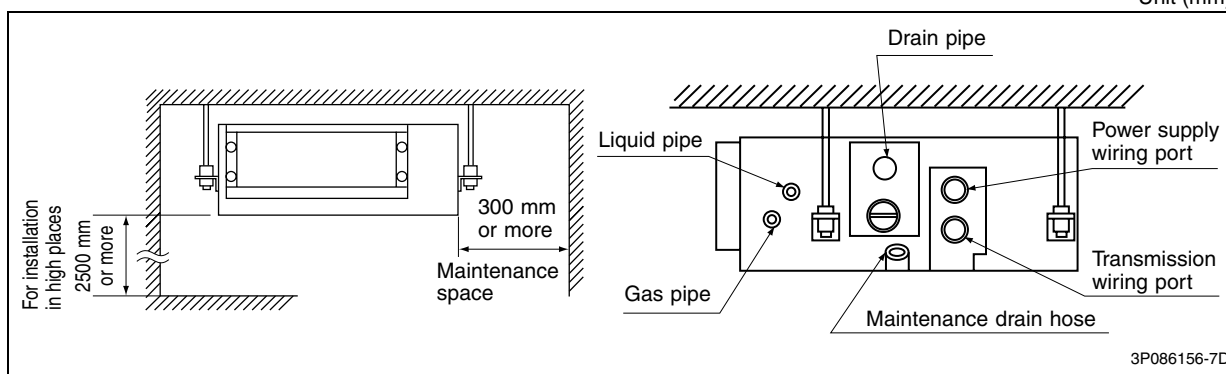
M O D E L	A	B
FXSQ20 · 25 · 32MVE	550	250
FXSQ40 · 50MVE	700	300
FXSQ63MVE	1000	460
FXSQ80 · 100 · 125MVE	1400	640

C : 4D036946D

6

### Service Space

Unit (mm)



3P086156-7D

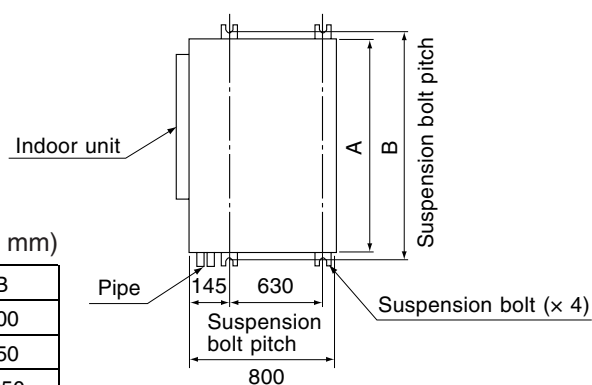
#### Note:

Above figure means minimum value. Please keep these value at least.

### Bolt Pitch

(Unit : mm)

Model	A	B
FXSQ20 · 25 · 32MVE	550	600
FXSQ40 · 50MVE	700	750
FXSQ63MVE	1000	1050
FXSQ80 · 100 · 125MVE	1400	1450



3P086156-7D

- For standard installation (air inlet on the bottom side), choose one of the below two means of installation.

**Note:** For other than standard installation, contact your Daikin dealer for details.

### Drain Pump Kit

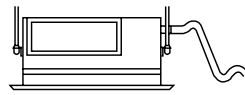
Indoor unit	Drain pump kit
FXSQ-M	Standard (Equipped with indoor unit)

## Drain Piping Work

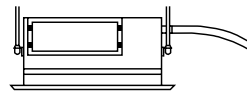
<<Rig the drain pipe as shown below and take measures against condensation. Improperly rigged piping could lead to leaks and eventually wet furniture and belongings.>>

### (1) Carry out the drain piping

- The diameter of the drain pipe should be greater than or equal to the diameter of the connecting pipe (vinyl tube ; pipe size; 25 mm ; outer dimension : 32 mm).
- Keep the drain pipe short and sloping downwards at a gradient of at least 1 / 100 to prevent air pockets from forming.
- If the drain hose cannot be sufficiently set on a slope, execute the drain raising piping.
- To keep the drain hose from sagging, space hanging wires every 1 to 1.5 m.



No Good



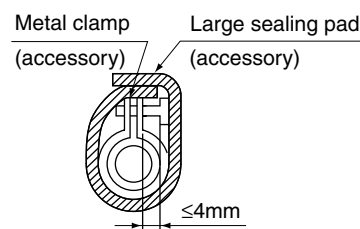
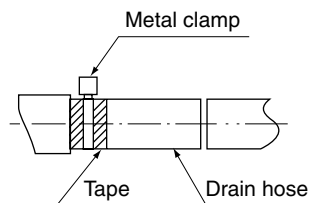
Good



### CAUTION

Setting the unit at an angle opposite to the drain piping might cause leaks.

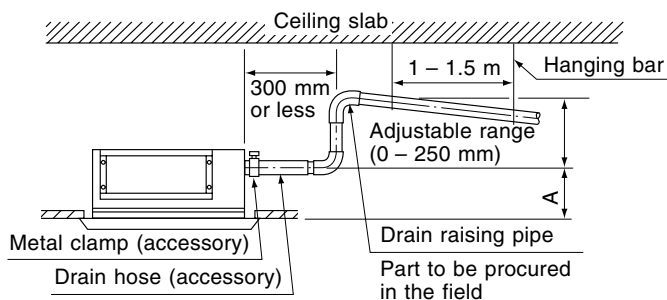
- Use the drain hose and the metal clamp. Tighten the clamp firmly. Insert the drain hose into the drain socket, up to the tape. Tighten the clamp until the screw head is less than 4 mm from the hose.
- Wrap the sealing pad over the metal clamp and drain hose to insulate.
- Insulate the drain hose inside the building.



## 〈 PRECAUTIONS FOR DRAIN RAISING PIPING 〉

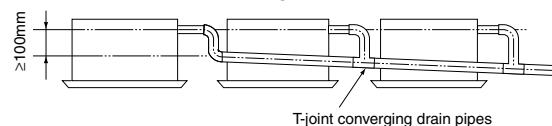
### (HOW TO INSTALL PIPING)

- (1) Connect the drain hose to the drain raising pipes, and insulate them.
- (2) Connect the drain hose to the drain outlet on the indoor unit, and tighten it with the metal clamp.
- (3) Insulate both metal clamp and drain hose with the sealing pad.



	A (mm)
When canvas duct is installed	350 - 530
When air inlet panel is directly installed	275

- If converging multiple drain pipes, install according to the procedure shown below.



Select converging drain pipes whose gauge is suitable for the operating capacity of the unit.

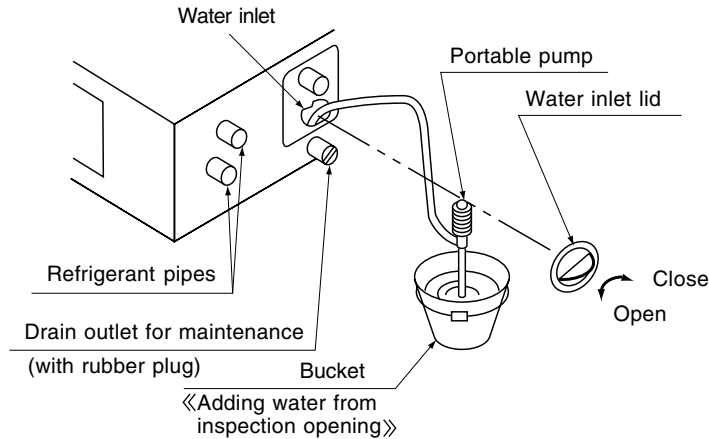


### CAUTION

- Drain piping connections  
Do not connect the drain piping directly to sewage pipes that smell of ammonia. The ammonia in the sewage might enter the indoor unit through the drain pipes and corrode the heat exchanger.
- Keep in mind that it will become the cause of getting drain pipe blocked if water collects on drain pipe.

**(2) After piping work is finished, check drainage flows smoothly.**

- Open the water inlet lid, add approximately 1 liter of water gradually and check drainage flow.



Note: Use this outlet to drain water from the drain pan.

6

**[ WHEN ELECTRIC WIRING WORK IS FINISHED ]**


- Check drainage flow during COOL running, explained under “TEST OPERATION.”





**[ WHEN ELECTRIC WIRING WORK IS NOT FINISHED ]**

- Remove the electric parts box lid, connect a power supply and remote controller to the terminals.

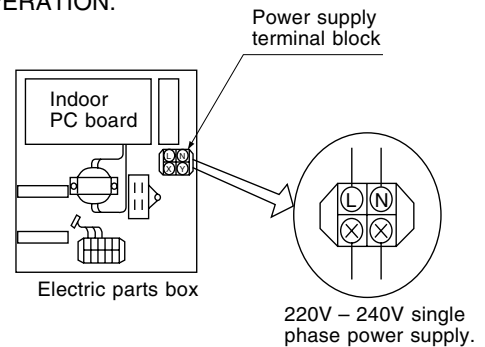
(Refer to the “HOW TO CONNECT WIRINGS”)

Be sure attach the electric parts box lid before turning on the power.

Next, press the inspection / test operation button “” on the remote controller. The unit will engage the test operation mode.

Press the operation mode selector button “” until selecting FAN OPERATION “”. Then, press the ON/OFF button “”. The indoor unit fan and drain pump will start up. Check that the water has drained from the unit. Press “” to go back to the first mode.

- You can check whether drainage is satisfactory or not by removing the access opening lid and checking the water level of the drain pan through the access opening.
- **Be careful when doing so because the fan is turning at the same time.**


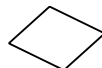











3P086156-7D

# 11. Accessories

## Standard Accessories

### FXSQ20~125M

Name	Metal clamp	Paper pattern for installation	Drain hose	Insulation for fitting	Sealing pad	Screws for duct flanges								
Quantity	1 pc.	1 pc.	1 pc.	1 each.	1 each.	1 set								
Shape				 for gas pipe  for liquid pipe	 Large  mid	 <table><tr><td>FXSQ20 · 25 · 32MVE</td><td>6</td></tr><tr><td>FXSQ40 · 50MVE</td><td>8</td></tr><tr><td>FXSQ63MVE</td><td>12</td></tr><tr><td>FXSQ80 · 100 · 125MVE</td><td>16</td></tr></table>	FXSQ20 · 25 · 32MVE	6	FXSQ40 · 50MVE	8	FXSQ63MVE	12	FXSQ80 · 100 · 125MVE	16
FXSQ20 · 25 · 32MVE	6													
FXSQ40 · 50MVE	8													
FXSQ63MVE	12													
FXSQ80 · 100 · 125MVE	16													

Name	Washer for hanging bracket	Clamp	Screws for fixing the paper pattern for installation	(Other) • Operation manual • Installation manual • Sealing material (Small 35×150)
Quantity	8 pcs.	6 pcs.	6 pcs.	
Shape				

- Screws for fixing panels are attached to decoration panel.

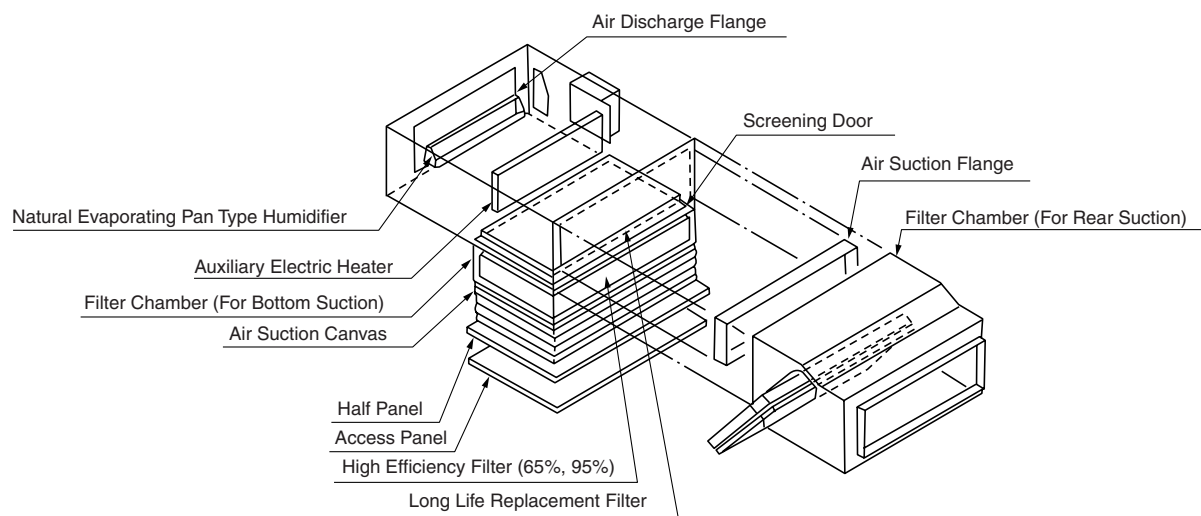
3P086156-7D

## Optional Accessories (For Unit)

No.	Item		Type	FXSQ20M FXSQ25M FXSQ32M	FXSQ40M FXSQ50M	FXSQ63M	FXSQ80M FXSQ100M	FXSQ125M
1	Panel related	Decoration panel		BYBS32DJW1	BYBS45DJW1	BYBS71DJW1	BYBS125DJW1	
		Access panel		KTBJ25K36W	KTBJ25K56W	KTBJ25K80W	KTBJ25K160W	
2	*1 Auxiliary electric heater	Model	240V/220V	KEA25K32VE	KEA25K50VE	KEA25K63VE	KEA25K100VE	KEA25K125VE
		Capacity	kW	0.75	1.2	1.4	2.1	2.8
3	Filter related	*2 High efficiency filter 65%		KAFJ252L36	KAFJ252L56	KAFJ252L80	KAFJ252L160	
		*2 High efficiency filter 90%		KAFJ253L36	KAFJ253L56	KAFJ253L80	KAFJ253L160	
		Long life replacement filter		KAFJ251K36	KAFJ251K56	KAFJ251K80	KAFJ251K160	
		Filter chamber	For bottom suction	KAJ25L36D	KAJ25L56D	KAJ25L80D	KAJ25L160D	
			For rear suction	KAJ25L36B	KAJ25L56B	KAJ25L80B	KAJ25L160B	
4	Air inlet and air discharge outlet related	Air suction canvas		KSA-25K36	KSA-25K56	KSA-25K80	KSA-25K160	
		Screening door		KBBJ25K36	KBBJ25K56	KBBJ25K80	KBBJ25K160	
		Air suction flange		KDJ2507K36	KDJ2507K56	KDJ2507K80	KDJ2507K160	
		Air discharge adaptor		KDAJ25K36	KDAJ25K56	KDAJ25K71	KDAJ25K140	
5	Natural evaporating pan type humidifier *1			KNM25K32V1	KNM25K50V1	KNM25K63V1	KNM25K125V1	

### Note:

- \*1 One adaptor for wiring (KRP1B61) per indoor unit is required if installing an electric heater or a natural evaporating pan type humidifier. An electric heater cannot be used for VRV system cooling only.
- \*2 If installing a high filter in the ceiling mounted built-in type, an assembly chamber for either bottom or rear suction is required.

**Optional Accessories (For Controls) : Refer to P.561**

(V0679)

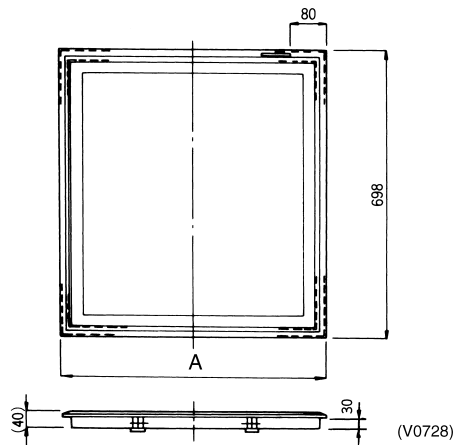


## Access Panel

## Specifications

Item	Model	KTBJ25K36W	KTBJ25K56W	KTBJ25K80W	KTBJ25K160W
Color	White				
Applicable Model		20~32 Class	40 · 50 Class	63 Class	80~125 Class

## Dimension

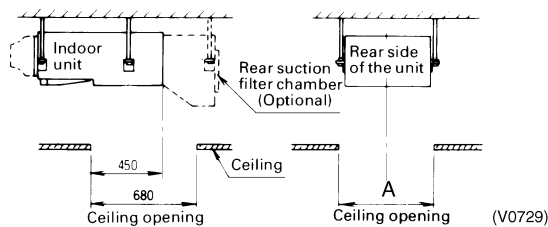


Model	A
KTBJ25K36W	626
KTBJ25K56W	776
KTBJ25K80W	1076
KTBJ25K160W	1476

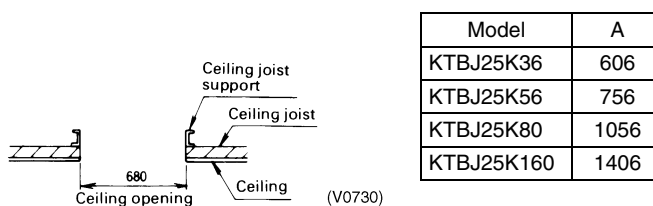
## Installation

[Before installation]

1. Make an opening on the ceiling



2. Install ceiling joist supports to fit the ceiling opening



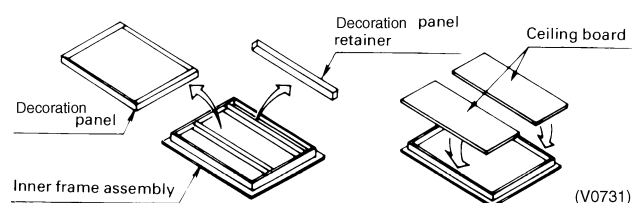
[Installation of the ceiling board]

The ceiling board can be installed into the inner frame assembly as follows.

1. Remove decoration panel retainer from the inner frame assembly.
2. Remove the decoration panel and substitute with the ceiling board.
3. Set the ceiling board by retainer removed in step 1 of above.

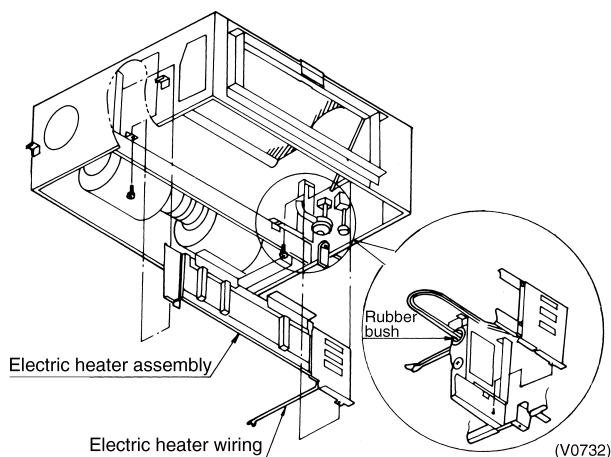
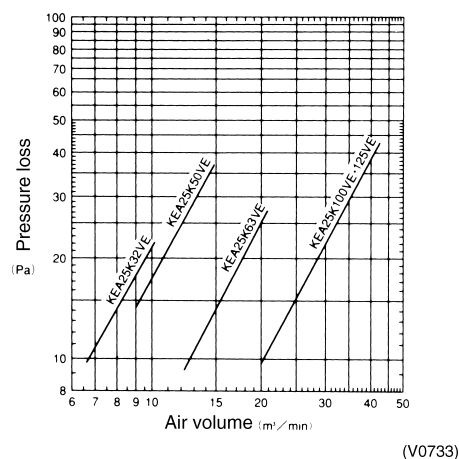
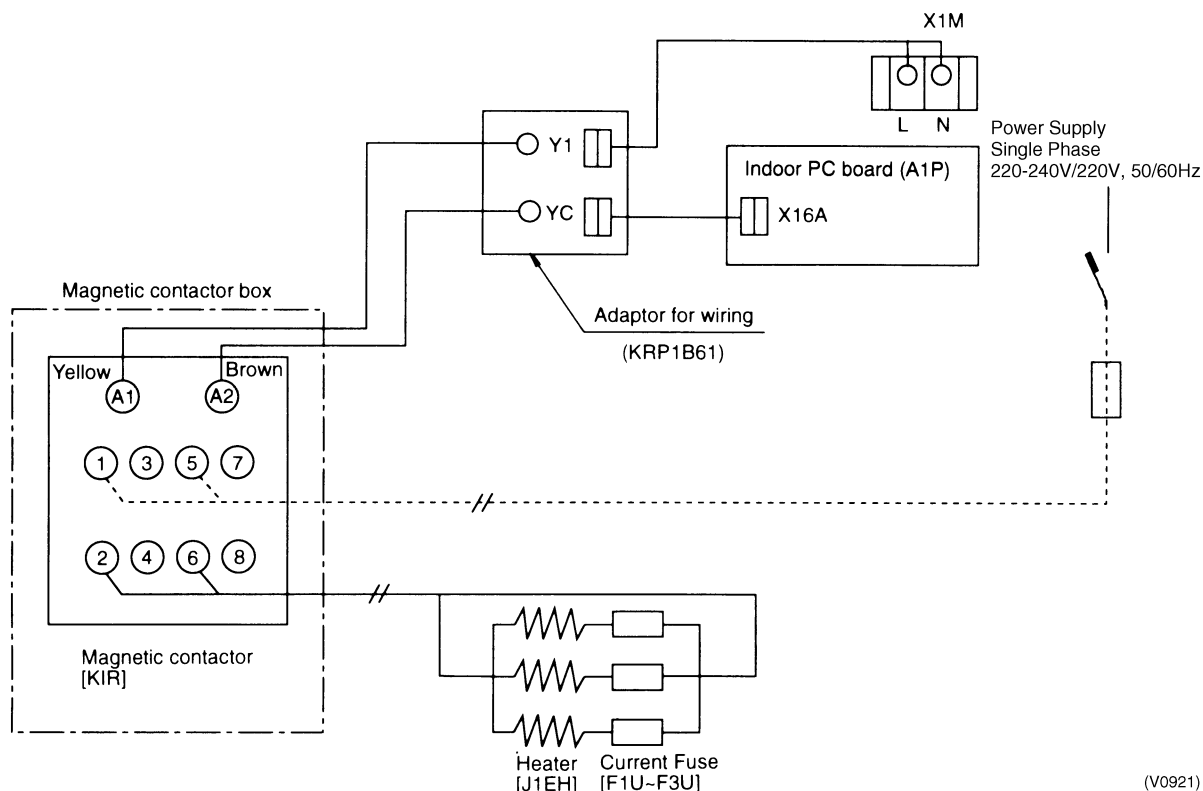
**CAUTION**

When the ceiling board is installed, the decoration panel is not needed.



**Auxiliary Electric Heater (A wiring adaptor is needed)****Specifications**

Items	Model	KEA25K32VE	KEA25K50VE	KEA25K63VE	KEA25K100VE	KEA25K125VE
Heater Capacity (kW)		0.75	1.2	1.4	2.1	2.8
Power Supply	Single Phase, 220-240V/220V 50Hz					
Applicable Models		20 · 25 · 32 Class	40 · 50 Class	63 Class	80 · 100 Class	125 Class

**Installation****Pressure Loss of Electric Heater****Wiring****Precaution at use**

1. When the aux. electric heater will be installed, "Wiring adaptor (KRP1B61)" is separately needed for one indoor unit by one piece of the adaptor.

## Natural Evaporating Pan Type Humidifier (Wiring adaptor is required.)

### Specifications

Item	Model	KNM25K32V1	KNM25K50V1	KNM25K63V1	KNM25K125V1
Humidifying Capacity (L/h)		0.4	0.6	1.0	1.8
Power Supply (W)		Single Phase, 220-240V 50Hz			
Power Consumption		12/9.6			
Water Inlet Port		1/2B			
Water Outlet Port		VP25 (External dia. $\phi 32$ ) (drain pipe at indoor unit)			
Applicable Models		20 · 25 · 32 Class	40 · 50 Class	63 Class	80 · 100 · 125 Class

### Precaution at use

1. "Wiring adaptor (KRP1B61)" is separately needed for one indoor unit by one piece of the adaptor.
2. This humidifier will be built in a indoor unit, while the solenoid valve box will be mounted out of the unit's body (refer to the dimensions of optional accessories).
3. The field setting should be changed by a remote controller.

### Note:

The value in JIS heating condition's standard.

### Feed water piping

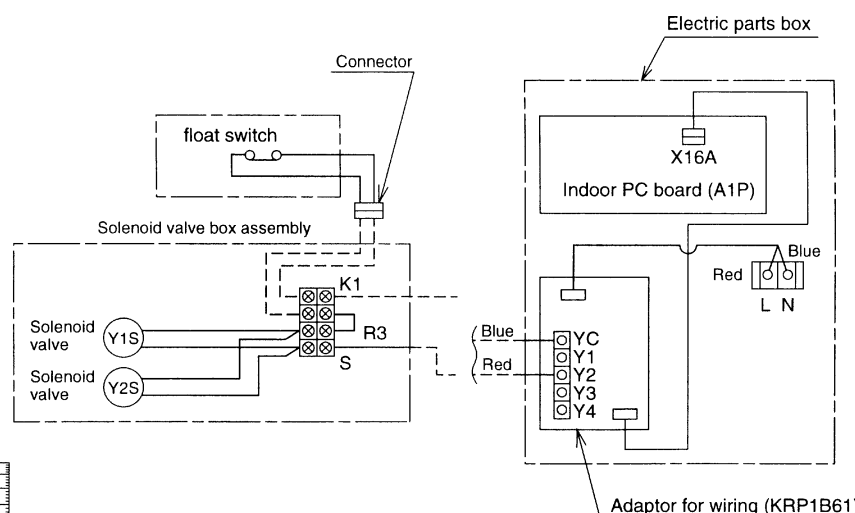
1. Provide a stop valve of feed water for the feed water circuit.
2. Supply clean water for the feed water. Contaminated water clogs a valve and the contaminants accumulate in a water tank, disturbing a normal operation of the humidifier. (Never use cooling water for a cooling tower or hot water for heating purpose). Moreover, since white powder will appear if the feed water contains much silica, it is recommended to install a water purifier or a water softener if these phenomena are found.
3. Use water in the range of water temperature 5 ~ 50°C and water pressure 0.049 ~ 0.294 MPa[0.5 ~ 3kg/cm<sup>2</sup>]. Provide a reducing valve between a strainer and this kit, in case of 0.294MPa or more for feed water pressure.
4. The feed water pipe can not be connected to a public water route. Accordingly, if water must be supplied through a public water by all means, provide a cistern tank (approved model only).

### Wiring diagram

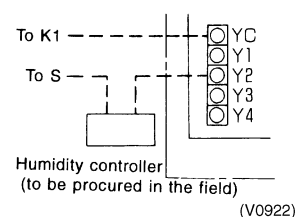
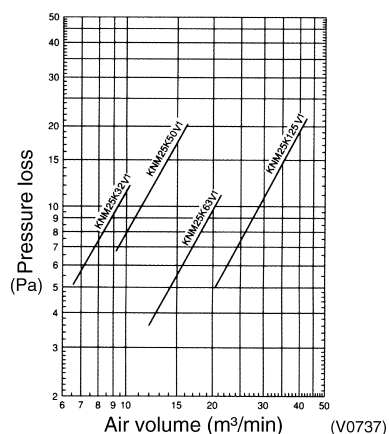
----- Field wiring

Make wiring as shown on the right, if a humidity controller will be mounted.

Arrange the wiring shown right locally for that case. Set the turn-over switch to OFF for the choice of ON/OFF of group humidity controlling input on the "Wiring adaptor PC board".



### Pressure Loss of Humidifier

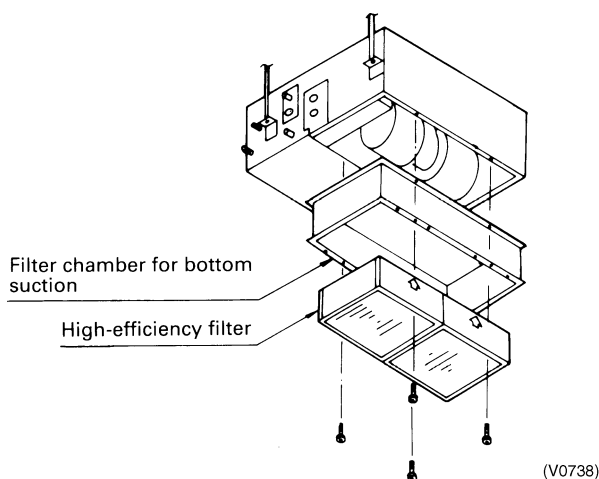


## High Efficiency Filter

### Specifications

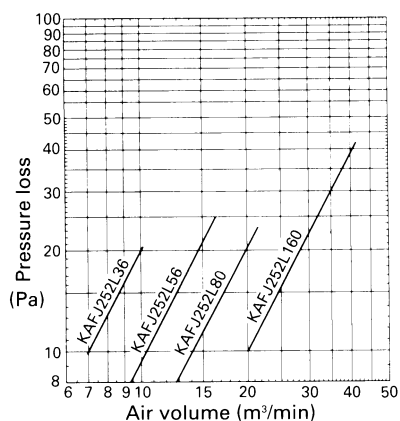
Model	Items	KAFJ252L36	KAFJ252L56	KAFJ252L80	KAFJ252L160	KAFJ253L36	KAFJ253L56	KAFJ253L80	KAFJ253L160
Dust Collection Efficiency (%)		Colorimetric method 65%				Colorimetric method 90%			
Initial Pressure Loss (Pa)		12 or less	14 or less		22 or less	21 or less	24 or less		34 or less
Final Pressure Loss (Pa)		98 or less				98 or less			
Filter		Non-woven fabric of synthetic fiber				Non-woven fabric of synthetic fiber			
Life Time (h)		2,500 hours (Dust density 0.15mg/m³)				1,800 hours (Dust density 0.15mg/m³)			
High Efficiency Filter Chamber (for the Bottom Suction)		KAJ25L36D	KAJ25L56D	KAJ25L80D	KAJ25L160D	KAJ25L36D	KAJ25L56D	KAJ25L80D	KAJ25L160D
High Efficiency Filter Chamber (for the Rear Suction)		KAJ25L36B	KAJ25L56B	KAJ25L80B	KAJ25L160B	KAJ25L36B	KAJ25L56B	KAJ25L80B	KAJ25L160B
External Dimension (mm) (T×W×D)		25×500×360	25×650×360	(25×475×360)×2	(25×700×360)×1 (25×650×360)×1	25×500×360	25×650×360	(25×475×360)×2	(25×700×360)×1 (25×650×360)×1
Applicable Models		20 · 25 · 32 Class	40 · 50 Class	63 Class	80 · 100 · 125 Class	20 · 25 · 32 Class	40 · 50 Class	63 Class	80 · 100 · 125 Class

### Installation



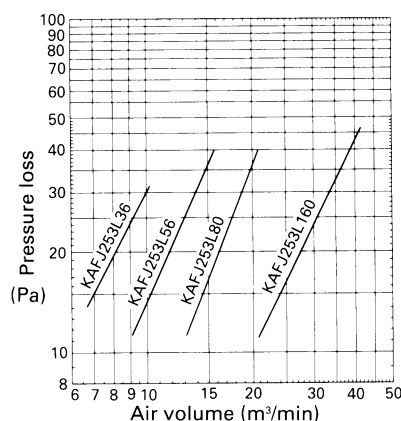
### Characteristics of Filter

■ 65% type



(V0739)

■ 90% type



(V0740)

## Long-Life Replacement Filter

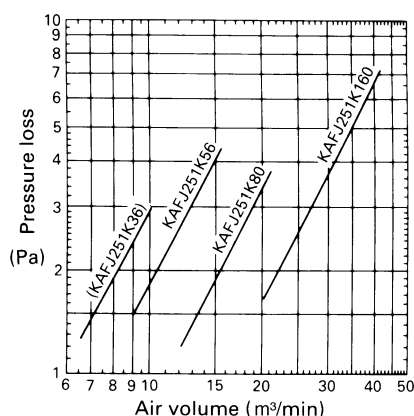
### Specifications

Model		KAFJ251K36	KAFJ251K56	KAFJ251K80	KAFJ251K160
Item					
Average Efficiency (%)		50% (Gravity method)			
Pressure Loss (Pa)	Initial	10 or less		4.9 or less	
	Final	49		49 or less	
Materials		Mildew Proof Resin Net			
Number Required per Model		1	1	2	2
Life Time (h)		2,500 hours (dust particle concentration at 0.15 mg/m³)			
Applicable Model		20 · 25 · 32 Class	40 · 50 Class	63 Class	80 · 100 · 125 Class

#### Note:

The filter models for 20 ~ 50 Class can be used also as Rear-suction types.

### Characteristics of filter



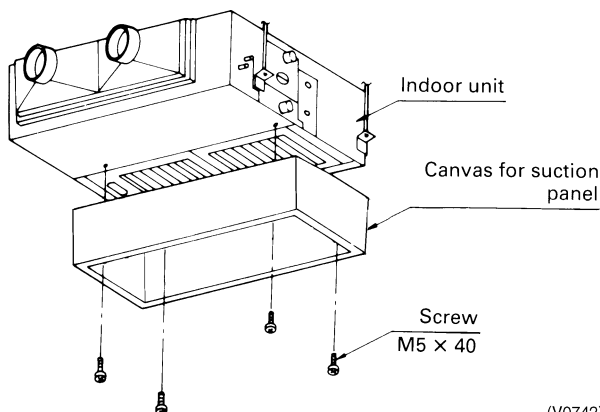
(V0741)

## Canvas Duct (Air Suction Canvas)

### Specifications

Item	Model	KSA-25K36	KSA-25K56	KSA-25K80	KSA-25K160
Dimensions (mm)	H	255	255	255	255
	W	550	700	1000	1400
	D	405	405	405	405
Canvas Duct		TOYOBO · SL1000 · SIMVER Flame resistant			
Applicable Model		BYBS32DJW1	BYBS45DJW1	BYBS71DJW1	BYBS125DJW1

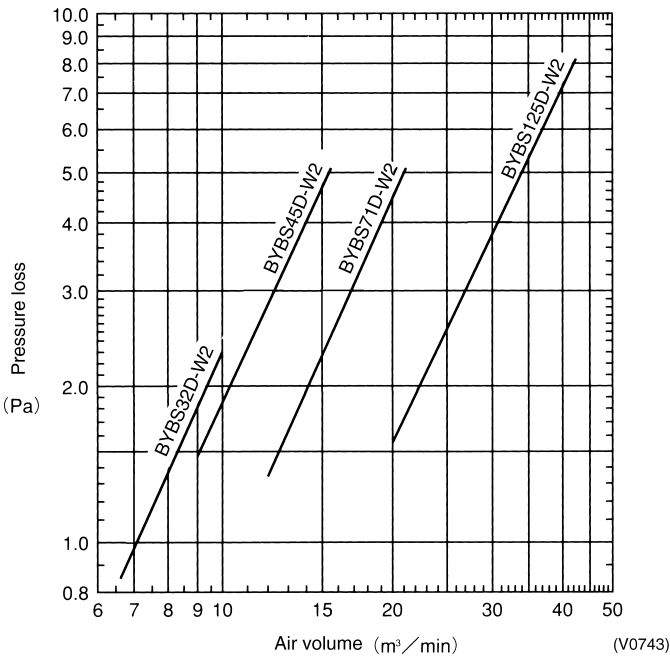
### Installation



(V0742)

Suction Panel

Pressure Loss of Suction Panel



6

Air Discharge Adaptor

Specifications

Item	Model	KDAJ25K36	KDAJ25K56	KDAJ25K71	KDAJ25K140
Connection Dia. (φmm)		φ200×1 port	φ200×2 port	φ200×2 port	φ200×4 port
Applicable Models		20 · 25 · 32 Class	40 · 50 Class	63 Class	80 · 100 · 125 Class

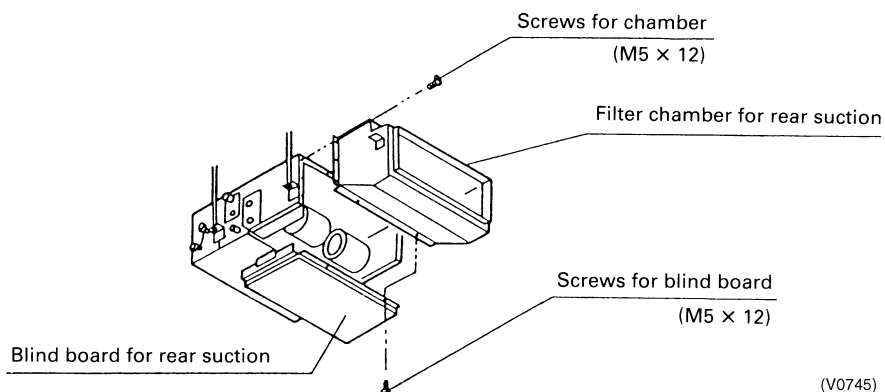
## Filter Chamber (for Rear-suction Type)

This kit will be used for the rear-suction type when the high efficiency filter or the long life filter will be built in.

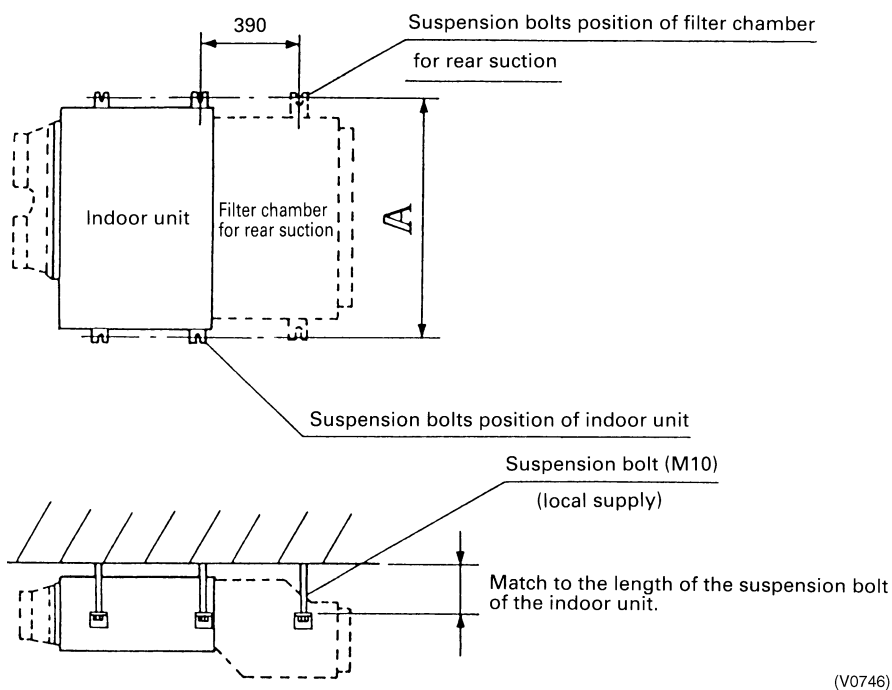
### Applicable Model

Model	Applicable Model
KAJ25L36B	20 · 25 · 32 Class
KAJ25L56B	40 · 50 Class
KAJ25L80B	63 Class
KAJ25L160B	80 · 100 · 125 Class

### Installation



Be sure to remove the long life filter and attach the rear-suction type's sealing plate there when the filter chamber (for the rear-suction type) must be installed.



Model	A
KAJ25L36B	600
KAJ25L56B	750
KAJ25L80B	1050
KAJ25L160B	1450

### Note:

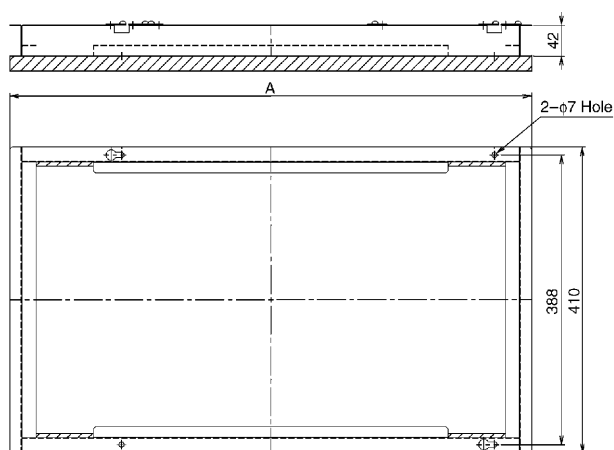
Refer to the appearance figure of optional accessory describing later for further details.

## Filter Chamber for Bottom Suction

### Applicable Model

Model	Applicable Model
KAJ25L36D	20 · 25 · 32 Class
KAJ25L56D	40 · 50 Class
KAJ25L80D	63 Class
KAJ25L160D	80 · 100 · 125 Class

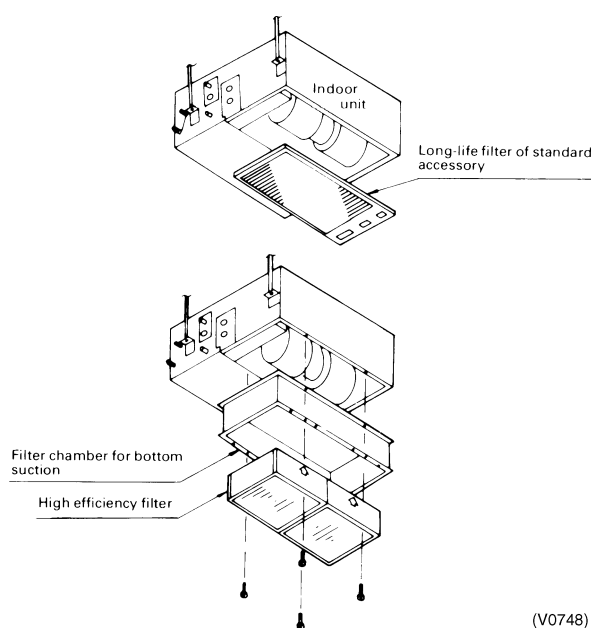
### Dimension



JC : D3K1420A

Model	A
KAJ25L36D	550
KAJ25L56D	700
KAJ25L80D	1000
KAJ25L160D	1400

### Installation



### Note:

Refer to the appearance figure of optional accessory describing later for further details.



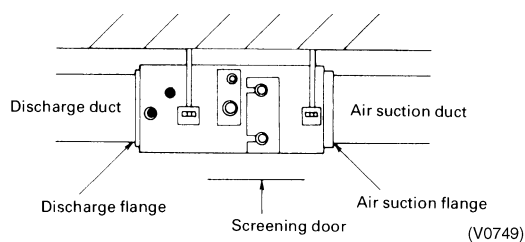
## Air Suction Flange

When this kit will be used, the rear suction type's sealing plate will be required separately.

### Specifications

Item		Model	Air Suction Flange			
			KDJ2507K36	KDJ2507K56	KDJ2507K80	KDJ2507K160
Dimensions (mm)	W		527	677	977	1377
	H		278			
	T		25			
Size of Connecting Duct (mm)	W		477	627	927	1327
	L		228			
Materials			Galvanized steel plate			
Applicable Model			20 · 25 · 32 Class	40 · 50 Class	63 Class	80 · 100 · 125 Class

### Example of Installation

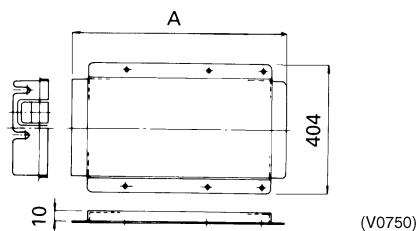


## Blind Board (Screening Door) used for the rear-suction type

### Specifications

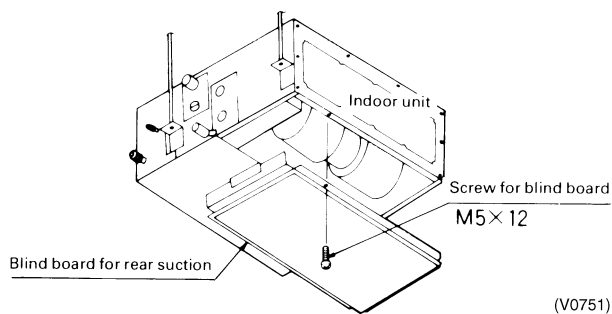
Item		Model	KBBJ25K36	KBBJ25K56	KBBJ25K80	KBBJ25K160
			535	685	985	1385
Dimensions (mm)	D		404			
	T		10			
Materials			Galvanized Steel Plate			
Applicable Model			20 · 25 · 32 Class	40 · 50 Class	63 Class	80 · 100 · 125 Class

### Dimension



Applicable Model	A
KBBJ25K36	535
KBBJ25K56	685
KBBJ25K80	985
KBBJ25K160	1385

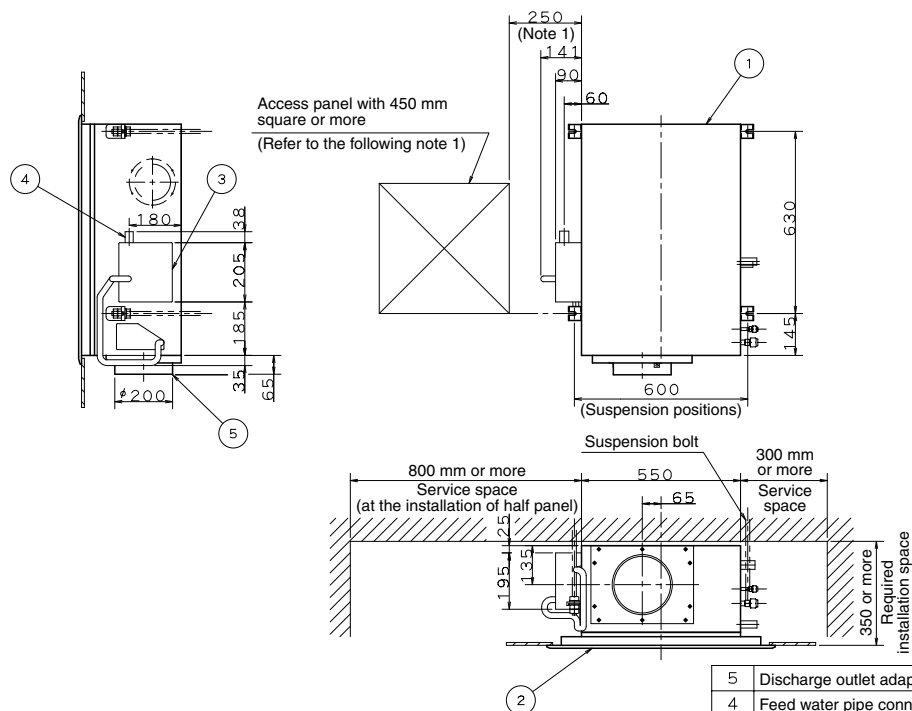
### Installation



## Dimensions with the Optional Accessories

### Natural evaporating pan type humidifier (Discharge outlet adaptor)

#### ■ FXSQ20~32M



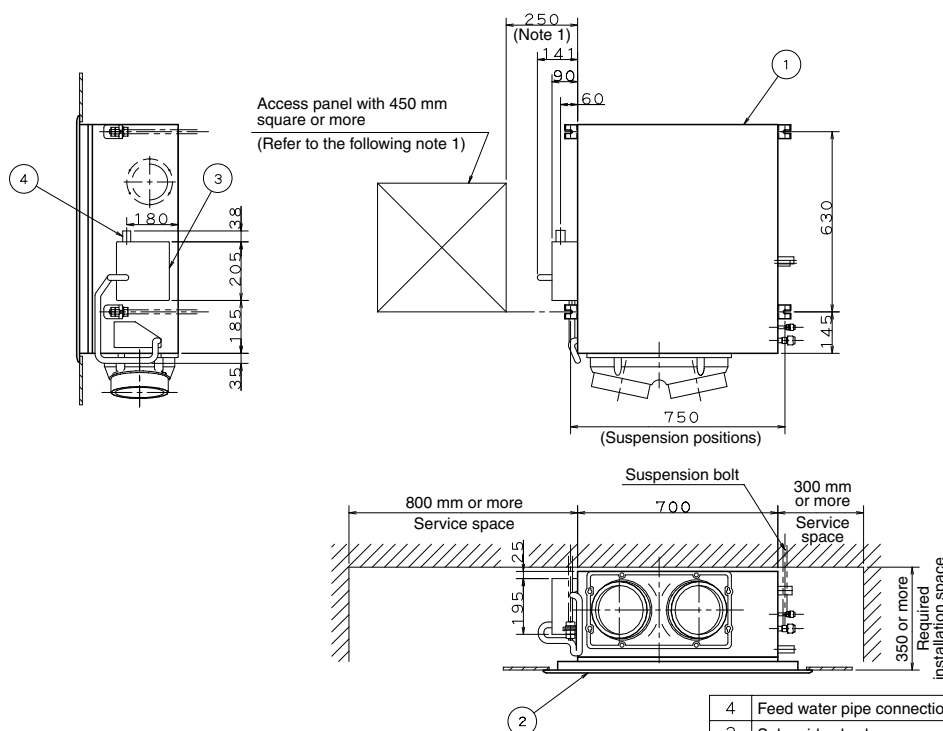
Note)

1. An access panel is needed when a half panel will be installed.
2. When optional accessory other than these kits will be built in, refer to external drawing with optional accessories.
3. Parts names ②~⑤ show optional accessories.

5	Discharge outlet adaptor	
4	Feed water pipe connection	For natural evaporating pan type humidifier PT 1/2
3	Solenoid valve box	For natural evaporating pan type humidifier
2	Suction full panel	
1	Built-in unit body	
Number	Name	Description

JC : DU220-245B

#### ■ FXSQ40・50M



Note)

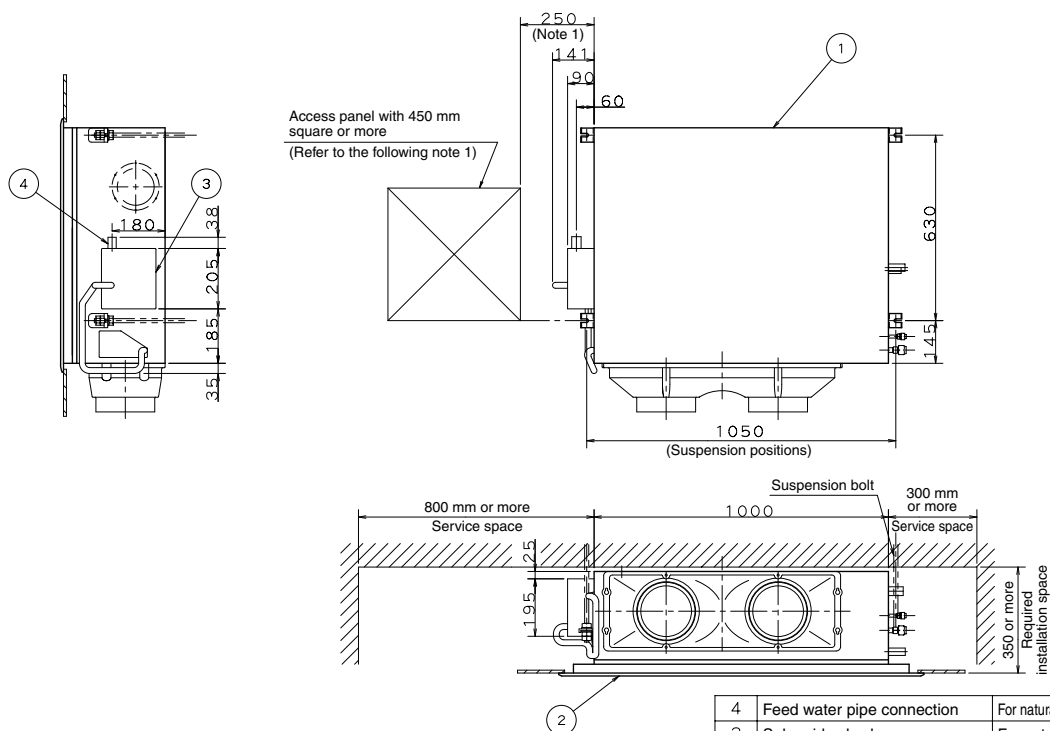
1. An access panel is needed when a half panel will be installed.
2. When optional accessory other than these kits will be built in, refer to external drawing with optional accessories.
3. Parts names ②~④ show optional accessories.

4	Feed water pipe connection	For natural evaporating pan type humidifier PT 1/2
3	Solenoid valve box	For natural evaporating pan type humidifier
2	Suction full panel	
1	Built-in Hi type body	
Number	Name	Description

JC : DU425-2111E

## External drawing with optional accessories (Natural evaporating type humidifier) (Air Discharge Adaptor)

## ■ FXSQ63M



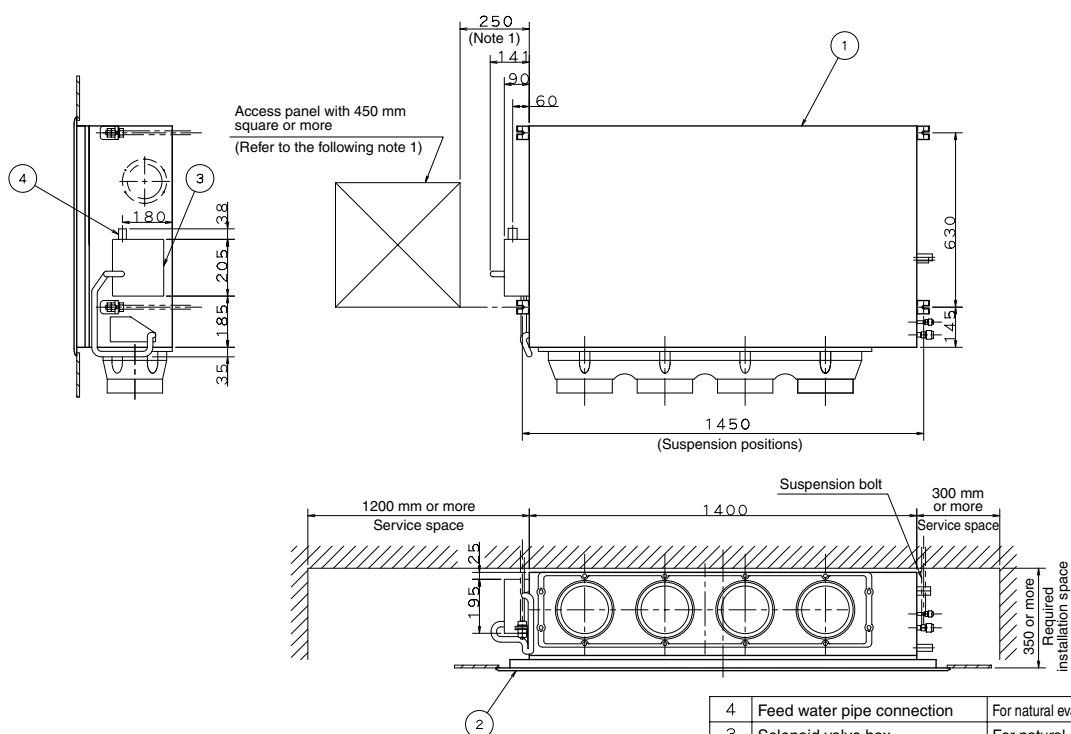
Note)

1. An access panel is needed when a half panel will be installed.
2. When optional accessory other than these kits will be built in, refer to external drawing with optional accessories.
3. Parts names ②~④ show optional accessories.

4	Feed water pipe connection	For natural evaporating pan type humidifier PT 1/2
3	Solenoid valve box	For natural evaporating pan type humidifier
2	Suction full panel	
1	Built-in Hi type body	
Number	Name	Description

JC : DU427-2192F

## ■ FXSQ80~125M



Note)

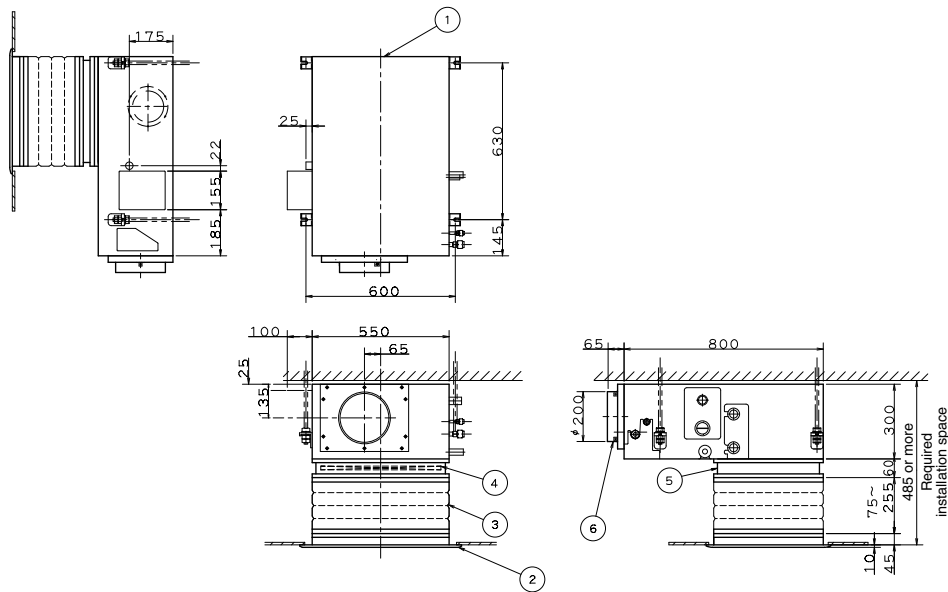
1. An access panel is needed when a half panel will be installed.
2. When optional accessory other than these kits will be built in, refer to external drawing with optional accessories.
3. Parts names ②~④ show optional accessories.

4	Feed water pipe connection	For natural evaporating pan type humidifier PT 1/2
3	Solenoid valve box	For natural evaporating pan type humidifier
2	Suction full panel	
1	Built-in Hi type body	
Number	Name	Description

JC : DU428-2158F

High Efficiency Filter (Air Discharge Adaptor)

■ FXSQ20~32M

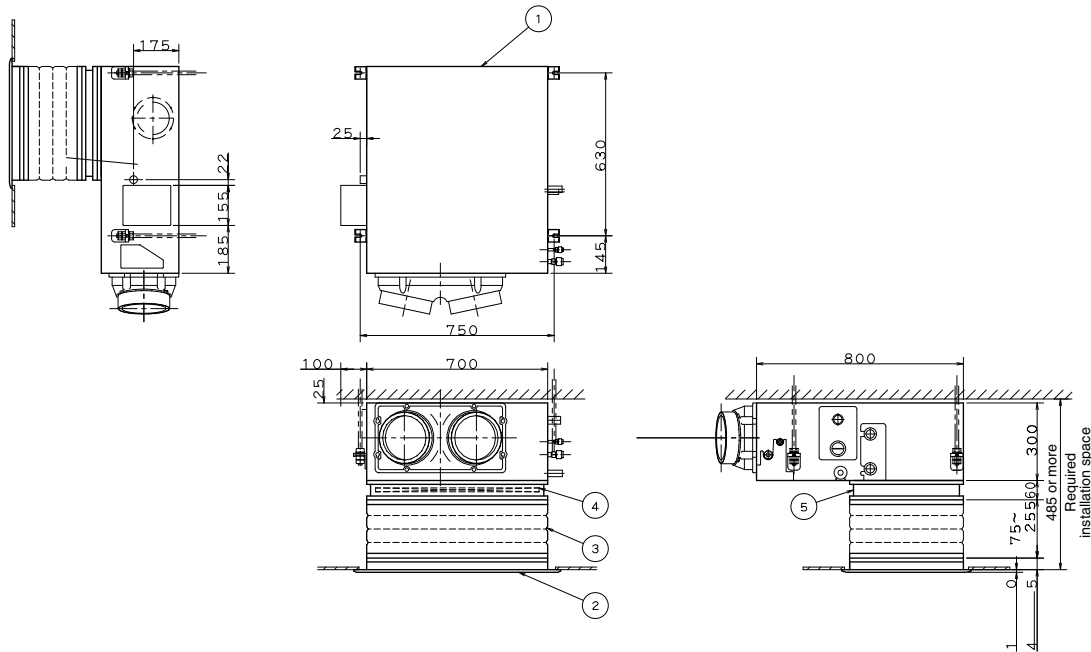


Note)  
1. When optional accessory other than these kits will be built in, refer to the external drawing with optional accessories.  
2. Parts names ㉔~㉖ show optional accessories.

6	Air discharge adaptor	
5	Bottom suction filter chamber	
4	High efficiency filter	
3	Air suction canvas	
2	Suction half panel	
1	Built-in unit body	
Number	Name	Description

JC : DU820-238B

■ FXSQ40・50M



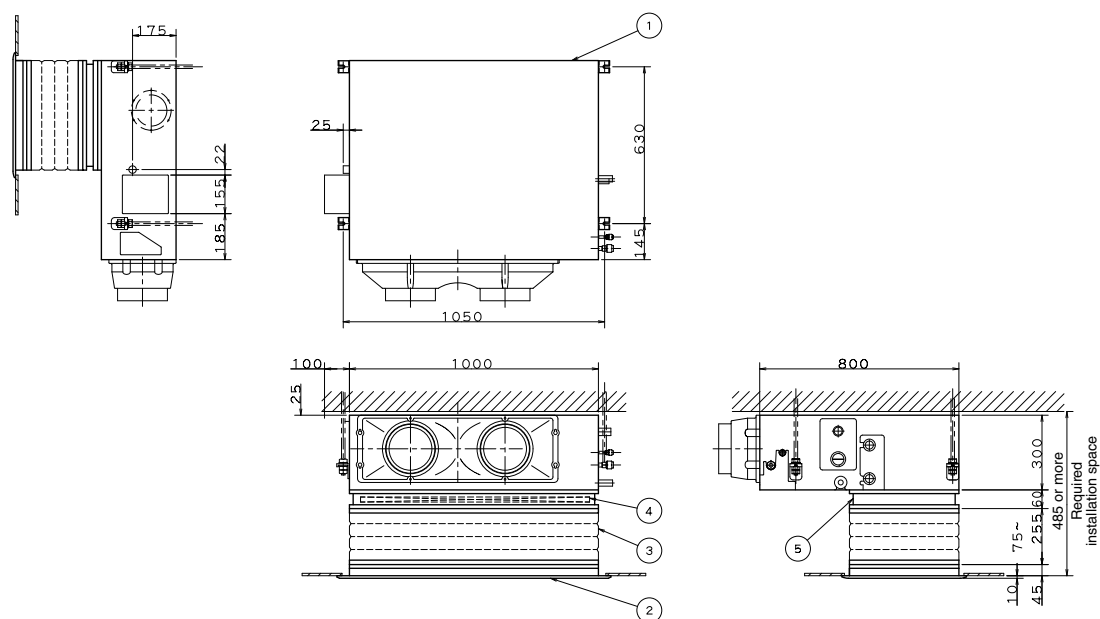
Note)  
1. When optional accessory other than these kits will be built in, refer to the external drawing with optional accessories.  
2. Parts names ㉔~㉖ show optional accessories.

5	Bottom suction filter chamber	
4	High efficiency filter	
3	Air suction canvas	
2	Suction half panel	
1	Built-in Hi type body	
Number	Name	Description

JC : DU823-226E

## High Efficiency Filter

## ■ FXSQ63M



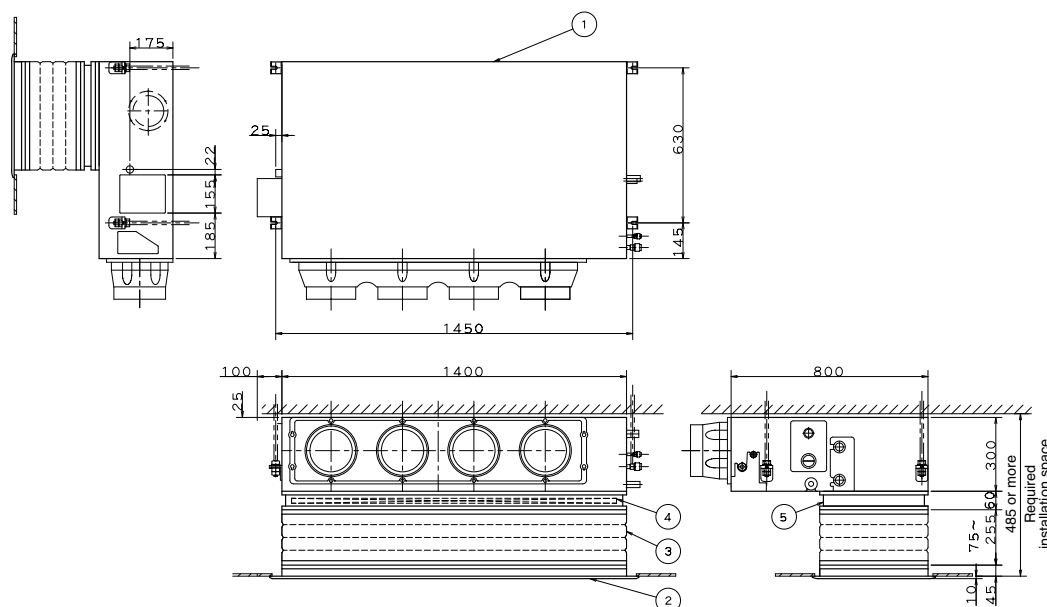
Note)

1. When optional accessory other than these kits will be built in, refer to the external drawing with optional accessories.
2. Parts names ②-⑤ show optional accessories.

5	Bottom suction filter chamber	
4	High efficiency filter	
3	Air suction canvas	
2	Suction half panel	
1	Built-in Hi type body	
Number	Name	Description

JC : DU826-207F

## ■ FXSQ80~125M



Note)

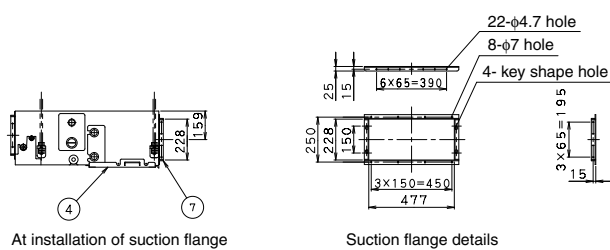
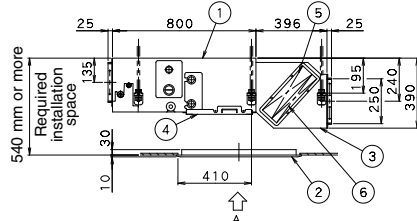
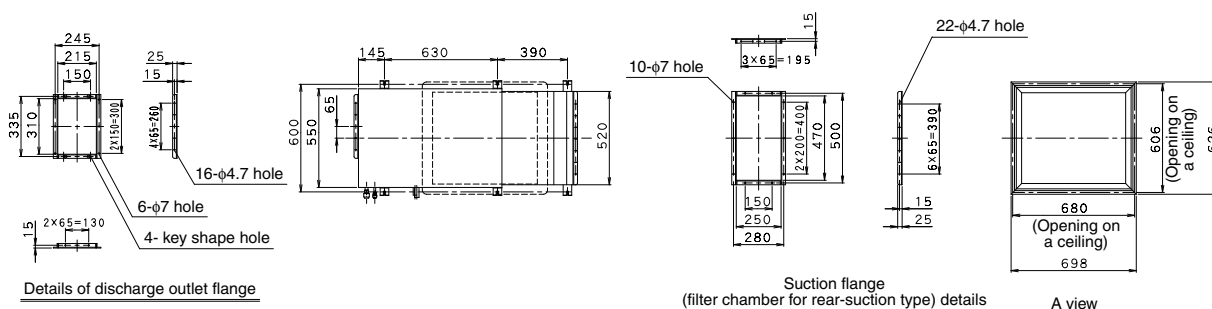
1. When optional accessory other than these kits will be built in, refer to the external drawing with optional accessories.
2. Parts names ②-⑤ show optional accessories.

5	Bottom suction filter chamber	
4	High efficiency filter	
3	Air suction canvas	
2	Suction half panel	
1	Built-in Hi type body	
Number	Name	Description

JC : DU828-215F

## Duct Style Installation

## ■ FXSQ20~32M



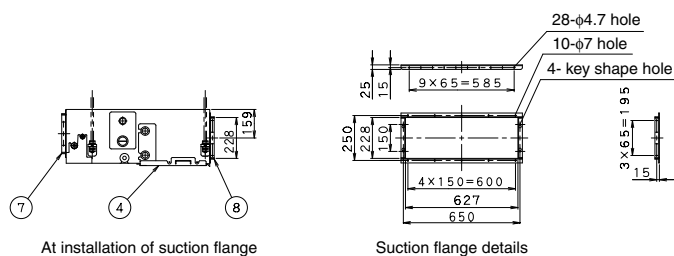
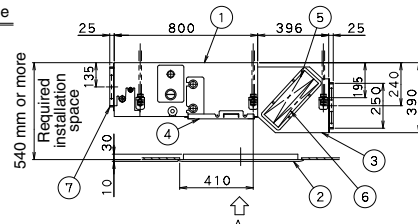
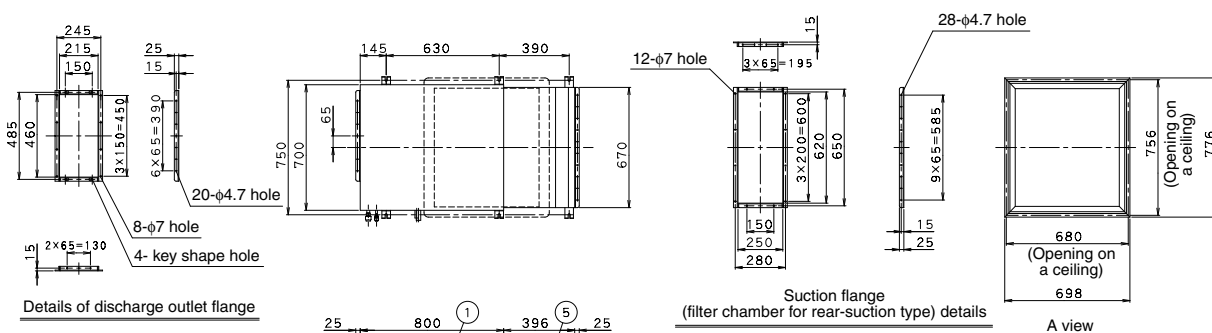
Note)

- When optional accessory other than these kits will be built in, refer to the external drawing with optional accessories.
- Parts names ②~⑦ show optional accessories.

7	Suction inlet flange	
6	Long life filter	
5	High efficiency filter	
4	Rear-suction sealing plate	
3	Rear-suction filter chamber	(with rear-suction sealing plate)
2	Access panel	
1	Built-in unit body	

JC : DU220-248B

## ■ FXSQ40・50M



Note)

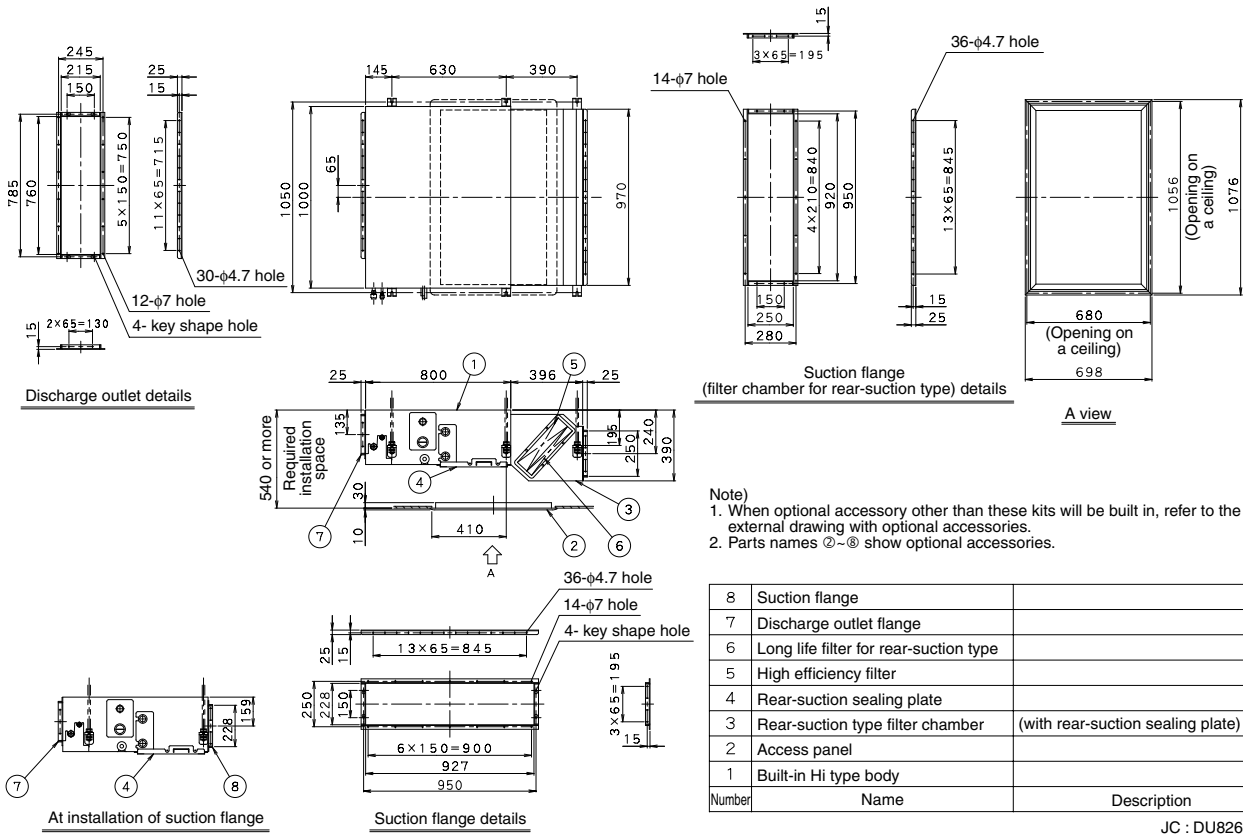
- When optional accessory other than these kits will be built in, refer to the external drawing with optional accessories.
- Parts names ②~⑧ show optional accessories.

8	Suction inlet flange	
7	Suction flange	
6	Long life filter	
5	High efficiency filter	
4	Rear-suction sealing plate	
3	Rear-suction filter chamber	(with rear-suction sealing plate)
2	Access panel	
1	Built-in Hi type body	

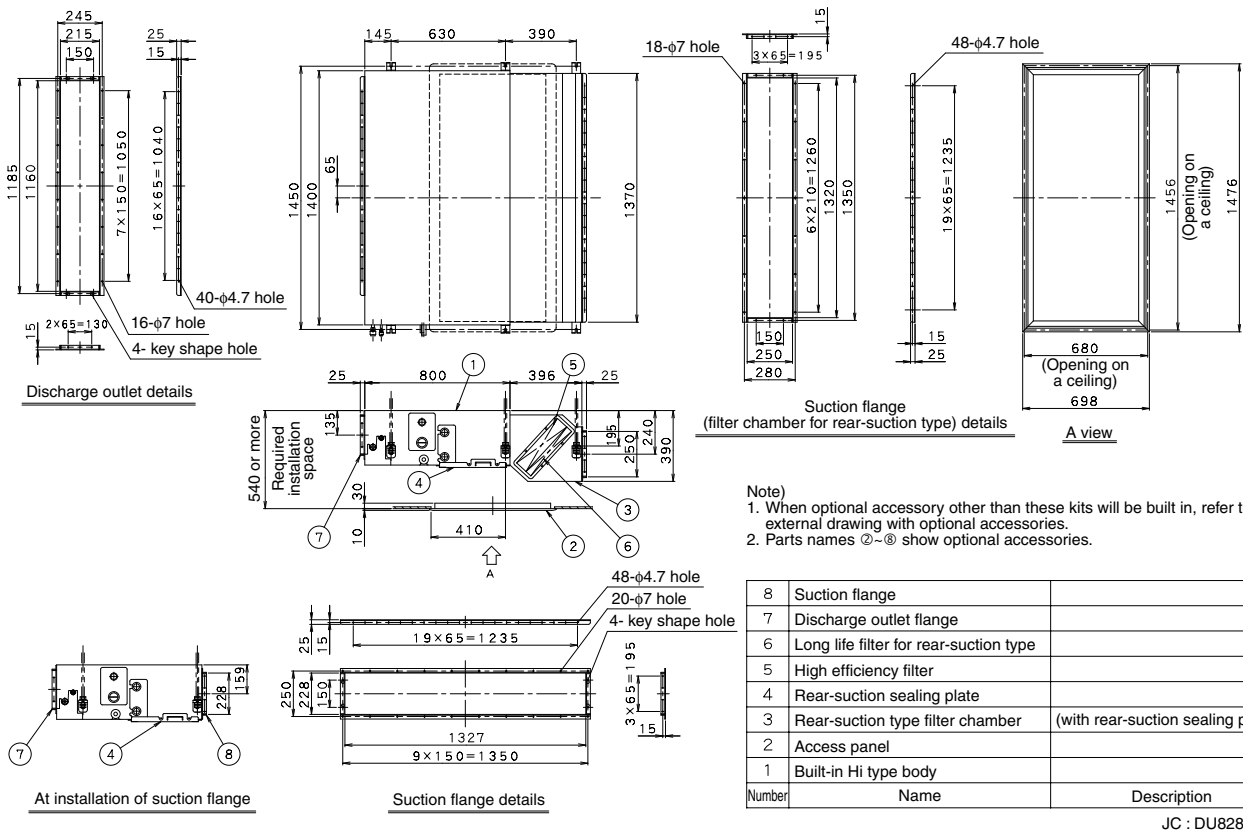
JC : DU425-2115E

## Duct Style Installation

## ■ FXSQ63M



## ■ FXSQ80~125M



# FXMQ-MA

## Ceiling Mounted Duct Type

1. Features .....	214
2. Specifications .....	215
3. Dimensions .....	217
4. Piping Diagrams .....	221
5. Wiring Diagrams .....	222
6. Electric Characteristics .....	224
7. Capacity Tables .....	225
7.1 Cooling Capacity .....	225
8. Fan Performances .....	226
8.1 50Hz .....	226
9. Sound Levels .....	227
10. Installation .....	228
11. Accessories .....	232

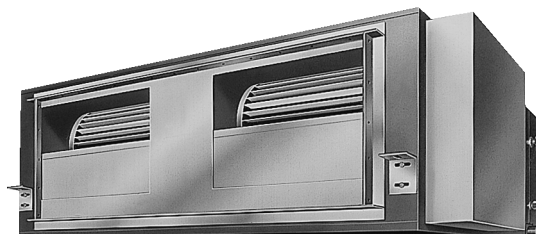


# 1. Features

**Ceiling mounted duct type is newly added to the line-up of the indoor unit for VRV series, which gives you much more flexibility in designing of the air conditioning system to satisfy the needs of individual air-conditioning even in the broad area.**

- High external static pressure allows extensive duct work for flexible applications.

Ceiling mounted duct type	
FXMQ40MA FXMQ50MA FXMQ63MA FXMQ80MA FXMQ100MA FXMQ125MA	FXMQ200MA FXMQ250MA



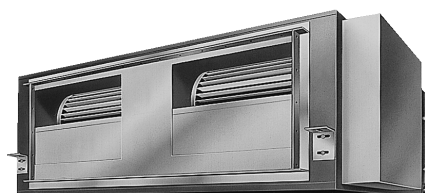
**Wide line-up to increase the flexibility in system designing.**



40~80 type



200 · 250 type



100 · 125 type

## 2. Specifications

### Ceiling Mounted Duct Type

Model			FXMQ40MAVE	FXMQ50MAVE	FXMQ63MAVE	FXMQ80MAVE
*1 Cooling Capacity (19.5°CWB)		kcal/h	4,000	5,000	6,300	8,000
		Btu/h	16,000	19,800	24,900	31,700
		kW	4.7	5.8	7.3	9.3
*2 Cooling Capacity (19.0°CWB)		kW	4.5	5.6	7.1	9.0
Casing			Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
Dimensions: (H×W×D)			mm	390×720×690	390×720×690	390×720×690
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	3×16×2.0	3×16×2.0	3×16×2.0	3×16×2.0
	Face Area	m <sup>2</sup>	0.181	0.181	0.181	0.181
Fan	Model		D11/2D3AB1VE	D11/2D3AB1VE	D11/2D3AB1VE	D11/2D3AA1VE
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	100×1	100×1	100×1	160×1
	Air Flow Rate (H/L)	m <sup>3</sup> /min	14/11.5	14/11.5	14/11.5	19.5/16
		cfm	494/406	494/406	494/406	688/565
	External Static Pressure 50Hz	Pa	157-118 *3	157-118 *3	157-118 *3	157-108 *3
	Drive		Direct Drive	Direct Drive	Direct Drive	Direct Drive
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material			Glass Fiber	Glass Fiber	Glass Fiber	Glass Fiber
Air Filter			*4	*4	*4	*4
Piping Connections	Liquid Pipes	mm	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ9.5 (Flare Connection)	φ9.5 (Flare Connection)
	Gas Pipes	mm	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ15.9 (Flare Connection)	φ15.9 (Flare Connection)
	Drain Pipe	mm	VP25 ( External Dia. 32 ) ( Internal Dia. 25 )	VP25 ( External Dia. 32 ) ( Internal Dia. 25 )	VP25 ( External Dia. 32 ) ( Internal Dia. 25 )	VP25 ( External Dia. 32 ) ( Internal Dia. 25 )
Machine Weight (Mass)			kg	44	44	45
*6 Sound Level (H/L) (220V)			dBA	39/35	39/35	42/38
Safety Devices			Fuse. Thermal Fuse for Fan Motor.	Fuse. Thermal Fuse for Fan Motor.	Fuse. Thermal Fuse for Fan Motor.	Fuse. Thermal Fuse for Fan Motor.
Refrigerant Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Connectable Outdoor Unit			R-410A P Series	R-410A P Series	R-410A P Series	R-410A P Series
Standard Accessories			Operation Manual. Installation Manual. Drain Hose. Clamp Metal. Insulation for Fitting. Sealing Pads. Clamps. Screws.	Operation Manual. Installation Manual. Drain Hose. Clamp Metal. Insulation for Fitting. Sealing Pads. Clamps. Screws.	Operation Manual. Installation Manual. Drain Hose. Clamp Metal. Insulation for Fitting. Sealing Pads. Clamps. Screws.	Operation Manual. Installation Manual. Drain Hose. Clamp Metal. Insulation for Fitting. Sealing Pads. Clamps. Screws.
Drawing No.			C : 3D038814A			

#### Note:

- \*1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.
- \*2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.
- \*3 External static pressure is changeable to change over the connectors inside electrical box, this pressure means "High static pressure-Standard".
- \*4 Air filter is not standard accessory, but please mount it in the duct system of the suction side. Select its colorimetric method (gravity method) 50% or more.
- 5 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- \*6 Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit center. These values are normally somewhat higher during actual operation as a result of ambient conditions.
- 7 Refer to page 224 for Fan Motor Input.

#### Conversion Formulae

$$\begin{aligned} \text{kcal/h} &= \text{kW} \times 860 \\ \text{Btu/h} &= \text{kW} \times 3412 \\ \text{cfm} &= \text{m}^3/\text{min} \times 35.3 \end{aligned}$$

## Ceiling Mounted Duct Type

Model			FXMQ100MAVE	FXMQ125MAVE	FXMQ200MAVE	FXMQ250MAVE
*1 Cooling Capacity (19.5°CWB)	kcal/h		10,000	12,500	19,800	24,800
	Btu/h		39,600	49,500	78,500	98,300
	kW		11.6	14.5	23.0	28.8
*2 Cooling Capacity (19.0°CWB)	kW		11.2	14.0	22.4	28.0
Casing			Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
Dimensions: (H×W×D)			mm	390×1,110×690	470×1,380×1,100	470×1,380×1,100
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	3×16×2.0	3×16×2.0	3×26×2.0	3×26×2.0
	Face Area	m <sup>2</sup>	0.319	0.319	0.68	0.68
Fan	Model		2D11/2D3AG1VE	2D11/2D3AF1VE	D13/4G2DA1×2	D13/4G2DA1×2
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	270×1	430×1	380×2	380×2
	Air Flow Rate (H/L)	m <sup>3</sup> /min	29/23	36/29	58/50	72/62
		cfm	1,024/812	1,271/1,024	2,047/1,765	2,542/2,189
	External Static Pressure 50Hz	Pa	157-98 *3	191-152 *3	221-132 *3	270-147 *3
	Drive		Direct Drive	Direct Drive	Direct Drive	Direct Drive
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material			Glass Fiber	Glass Fiber	Glass Fiber	Glass Fiber
Air Filter			*4	*4	*4	*4
Piping Connections	Liquid Pipes	mm	φ9.5 (Flare Connection)	φ9.5 (Flare Connection)	φ9.5 (Flare Connection)	φ9.5 (Flare Connection)
	Gas Pipes	mm	φ15.9 (Flare Connection)	φ15.9 (Flare Connection)	φ19.1 (Braze Connection)	φ22.2 (Braze Connection)
	Drain Pipe	mm	VP25 ( External Dia. 32 ) ( Internal Dia. 25 )	VP25 ( External Dia. 32 ) ( Internal Dia. 25 )	PS1B	PS1B
Machine Weight (Mass)			kg	63	65	137
*6 Sound Level (H/L) (220V)			dBA	43/39	45/42	48/45
Safety Devices			Fuse. Thermal Fuse for Fan Motor.	Fuse. Thermal Fuse for Fan Motor.	Fuse. Thermal Protector for Fan Motor.	Fuse. Thermal Protector for Fan Motor.
Refrigerant Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Connectable Outdoor Unit			R-410A P Series	R-410A P Series	R-410A P Series	R-410A P Series
Standard Accessories			Operation Manual. Installation Manual. Drain Hose. Clamp Metal. Insulation for Fitting. Sealing Pads. Clamps. Screws.	Operation Manual. Installation Manual. Drain Hose. Clamp Metal. Insulation for Fitting. Sealing Pads. Clamps. Screws.	Operation Manual. Installation Manual. Sealing Pads. Connection Pipes. Screws. Clamps.	Operation Manual. Installation Manual. Sealing Pads. Connection Pipes. Screws. Clamps.
Drawing No.			C : 3D038814A			

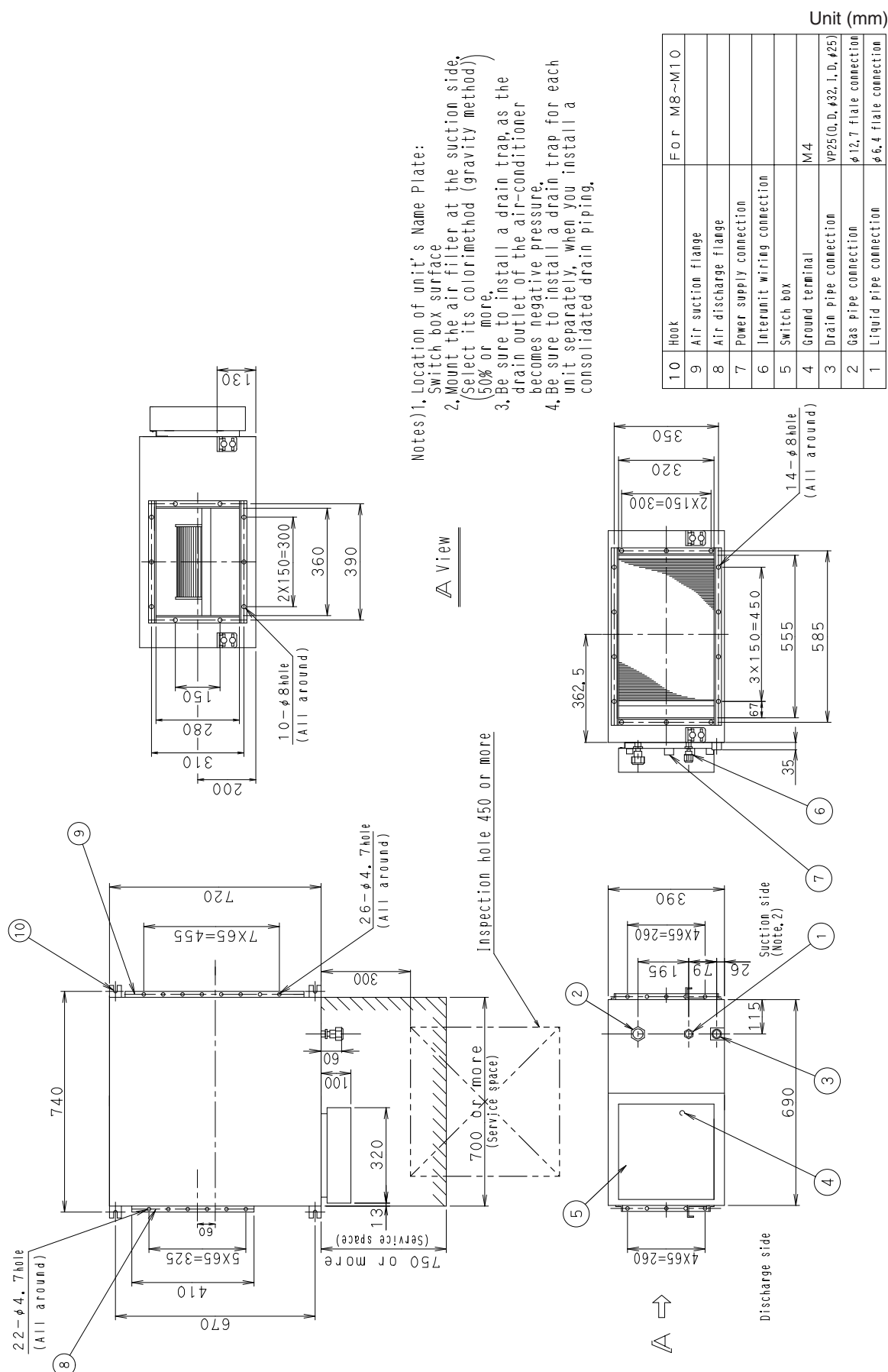
## Note:

- \*1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.
- \*2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.
- \*3 External static pressure is changeable to change over the connectors inside electrical box, this pressure means "High static pressure-Standard".
- \*4 Air filter is not standard accessory, but please mount it in the duct system of the suction side. Select its colorimetric method (gravity method) 50% or more.
- 5 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- \*6 Anechoic chamber conversion value, measured at a point 1.5 m downward from the unit center. These values are normally somewhat higher during actual operation as a result of ambient conditions.
- 7 Refer to page 224 for Fan Motor Input.

Conversion Formulae	
kcal/h=kW×860	
Btu/h=kW×3412	
cfm=m <sup>3</sup> /min×35.3	

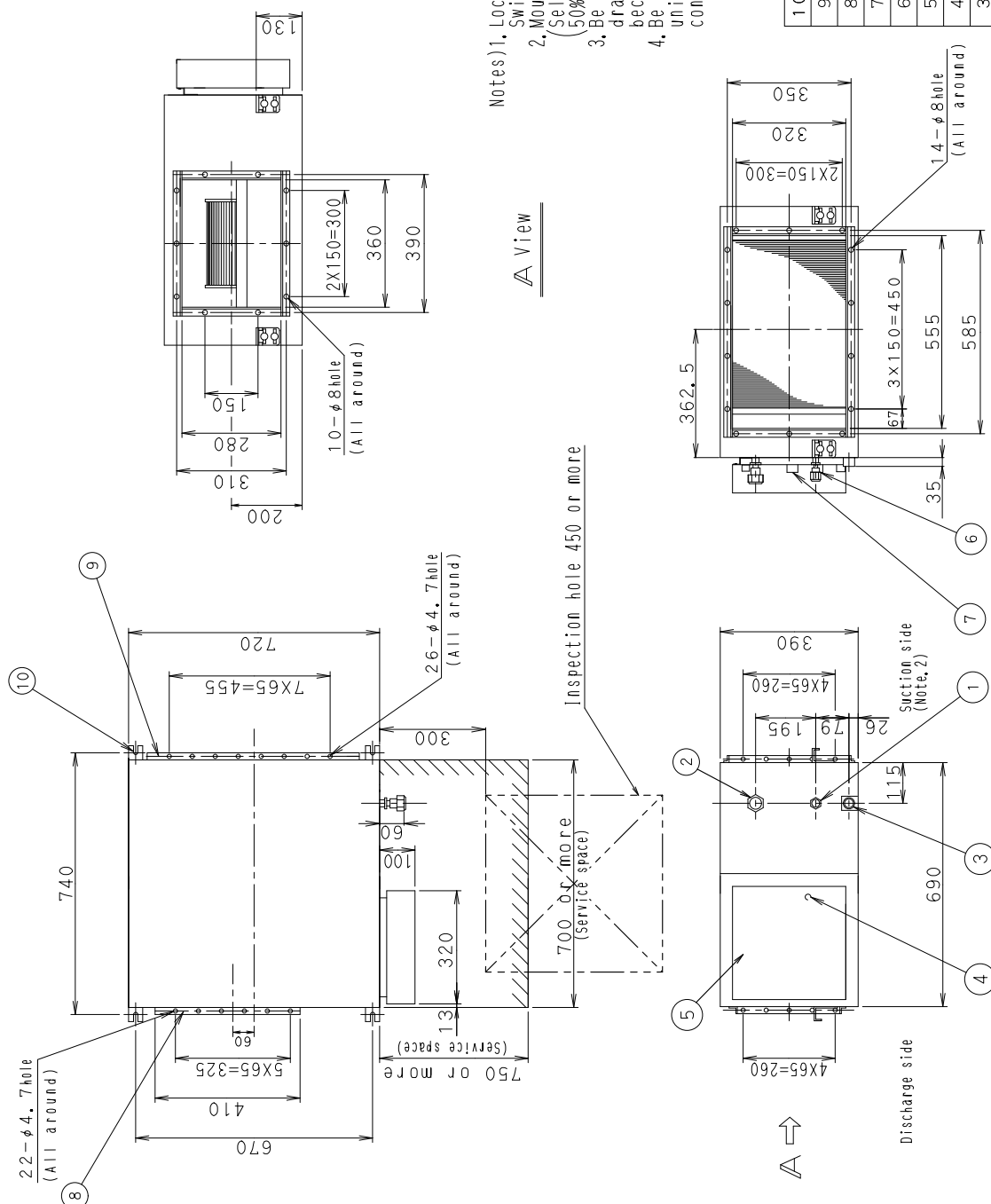
### 3. Dimensions

FXMQ40MA  
FXMQ50MA



3D038848

FXMQ63MA  
FXMQ80MA



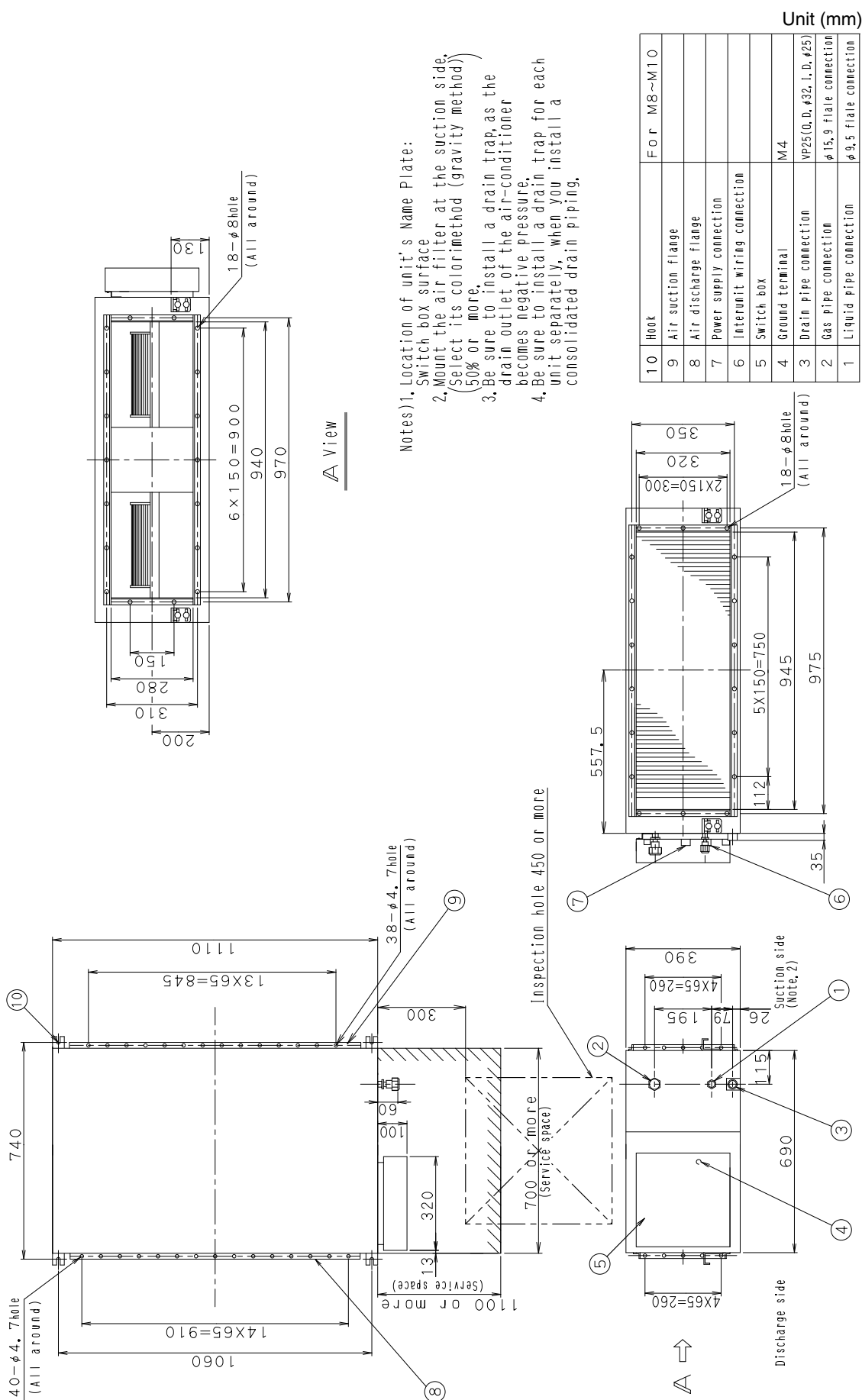
- Notes) 1. Location of unit's Name Plate:  
2. Switch box surface  
3. Mount the air filter at the suction side.  
4. Select its color method (gravity method).  
5. 50% or more.  
6. Be sure to install a drain trap, as the drain outlet of the air-conditioner becomes negative pressure.  
7. Be sure to install a drain trap for each unit separately, when you install a consolidated drain piping.

A View

Unit (mm)

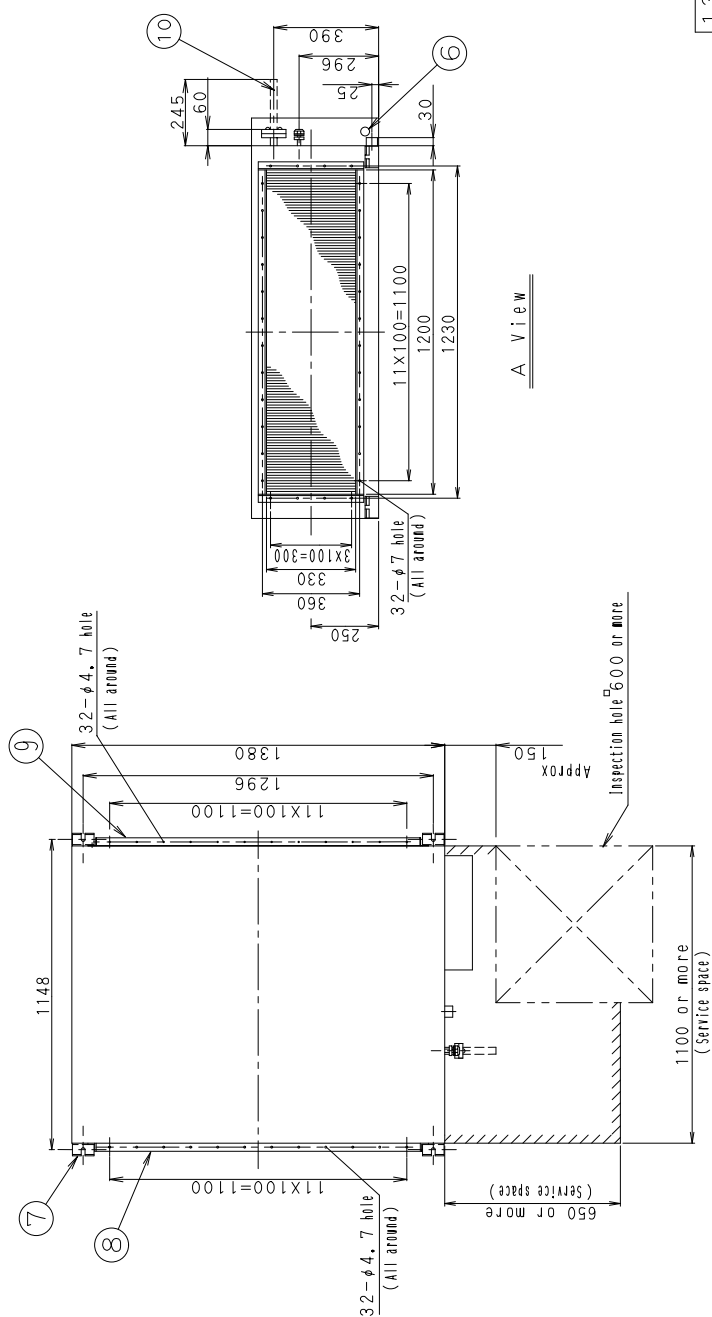
No.	Item	For M8~M10
10	Hook	
9	Air suction flange	
8	Air discharge flange	
7	Power supply connection	
6	Interunit wiring connection	
5	Switch box	
4	Ground terminal	M4
3	Drain pipe connection	VP25(O.D. ø32 I.D. ø25)
2	Gas pipe connection	ø15.9 flange connection
1	Liquid pipe connection	ø9.5 flange connection

3D038849

**FXMQ100MA**  
**FXMQ125MA**


3D038850

**FXMQ200MA**  
**FXMQ250MA**



A view

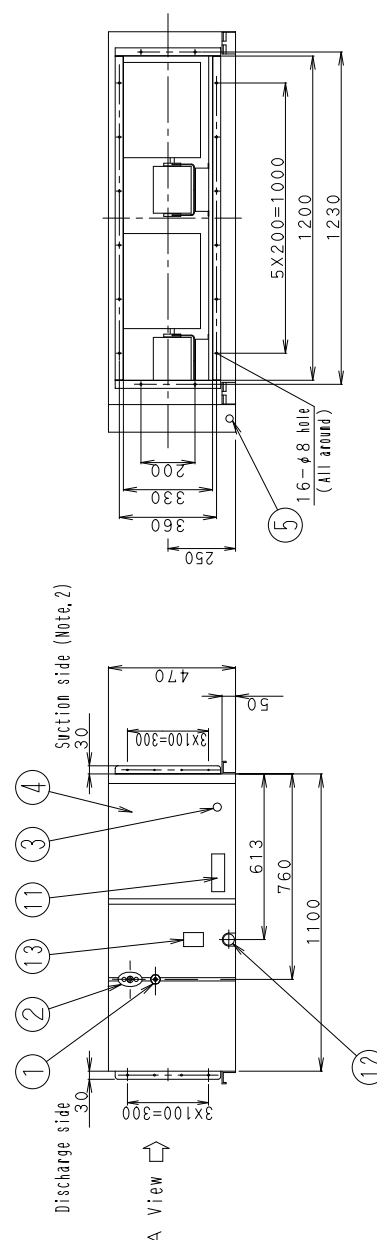
Piping size (Field supply)		
Indoor unit	Gas side	Liquid side
FXMQ200WE	φ 19, 1 attached piping	φ 9, 5
FXMQ250WE	φ 22, 2 attached piping	φ 9, 5

Notes) 1. Location of unit's Name Plates:

2. Mount the air filter at the suction side.  
(Select its color method (gravity method)  
(50% or more).

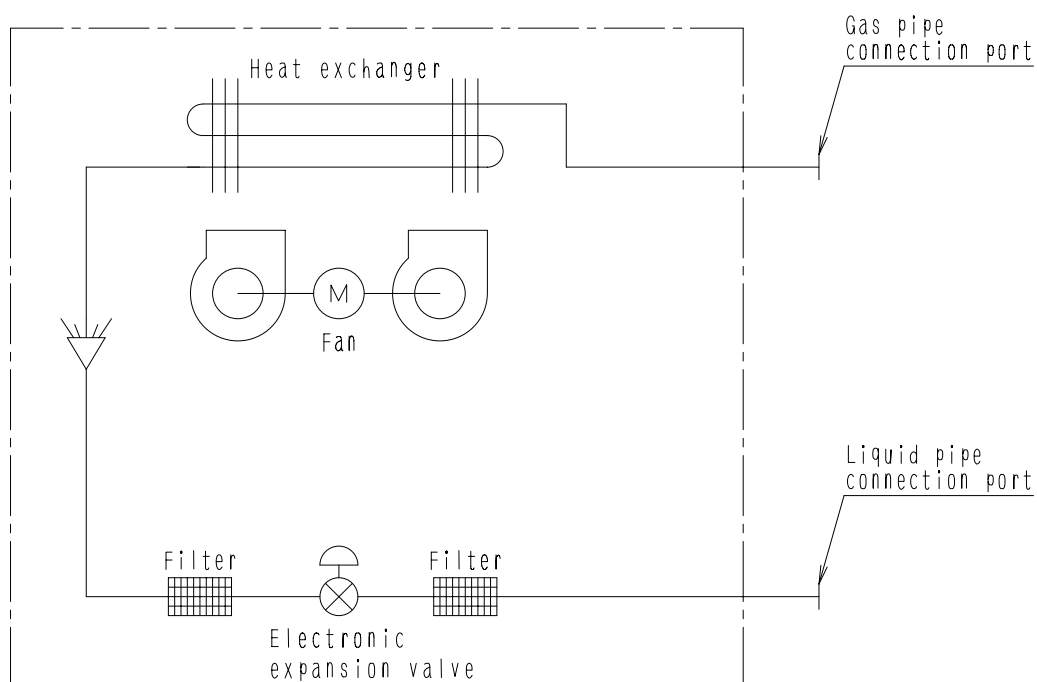
Unit (mm)

13	Water supply port	
12	Drain piping connection	PSJB Internal thread Major dia. $\phi 33, 349$ , Minor dia. $\phi 30, 391$
11	Name plate	
10	Attached piping	Brazing
9	Suction flange	
8	Discharge companion flange	
7	Hook	M10
6	Transmission wiring connection	
5	Power supply wiring connection	
4	Switch box	
3	Ground terminal	M5 (Inside switch box)
2	Gas pipe connection	Attendant piping connection
1	Liquid pipe connection	Flange connection



3D038851

## 4. Piping Diagrams



7

4D034245B

### ■ Refrigerant pipe connection port diameters

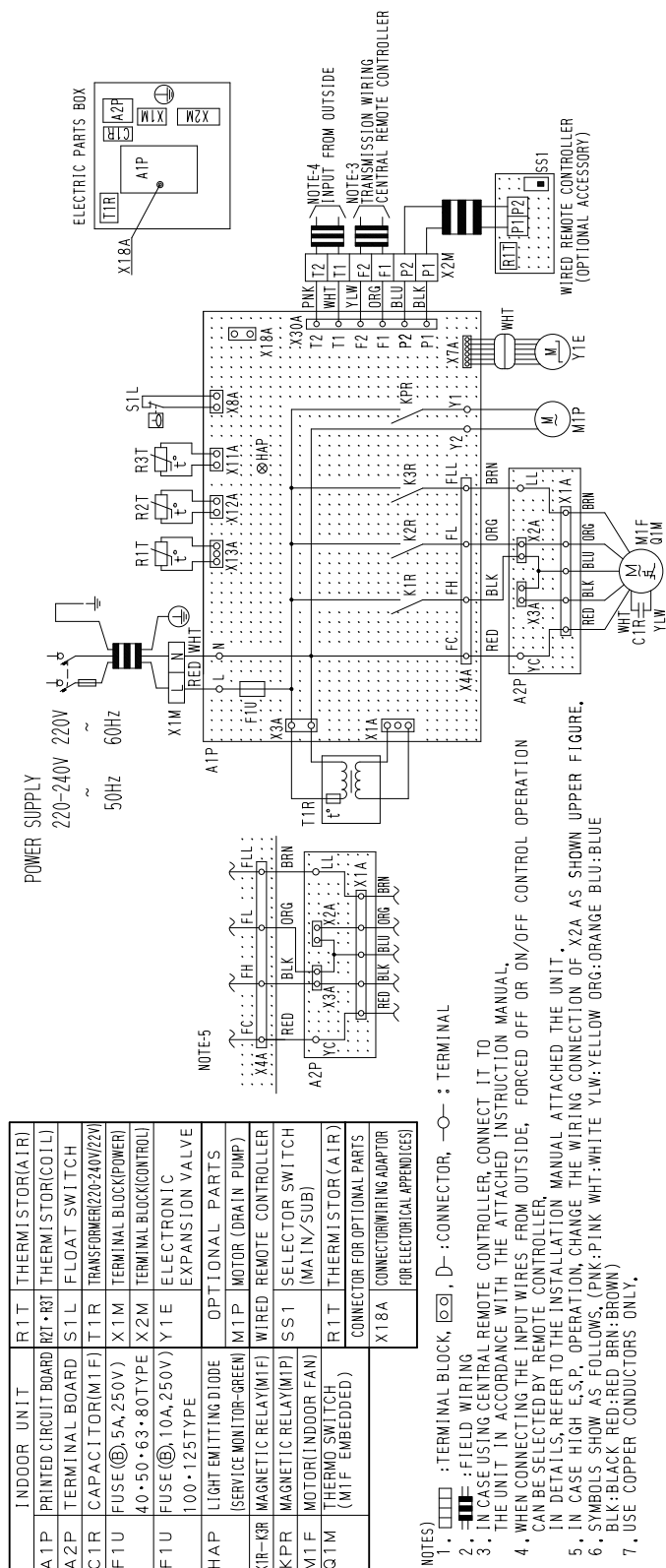
Model	(mm)	
	Gas	Liquid
FXMQ40 · 50MA	φ12.7	φ6.4
FXMQ63 · 80 · 100 · 125MA	φ15.9	φ9.5
FXMQ200MA	φ19.1	
FXMQ250MA	φ22.2	



## 5. Wiring Diagrams

**FXMQ40 · 50 · 63 · 80 · 100 · 125MAVE**

3D039620B



NOTES)

1. ☐ : TERMINAL BLOCK

2. ☒ : FIELD WIRING

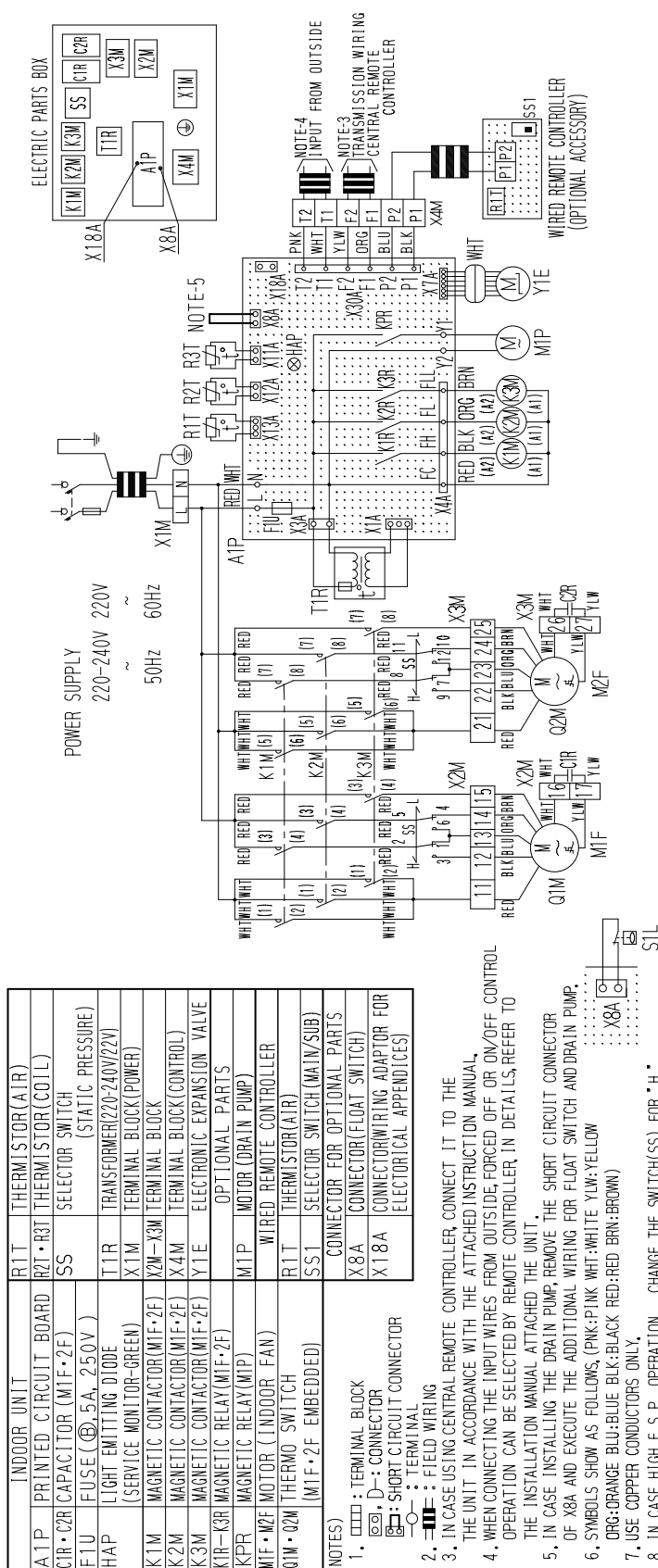
3. IN CASE USING CENTRAL REMOTE CONTROLLER, CONNECT IT TO THE UNIT IN ACCORDANCE WITH THE ATTACHED INSTRUCTION MANUAL.

4. WHEN CONNECTING THE INPUT WIRES FROM OUTSIDE, FORCED OFF OR ON CAN BE SELECTED BY REMOTE CONTROLLER, IN DETAILS REFER TO THE INSTALLATION MANUAL ATTACHED THE UNIT

5. IN CASE HIGH E.S.P. OPERATION, CHANGE THE WIRING CONNECTION OF X2A AS SHOWN UPPER FIGURE.

6. SYMBOLS SHOW AS FOLLOWS. (PINK: PINK WHT: WHITE YLW: YELLOW ORG: ORANGE BLU: BLUE

7. USE COPPER CONDUCTORS ONLY.

**FXMQ200 · 250MAVE**

3D039621B

## 6. Electric Characteristics

Units					Power supply		IFM		Input (W)	
Model	Type	Hz	Volts	Voltage range	MCA	MFA	KW	FLA	Cooling	Heating
FXMQ40・50・63MA	VE	50	220-240	MAX. 264 Min. 198	1.3	15	0.100	1.0	211	211
FXMQ80MA					1.5	15	0.160	1.2	284	284
FXMQ100MA					2.5	15	0.270	2.0	411	411
FXMQ125MA					3.8	15	0.430	3.0	619	619
FXMQ200MA					8.1	15	0.380×2	6.5	1294	1294
FXMQ250MA					9.0	15	0.380×2	7.2	1465	1465

Symbols :

MCA : Min. Circuit Amps (A)  
 MFA : Max. Fuse Amps (See note 5)  
 KW : Fan Motor Rated Output (KW)  
 FLA : Full Load Amps (A)  
 IFM : Indoor Fan Motor

Note :

1. Voltage range

Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits,

2. Maximum allowable voltage unbalance between phases is 2%.

3. MCA/MFA

$$MCA = 1.25 \times FLA$$

$$MFA \leq 4 \times FLA$$

(Next lower standard fuse rating. Min. 15A)

4. Select wire size based on the MCA.

5. Instead of fuse, use Circuit Breaker.

C : 4D040330A

# 7. Capacity Tables

## 7.1 Cooling Capacity

FXMQ-MA

[50Hz]

Unit Size	Outdoor air temp. °CDB	Indoor air temp.												Cooling capacity			
		14.0°CWB				16.0°CWB				18.0°CWB				20.0°CWB			
		TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
100	10.0	7.6	6.7	9.0	7.4	10.5	8.3	11.2	8.3	11.9	8.5	12.4	8.7	13.4	8.7	14.7	8.8
	12.0	7.6	6.7	9.0	7.4	10.5	8.3	11.2	8.3	11.9	8.5	12.4	8.7	13.4	8.7	14.7	8.8
	14.0	7.6	6.7	9.0	7.4	10.5	8.3	11.2	8.3	11.9	8.5	12.4	8.7	13.4	8.7	14.7	8.8
	16.0	7.6	6.7	9.0	7.4	10.5	8.3	11.2	8.3	11.9	8.5	12.4	8.7	13.4	8.7	14.7	8.8
	18.0	7.6	6.7	9.0	7.4	10.5	8.3	11.2	8.3	11.9	8.5	12.4	8.7	13.4	8.7	14.7	8.8
	20.0	7.6	6.7	9.0	7.4	10.5	8.3	11.2	8.3	11.9	8.5	12.4	8.7	13.4	8.7	14.7	8.8
	22.0	7.6	6.7	9.0	7.4	10.5	8.3	11.2	8.3	11.9	8.5	12.4	8.7	13.4	8.7	14.7	8.8
	24.0	7.6	6.7	9.0	7.4	10.5	8.3	11.2	8.3	11.9	8.5	12.4	8.7	13.4	8.7	14.7	8.8
	26.0	7.6	6.7	9.0	7.4	10.5	8.3	11.2	8.3	11.9	8.5	12.4	8.7	13.4	8.7	14.7	8.8
	28.0	7.6	6.7	9.0	7.4	10.5	8.3	11.2	8.3	11.9	8.5	12.4	8.7	13.4	8.7	14.7	8.8
	30.0	7.6	6.7	9.0	7.4	10.5	8.3	11.2	8.3	11.9	8.5	12.4	8.7	13.4	8.7	14.7	8.8
	32.0	7.6	6.7	9.0	7.4	10.5	8.3	11.2	8.3	11.9	8.5	12.4	8.7	13.4	8.7	14.7	8.8
125	10.0	9.5	8.2	11.3	9.1	13.1	10.0	14.0	10.2	14.9	10.4	15.6	10.1	16.9	10.1	18.6	9.9
	12.0	9.5	8.2	11.3	9.1	13.1	10.0	14.0	10.2	14.9	10.4	15.6	10.1	16.9	10.1	18.6	9.9
	14.0	9.5	8.2	11.3	9.1	13.1	10.0	14.0	10.2	14.9	10.4	15.6	10.1	16.9	10.1	18.6	9.9
	16.0	9.5	8.2	11.3	9.1	13.1	10.0	14.0	10.2	14.9	10.4	15.6	10.1	16.9	10.1	18.6	9.9
	18.0	9.5	8.2	11.3	9.1	13.1	10.0	14.0	10.2	14.9	10.4	15.6	10.1	16.9	10.1	18.6	9.9
	20.0	9.5	8.2	11.3	9.1	13.1	10.0	14.0	10.2	14.9	10.4	15.6	10.1	16.9	10.1	18.6	9.9
	22.0	9.5	8.2	11.3	9.1	13.1	10.0	14.0	10.2	14.9	10.4	15.6	10.1	16.9	10.1	18.6	9.9
	24.0	9.5	8.2	11.3	9.1	13.1	10.0	14.0	10.2	14.9	10.4	15.6	10.1	16.9	10.1	18.6	9.9
	26.0	9.5	8.2	11.3	9.1	13.1	10.0	14.0	10.2	14.9	10.4	15.6	10.1	16.9	10.1	18.6	9.9
	28.0	9.5	8.2	11.3	9.1	13.1	10.0	14.0	10.2	14.9	10.4	15.6	10.1	16.9	10.1	18.6	9.9
	30.0	9.5	8.2	11.3	9.1	13.1	10.0	14.0	10.2	14.9	10.4	15.6	10.1	16.9	10.1	18.6	9.9
	32.0	9.5	8.2	11.3	9.1	13.1	10.0	14.0	10.2	14.9	10.4	15.6	10.1	16.9	10.1	18.6	9.9
200	10.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.8	17.0	25.1	17.1	26.6	16.2	28.4	17.6
	12.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.8	17.0	25.1	17.1	26.6	16.2	28.4	17.6
	14.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.8	17.0	25.1	17.1	26.6	16.2	28.4	17.6
	16.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.8	17.0	25.1	17.1	26.6	16.2	28.4	17.6
	18.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.8	17.0	25.1	17.1	26.6	16.2	28.4	17.6
	20.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.8	17.0	25.1	17.1	26.6	16.2	28.4	17.6
	22.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.8	17.0	25.1	17.1	26.6	16.2	28.4	17.6
	24.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.8	17.0	25.1	17.1	26.6	16.2	28.4	17.6
	26.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.8	17.0	25.1	17.1	26.6	16.2	28.4	17.6
	28.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.8	17.0	25.1	17.1	26.6	16.2	28.4	17.6
	30.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.8	17.0	25.1	17.1	26.6	16.2	28.4	17.6
	32.0	15.1	13.4	18.0	14.9	21.0	16.3	22.4	16.8	23.8	17.0	25.1	17.1	26.6	16.2	28.4	17.6
250	10.0	18.9	16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.8	21.2	33.5	22.1	36.3	21.8	39.9	22.9
	12.0	18.9	16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.8	21.2	33.5	22.1	36.3	21.8	39.9	22.9
	14.0	18.9	16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.8	21.2	33.5	22.1	36.3	21.8	39.9	22.9
	16.0	18.9	16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.8	21.2	33.5	22.1	36.3	21.8	39.9	22.9
	18.0	18.9	16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.8	21.2	33.5	22.1	36.3	21.8	39.9	22.9
	20.0	18.9	16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.8	21.2	33.5	22.1	36.3	21.8	39.9	22.9
	22.0	18.9	16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.8	21.2	33.5	22.1	36.3	21.8	39.9	22.9
	24.0	18.9	16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.8	21.2	33.5	22.1	36.3	21.8	39.9	22.9
	26.0	18.9	16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.8	21.2	33.5	22.1	36.3	21.8	39.9	22.9
	28.0	18.9	16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.8	21.2	33.5	22.1	36.3	21.8	39.9	22.9
	30.0	18.9	16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.8	21.2	33.5	22.1	36.3	21.8	39.9	22.9
	32.0	18.9	16.9	22.5	18.5	26.2	20.4	28.0	20.9	29.8	21.2	33.5	22.1	36.3	21.8	39.9	22.9

Total capacity : kW  
Sensible capacity : kW

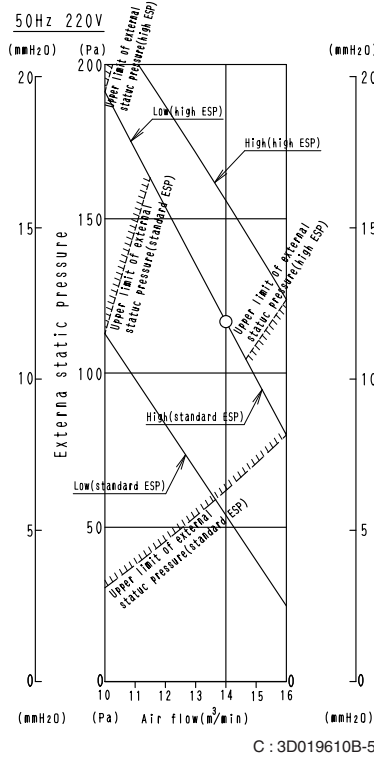


Refer to Outdoor Unit Capacity Tables : on page 411~ 470~, for the actual performance data of each indoor and outdoor unit combination.

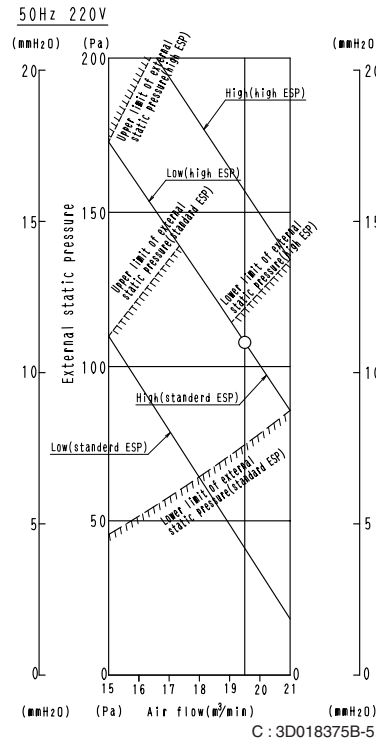
## 8. Fan Performances

### 8.1 50Hz

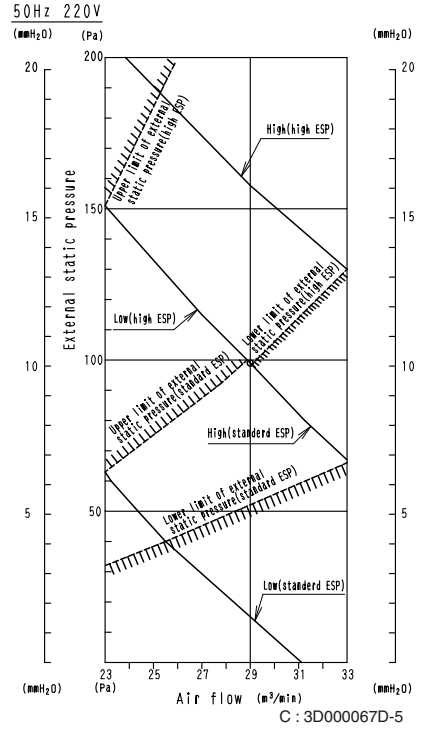
FXMQ40 · 50 · 63MA



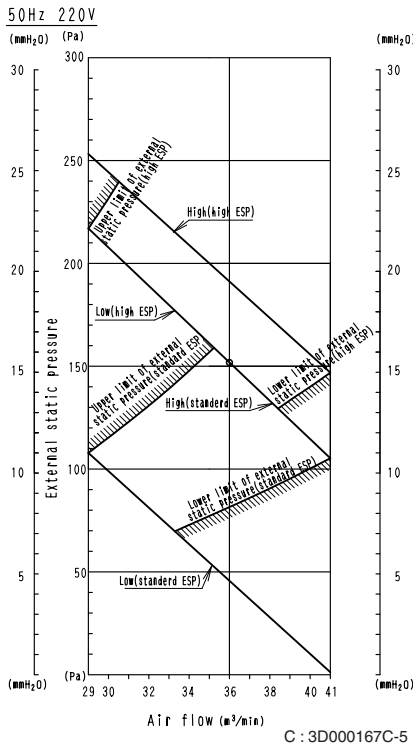
FXMQ80MA



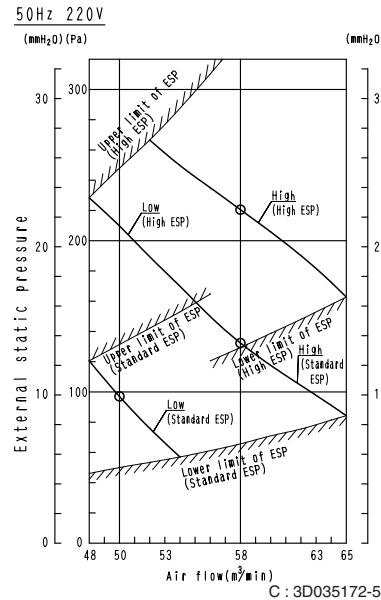
FXMQ100MA



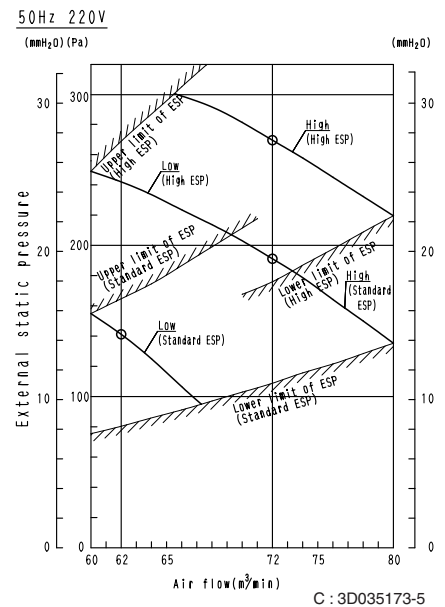
FXMQ125MA



FXMQ200MA



FXMQ250MA

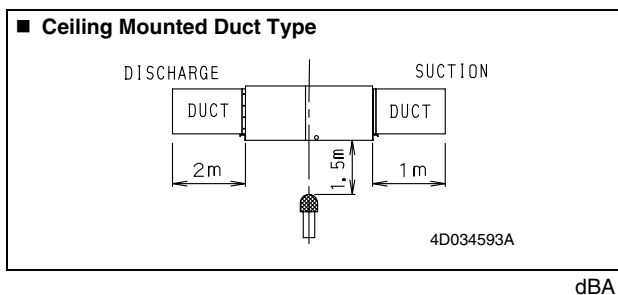


#### Note:

1. The remote controller can be used to switch between "high" and "low".
2. The air flow is set to "standard" before leaving the factory. It is possible to switch between "standard ESP" and "high ESP" by changing the switch in the indoor unit electrical box.

## 9. Sound Levels

### Overall



#### Note:

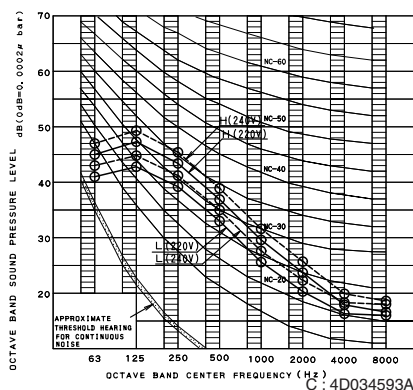
1. The operating conditions are assumed to be standard (JIS conditions).
2. These operating values were obtained in a dead room (conversion values).  
Sound level will vary depending on a range of factors such as the construction (acoustic absorption coefficient) of the particular room in which the equipments installed.

Model	220V, 50Hz		240V, 50Hz	
	H	L	H	L
FXMQ40MA FXMQ50MA FXMQ63MA	39	35	41	37
FXMQ80MA	42	38	44	40
FXMQ100MA	43	39	45	41
FXMQ125MA	45	42	47	44
FXMQ200MA FXMQ250MA	48	45	49	46

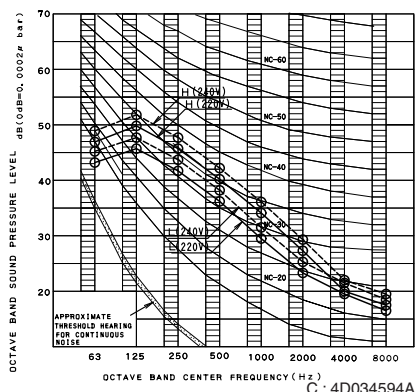
### Octave Band Level

- — ○ 220V 50Hz  
○ - - - ○ 240V 50Hz

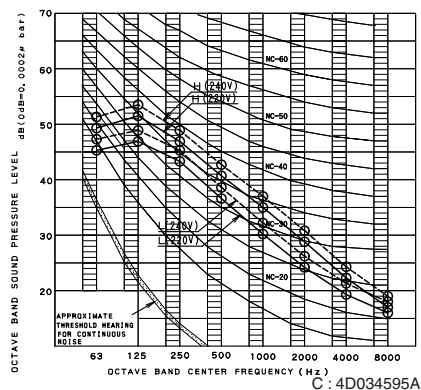
FXMQ40 · 50 · 63MAVE



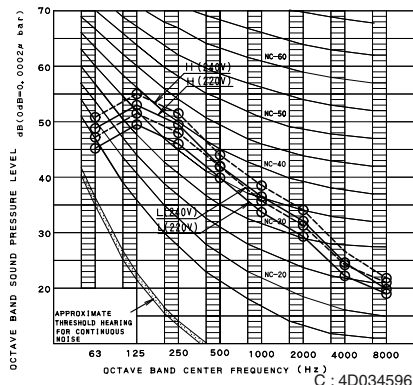
FXMQ80MAVE



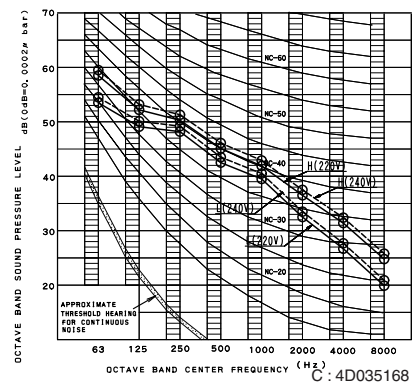
FXMQ100MAVE



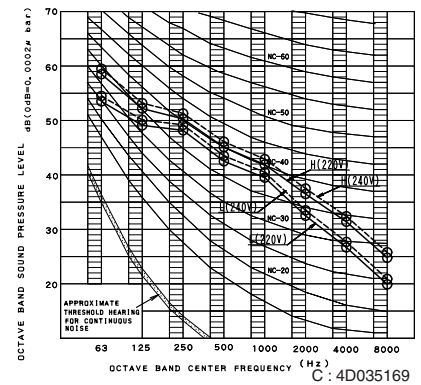
FXMQ125MAVE



FXMQ200MAVE

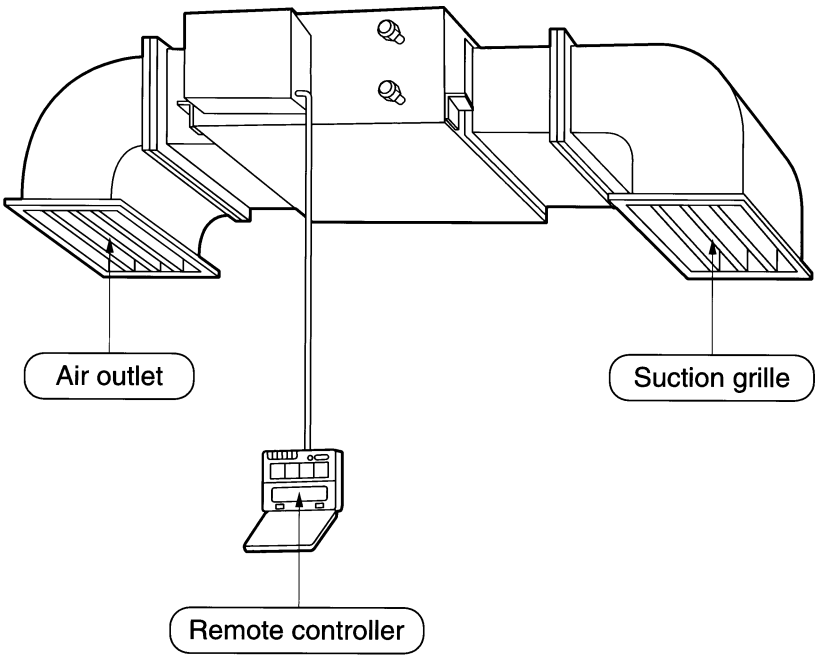


FXMQ250MAVE



# 10. Installation

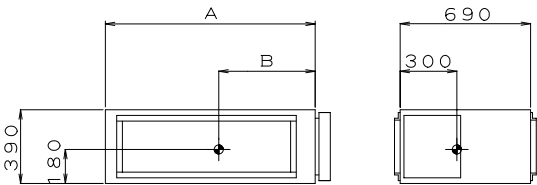
## Installation Example



3P086155-2B

## Center of Gravity FXMQ40~125MA

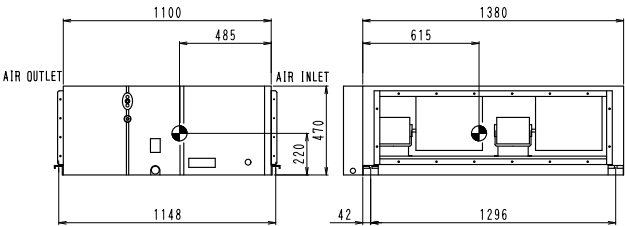
Unit (mm)



	A	B
FXMQ40・50・63・80MAVE	720	290
FXMQ100・125MAVE	1110	510

C : 4D040333

## FXMQ200・250MA



C : 4D035171

## Service Space

Please attach additional thermal insulation material to the unit body when it is believed that the relative humidity in the ceiling exceeds 80%. Use glass wool, polyethylene foam, or similar with a thickness of 10 mm or more as thermal insulation material.

- (1) Select an installation site where the following conditions are fulfilled and that meets with your customer's approval.
  - In the upper space (including the back of the ceiling) of the indoor unit where there is no possible dripping of water from the refrigerant pipe, drain pipe, water pipe, etc.
  - Where optimum air distribution can be ensured.
  - Where nothing blocks the air passage.
  - Where condensate can be properly drained.
  - If supporting structural members are not strong enough to take the unit's weight, the unit could fall out of place and cause serious injury.
  - Where the false ceiling is not noticeably on an incline.
  - Where there is no risk of flammable gas leakage.
  - Where sufficient clearance for maintenance and service can be ensured. **(Refer to Fig. 1)**
  - Where piping between indoor and outdoor units is possible within the allowable limit. (Refer to the installation manual of the outdoor unit.)

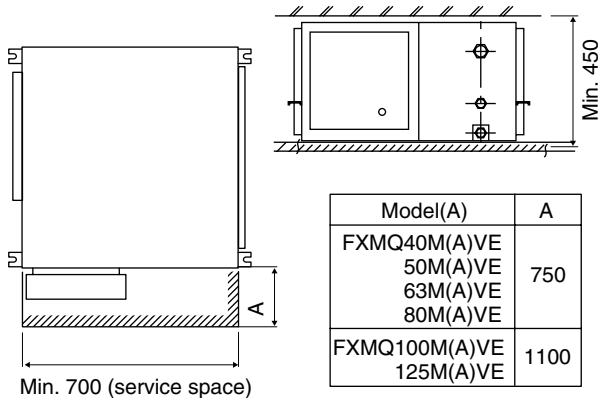


### CAUTION

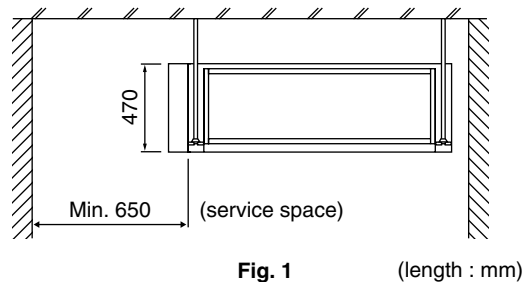
- Install the indoor and outdoor units, power supply wiring and connecting wires at least 1 meter away from televisions or radios in order to prevent image interference or noise. (Depending on the radio waves, a distance of 1 meter may not be sufficient enough to eliminate the noise.)

- (2) Use suspension bolts for installation. Check whether the ceiling is strong enough to support the weight of the unit or not. If there is a risk, reinforce the ceiling before installing the unit.

〈FXMQ40 · 50 · 63 · 80 · 100 · 125M(A)VE〉



〈FXMQ200 · 250M(A)VE〉



### Note:

Above figure means minimum value. Please keep these value at least.

C : 3P086156-6U

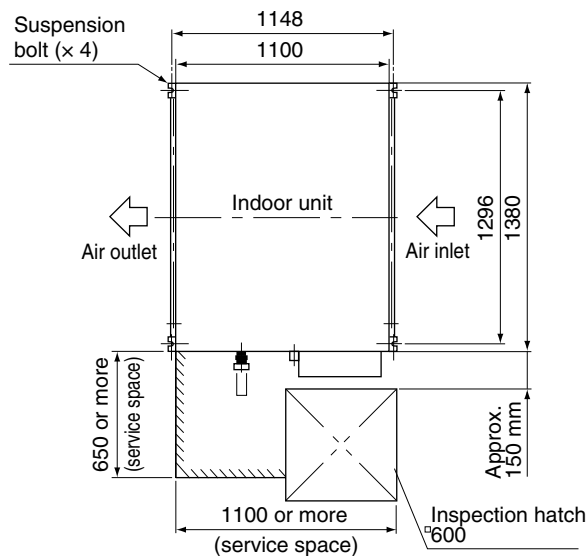
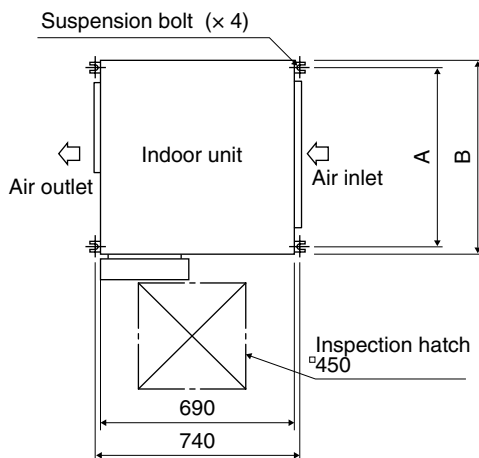


## Bolt Pitch

(1) Relative positions of indoor unit and suspension bolt. (Refer to Fig. 2)

〈FXMQ40 · 50 · 63 · 80 · 100 · 125M(A)VE〉

〈FXMQ200 · 250M(A)VE〉



Model	A	B
FXMQ40M(A)VE 50M(A)VE 63M(A)VE 80M(A)VE	670	720
FXMQ100M(A)VE 125M(A)VE	1060	1110

Fig. 2

(length : mm)

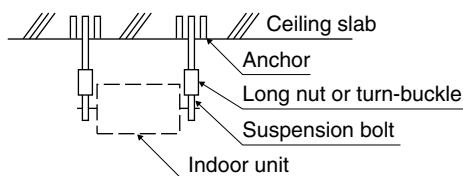
(2) Install a canvass duct to the air discharge outlet and air inlet so that vibration from the machine body isn't transmitted to the duct or ceiling.

You should also apply acoustic (insulation material) to the inside of the duct, and vibration insulation rubber to the suspension bolts.

(3) Install suspension bolts. (Use bolts of 10 mm diameter.)

- Install the equipment where supporting structures are strong enough to bear the equipment's weight. Use embedded inserts or anchor bolts with new buildings and hole-in-anchors with old buildings.

〈 Installation example 〉



Note) All the above parts are field supplied.

C : 3P086156-6U

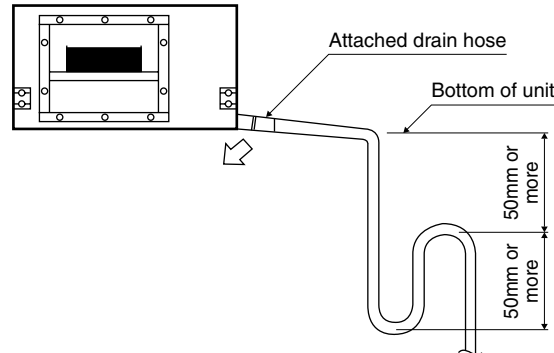
## Drain Piping Work

«Rig the drain pipe as shown below and take measures against condensation. Improperly rigged piping could lead to leaks and eventually wet furniture and belongings.»

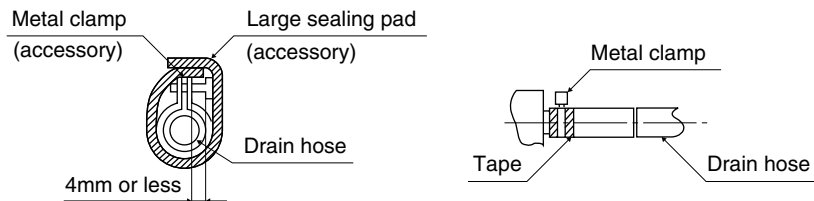
«Insulate the drain hose inside the building.»

(1) Carry out the drain piping.

### FXMQ40-125MAVE



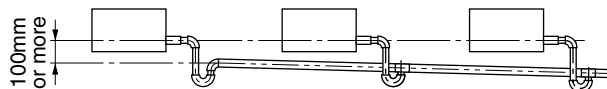
- Keep piping as short as possible and slope it downwards so that air may not remain trapped inside the pipe.
- Keep pipe size equal to or greater than that of the connecting pipe (Vinyl pipe of 25 mm nominal diameter and 32 mm outer diameter).
- Use the attached drain hose and clamp. Tighten the clamp firmly.
- Insulate the clamp metal with the sealing pad.



- There is negative pressure inside the unit relative to atmospheric pressure when the unit is running, so be sure to provide drain flap on the drain outlet. (See the figure)
- In order to prevent foreign matter from building up inside the piping, you should avoid curves as much as possible, and arrange so the trap can be cleaned.

### NOTE

- If converging multiple drain pipes, install according to the procedure shown below. (Install a drain trap for each indoor unit.)



### FXMQ200 · 250MAVE

- A drain trap need not be installed.
- The diameter of the piping is the same as that of the connecting pipe (PS1B), and should be kept equal to or greater than that of the connecting pipe.

(2) After piping work is finished, check drainage flows smoothly.

### FXMQ40-125MAVE

- Add approximately 1 liter of water slowly from the air inlet and check drainage flow.

### FXMQ200 · 250MAVE

- Open the water supply port, add approximately 1 liter of water slowly into the drain pan and check drainage flow.





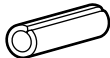


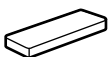


### CAUTION

- Drain piping connections  
Do not connect the drain piping directly to sewage pipes that smell of ammonia. The ammonia in the sewage might enter the indoor unit through the drain pipes and corrode the heat exchanger.


# 11. Accessories

## Standard Accessories

### FXMQ40~125MA

Name	Metal clamp	Drain hose	Insulation for fitting	Sealing pad	Clamp	Screws for duct flanges	<div>(Other)</div> <ul style="list-style-type: none"><li>• Operation manual</li><li>• Installation manual</li><li>• Washers (8 pcs.)</li></ul>			
Quantity	1 pc.	1 pc.	1 each.	1 each.	6 pcs.	As described in table below				
Shape			<div> for liquid pipe</div> <div> for gas pipe</div>	<div> Large</div> <div> Small</div>		<div></div> <table><tr><td>FXMQ40・50・63・80M(A)VE</td><td>16</td></tr><tr><td>FXMQ100・125M(A)VE</td><td>28</td></tr></table>		FXMQ40・50・63・80M(A)VE	16	FXMQ100・125M(A)VE
FXMQ40・50・63・80M(A)VE	16									
FXMQ100・125M(A)VE	28									

### FXMQ200・250MA

Name	Attached piping (1)	(Other) • Operation manual • Installation manual • Screws for flange connection (M5) (48 pcs.) • Insulation material (for hanger)(2 pcs.) • Washers (8 pcs.) • Clamps (2 pcs.) • Hexagon head bolt for pipe flange (M10) (2 pcs.) • Spring washer for pipe flange (M10) (2 pcs.)
Quantity	1 set	
Shape		

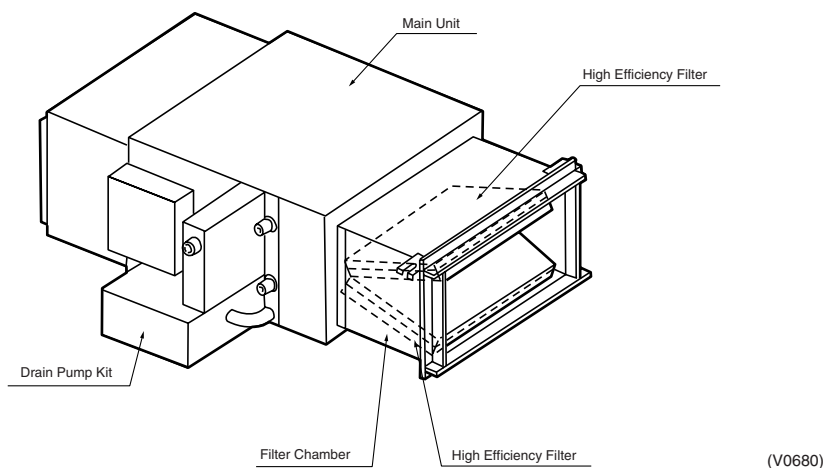
C : 3P086156-6U

## Optional Accessories (For Unit)

Type		FXMQ40MA	FXMQ50MA	FXMQ63MA	FXMQ80MA	FXMQ100MA	FXMQ125MA	FXMQ200MA	FXMQ250MA
Drain pump kit		KDU-30L125VE						KDU30L250VE	
High efficiency filter	65%	KAFP372A80				KAFP372A160		KAFJ372L280	
	90%	KAFP373A80				KAFP373A160		KAFJ373L280	
Filter chamber		KDDFP37A80				KDDFP37A160		KDJ3705L280	
Long life replacement filter		KAFP371A80				KAFP371A160		KAFJ371L280	

3D034598B

## Optional Accessories (For Controls) : Refer to P.561



## High Efficiency Filter Specification

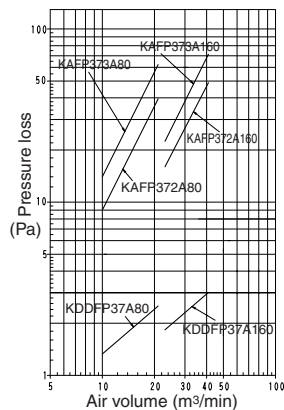
Model	65% type						90% type					
Items	KAFP372A80		KAFP372A160		KAFJ372L280		KAFP373A80		KAFP373A160		KAFJ373L280	
Filter Chamber	KDDFP37A80		KDDFP37A160		KDJ3705L280		KDDFP37A80		KDDFP37A160		KDJ3705L280	
Dimension (W×D×T) (mm)	355×305×44		550×305×44		684×445×60		355×305×44		550×305×44		684×445×60	
Average Dust Collection Efficiency (%)	Colorimetric method 65%						Colorimetric method 90%					
Initial Pressure Loss (Pa)	18	35	26	38	27	42	28	54	36	56	29	45
Final Pressure Loss (Pa)	98						98					
Filter	Non-woven fabric of synthetic fiber						Non-woven fabric of synthetic fiber					
Life Time (h)	2500 hours (dust density 0.15mg/m³)						1800 hours (dust density 0.15mg/m³)					
Seats Structured	2		2		2		2		2		2	
Applicable Models	40 Class	50-63-80 Class	100 Class	125 Class	200-250 Class		40 Class	50-63-80 Class	100 Class	125 Class	200-250 Class	

### Note:

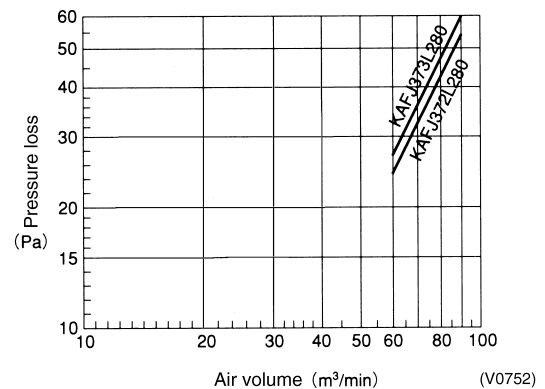
The filter chamber is separately required when the high efficiency filter will be installed.

### Characteristics of filter

■ KAFP372A80, KAFP372A160, KAFP373A80,  
KAFP373A160, KDDFP37A80, KDDFP37A160

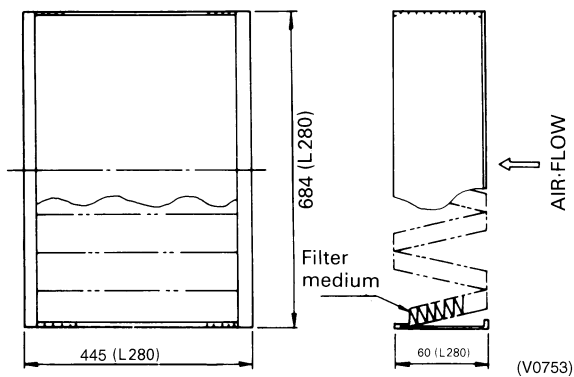


■ KAFJ372L280, KAFJ373L280

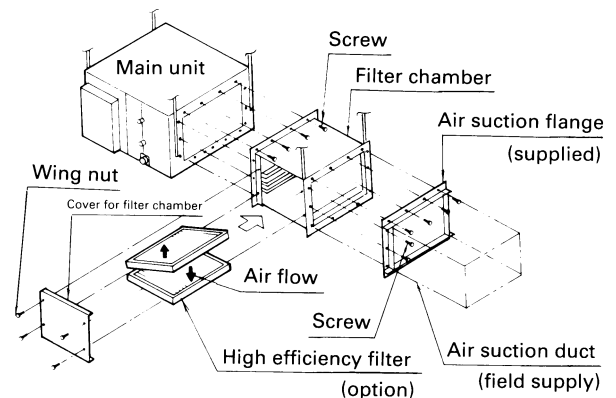


### Dimensions of filter

■ KAFJ372L280, KAFJ373L280



### Installation



(V0754)

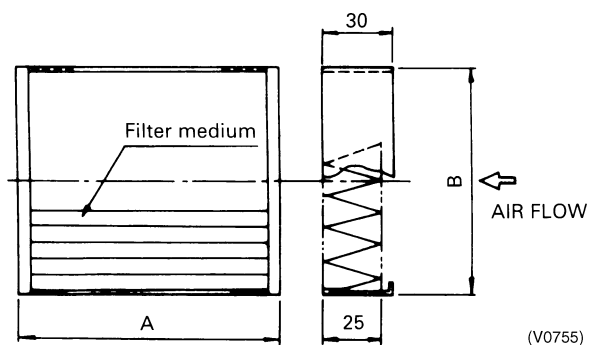
- Meet the airflow direction and arrow mark putting on the High efficiency filter.
- It is impossible to be built in with the air cleaning unit together.

## Long Life Replacement Filter

### Specifications

Item	Model	KAFP371A80	KAFP371A160	KAFJ371L280
Filter Chamber for Bottom Suction		KDDFP37A80	KDDFP37A160	KDJ3705L280
Dimensions (W×D×T) mm		358.5×305×25	553.5×305×25	684×445×30
Average Efficiency (%)		50% (Gravity method)		
Pressure Loss (Pa)	Initial	7	8	9.8 (1mmH <sub>2</sub> O)
	Final	49 (5mmH <sub>2</sub> O)		
Material		Mildew Proof Resin Net		
Number Required per Unit		2	2	2
Life Time (h)		2,500 h (dust particle concentration at 0.15mg/m <sup>3</sup> )		
Applicable Model		40-50-63-80 Class	100-125 Class	200-250 Class

### Dimensions



Model	A×B	Quantity
KAFP371A80	305×25	2
KAFP371A160	305×25	2
KAFJ371L280	684×445	2

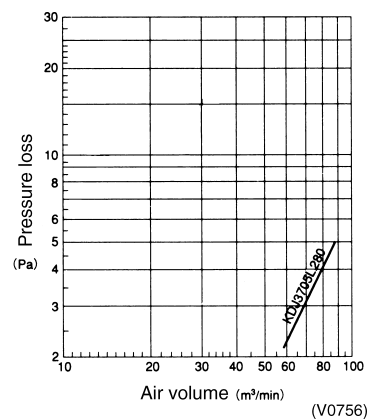
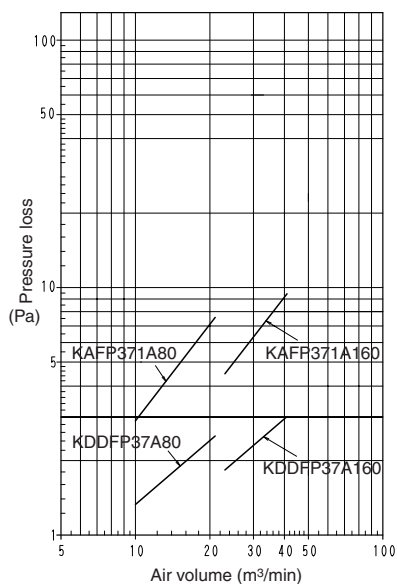
### Note:

The filter chamber is required when the long life filter will be installed.

### Characteristics of filter

■ KAFP371A80, KAFP371A160, KDDFP37A80, KDDFP37A160

■ KDJ3705L280



## Drain Pump Kit

### Specification

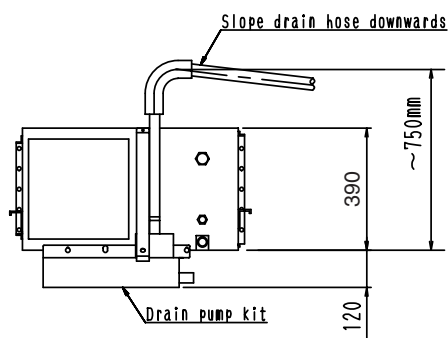
Items	Model	KDU-30L125VE	KDU30L250VE
Power Supply		Single phase 220-240V/220V 50Hz	
Power Consumption (W)		12/11 (50Hz)	19/17 (50Hz)
Drain-up Lift (mm)		Standard drain outlet of the unit +300~+750	Standard drain outlet of the unit +197~+447
Drain Outlet		VP25 (Internal diameter $\phi 25$ , external diameter $\phi 32$ )	
Safety Device		Float switch	
Weight (kg)		5.8	10
Applied Models		40 · 50 · 63 · 80 · 100 · 125 Class	200 · 250 Class

### Precaution at use

1. When this kit will be used with the natural evaporation pan type humidifier together, the piping of unit's drain and humidifier's drain can be used in common.
2. Be sure to do test run (cooling) to make sure the drain flows out.
3. Prohibit providing a drain trap when the drain pump kit will be mounted.

### Installation Space

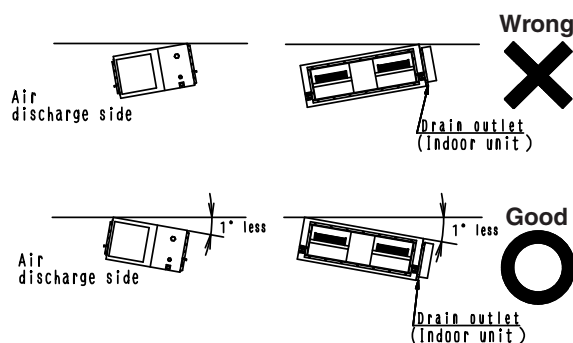
#### KDU-30L125VE



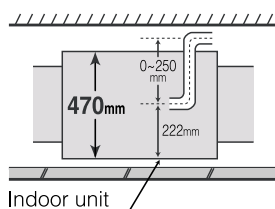
Provide a inspection hatch in a position which makes it easy to service the indoor unit and drain pump kit.  
(See the service space for the indoor unit)  
Refer to the installation manual provided with the indoor unit.

If the drain pump kit has already been installed, note the following points when installing the indoor unit.

- Do not install the indoor unit on an incline against drainage flow (away from the drain outlet). This can lead to water leaks.

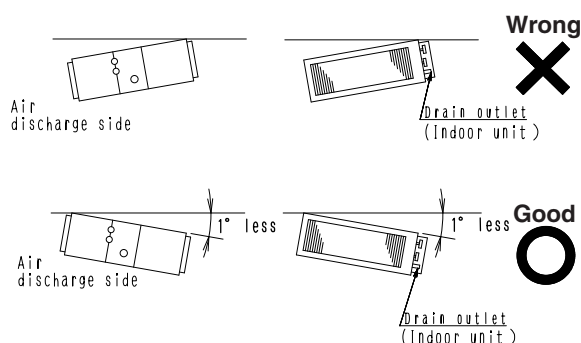


#### KDU30L250VE



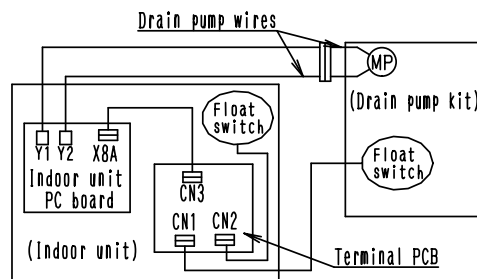
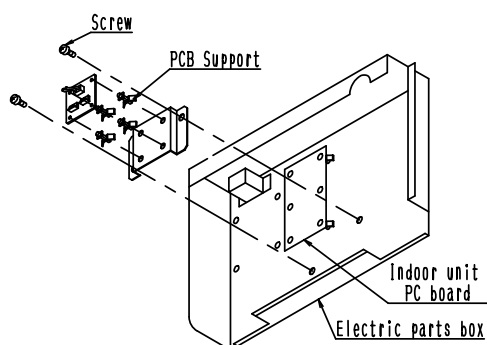
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- Do not install the indoor unit on an incline against drainage flow (away from the drain outlet). This can lead to water leaks.

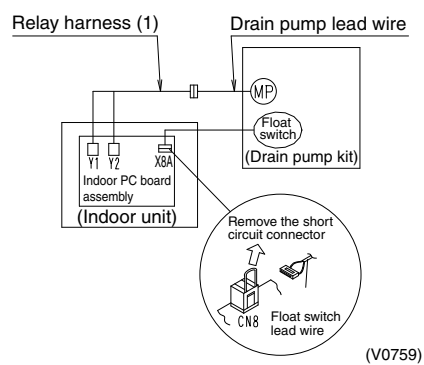
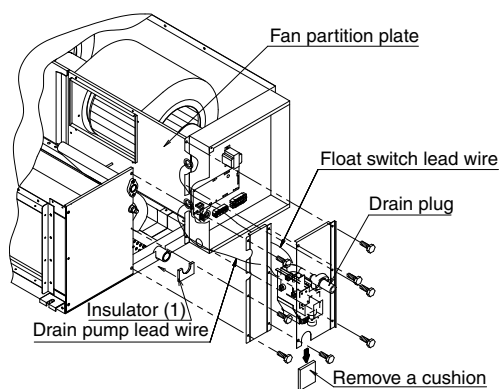


## Internal Wiring Method

## ■ KDU-30L125VE



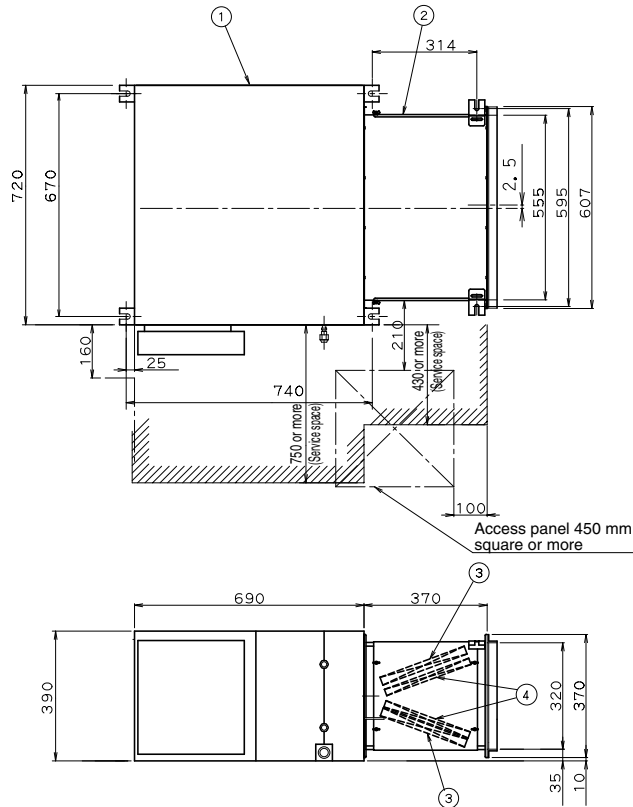
## ■ KDU30L250VE



Dimensions with the Optional Accessories

High efficiency filter (Long life filter)

■ FXMQ40~80MA

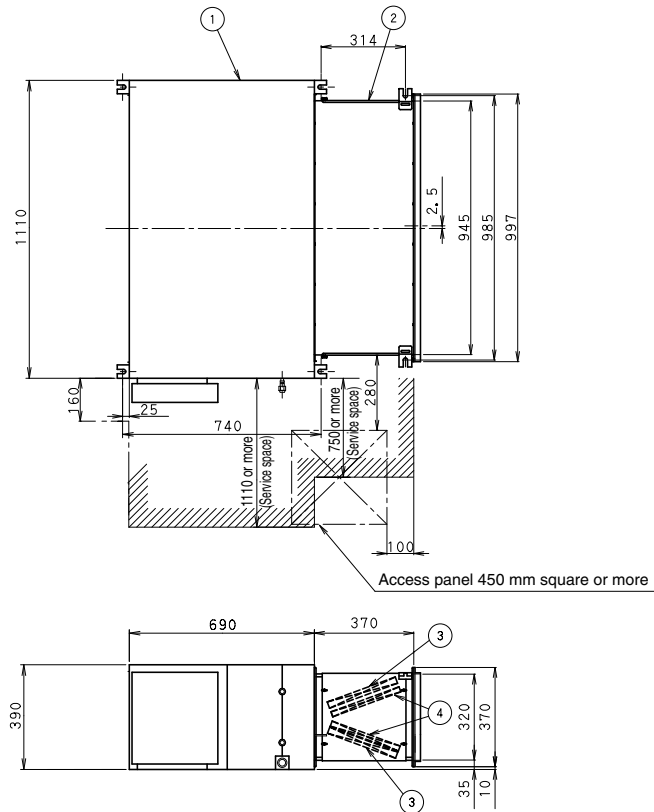


- Note)
1. Be sure to provide an air filter in the suction air duct (with dust collection efficiency by more than 50% in the weight method.)
  2. Be sure to install a drain trap in the drain piping because the outlet of drain will fall to negative pressure.
  3. when a central drain system will be applied, each indoor unit should have a drain trap individually.

4	Long life filter	
3	High efficiency filter	
2	Filter chamber	
1	Ceiling mounted duct type 's body	
Number	Name	Description

JC : DU824-202N

■ FXMQ100・125MA



- Note)
1. Be sure to provide an air filter in the suction air duct (with dust collection efficiency by more than 50% in the weight method.)
  2. Be sure to install a drain trap in the drain piping because the outlet of drain will fall to negative pressure.
  3. when a central drain system will be applied, each indoor unit should have a drain trap individually.

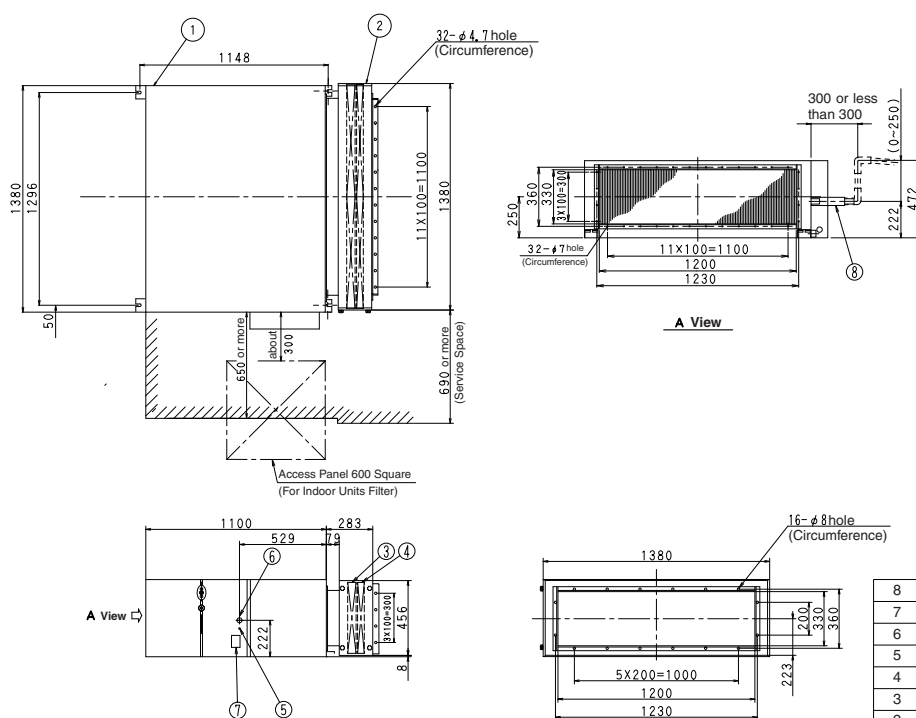
4	Long life filter	
3	High efficiency filter	
2	Filter chamber	
1	Ceiling mounted duct type 's body	
Number	Name	Description

JC : DU827-244N



**Drain pump kit, High efficiency filter, Long life filter**

■ FXMQ200 · 250MA



8	Drain hose	Attached to Drain pump kit
7	Water inlet	
6	Drain piping connection	VP25(O.D.φ32,I.D.φ25)
5	Drain pump kit	Built in a body
4	Long life filter	
3	High efficiency filter	
2	Filter chamber	
1	Ceiling mounted duct type's body	
Number	Name	Description

JC : 3D011124G

# FXHQ-MA

## Ceiling Suspended Type

1. Features .....	240
2. Specifications .....	241
3. Dimensions .....	242
4. Piping Diagrams .....	245
5. Wiring Diagrams .....	246
6. Electric Characteristics .....	247
7. Capacity Tables .....	248
7.1 Cooling Capacity .....	248
8. Sound Levels .....	249
9. Installation .....	250
10. Accessories .....	253

# 1. Features

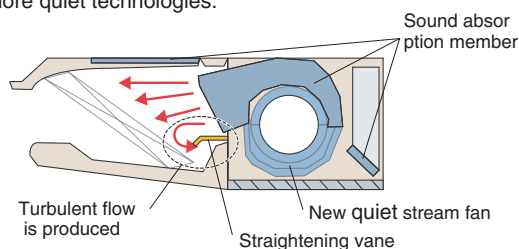
## External Appearance



## Slim body with quieter and wider air flow

### ●Adoption of newly designed QUIET STREAM FAN

Uses the new quiet stream fan and many more quiet technologies.



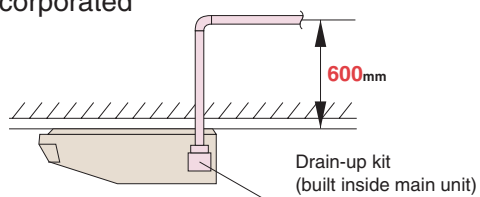
### ●Low operating sound

(dB(A))

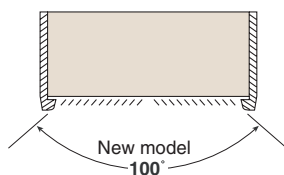
Class	32	63	100
Operating sound (H/L)	36/31	39/34	45/37

### ●Installation is easy

- Drain-up kit (optional) can be easily incorporated



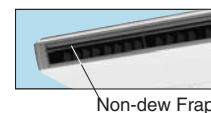
### ●Wide air discharge openings produce a spreading 100° air flow



### ●Maintenance is easy

- New Non-dew Frap with no implanted

Bristle-free Frap minimizes contamination and makes cleaning simpler.



- Easy to clean flat design
- Maintenance is easier because everything can be performed from below the unit
- A long-life filter (maintenance free up to one year) is equipped as standard

## 2. Specifications

### Ceiling Suspended Type

Model			FXHQ32MAVE	FXHQ63MAVE	FXHQ100MAVE
*1 Cooling Capacity (19.5°CWB)		kcal/h	3,200	6,300	10,000
		Btu/h	12,600	24,900	39,600
		kW	3.7	7.3	11.6
*2 Cooling Capacity (19.0°CWB)		kW	3.6	7.1	11.2
Casing Color			White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)
Dimensions: (H×W×D)		mm	195×960×680	195×1,160×680	195×1,400×680
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	2×12×1.75	3×12×1.75	3×12×1.75
	Face Area	m²	0.182	0.233	0.293
Fan	Model		3D12K1AA1	4D12K1AA1	3D12K2AA1
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	62×1	62×1	130×1
	Air Flow Rate (H/L)	m³/min	12/10	17.5/14	25/19.5
		cfm	424/353	618/494	883/688
	Drive		Direct Drive	Direct Drive	Direct Drive
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material			Glass Wool	Glass Wool	Glass Wool
Air Filter			Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)
Piping Connections	Liquid Pipes	mm	φ6.4 (Flare Connection)	φ9.5 (Flare Connection)	φ9.5 (Flare Connection)
	Gas Pipes	mm	φ12.7 (Flare Connection)	φ15.9 (Flare Connection)	φ15.9 (Flare Connection)
	Drain Pipe	mm	VP20 (External Dia. 26 Internal Dia. 20)	VP20 (External Dia. 26 Internal Dia. 20)	VP20 (External Dia. 26 Internal Dia. 20)
Machine Weight (Mass)		kg	24	28	33
*4 Sound Level (H/L) (220-240V)		dBA	36/31	39/34	45/37
Safety Devices			Fuse. Thermal Protector for Fan Motor.	Fuse. Thermal Protector for Fan Motor.	Fuse. Thermal Protector for Fan Motor.
Refrigerant Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Connectable Outdoor Unit			R-410A P Series	R-410A P Series	R-410A P Series
Standard Accessories			Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Insulation for Fitting. Clamps. Washers.	Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Insulation for Fitting. Clamps. Washers.	Operation Manual. Installation Manual. Paper Pattern for Installation. Drain Hose. Clamp Metal. Insulation for Fitting. Clamps. Washers.
Drawing No.			C : 3D038815A		

#### Note:

- \*1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.  
 \*2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.  
 \*3 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.  
 \*4 Anechoic chamber conversion value, measured at a point 1 m in front of the unit and 1 m downward. During actual operation, these values are normally somewhat higher as a result of ambient conditions.  
 5 Refer to page 247 for Fan Motor Input.

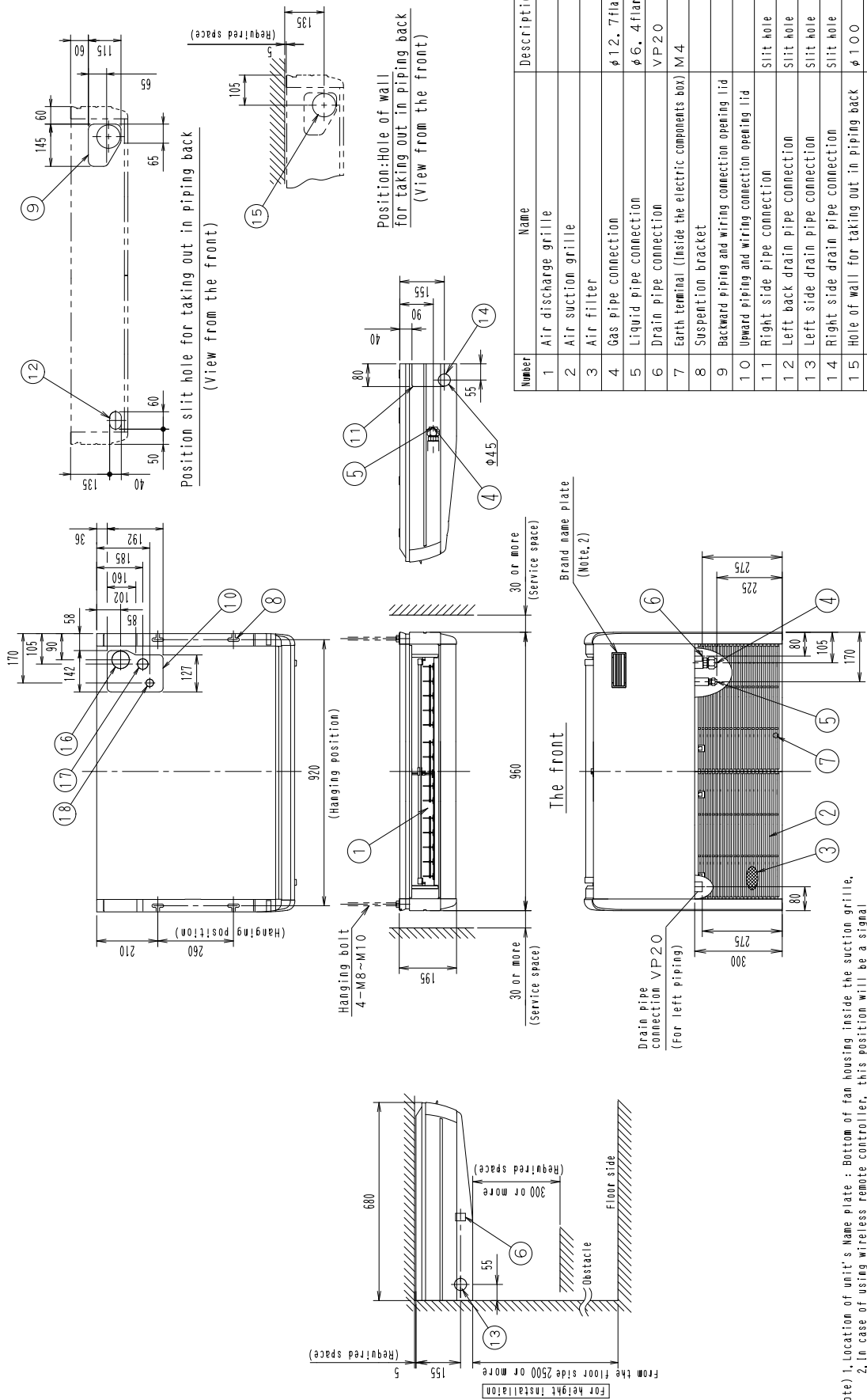
#### Conversion Formulae

kcal/h=kW×860  
 Btu/h=kW×3412  
 cfm=m<sup>3</sup>/min×35.3

3. Dimensions

FXHQ32MA

Unit (mm)



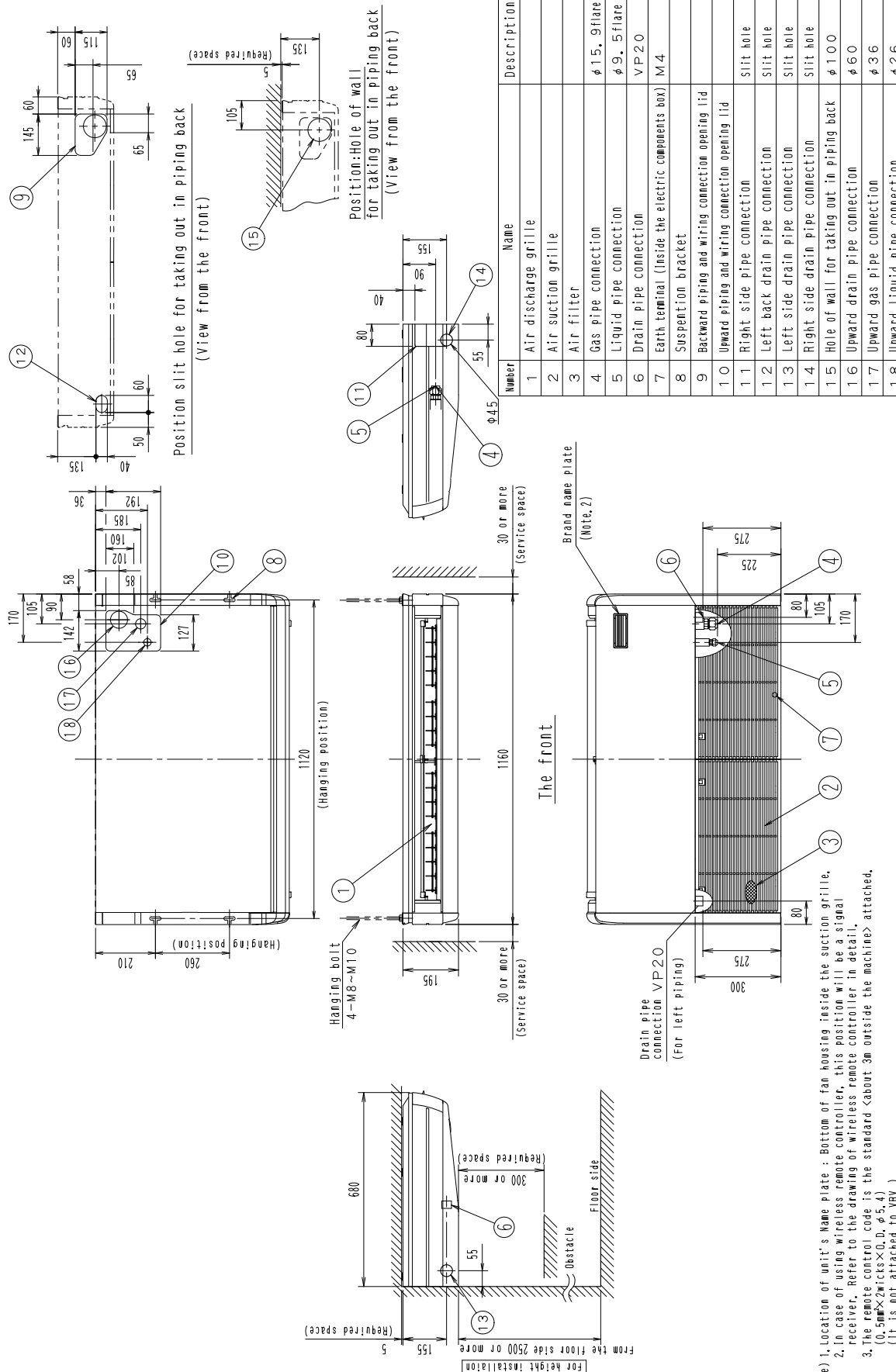
Number	Name	Description
1	Air discharge grille	
2	Air suction grille	
3	Air filter	
4	Gas pipe connection	φ 12, 7 flare
5	Liquid pipe connection	φ 6, 4 flare
6	Drain pipe connection	VP 20
7	Earth terminal (Inside the electric components box)	M 4
8	Suspension bracket	
9	Backward piping and wiring connection opening lid	
10	Upward piping and wiring connection opening lid	
11	Right side pipe connection	Slit hole
12	Left back drain pipe connection	Slit hole
13	Left side drain pipe connection	Slit hole
14	Right side drain pipe connection	Slit hole
15	Hole of wall for taking out in piping back	φ 100
16	Upward drain pipe connection	φ 60
17	Upward gas pipe connection	φ 36
18	Upward liquid pipe connection	φ 26

3D038855

Note) 1. Location of unit's Name plate : Bottom of fan housing inside the suction grille.  
2. In case of using wireless remote controller, this position will be a signal receiver. Refer to the drawing of wireless remote controller in detail.  
3. The remote control code is the standard <about 3m outside the machine> attached, (0, 5mm×2wicks×0, 0, φ 5, 4) (it is not attached to VRV.)

**FXHQ63MA**

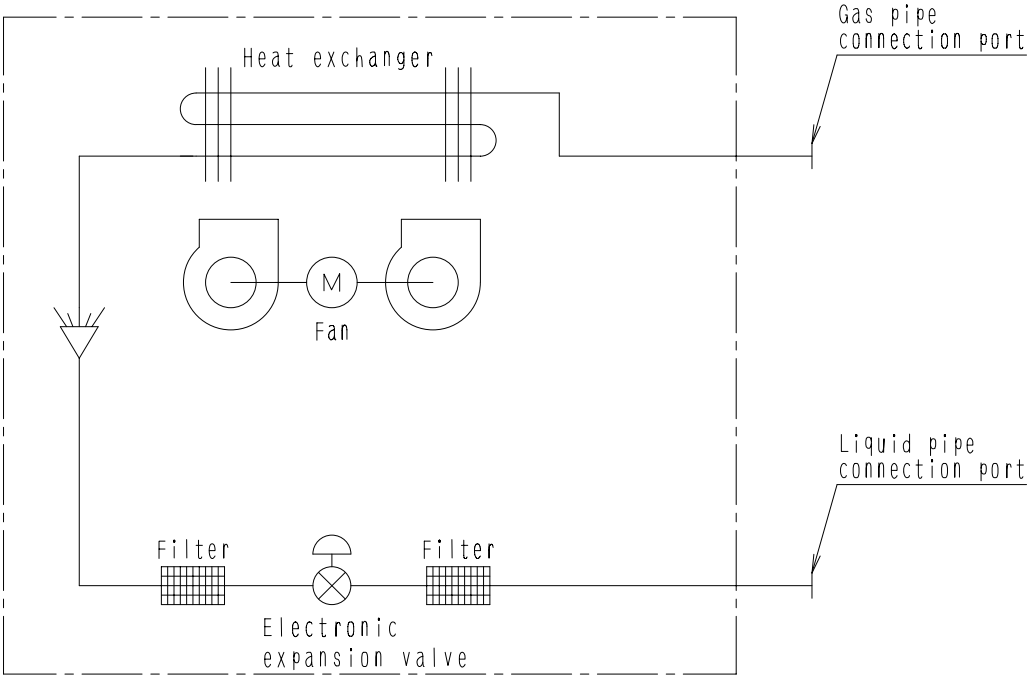
## Unit (mm)



3D038856



4. Piping Diagrams



8

4D034245A

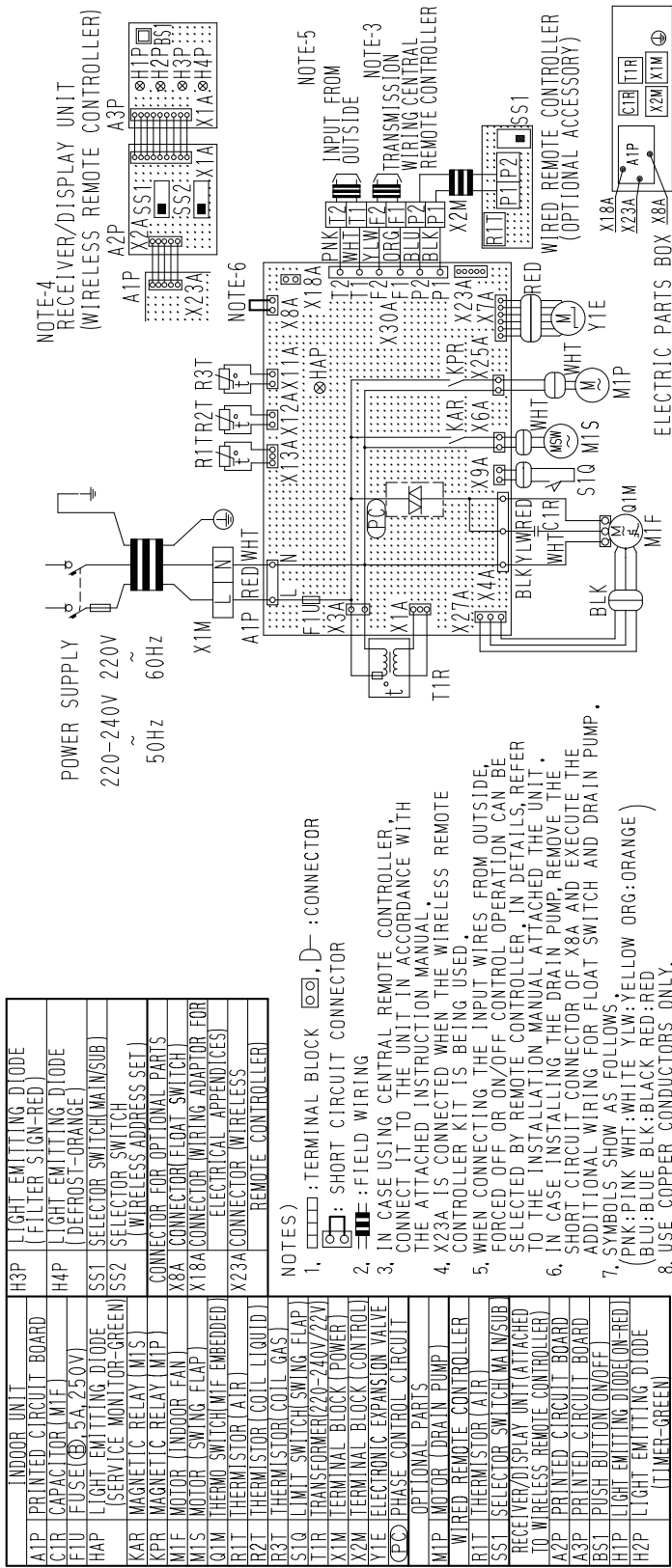
■ Refrigerant pipe connection port diameters

Model	(mm)	
	Gas	Liquid
FXHQ32MA	φ12.7	φ6.4
FXHQ63 · 100MA	φ15.9	φ9.5



# 5. Wiring Diagrams

FXHQ32 · 63 · 100MAVE



3D039801D

## 6. Electric Characteristics

Model	Units			Power supply		IFM		Input(W)	
	Hz	Volts	Voltage range	MCA	MFA	KW	FLA	Cooling	Heating
FXHQ32MAVE	50	220-240	MAX. 264 Min. 198	0.8	15	0.062	0.6	111	111
FXHQ63MAVE				0.8	15	0.062	0.6	115	115
FXHQ100MAVE				0.9	15	0.130	0.7	135	135

### Symbols :

MCA : Min. Circuit Amps (A)  
 MFA : Max. Fuse Amps (See note 5)  
 KW : Fan Motor Rated Output(KW)  
 FLA : Full Load Amps(A)  
 IFM : Indoor Fan Motor

### Note :

#### 1. Voltage range

Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits,

#### 2. Maximum allowable voltage unbalance between phases is 2%.

#### 3. MCA/MFA

$$MCA = 1.25 \times FLA$$

$$MFA \leq 4 \times FLA$$

(Next lower standard fuse rating. Min.15A)

#### 4. Select wire size based on the MCA.

#### 5. Instead of fuse, use Circuit Breaker.

C : 4D035304B

## 7. Capacity Tables

### 7.1 Cooling Capacity

FXHQ-MA

[50Hz]

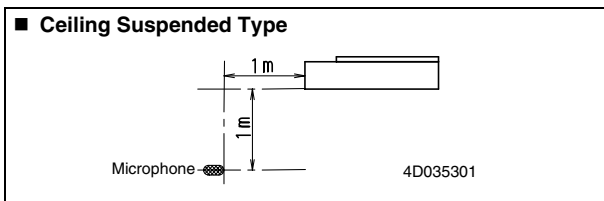
Unit Size	Outdoor air temp. °CDB	Indoor air temp.												Cooling capacity												
		14.0°CWB				16.0°CWB				18.0°CWB				20.0°CWB				22.0°CWB				24.0°CWB				
		TC		SC		TC		SC		TC		SC		TC		SC		TC		SC		TC		SC		
		20°CDB	23°CDB	26°CDB	29°CDB	20°CDB	23°CDB	26°CDB	29°CDB	20°CDB	23°CDB	26°CDB	29°CDB	20°CDB	23°CDB	26°CDB	29°CDB	20°CDB	23°CDB	26°CDB	29°CDB	20°CDB	23°CDB	26°CDB	29°CDB	
32	100	24	23	29	26	34	28	36	29	38	29	43	30	47	31											
	120	24	23	29	26	34	28	36	29	38	29	43	30	47	30											
	140	24	23	29	26	34	28	36	29	38	29	43	30	46	30											
	160	24	23	29	26	34	28	36	29	38	29	43	30	46	30											
	180	24	23	29	26	34	28	36	29	38	29	43	30	45	29											
	200	24	23	29	26	34	28	36	29	38	29	43	30	44	29											
	210	24	23	29	26	34	28	36	29	38	29	43	30	44	29											
	230	24	23	29	26	34	28	36	29	38	29	43	30	44	29											
	250	24	23	29	26	34	28	36	29	38	29	43	30	43	28											
	270	24	23	29	26	34	28	36	29	38	29	41	29	42	28											
63	290	24	23	29	26	34	28	36	29	38	29	41	29	42	27											
	310	24	23	29	26	34	28	36	29	38	29	40	28	41	27											
	330	24	23	29	26	34	28	36	29	38	29	39	28	40	27											
	350	24	23	29	26	34	28	36	29	38	29	38	28	39	27											
	370	24	23	29	26	34	28	36	29	37	29	38	28	39	27											
	390	24	23	29	26	34	28	36	29	37	29	38	27	38	26											
	100	48	41	57	46	66	51	71	52	76	53	85	55	93	56											
	120	48	41	57	46	66	51	71	52	76	53	85	55	92	55											
	140	48	41	57	46	66	51	71	52	76	53	85	55	90	53											
	160	48	41	57	46	66	51	71	52	76	53	85	55	88	53											
100	180	48	41	57	46	66	51	71	52	76	53	85	55	87	52											
	200	48	41	57	46	66	51	71	52	76	53	85	55	87	52											
	210	48	41	57	46	66	51	71	52	76	53	85	55	87	52											
	230	48	41	57	46	66	51	71	52	76	53	85	55	87	52											
	250	48	41	57	46	66	51	71	52	76	53	85	55	87	52											
	270	48	41	57	46	66	51	71	52	76	53	85	55	87	52											
	290	48	41	57	46	66	51	71	52	76	53	85	55	87	52											
	310	48	41	57	46	66	51	71	52	76	53	85	55	87	52											
	330	48	41	57	46	66	51	71	52	76	53	85	55	87	52											
	350	48	41	57	46	66	51	71	52	76	53	85	55	87	52											
	370	48	41	57	46	66	51	71	52	76	53	85	55	87	52											
	390	48	41	57	46	66	51	71	52	76	53	85	55	87	52											
TC SC	Total capacity ; kW		76	62	90	69	105	78	112	80	119	81	134	85	147	87										
	Sensible capacity ; kW		76	62	90	69	105	78	112	80	119	81	134	85	145	84										

Refer to Outdoor Unit Capacity Tables : on page 411~, 470~, for the actual performance data of each indoor and outdoor unit combination.



## 8. Sound Levels

### Overall



dBA

Model	220~240V, 50Hz	
	H	L
FXHQ32MA	36	31
FXHQ63MA	39	34
FXHQ100MA	45	37

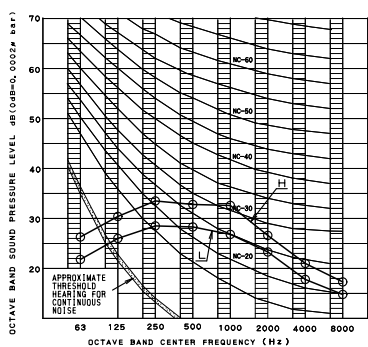
#### Note:

1. The operating conditions are assumed to be standard (JIS conditions).
2. These operating values were obtained in a dead room (conversion values).  
Sound level will vary depending on a range of factors such as the construction (acoustic absorption coefficient) of the particular room in which the equipments installed.

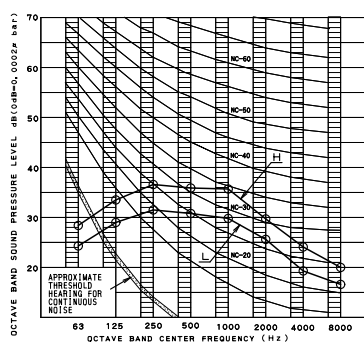
### Octave Band Level

○ — ○ 220~240V 50Hz

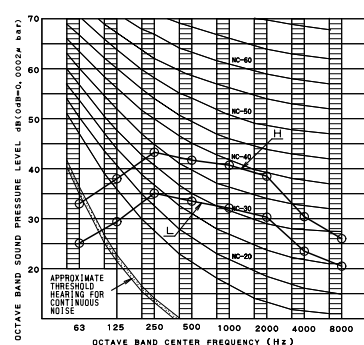
#### FXHQ32MAVE



#### FXHQ63MAVE

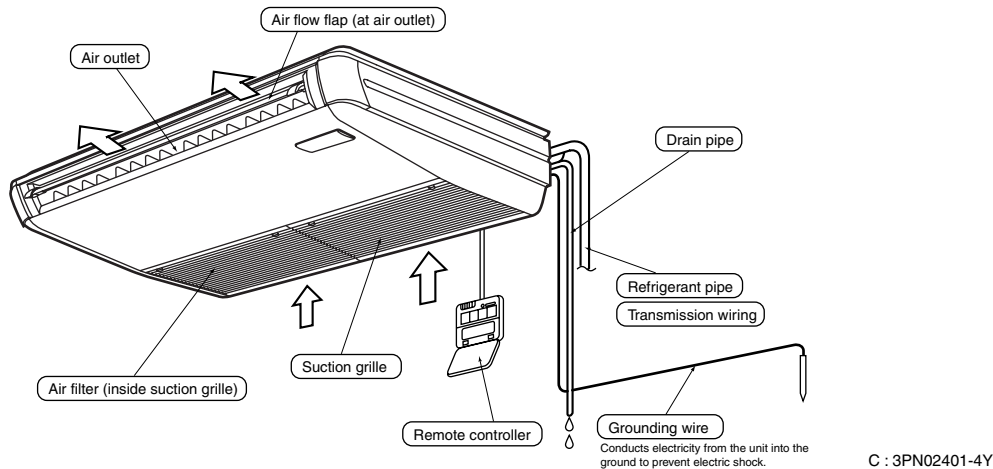


#### FXHQ100MAVE



## 9. Installation

### Installation Example



### Service Space

**(1) Select an installation site where the following conditions are fulfilled and that meets your customer's approval.**

- In the upper space of the indoor unit where there is no possible dripping of water from the refrigerant pipe, drain pipe, water pipe, etc.
- Where optimum air distribution can be ensured.
- Where nothing blocks air passage.
- Where condensate can be properly drained.
- If supporting structural members are not strong enough to take the unit's weight, the unit could fall out of place and cause serious injury.
- Where the false ceiling is not noticeably on an incline.
- Where there is no risk of flammable gas leakage.
- Where sufficient clearance for maintenance and service can be ensured. **(Refer to Fig. 1)**  
If sufficient clearance could be ensured at\*, leave a space of 200 mm or more between the unit and its surroundings easier maintenance and service.
- Where piping between indoor and outdoor units is possible within the allowable limit. (Refer to the installation manual for the outdoor unit.)



### CAUTION

- Install the indoor and outdoor units, power supply wiring and connecting wires at least 1 meter away from televisions or radios in order to prevent image interference or noise.  
(Depending on the radio waves, a distance of 1 meter may not be sufficient enough to eliminate the noise.)

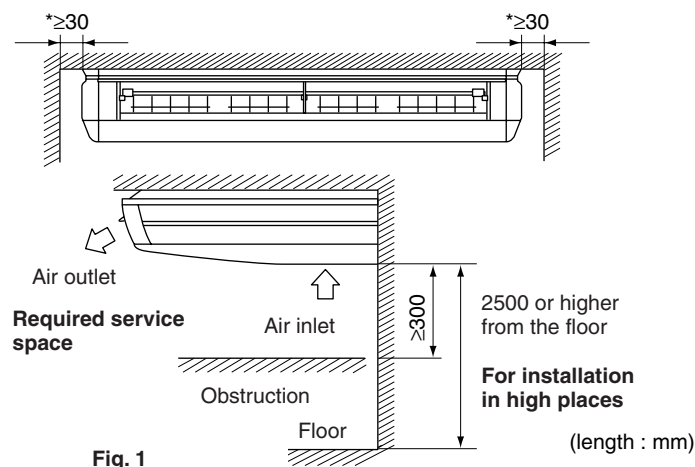


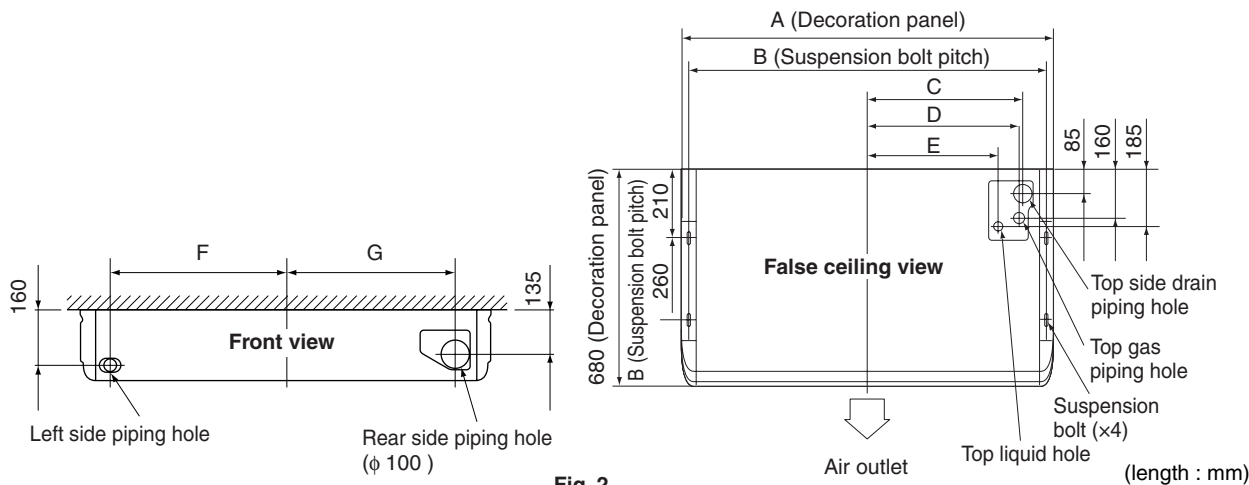
Fig. 1

- (2) This indoor unit may be installed on ceilings up to 3.5 m in height. However, if the ceiling is higher than 2.7m, the remote control will have to be set locally. (Refer to "FIELD SETTING")**
- (3) Use suspension bolts for installation. Check whether the ceiling is strong enough to support the weight of the unit or not. If there is a risk, reinforce the ceiling before installing the unit.**  
(Installation pitch is marked on the paper pattern for installation. Refer to it to check for points requiring reinforcing.)

C : 3PN01417-7P

## Bolt Pitch

- (1) Relative positions of indoor unit, suspension bolt, piping hole, drain piping hole, and electric wire hole position. (Refer to Fig. 2)



Model	A	B	C	D	E	F	G
FXHQ32M(A)VE	960	920	390	375	310	400	375
FXHQ63M(A)VE	1160	1120	490	475	410	500	475
FXHQ100M(A)VE	1400	1360	610	595	530	620	595

- (2) Make the suspension bolt hole, piping hole, drain piping hole.

- Refer to the paper pattern for installation for hole positions.
- Fix the positions for suspension bolt, piping hole, drain piping hole, and electric wire hole, and make the openings.

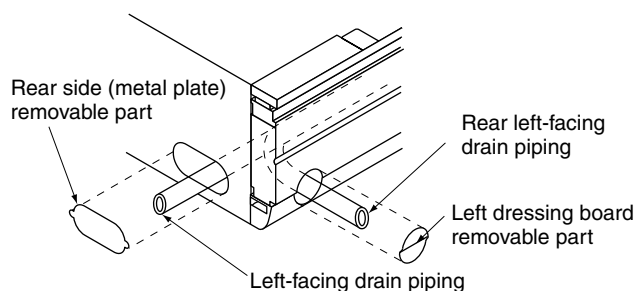
C : 3P172532-7

## Drain Piping Work

Rig the drain pipe as shown below and take measures against condensation. Improperly rigged piping could lead to leaks and eventually wet furniture and belongings.

- (1) Carry out the drain piping.

- For drain work, rig the pipes so that they drain reliably.
- The drain pipe outlet direction can be chosen from the right rear, right, left rear, and left. Refer to "REFRIGERANT PIPING WORK" for right rear and right direction, and refer to Fig. 20 for left rear and left direction.



**Fig. 20**

- For left drain pipe outlet, remove the rubber plug and the insulation on the drain pipe connecting opening on the left side of the unit and change the position to the right side.
- Insert the rubber stopper securely, all the way to the base, in order to prevent water leakage.
- The diameter of the drain pipe should be greater than or equal to the diameter of the connecting pipe. (Vinyl tube ; pipe size : 20 mm ; outer dimension : 26 mm)
- Keep the drain pipe short and sloping downwards at a gradient of at least 1/100 to prevent air pockets from forming. (Refer to Fig. 21)
- Use the drain hose (1) and the metal clamp (2).  
Insert the drain hose into the drain socket, up to the gray tape. (Refer to Fig. 22)  
Tighten the metal clamp until the screw head is less than 4 mm from the hose. (Refer to Fig. 23)  
(Be careful of the installation direction. Install so that the metal clamp does not contact the intake grill.)
- Wrap the sealing pad (8) (accessory) over the clamp and drain hose to insulate. (Refer to Fig. 23)
- No folding of drain hose inside the indoor unit. (Refer to Fig. 24)  
(If there is slack in the drain hose, it may cause damage to the intake grill.)

C : 3P172532-7

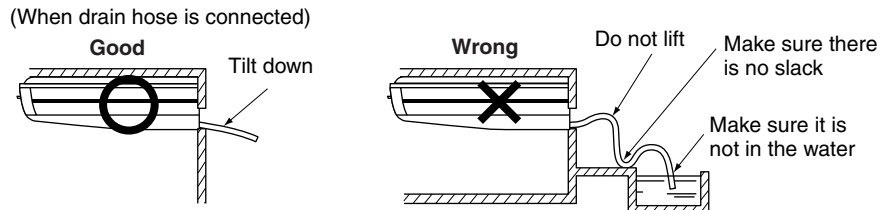


Fig. 21

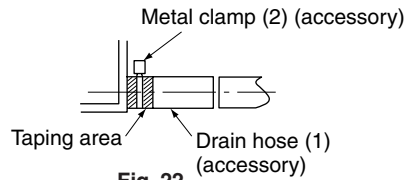


Fig. 22

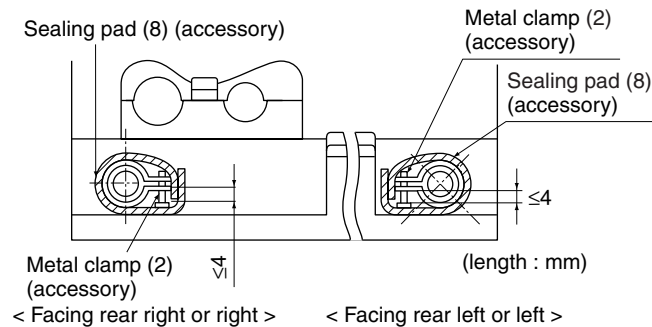
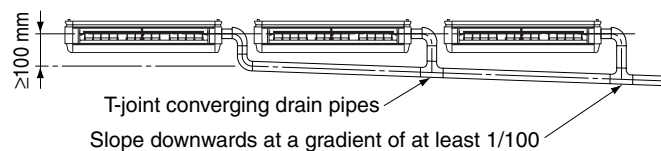


Fig. 23

**NOTE**

- To ensure no excessive pressure is applied to the included drain hose (1), do not bend or twist when installing. (This may cause leakage.)
- If converging multiple drain pipes, install according to the procedure shown below.



Select converging drain pipes whose gauge is suitable for the operating capacity of the unit.

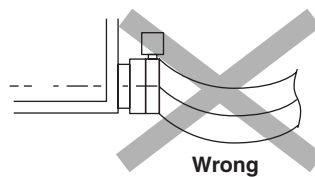


Fig. 24

**(2) Confirm that smooth drainage is achieved after the piping work.**

- Add 0.6 liter of water in the drain pan from the air outlet for confirming drainage. (Refer to Fig. 25)

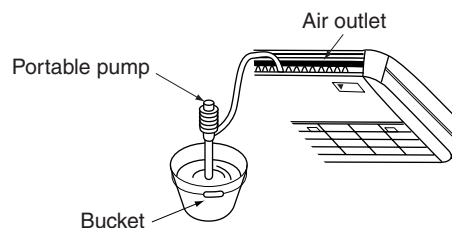






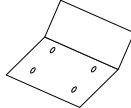


Fig. 25



**CAUTION**

- Drain piping connections  
Do not connect the drain piping directly to sewage pipes that smell of ammonia. The ammonia in the sewage might enter the indoor unit through the drain pipes and corrode the heat exchanger.
- Keep in mind that it will become the cause of getting drain pipe blocked if water collects on drain pipe.

10. Accessories

Standard Accessories  
FXHQ32~100MA

Name	(1) Drain hose	(2) Metal clamp	(3) Washer for hanging bracket	(4) Clamp	(5) Paper pattern for installation	Insulation for fitting
Quantity	1 pc.	1 pc.	8 pcs.	6 pcs.	1 pc.	1 each
Shape						(6)For gas pipe  (7)For liquid pipe 

Name	Sealing pad	<div>(Other)<ul style="list-style-type: none"><li>• Operation manual</li><li>• Installation manual</li></ul></div>
Quantity	1 each	
Shape	(8) Large  (9) Small 	

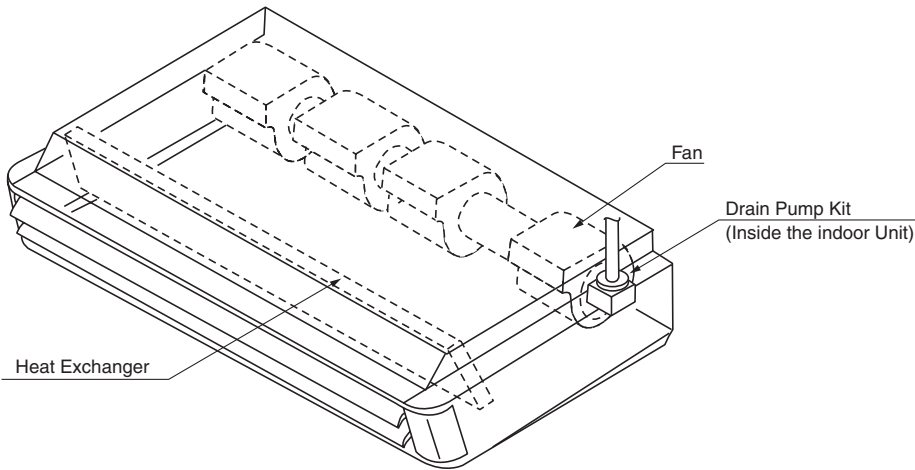
C : 3P172532-7

Optional Accessories (For Unit)

No.	Item	Model	FXHQ32MAVE	FXHQ63MAVE	FXHQ100MAVE
1	Drain pump kit		KDU50M60VE	KDU50M125VE	
2	Replacement long-life filter (Resin net)		KAFJ501D56	KAFJ501D80	KAFJ501D112
3	L-type piping kit (for upward direction)		KHFP5M35	KHFP5M63	

C : 4D040446A

Optional Accessories (For Controls) : Refer to P.561



(V0681)



## Drain Pump Kit

### Specifications

Items		Model	KDU50M60VE	KDU50M125VE	
Drain-up Lift (mm)			600		
Drain Con. Diameter			VP20 (Ex. dia. ϕ26, Int. dia. ϕ20)		
Pump	Power Supply		Single phase 220-240V/220V 50Hz (from Indoor Unit PC Board)		
	Power Consumption (W)		20/17 (50Hz)		
Applicable Models			32 class	63 class	100 class

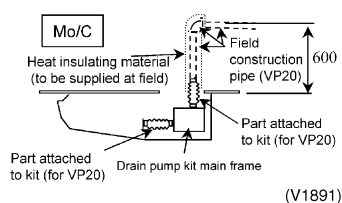
### Precaution at use

1. Don't turn off the power within 5 minutes after cooling operation stops.
2. The liquid crystal display blinks to inform us that safety device actuated.
3. When cooling operation's season is over, extract drain water.

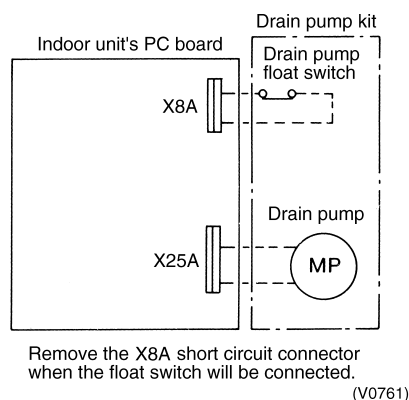
### Installation guide of the drain pump kit

#### <Changes in drain pump kit>

- Exit drain pipe has been changed from VP25 to VP20 (to meet the drain diameter of main frame).
- Attached drain pipe (450 mm chloride vinyl straight pipe bellow, elbow) -> only bellow hose for VP20
- All units of drain up height was unified to 600mm (From the bottom of the ceiling)



### Wiring diagram

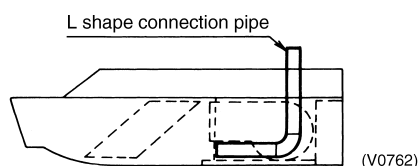


## L Shape Connection Pipe Kit

### Application purpose

This kit must be bent inside the unit as shown below, when the refrigerant piping is carried out in a ceiling space. This L shape kit is an optional accessory which has been developed for improving the work of the processing on site.

### Installation



# FXAQ-MA

## Wall Mounted Type

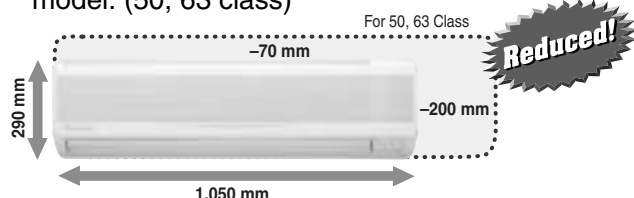
1. Features .....	256
2. Specifications .....	257
3. Dimensions .....	259
4. Piping Diagrams .....	262
5. Wiring Diagrams .....	263
6. Electric Characteristics .....	264
7. Capacity Tables .....	265
7.1 Cooling Capacity .....	265
8. Sound Levels .....	266
9. Installation .....	267
10. Accessories .....	275

# 1. Features

## External Appearance



- Compact and stylish design that does not detract from the decor of the room.
- More compact than compared with previous model. (50, 63 class)



- Drastic 10 kg weight reduction from 24 kg to 14 kg.
- Volume reduced by 22%.
- Space savings of up to 47%.

- Low operating sound

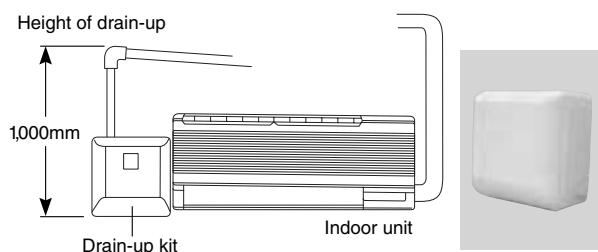
(220V-240V)(dB(A))

Class	20	25	32	40	50	63
Operating sound (H/L)	35/29	36/29	37/29	39/34	42/36	46/39

- Drain pan and air filter can be kept clean by mildew-proof polystyrene.
- Washable grille, the front grille can be easily removed for washing.
- Auto-swing ensures efficiency of air distribution. The louver closes automatically when the unit stops.
- 5 steps of discharge angle can be set by remote controller.
- Discharge angle is automatically set at the same angle as the previous operation when restarts. (Initial setting; 10° for cooling and 70° for heating)



- Drain-pump kit is available as optional accessory, which lifts the drain 1,000mm from the bottom of the unit.
- Flexible installation.
  - Drain pipe can be fitted to from either left or right sides.



## 2. Specifications

### Wall Mounted Type

Model			FXAQ20MAVE	FXAQ25MAVE	FXAQ32MAVE
*1 Cooling Capacity (19.5°CWB)		kcal/h	2,000	2,500	3,200
		Btu/h	7,800	9,900	12,600
		kW	2.3	2.9	3.7
*2 Cooling Capacity (19.0°CWB)		kW	2.2	2.8	3.6
Casing Color			White (3.0Y8.5/0.5)	White (3.0Y8.5/0.5)	White (3.0Y8.5/0.5)
Dimensions: (H×W×D)		mm	290×795×230	290×795×230	290×795×230
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	2×14×1.4	2×14×1.4	2×14×1.4
	Face Area	m²	0.161	0.161	0.161
Fan	Model		QCL9661M	QCL9661M	QCL9661M
	Type		Cross Flow Fan	Cross Flow Fan	Cross Flow Fan
	Motor Output × Number of Units	W	40×1	40×1	40×1
	Air Flow Rate (H/L)	m³/min	7.5/4.5	8/5	9/5.5
		cfm	265/159	282/177	318/194
	Drive		Direct Drive	Direct Drive	Direct Drive
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material			Foamed Polystyrene / Foamed Polyethylene	Foamed Polystyrene / Foamed Polyethylene	Foamed Polystyrene / Foamed Polyethylene
Air Filter			Resin Net (Washable)	Resin Net (Washable)	Resin Net (Washable)
Piping Connections	Liquid Pipes	mm	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)
	Gas Pipes	mm	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)
	Drain Pipe	mm	VP13 (External Dia. 18 Internal Dia. 13)	VP13 (External Dia. 18 Internal Dia. 13)	VP13 (External Dia. 18 Internal Dia. 13)
Machine Weight (Mass)		kg	11	11	11
*4 Sound Level (H/L) (220-240V)		dBA	35/29	36/29	37/29
Safety Devices			Fuse	Fuse	Fuse
Refrigerant Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Connectable Outdoor Unit			R-410A P Series	R-410A P Series	R-410A P Series
Standard Accessories			Operation Manual. Installation Manual. Installation Panel. Paper Pattern for Installation. Insulation Tape. Clamps. Screws.	Operation Manual. Installation Manual. Installation Panel. Paper Pattern for Installation. Insulation Tape. Clamps. Screws.	Operation Manual. Installation Manual. Installation Panel. Paper Pattern for Installation. Insulation Tape. Clamps. Screws.
Drawing No.			C : 3D039370B		

#### Note:

- \*1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.
- \*2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.
- \*3 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- \*4 Anechoic chamber conversion value, measured at a point 1 m in front of the unit and 1 m downward. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
- 5 Refer to page 264 for Fan Motor Input.

#### Conversion Formulae

kcal/h=kW×860  
 Btu/h=kW×3412  
 cfm=m<sup>3</sup>/min×35.3

## Wall Mounted Type

Model			FXAQ40MAVE	FXAQ50MAVE	FXAQ63MAVE
*1 Cooling Capacity (19.5°CWB)		kcal/h	4,000	5,000	6,300
		Btu/h	16,000	19,800	24,900
		kW	4.7	5.8	7.3
*2 Cooling Capacity (19.0°CWB)		kW	4.5	5.6	7.1
Casing Color			White (3.0Y8.5/0.5)	White (3.0Y8.5/0.5)	White (3.0Y8.5/0.5)
Dimensions: (H×W×D)		mm	290×1,050×230	290×1,050×230	290×1,050×230
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	2×14×1.4	2×14×1.4	2×14×1.4
	Face Area	m²	0.213	0.213	0.213
Fan	Model		QCL9686M	QCL9686M	QCL9686M
	Type		Cross Flow Fan	Cross Flow Fan	Cross Flow Fan
	Motor Output × Number of Units	W	43×1	43×1	43×1
	Air Flow Rate (H/L)	m³/min	12/9	15/12	19/14
		cfm	424/318	530/424	671/494
	Drive		Direct Drive	Direct Drive	Direct Drive
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material			Foamed Polystyrene / Foamed Polyethylene	Foamed Polystyrene / Foamed Polyethylene	Foamed Polystyrene / Foamed Polyethylene
Air Filter			Resin Net (Washable)	Resin Net (Washable)	Resin Net (Washable)
Piping Connections	Liquid Pipes	mm	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ9.5 (Flare Connection)
	Gas Pipes	mm	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ15.9 (Flare Connection)
	Drain Pipe	mm	VP13 (External Dia. 18 Internal Dia. 13)	VP13 (External Dia. 18 Internal Dia. 13)	VP13 (External Dia. 18 Internal Dia. 13)
Machine Weight (Mass)		kg	14	14	14
*4 Sound Level (H/L) (220-240V)		dBA	39/34	42/36	46/39
Safety Devices			Fuse	Fuse	Fuse
Refrigerant Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Connectable Outdoor Unit			R-410A P Series	R-410A P Series	R-410A P Series
Standard Accessories			Operation Manual. Installation Manual. Installation Panel. Paper Pattern for Installation. Insulation Tape. Clamps. Screws.	Operation Manual. Installation Manual. Installation Panel. Paper Pattern for Installation. Insulation Tape. Clamps. Screws.	Operation Manual. Installation Manual. Installation Panel. Paper Pattern for Installation. Insulation Tape. Clamps. Screws.
Drawing No.			C : 3D039370B		

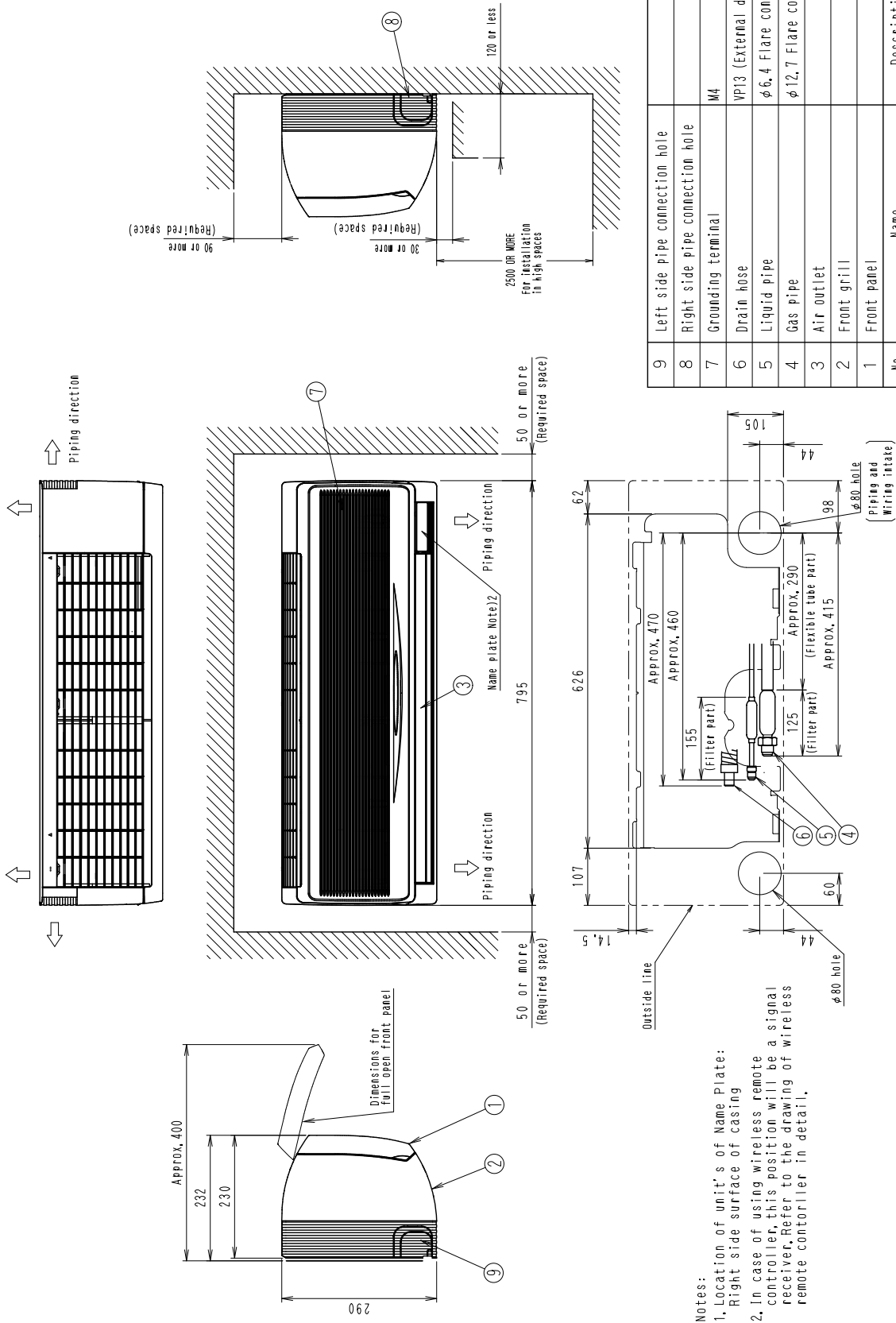
## Note:

- \*1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.  
 \*2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.  
 \*3 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.  
 \*4 Anechoic chamber conversion value, measured at a point 1 m in front of the unit and 1 m downward. During actual operation, these values are normally somewhat higher as a result of ambient conditions.  
 5 Refer to page 264 for Fan Motor Input.

Conversion Formulae	
kcal/h=	kW×860
Btu/h=	kW×3412
cfm=	m <sup>3</sup> /min×35.3

3. Dimensions

FXAQ20MA  
FXAQ25MA  
FXAQ32MA



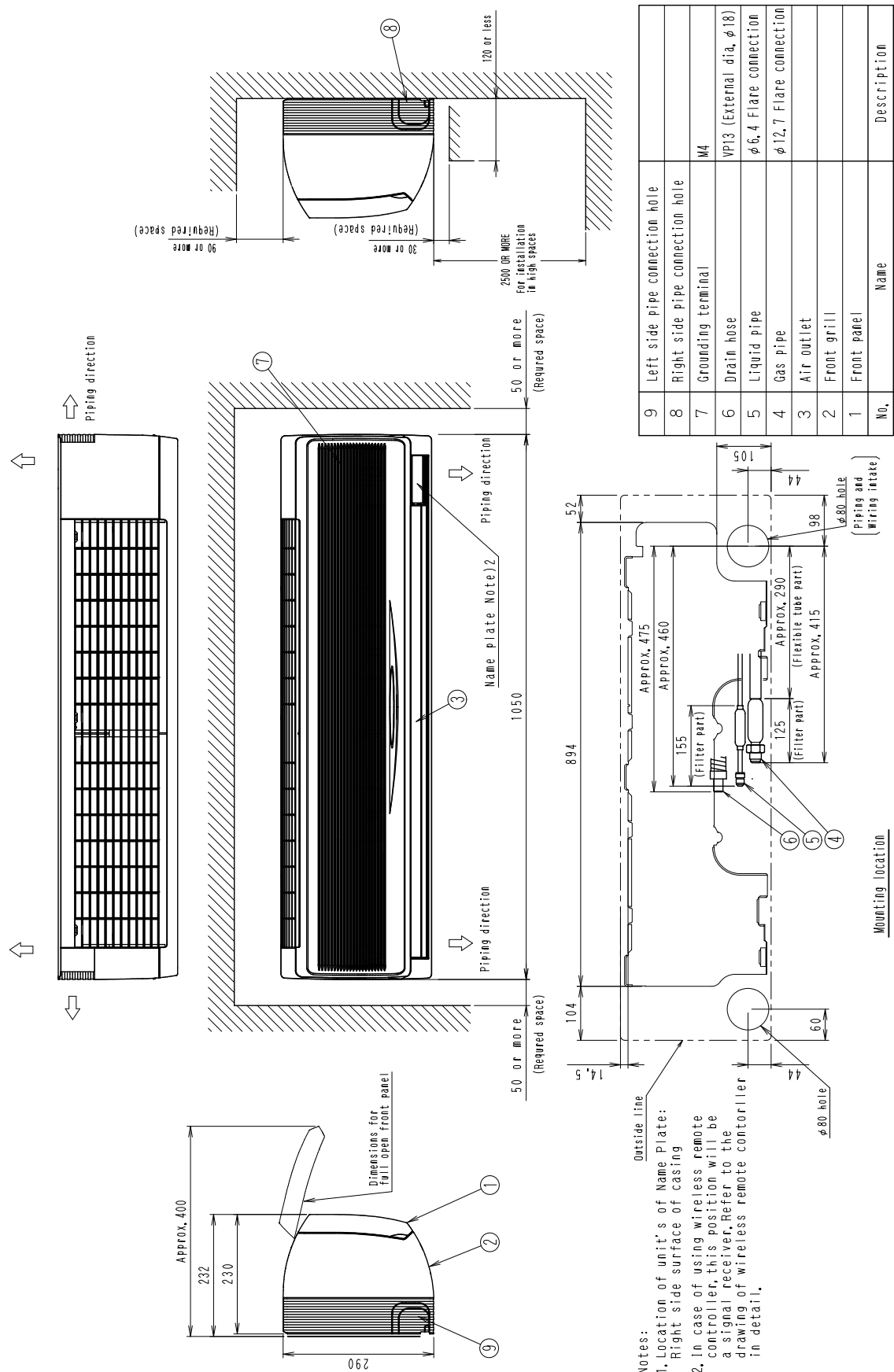
Unit (mm)

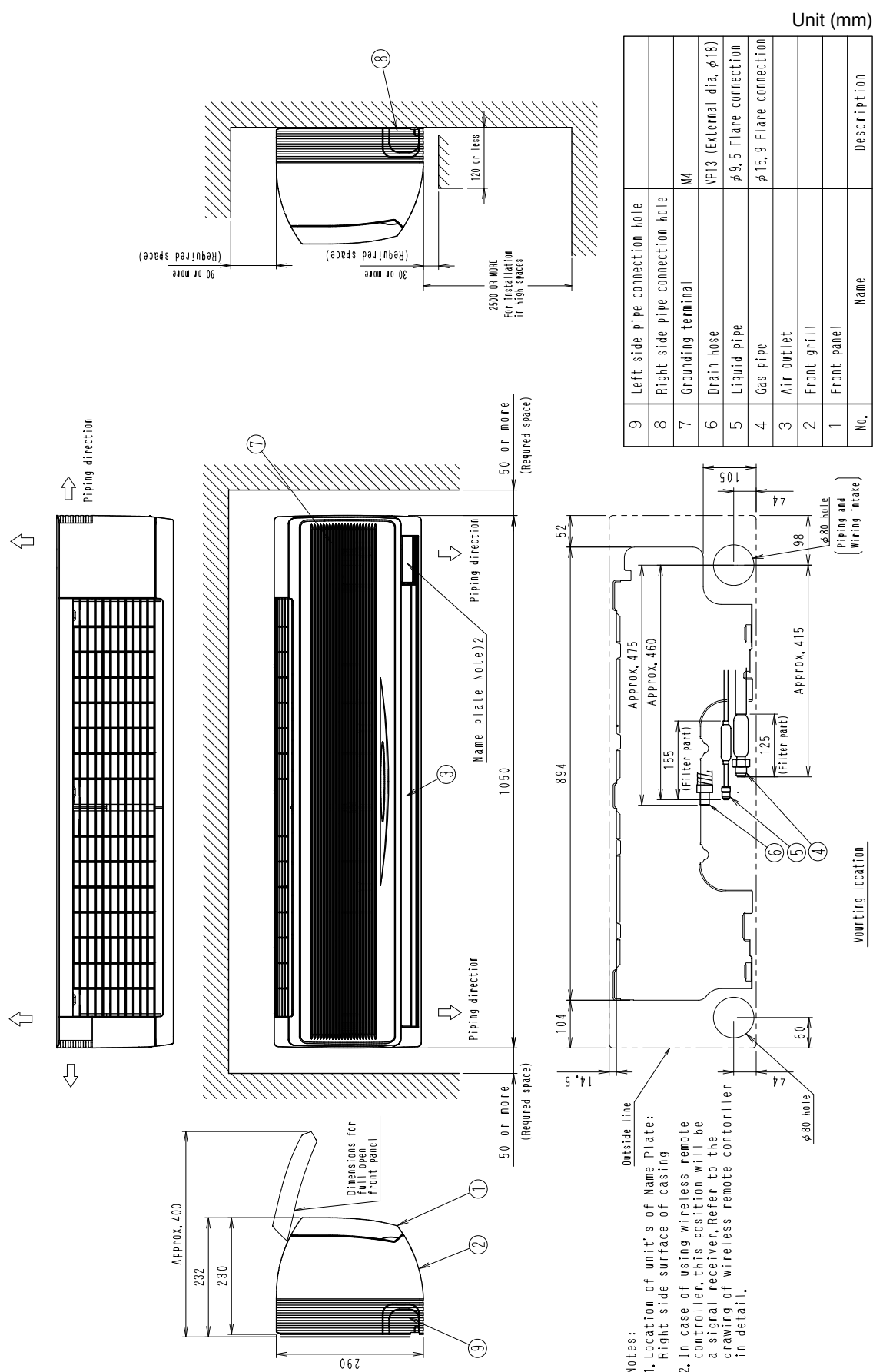
No.	Name	Description
9	Left side pipe connection hole	
8	Right side pipe connection hole	
7	Grounding terminal	M4
6	Drain hose	VP13 (External dia, φ18)
5	Liquid pipe	φ6.4 Flare connection
4	Gas pipe	φ12.7 Flare connection
3	Air outlet	
2	Front grill	
1	Front panel	

3D034903C

**FXAQ40MA**  
**FXAQ50MA**

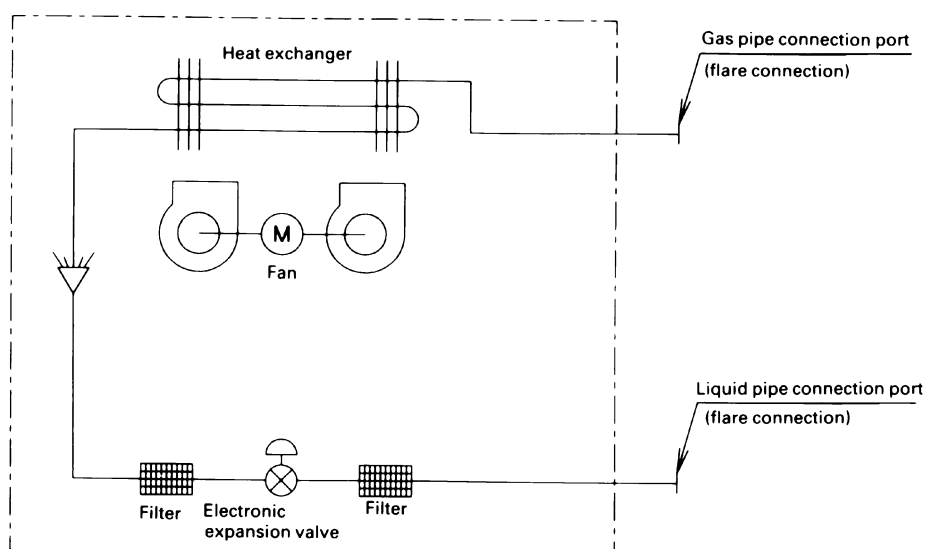
## Unit (mm)



**FXAQ63MA**



## 4. Piping Diagrams

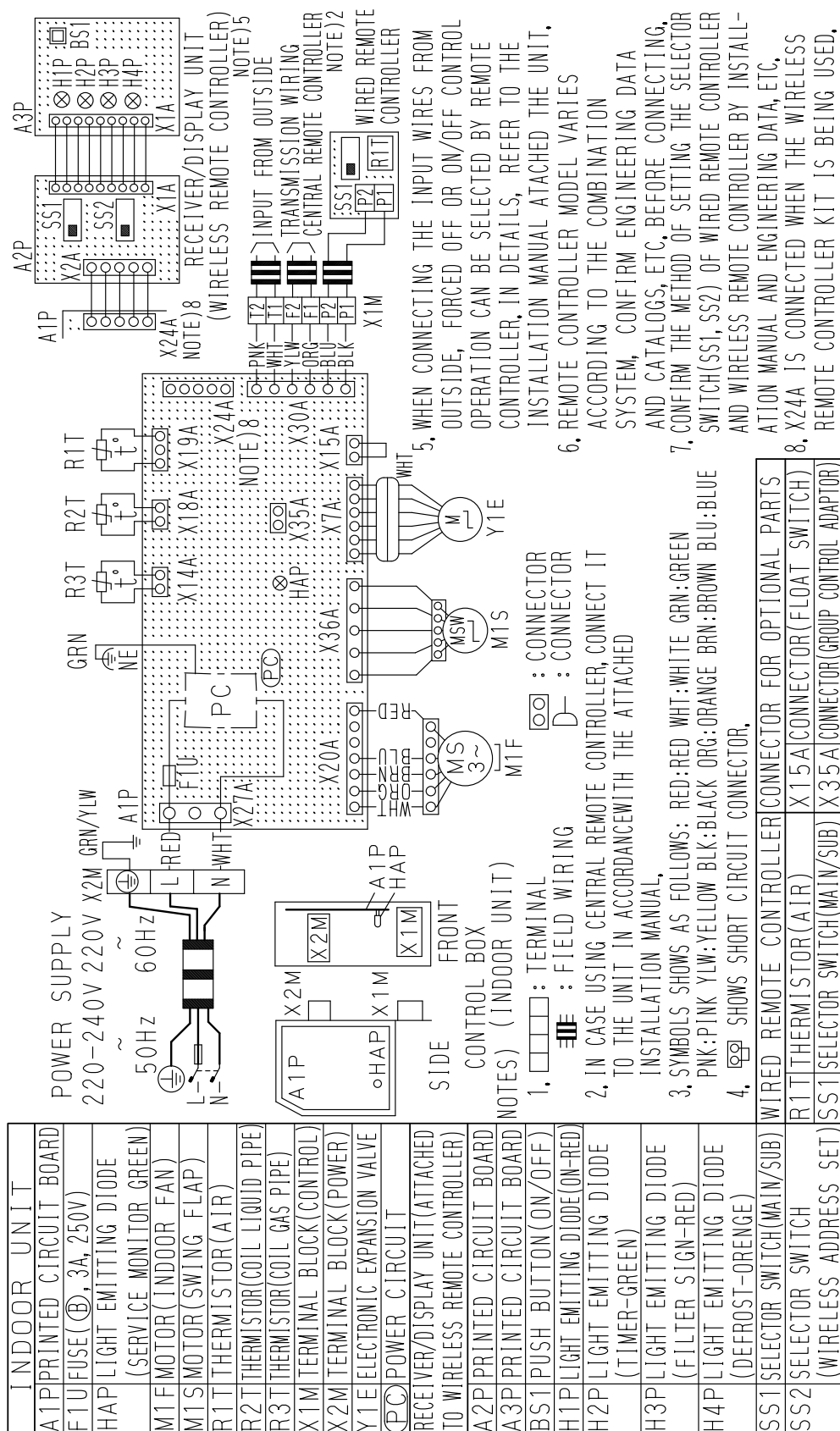


JC : DU220-602J

### ■ Refrigerant pipe connection port diameters

Model	(mm)	
	Gas	Liquid
FXAQ20 · 25 · 32 · 40 · 50MA	φ12.7	φ6.4
FXAQ63MA	φ15.9	φ9.5

## 5. Wiring Diagrams

**FXAQ20 · 25 · 32 · 40 · 50 · 63MAVE**

3D034206C

## 6. Electric Characteristics

Units					Power supply		IFM		Input(W)	
Model	Type	Hz	Volts	Voltage range	MCA	MFA	kW	FLA	Cooling	Heating
FXAQ20MA	VE	50	220-240	MAX. 264 Min. 198	0.3	15	0.040	0.2	16	24
FXAQ25MA					0.4	15	0.040	0.3	22	27
FXAQ32MA					0.4	15	0.040	0.3	27	32
FXAQ40MA					0.4	15	0.043	0.3	20	20
FXAQ50MA					0.4	15	0.043	0.3	27	32
FXAQ63MA					0.6	15	0.043	0.5	50	60

### Symbols :

MCA : Min. Circuit Amps (A)  
 MFA : Max. Fuse Amps (See note 5)  
 kW : Fan Motor Rated Output(kW)  
 FLA : Full Load Amps(A)  
 IFM : Indoor Fan Motor

### Note :

- Voltage range  
Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits,
- Maximum allowable voltage unbalance between phases is 2%.
- MCA/MFA  
 $MCA = 1.25 \times FLA$   
 $MFA \leq 4 \times FLA$   
 (Next lower standard fuse rating. Min.15A)
- Select wire size based on the MCA.
- Instead of fuse, use Circuit Breaker.

C : 4D034907E

# 7. Capacity Tables

## 7.1 Cooling Capacity

FXAQ-MA

[50Hz]

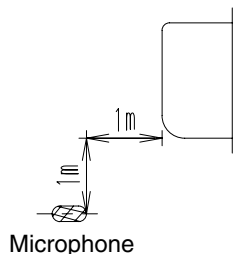
Unit Size	Outdoor air temp. °CDB	Indoor air temp.												Cooling capacity													
		14.0°CWB 20°CDB				16.0°CWB 23°CDB				18.0°CWB 26°CDB						20.0°CWB 28°CDB				22.0°CWB 30°CDB				24.0°CWB 32°CDB			
		TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
40	10.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.8	3.6	5.4	3.6	5.9	3.6	5.9	3.6	5.9	3.6	5.9	3.6	5.9	3.6	5.9	3.6	5.9	3.6
	12.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.8	3.6	5.4	3.6	5.8	3.5	5.8	3.5	5.8	3.5	5.8	3.5	5.8	3.5	5.8	3.5	5.8	3.5
	14.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.8	3.6	5.4	3.6	5.7	3.5	5.7	3.5	5.7	3.5	5.7	3.5	5.7	3.5	5.7	3.5	5.7	3.5
	16.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.8	3.6	5.4	3.6	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4
	18.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.8	3.6	5.4	3.6	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4
	20.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.8	3.6	5.4	3.6	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4
	22.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.8	3.6	5.4	3.6	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4
	24.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.8	3.6	5.4	3.6	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4
	26.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.8	3.6	5.4	3.6	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4
	28.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.8	3.6	5.4	3.6	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4	5.6	3.4
50	10.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	7.4	4.4	7.4	4.4	7.4	4.4	7.4	4.4	7.4	4.4	7.4	4.4	7.4	4.4
	12.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	7.3	4.3	7.3	4.3	7.3	4.3	7.3	4.3	7.3	4.3	7.3	4.3	7.3	4.3
	14.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	7.1	4.3	7.1	4.3	7.1	4.3	7.1	4.3	7.1	4.3	7.1	4.3	7.1	4.3
	16.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	7.0	4.2	7.0	4.2	7.0	4.2	7.0	4.2	7.0	4.2	7.0	4.2	7.0	4.2
	18.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	6.9	4.2	6.9	4.2	6.9	4.2	6.9	4.2	6.9	4.2	6.9	4.2	6.9	4.2
	20.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2
	22.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2
	24.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2
	26.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2
	28.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2
63	10.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	7.4	4.4	7.4	4.4	7.4	4.4	7.4	4.4	7.4	4.4	7.4	4.4	7.4	4.4
	12.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	7.3	4.3	7.3	4.3	7.3	4.3	7.3	4.3	7.3	4.3	7.3	4.3	7.3	4.3
	14.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	7.1	4.3	7.1	4.3	7.1	4.3	7.1	4.3	7.1	4.3	7.1	4.3	7.1	4.3
	16.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	7.0	4.2	7.0	4.2	7.0	4.2	7.0	4.2	7.0	4.2	7.0	4.2	7.0	4.2
	18.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	6.9	4.2	6.9	4.2	6.9	4.2	6.9	4.2	6.9	4.2	6.9	4.2	6.9	4.2
	20.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2
	22.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2
	24.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2
	26.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2
	28.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	6.0	4.3	6.7	4.4	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2	6.8	4.2
TC	Total capacity : kW																										
	Sensible capacity : kW																										
	SC																										

Refer to Outdoor Unit Capacity Tables : on page 411~ 470~, for the actual performance data of each indoor and outdoor unit combination.

## 8. Sound Levels

### Overall

#### ■ Wall Mounted Type



4D037087D

#### Note:

1. The operating conditions are assumed to be standard (JIS conditions).
2. These operating values were obtained in a dead room (conversion values).  
Sound level will vary depending on a range of factors such as the construction (acoustic absorption coefficient) of the particular room in which the equipments installed.

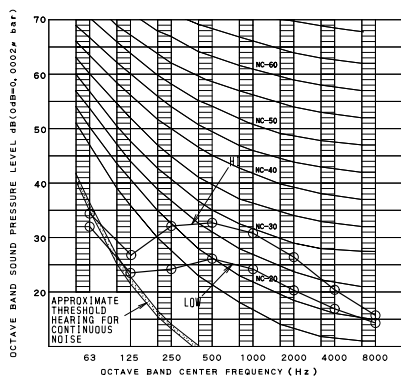
Model	220~240V, 50Hz	
	H	L
FXAQ20MA	35	29
FXAQ25MA	36	29
FXAQ32MA	37	29
FXAQ40MA	39	34
FXAQ50MA	42	36
FXAQ63MA	46	39

dBA

### Octave Band Level

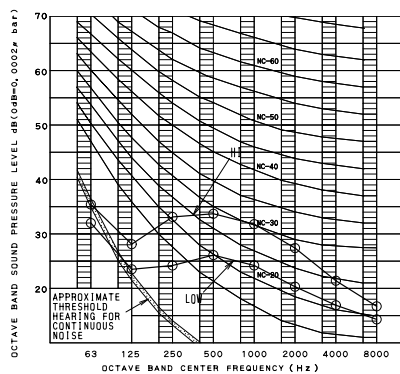
○ — ○ 220~240V 50Hz

#### FXAQ20MAVE



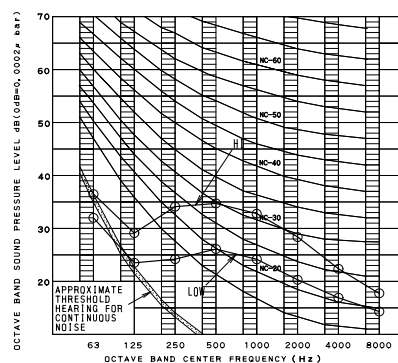
4D037087D

#### FXAQ25MAVE



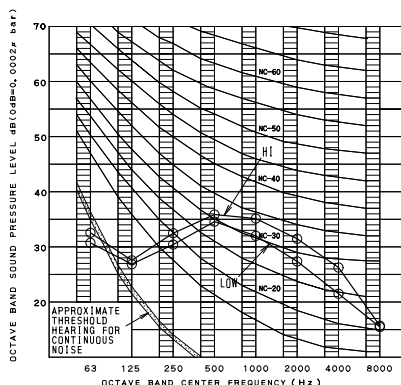
4D037088D

#### FXAQ32MAVE



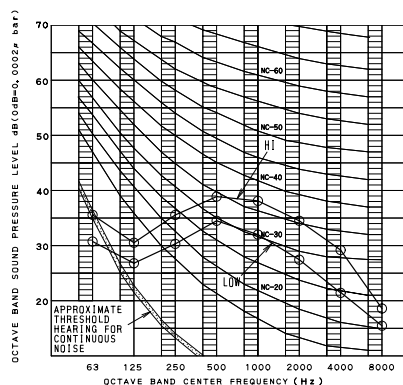
4D037089D

#### FXAQ40MAVE



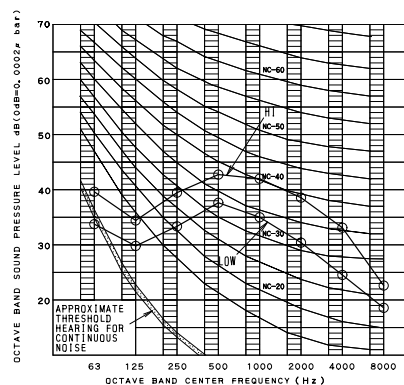
4D038513A

#### FXAQ50MAVE



4D038514A

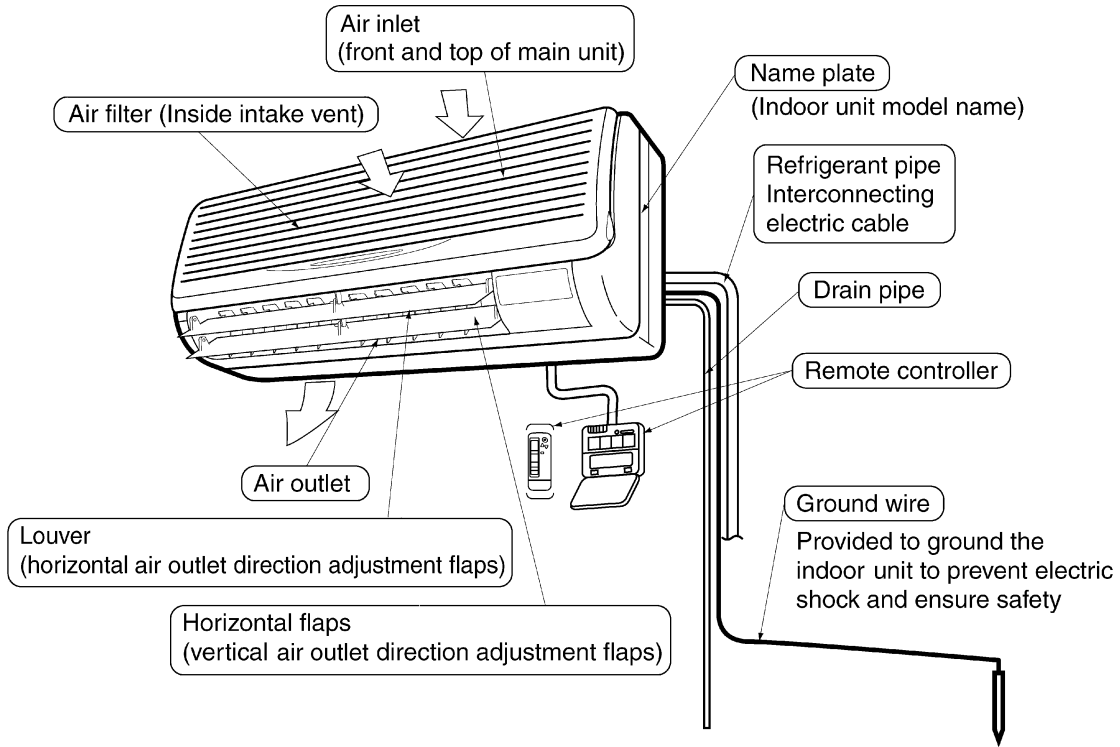
#### FXAQ63MAVE



4D038515A

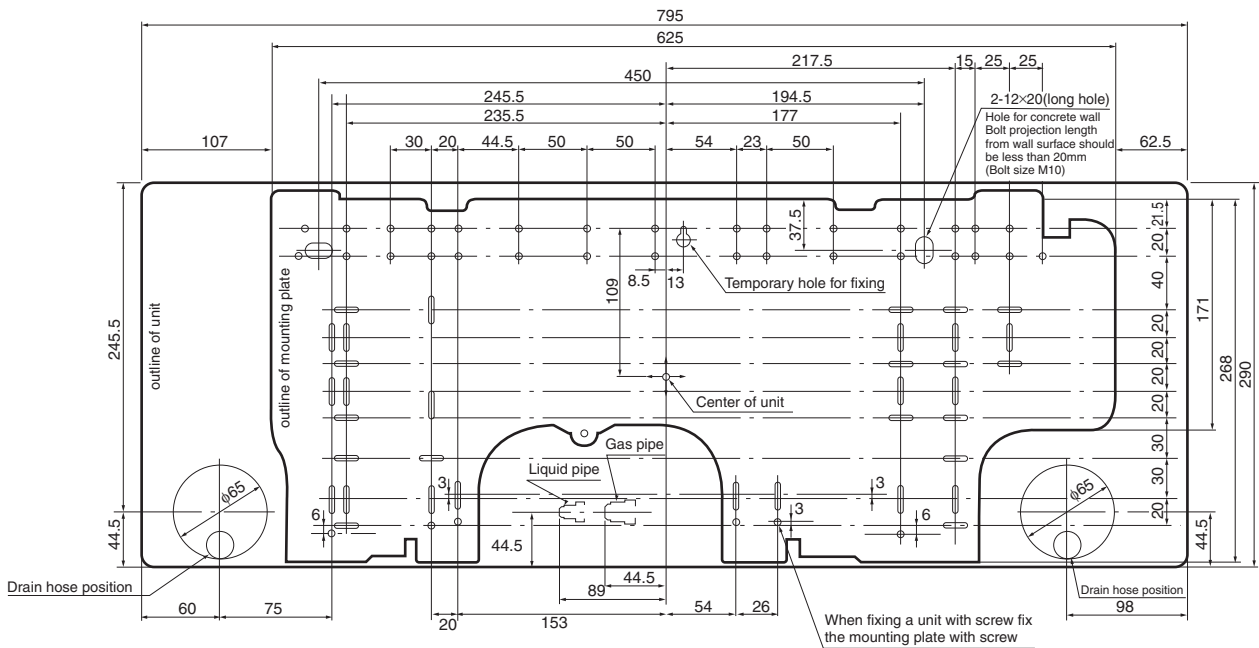
## 9. Installation

### Installation Example



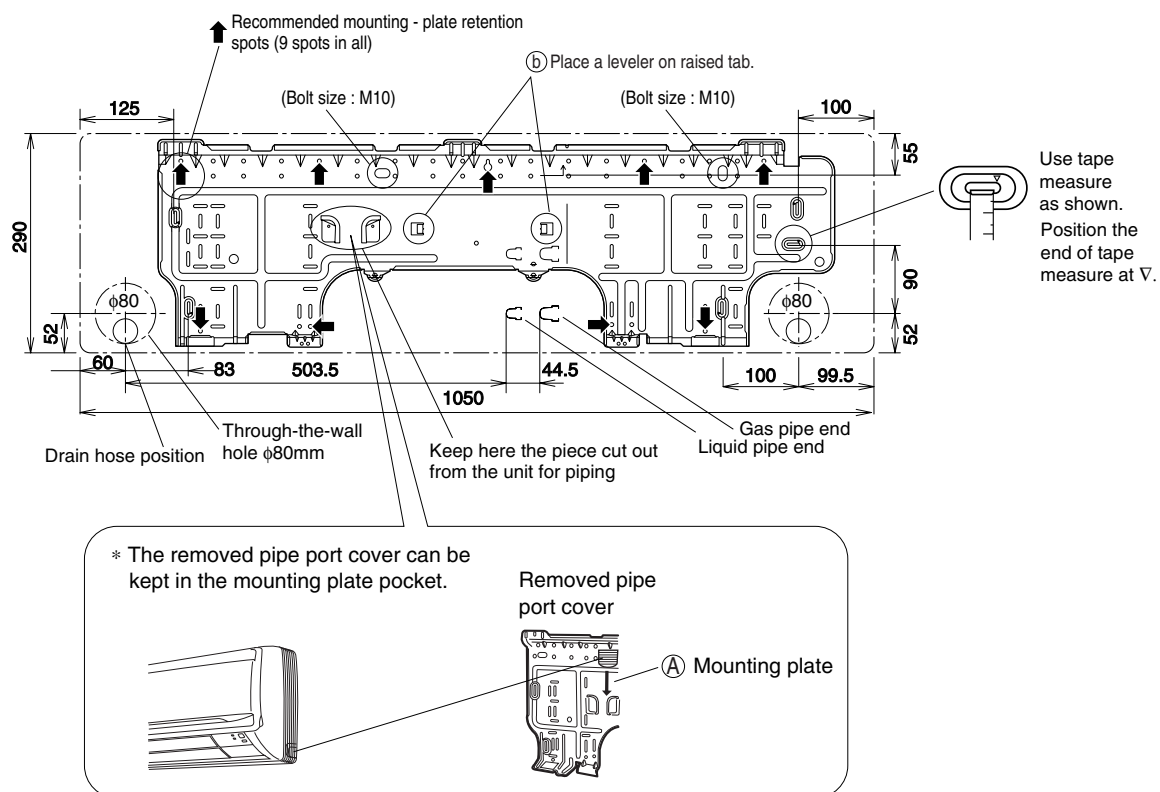
C : 3PN02401-8Q

### Recommended mounting-plate retention spots and Dimensions 20 · 25 · 32 class



C : 1P079690-1B

## 40 · 50 · 63 class



C : 2P095003-1C

## Service Space

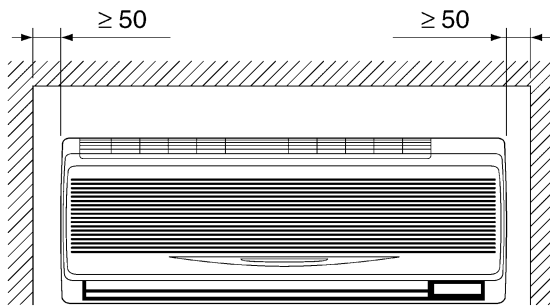
**(1) Select an installation site where the following conditions are fulfilled and that meets with your customer's approval.**

- In the upper space (including the back of the ceiling) of the indoor unit where there is no possible dripping of water from the refrigerant pipe, drain pipe, water pipe, etc.
- Where the wall is strong enough to bear the indoor unit weight.
- Where sufficient clearance for installation and maintenance can be ensured.

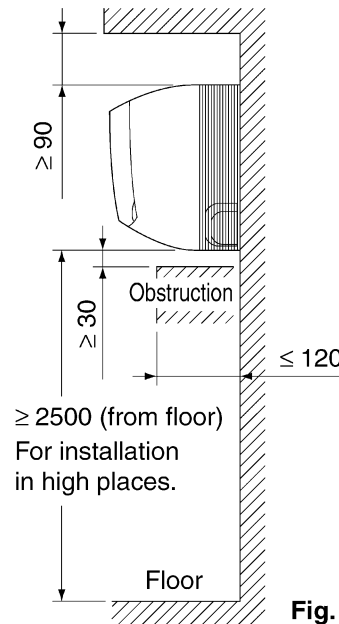
**(Refer to Fig. 1 and Fig. 2)**

- Where optimum air distribution can be ensured.
- Where nothing blocks the air passage.
- Where condensate can be properly drained.
- Where the wall is not significantly tilted.
- Where not exposed to combustible gases.
- Where pipe between indoor and outdoor units is possible within the allowable limit.  
(Refer to the installation manual of the outdoor unit.)
- Install the indoor and outdoor units, power cable and transmission wiring, at least 1 m from TVs and radios, to prevent distorted pictures and static. (Depending on the type and source of the electrical waves, static may be heard even when more than 1 m away.)
- Install the indoor unit no less than 2.5 m above the floor. Where unavoidably lower, take what measures are necessary to keep hands out of the air inlet.
- Where the cool (warm) air reaches all across the room.

[ Space required for installation (mm) ]



**Fig. 1**



**Fig. 2**

- (2) Consider whether the place where the unit will be installed can support the full weight of the unit, and reinforce it with boards and beams, etc. if needed before proceeding with the installation. Also, reinforce the place to prevent vibration and noise before installing. (The installation pitch can be found on the paper pattern for installation (3), so refer to it when considering the necessity for reinforcing the location.)**
- (3) The indoor unit may not be directly installed on the wall. Use the attached installation panel (1) before installing the unit.**

C : 3P156215-6D



## Installation

### (1) Open the piping through-hole.

- The refrigerant pipe and drain pipe can be passed out in one of 6 directions: left, bottom-left, back-left, right, bottom-right, and back-right. **(Refer to Fig. 3)**
- Using the paper pattern for installation (3), choose where to pass the piping out and open a through-hole ( $\phi 80$ ) in the wall.  
Open the hole so that there is a downward slope for the drain piping. (See "DRAIN PIPING WORK")

### (2) Remove the installation panel (1) from the unit and attach to the wall.

(The installation panel is temporarily attached to the unit with screw. (In case of 20-32 type))

**(Refer to Fig. 3)**

- Check the location for the hole using the included paper pattern for installation (3).
  - Choose a location so that there is at least a 90 mm gap between the ceiling and the main unit.
- Temporarily attach the installation panel (1) at the temporary-securing position on the paper pattern for installation (3) and use a level to make sure the drain hose is either level or tilted slightly downward.
- Secure the installation panel (1) to the wall using either screws or bolts.
  - If using the attachment screws for the installation panel (2), attach using at least 4 screws on either side (for a total of 8 screws (20-32 type), 9 screws (40-63 type)) of the recommended installation cleat position on the included paper pattern for installation (3).
  - If using bolts, attach using a M8 - M10 bolt (for a total of 2 bolts) on either side.
  - If dealing with concrete, use commercially available foundation bolts (M8 - M10).

### (3) If using the left, bottom-left, right, or bottom-right positions for the piping, cut out the through-hole for the piping in the front grill. (Refer to Fig. 4)

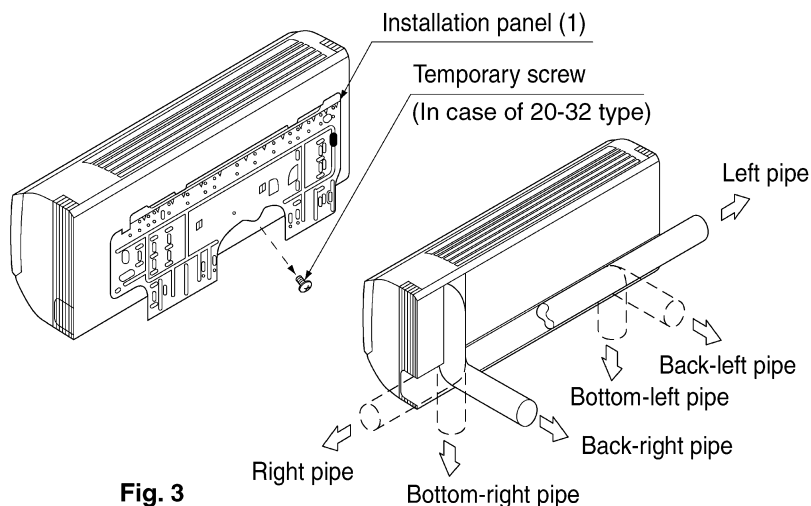


Fig. 3

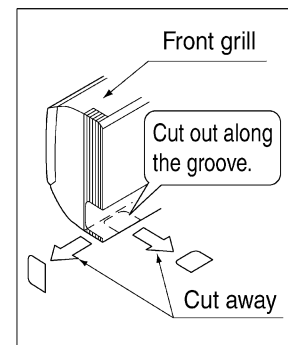


Fig. 4

### (4) Remove the front panel and the service lid. (Refer to Fig. 5)

< How to remove the front panel and service lid >

- Open the front panel to the point where it stops.
- Push the axes on either side of the front panel towards the center of the main unit and remove. (You can also remove it by sliding the front panel either to the left or right and pulling it forward.)
- Remove the screw from the service lid and pull the handle forward.

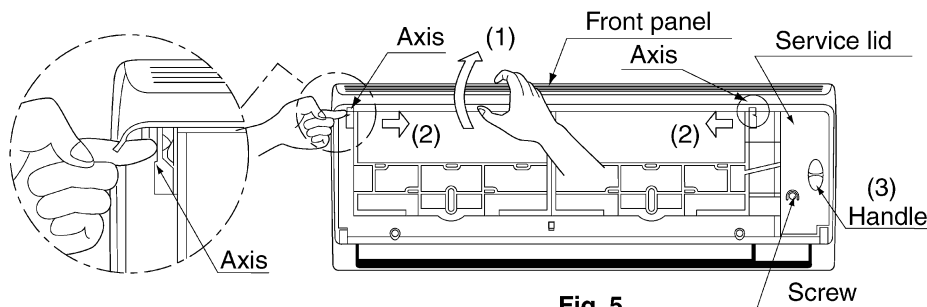


Fig. 5

C : 3P156215-6D

**(5) Point the pipe in the direction it will be passed out.**

**For right, bottom-right, and back-right piping (Refer to Fig. 6)**

- Wrap the drain hose and the refrigerant piping together with the insulating tape (4) so that the drain hose is below the refrigerant piping.

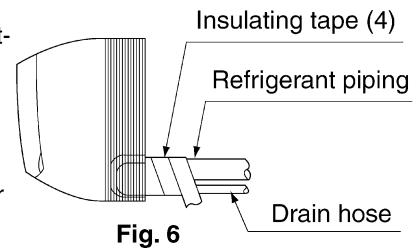
**For left, bottom-left, and left-back piping**

- Remove the front grill. (Refer to Fig. 7)

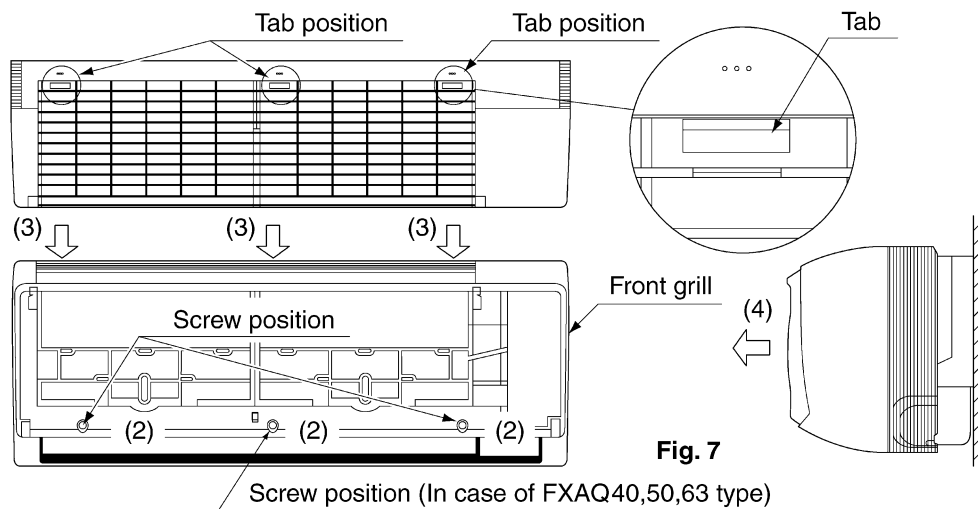
**< How to remove the front grill >**

Remove the front grill as described below when securing the indoor unit with screws or when attaching Optional Accessories (wireless remote controller, adapter PC board, etc.).

- (1) Remove the front panel.
- (2) Remove the screws (2 places in case of FXAQ20,25,32 type/3 places in case of FXAQ40,50,63 type) securing the front grill.
- (3) Remove the tabs (3 places) securing the front grill by pushing them in the direction of the arrows.
- (4) Making sure not to catch the horizontal flaps, remove the front grill by pulling in the direction of the arrow.



**Fig. 6**

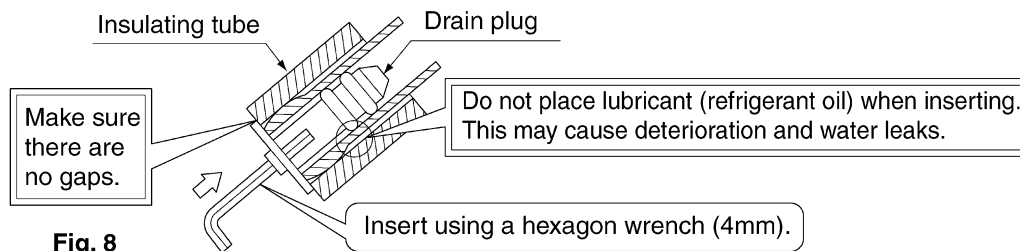


**Fig. 7**

- Remove the drain plug, the insulation tubing, and the drain hose from the drain pan and replace. (Refer to Fig. 8)
- Connect the local refrigerant piping ahead of time, matching it to the liquid pipe and gas pipe marks engraved on the installation panel (1).

**< Replacing the drain hose and drain plug >**

- (1) Remove the drain plug and insulation tubing.
- (2) Remove the drain hose and replace onto the left side.
- (3) Replace the drain plug and the insulation tubing onto the right side.

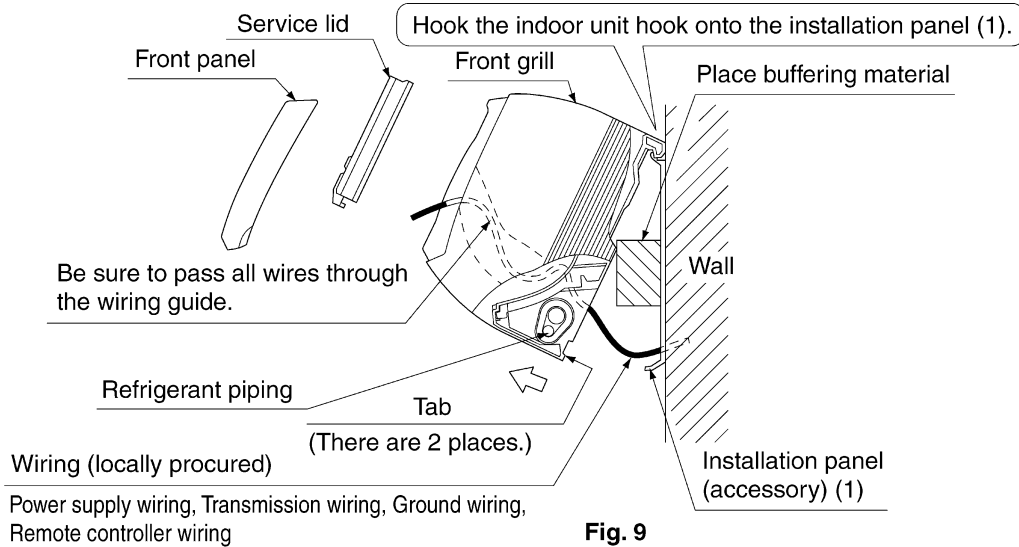


**Fig. 8**

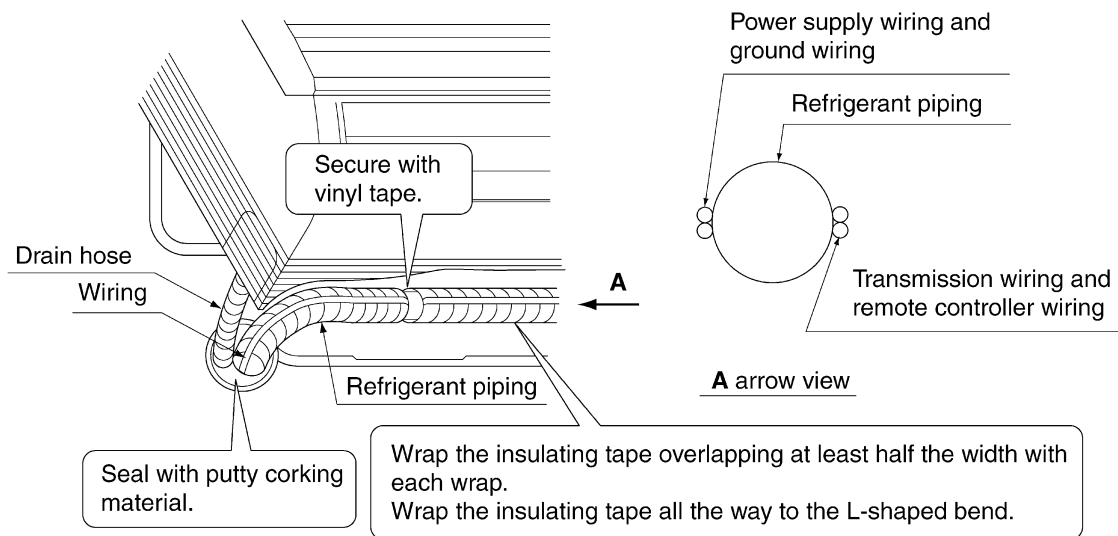
C : 3P156215-6D

**(6) Hook the indoor unit onto the installation panel. (Refer to Fig. 9)**

- Placing buffering material between the wall and the indoor unit at this time will make work easier.

**For right, bottom-right, and back-right piping**

- Pass the drain hose and the refrigerant piping to the wall.

**(7) Pass power supply wiring, transmission wiring, ground wiring, and remote controller wiring through the wiring guide in through the back of the indoor unit and to the front.****(8) Connect the piping. (See Fig. 10)**

- To avoid the influence of noise from the power supply line on the transmission wiring and the remote controller wiring, these wirings must be kept as far as possible from the power/ground wirings. As shown in the figure, keep the power supply wiring and the ground wiring together. Keep the transmission and remote controller wirings together and route them maintaining a good distance from the power supply/ground wirings (that is, on the other side of the power supply/ground wirings). Then, fix them securely on the refrigerant pipe.
- Seal the piping through-hole with putty corking material.

**(9) Push on both bottom edges of the indoor unit using both hands and hook the tab on the back of the indoor unit onto the installation panel (1). (Refer to Fig. 9)**

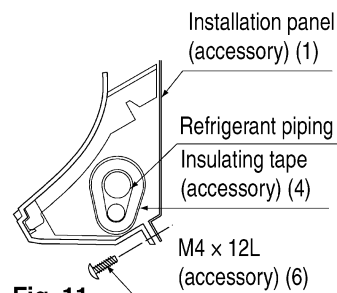
- At this time remove the buffering material placed in step (6).

C : 3P156215-6D

- Make sure power supply wiring, transmission wiring, ground wiring and remote controller wiring are not caught inside the indoor unit.

■ **When screwing in the indoor unit**

- Remove the front grill. **(Refer to Fig. 7)**
- Secure the indoor unit to the installation panel (1) with the securing screws (6). **(Refer to Fig. 11)**



**Fig. 11**

C : 3P156215-6D

## Drain Piping Work

### (1) Install the drain piping. (Refer to Fig. 16)

- The drain pipe should be short with a downward slope and should prevent air pockets from forming.
- Watch out for the points in the figure 16 when performing drain work.

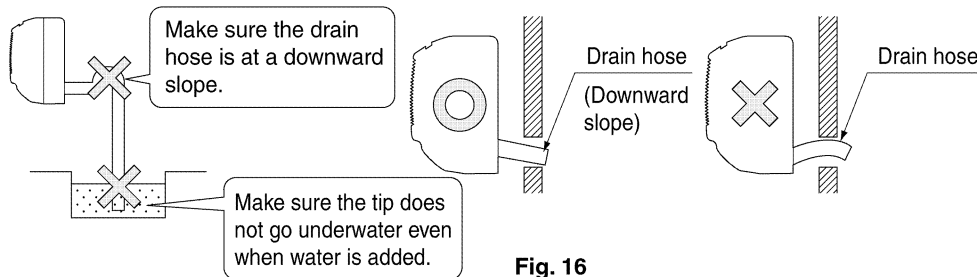


Fig. 16

- When extending the drain hose, use a commercially available drain extension hose, and be sure to insulate the extended section of the drain hose which is indoors. (Refer to Fig. 17)

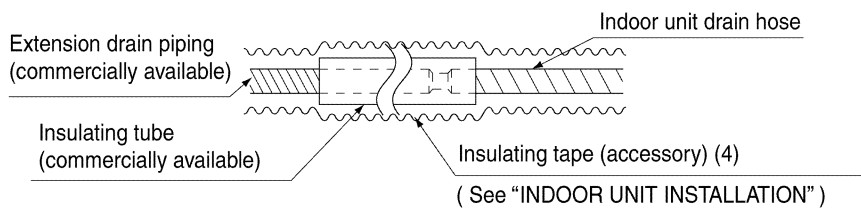


Fig. 17

- Make sure the diameter of the piping is the same as the piping (hard vinyl chloride, nominal diameter 13mm) or bigger.
- When directly connecting a hard vinyl chloride pipe joint (nominal diameter 13mm) to the drain hose connected to the indoor unit (i.e. for embedded piping, etc.), use a commercially available hard vinyl chloride pipe joint (nominal diameter 13mm). (Refer to Fig. 18)

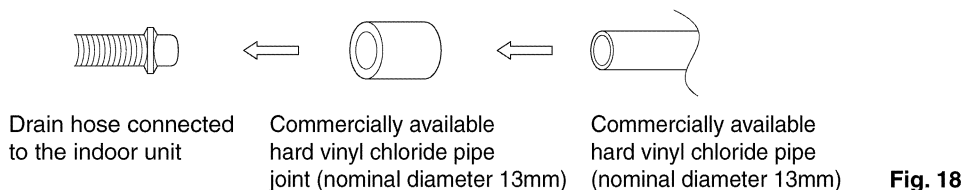


Fig. 18

### (2) Make sure the drain works properly.

- After drain work is complete, perform a drain check by opening the front panel, **removing the air filter**, pouring water into the drain pan, and making sure water flows smoothly out of the drain hose. (Refer to Fig. 19)

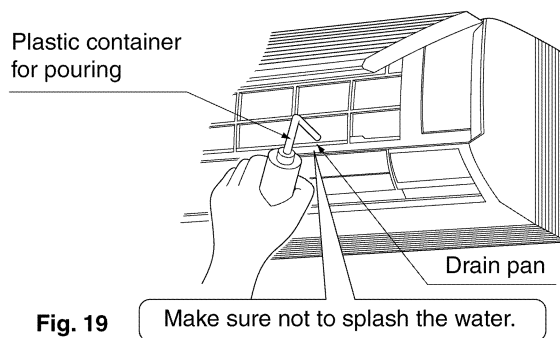


Fig. 19

### CAUTION

#### Drain piping connections

Do not connect the drain piping directly to sewage pipes that smell of ammonia. The ammonia in the sewage might enter the indoor unit through the drain pipes and corrode the heat exchanger.

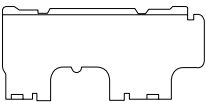

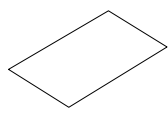
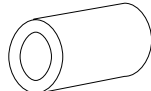
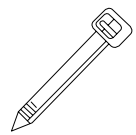
Keep in mind that it will become the cause of getting drain pipe blocked if water collects on drain pipe.


C : 3P156215-6D

## 10. Accessories

### Standard Accessories

#### FXAQ20~63MA

Name	(1) Installation panel	(2) Attachment screws for the installation panel	(3) Paper pattern for installation	(4) Insulating tape	(5) Clamp
Quantity	1 set	8 pcs. → FXA(Q)20,25,32 type 9 pcs. → FXA(Q)40,50,63 type	1 pc.	1 pc.	1 large 3 small
Shape		 M4 × 25L			

Name	(6) Securing screws	(Other) • Operation manual • Installation manual
Quantity	2 pcs.	
Shape	 M4 × 12L	

C : 3P156215-6D

9

### Optional Accessories (For Unit)

No.	Type Item	FXAQ20MA	FXAQ25MA	FXAQ32MA	FXAQ40MA	FXAQ50MA	FXAQ63MA
1	Drain pump kit	K-KDU572CVE					

### Optional Accessories (For Controls) : Refer to P.561

## Drain Pump Kit — K-KDU572CVE

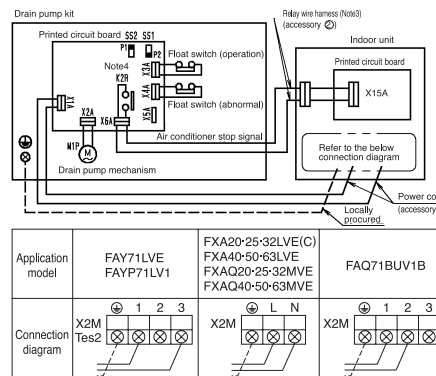
## Specification

Main Applicable Models		20-25-32-40-50-63 Class
Drain pump head (mm)	(Note 1)	1,000
Drain up mechanism	Power supply	Single phase 220-240V/ 220V, 50/60Hz
	Power consumption	15.6/14.1(W)
	Operating current	0.26/0.26(A)
	Insulation	Class E
Drain inlet connection pipe diameter		VP20 (Note 2)
Drain exit connection pipe diameter		VP20
Safety device		Float switch
Operating noise (dB)		25
Machine weight (Mass)(kg)		3.0

Note 1: Height from bottom of drain pump kit up to the drain pipe.

Note 2: Connect to the VP13 using the soft reducing socket.

## Wiring Diagram



The earth wire (copper) should be at least 2.0mm<sup>2</sup> or  $\phi$  1.6mm. When the relay wire harness is connected, remove the X15A short-circuit connector.

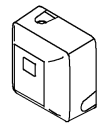







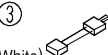










Note1: Don't forget to turn on the power. If it is not turned on, the air conditioner will perform an error stop and operation will not be possible.

Note2: Make sure that slide switch SS1 on the drain pump kit printed board assembly is set to P2 and slide switch SS2 is set to P1.

Note3: The relay wire harness cannot be extended.

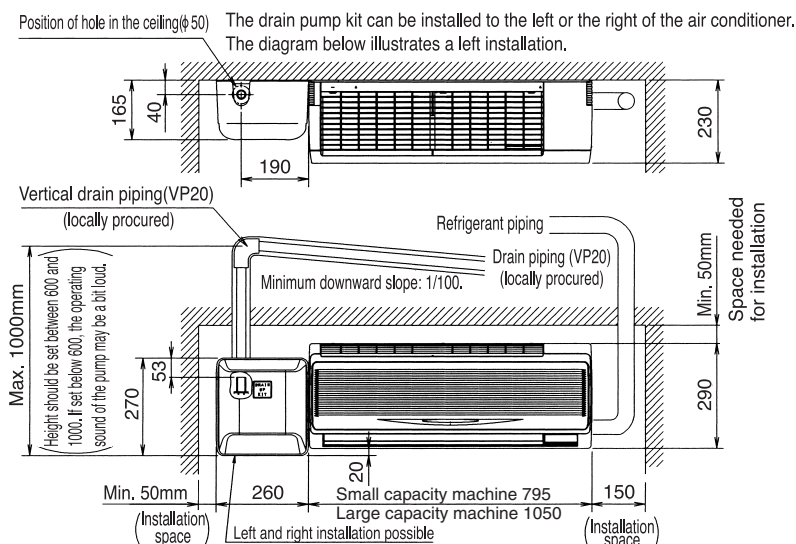
4: Turning on the power will close the K2R connector, making is a non-volatile B connector.

## Component Parts

Name	Shape	Quantity	Name	Shape	Quantity	Name	Shape	Quantity
Drain Pump Kit		1	Insulation	 50X300Xt10	1	Rigid polyvinyl chloride pipe (Note3)	 VP13 365	1
			Clamp		2	Soft drain pipe	 VP20 200	1
Relay wire harness	 (Green) (Red)	1	Clamp		1	Screw Washer	 (White) 0	1
Connecting harness	 (White)	1		Soft reducing socket	 VP13	1	Screw	 M5X35
Power cord	 (Blue)	1	Drain hose		 150	1	Clamp material	
Insulation pipe cover		1		Paper pattern for Installation		1	Installation Manual	
Insulation	 90X300Xt2	1	Rigid polyvinyl chloride pipe joint	 VP13 57	1			

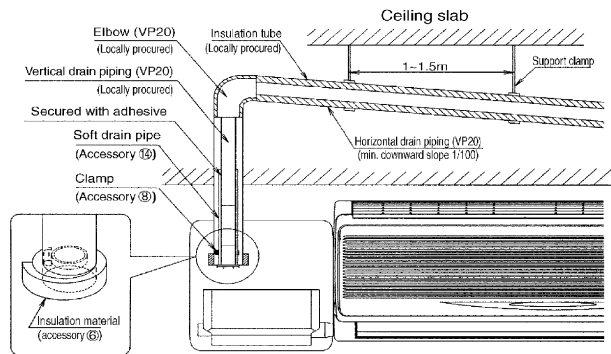
Note 3: This pipe must be procured locally for the large capacity machine.

### External drawing of drain pump kit and Service space



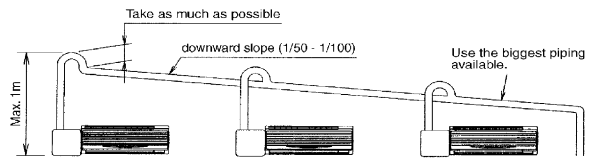
## Installation

- ⚠ Caution**
- Exit piping parts must be procured locally.
  - Be sure to insulate the drain piping.
  - Give the horizontal sections on the drain piping a downward slope of at least 1/100 and make sure no air bubbles accumulate.
  - Secure long horizontal sections with support clamps to prevent them from shaking.



### When using centralized piping

- Follow the figure below to make sure there is absolutely no back-up when using centralized piping.







# **FXLQ-MA / FXNQ-MA**

## **Floor Standing Type /**

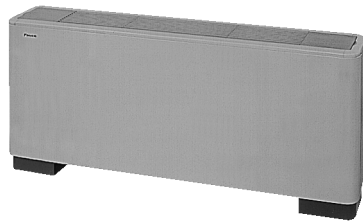
## **Concealed Floor Standing Type**

1. Features .....	280
2. Specifications .....	281
2.1 FXLQ-MA .....	281
2.2 FXNQ-MA .....	283
3. Dimensions .....	285
3.1 FXLQ-MA .....	285
3.2 FXNQ-MA .....	288
4. Piping Diagrams .....	291
5. Wiring Diagrams .....	292
6. Electric Characteristics .....	293
7. Capacity Tables .....	294
7.1 Cooling Capacity .....	294
8. Sound Levels .....	295
9. Installation .....	297
10. Accessories .....	300

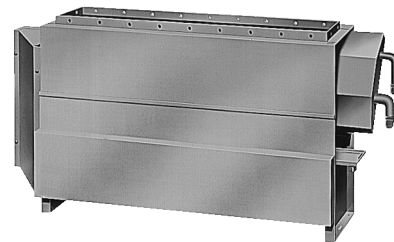
# 1. Features

Efficient for perimeter zone airconditioning.

Can be built into pericounter



FXLQ-MA



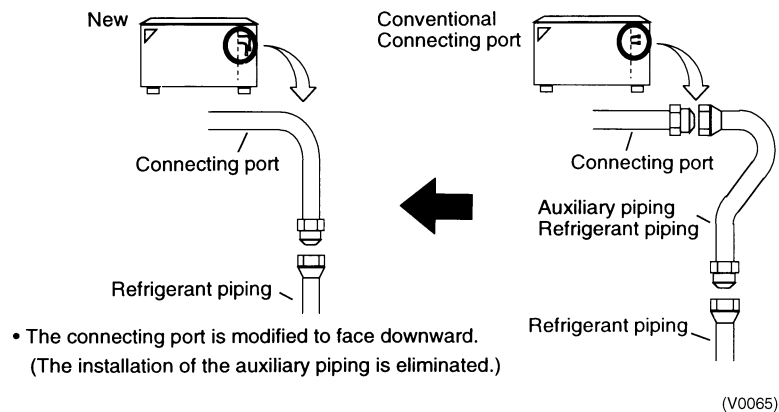
FXNQ-MA

## (1) New round-shape adds the gentle feeling to office environment.

- Mild color is applied to the discharge grille and the bottom frame.
- The slimming top plate ensures elegance in dynamics.

## (2) Improvement on the installation

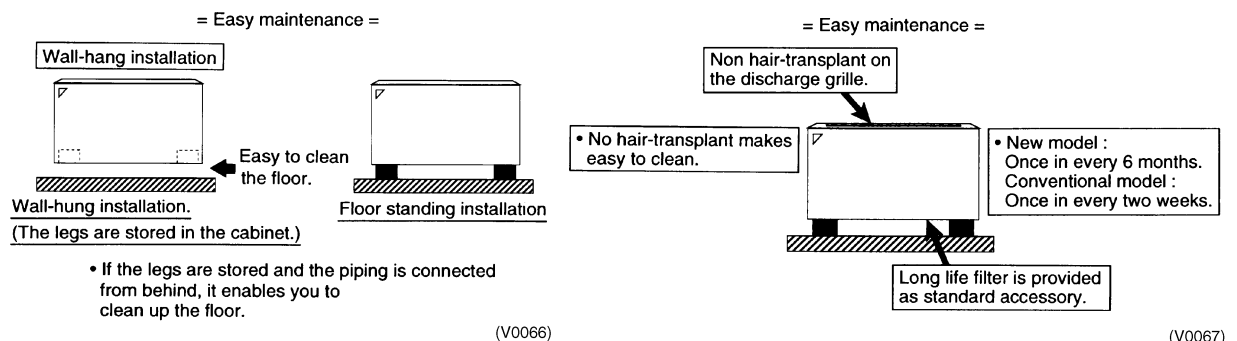
- The piping connection work is facilitated drastically.



## (3) Easy maintenance

When the unit is hung on the wall, it is easy to clean the floor. (Exposed type)

- The maintenance of the discharge grille is improved.
- The interval of filter cleaning is prolonged.



## 2. Specifications

### 2.1 FXLQ-MA

#### Floor Standing Type

Model			FXLQ20MAVE	FXLQ25MAVE	FXLQ32MAVE
*1 Cooling Capacity (19.5°CWB)		kcal/h	2,000	2,500	3,200
		Btu/h	7,800	9,900	12,600
		kW	2.3	2.9	3.7
*2 Cooling Capacity (19.0°CWB)		kW	2.2	2.8	3.6
Casing Color			Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
Dimensions: (H×W×D)		mm	600×1,000×222	600×1,000×222	600×1,140×222
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	3×14×1.5	3×14×1.5	3×14×1.5
	Face Area	m²	0.159	0.159	0.200
Fan	Model		D14B20	D14B20	2D14B13
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	15×1	15×1	25×1
	Air Flow Rate (H/L)	m³/min	7/6	7/6	8/6
		cfm	247/212	247/212	282/212
	Drive		Direct Drive	Direct Drive	Direct Drive
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material			Glass Fiber/ Urethane Foam	Glass Fiber/ Urethane Foam	Glass Fiber/ Urethane Foam
Air Filter			Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)
Piping Connections	Liquid Pipes	mm	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)
	Gas Pipes	mm	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)
	Drain Pipe	mm	φ21 O.D (Vinyl Chloride)	φ21 O.D (Vinyl Chloride)	φ21 O.D (Vinyl Chloride)
Machine Weight (Mass)		kg	25	25	30
*4 Sound Level (H/L) (220V)		dBA	35/32	35/32	35/32
Safety Devices			Fuse. Thermal Protector for Fan Motor.	Fuse. Thermal Protector for Fan Motor.	Fuse. Thermal Protector for Fan Motor.
Refrigerant Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Connectable Outdoor Unit			R-410A P Series	R-410A P Series	R-410A P Series
Standard Accessories			Operation Manual. Installation Manual. Insulation for Fitting. Drain Hose. Clamps. Screws. Washers. Level Adjustment Screw.	Operation Manual. Installation Manual. Insulation for Fitting. Drain Hose. Clamps. Screws. Washers. Level Adjustment Screw.	Operation Manual. Installation Manual. Insulation for Fitting. Drain Hose. Clamps. Screws. Washers. Level Adjustment Screw.
Drawing No.			C : 3D038816A		

#### Note:

- \*1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.  
 \*2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.  
 \*3 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.  
 \*4 Anechoic chamber conversion value, measured at a point 1.5 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.  
 5 Refer to page 293 for Fan Motor Input.

#### Conversion Formulae

kcal/h=kW×860  
 Btu/h=kW×3412  
 cfm=m<sup>3</sup>/min×35.3

## Floor Standing Type

Model			FXLQ40MAVE	FXLQ50MAVE	FXLQ63MAVE
*1 Cooling Capacity (19.5°CWB)		kcal/h	4,000	5,000	6,300
		Btu/h	16,000	19,800	24,900
		kW	4.7	5.8	7.3
*2 Cooling Capacity (19.0°CWB)		kW	4.5	5.6	7.1
Casing Color			Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
Dimensions: (H×W×D)		mm	600×1,140×222	600×1,420×222	600×1,420×222
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	3×14×1.5	3×14×1.5	3×14×1.5
	Face Area	m²	0.200	0.282	0.282
Fan	Model		2D14B13	2D14B20	2D14B20
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	25×1	35×1	35×1
	Air Flow Rate (H/L)	m³/min	11/8.5	14/11	16/12
		cfm	388/300	494/388	565/424
	Drive		Direct Drive	Direct Drive	Direct Drive
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material			Glass Fiber/ Urethane Foam	Glass Fiber/ Urethane Foam	Glass Fiber/ Urethane Foam
Air Filter			Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)
Piping Connections	Liquid Pipes	mm	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ9.5 (Flare Connection)
	Gas Pipes	mm	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ15.9 (Flare Connection)
	Drain Pipe	mm	φ21 O.D (Vinyl Chloride)	φ21 O.D (Vinyl Chloride)	φ21 O.D (Vinyl Chloride)
Machine Weight (Mass)		kg	30	36	36
*4 Sound Level (H/L) (220V)		dBA	38/33	39/34	40/35
Safety Devices			Fuse. Thermal Protector for Fan Motor.	Fuse. Thermal Protector for Fan Motor.	Fuse. Thermal Protector for Fan Motor.
Refrigerant Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Connectable Outdoor Unit			R-410A P Series	R-410A P Series	R-410A P Series
Standard Accessories			Operation Manual. Installation Manual. Insulation for Fitting. Drain Hose. Clamps. Screws. Washers. Level Adjustment Screw.	Operation Manual. Installation Manual. Insulation for Fitting. Drain Hose. Clamps. Screws. Washers. Level Adjustment Screw.	Operation Manual. Installation Manual. Insulation for Fitting. Drain Hose. Clamps. Screws. Washers. Level Adjustment Screw.
Drawing No.			C : 3D038816A		

### Note:

- \*1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.  
 \*2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.  
 \*3 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.  
 \*4 Anechoic chamber conversion value, measured at a point 1.5 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.  
 5 Refer to page 293 for Fan Motor Input.

Conversion Formulae	
kcal/h=kW×860	
Btu/h=kW×3412	
cfm=m <sup>3</sup> /min×35.3	

## 2.2 FXNQ-MA

### Concealed Floor Standing Type

Model			FXNQ20MAVE	FXNQ25MAVE	FXNQ32MAVE
*1 Cooling Capacity (19.5°CWB)		kcal/h	2,000	2,500	3,200
		Btu/h	7,800	9,900	12,600
		kW	2.3	2.9	3.7
*2 Cooling Capacity (19.0°CWB)		kW	2.2	2.8	3.6
Casing Color			Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
Dimensions: (H×W×D)		mm	610×930×220	610×930×220	610×1,070×220
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	3×14×1.5	3×14×1.5	3×14×1.5
	Face Area	m²	0.159	0.159	0.200
Fan	Model		D14B20	D14B20	2D14B13
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	15×1	15×1	25×1
	Air Flow Rate (H/L)	m³/min	7/6	7/6	8/6
		cfm	247/212	247/212	282/212
	Drive		Direct Drive	Direct Drive	Direct Drive
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material			Glass Fiber/ Urethane Foam	Glass Fiber/ Urethane Foam	Glass Fiber/ Urethane Foam
Air Filter			Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)
Piping Connections	Liquid Pipes	mm	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)
	Gas Pipes	mm	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)
	Drain Pipe	mm	φ21 O.D (Vinyl Chloride)	φ21 O.D (Vinyl Chloride)	φ21 O.D (Vinyl Chloride)
Machine Weight (Mass)		kg	19	19	23
*4 Sound Level (H/L) (220V)		dBA	35/32	35/32	35/32
Safety Devices			Fuse. Thermal Protector for Fan Motor.	Fuse. Thermal Protector for Fan Motor.	Fuse. Thermal Protector for Fan Motor.
Refrigerant Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Connectable Outdoor Unit			R-410A P Series	R-410A P Series	R-410A P Series
Standard Accessories			Operation Manual. Installation Manual. Insulation for Fitting. Drain Hose. Clamps. Screws. Washers. Level Adjustment Screw.	Operation Manual. Installation Manual. Insulation for Fitting. Drain Hose. Clamps. Screws. Washers. Level Adjustment Screw.	Operation Manual. Installation Manual. Insulation for Fitting. Drain Hose. Clamps. Screws. Washers. Level Adjustment Screw.
Drawing No.			C : 3D038817A		

#### Note:

- \*1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.  
 \*2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.  
 \*3 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.  
 \*4 Anechoic chamber conversion value, measured at a point 1.5 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.  
 5 Refer to page 293 for Fan Motor Input.

#### Conversion Formulae

kcal/h=kW×860  
 Btu/h=kW×3412  
 cfm=m<sup>3</sup>/min×35.3

## Concealed Floor Standing Type

Model			FXNQ40MAVE	FXNQ50MAVE	FXNQ63MAVE
※1 Cooling Capacity (19.5°CWB)		kcal/h	4,000	5,000	6,300
		Btu/h	16,000	19,800	24,900
		kW	4.7	5.8	7.3
※2 Cooling Capacity (19.0°CWB)		kW	4.5	5.6	7.1
Casing Color			Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
Dimensions: (H×W×D)		mm	610×1,070×220	610×1,350×220	610×1,350×220
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	3×14×1.5	3×14×1.5	3×14×1.5
	Face Area	m <sup>2</sup>	0.200	0.282	0.282
Fan	Model		2D14B13	2D14B20	2D14B20
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	25×1	35×1	35×1
	Air Flow Rate (H/L)	m <sup>3</sup> /min	11/8.5	14/11	16/12
		cfm	388/300	494/388	565/424
	Drive		Direct Drive	Direct Drive	Direct Drive
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material			Glass Fiber / Urethane Foam	Glass Fiber / Urethane Foam	Glass Fiber / Urethane Foam
Air Filter			Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)	Resin Net (with Mold Resistant)
Piping Connections	Liquid Pipes	mm	φ6.4 (Flare Connection)	φ6.4 (Flare Connection)	φ9.5 (Flare Connection)
	Gas Pipes	mm	φ12.7 (Flare Connection)	φ12.7 (Flare Connection)	φ15.9 (Flare Connection)
	Drain Pipe	mm	φ21 O.D (Vinyl Chloride)	φ21 O.D (Vinyl Chloride)	φ21 O.D (Vinyl Chloride)
Machine Weight (Mass)		kg	23	27	27
※4 Sound Level (H/L) (220V)		dBA	38/33	39/34	40/35
Safety Devices			Fuse. Thermal Protector for Fan Motor.	Fuse. Thermal Protector for Fan Motor.	Fuse. Thermal Protector for Fan Motor.
Refrigerant Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Connectable Outdoor Unit			R-410A P Series	R-410A P Series	R-410A P Series
Standard Accessories			Operation Manual. Installation Manual. Insulation for Fitting. Drain Hose. Clamps. Screws. Washers. Level Adjustment Screw.	Operation Manual. Installation Manual. Insulation for Fitting. Drain Hose. Clamps. Screws. Washers. Level Adjustment Screw.	Operation Manual. Installation Manual. Insulation for Fitting. Drain Hose. Clamps. Screws. Washers. Level Adjustment Screw.
Drawing No.			C : 3D038817A		

## Note:

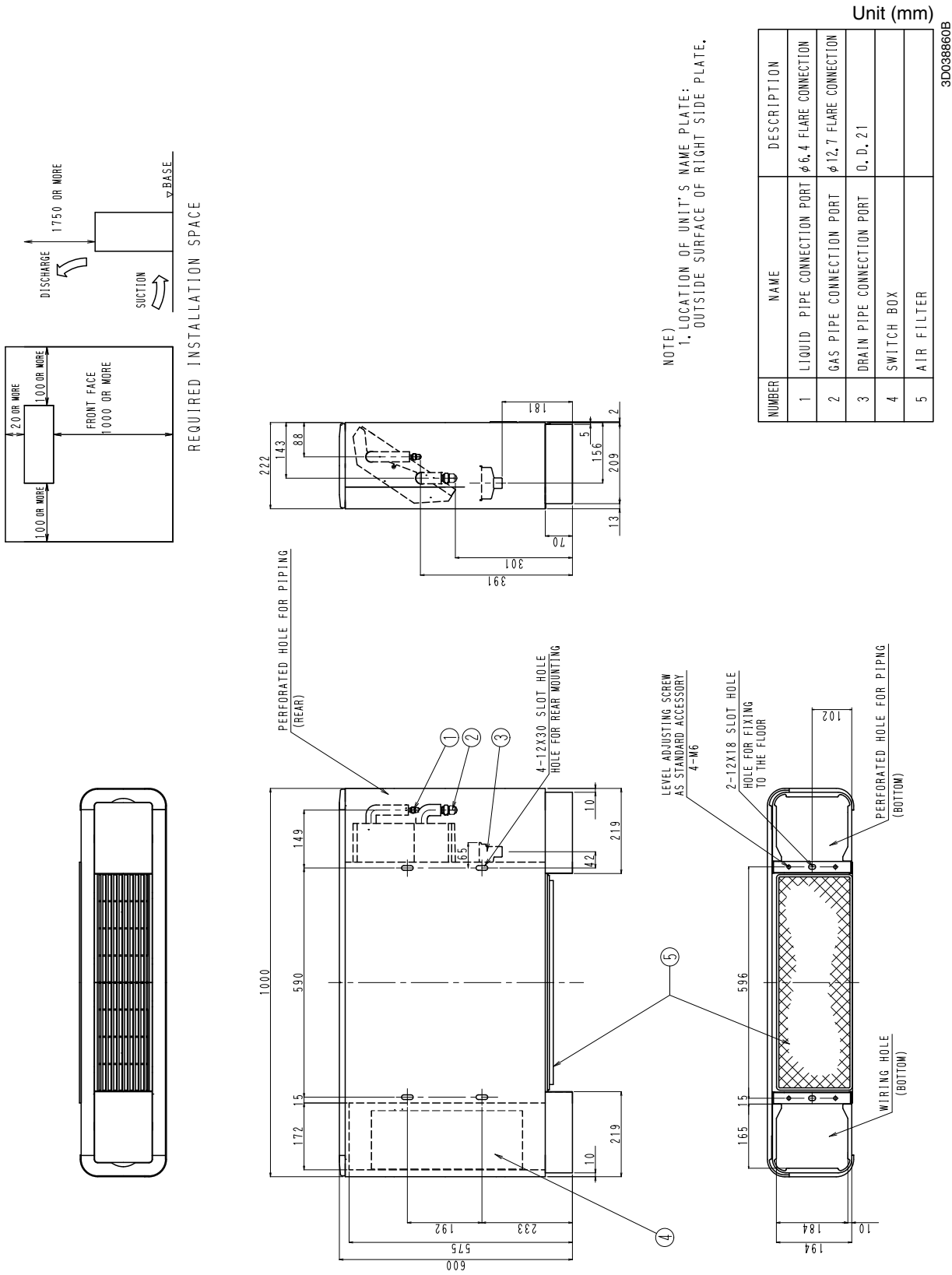
- \*1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.  
 \*2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5 m, level difference : 0 m.  
 \*3 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.  
 \*4 Anechoic chamber conversion value, measured at a point 1.5 m in front of the unit at a height of 1.5 m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.  
 5 Refer to page 293 for Fan Motor Input.

Conversion Formulae
kcal/h=kW×860 Btu/h=kW×3412 cfm=m <sup>3</sup> /min×35.3

3. Dimensions

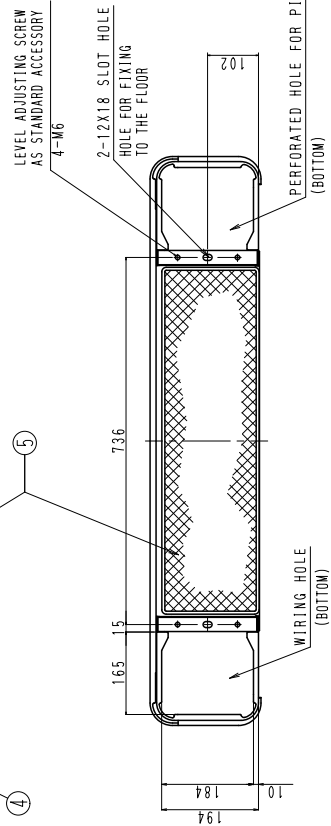
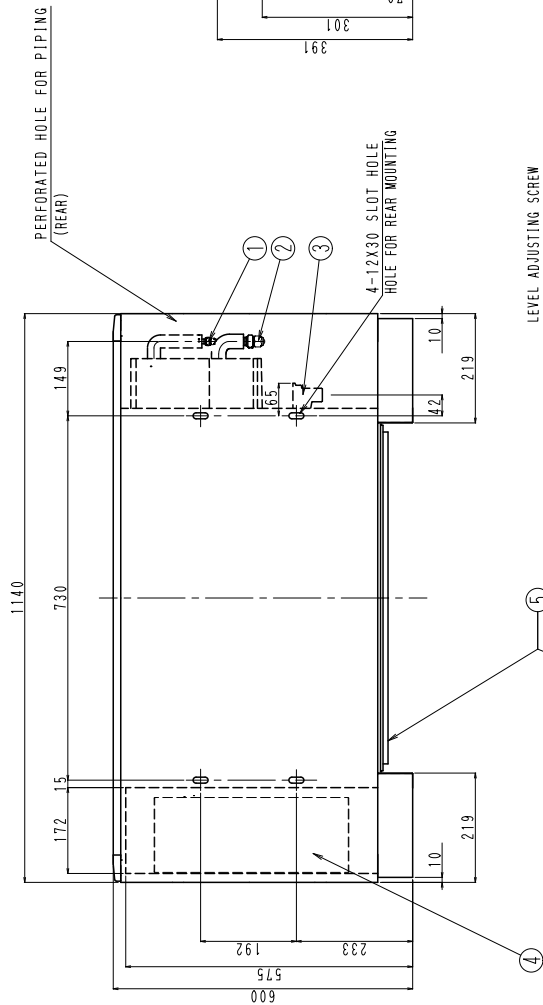
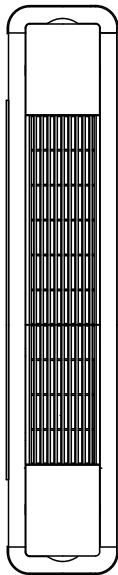
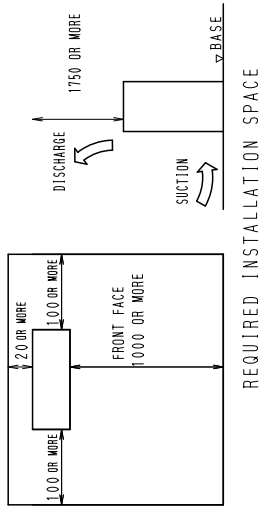
3.1 FXLQ-MA

FXLQ20MA  
FXLQ25MA





FXLQ32MA  
FXLQ40MA



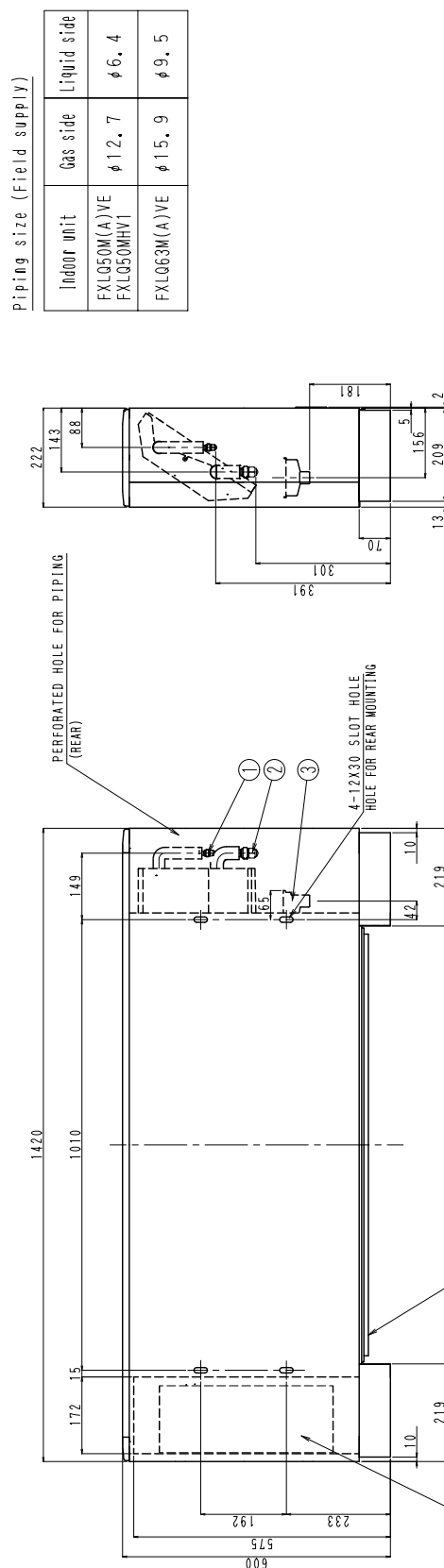
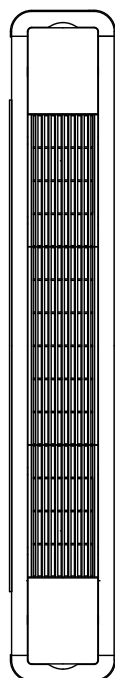
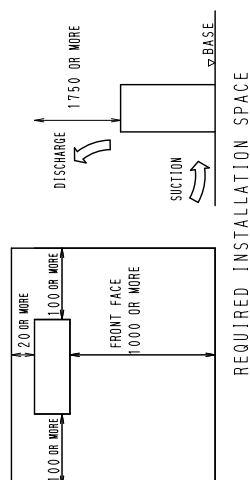
NOTE)  
1. LOCATION OF UNIT'S NAME PLATE:  
OUTSIDE SURFACE OF RIGHT SIDE PLATE.

NUMBER	NAME	DESCRIPTION
1	LIQUID PIPE CONNECTION PORT	φ6.4 FLARE CONNECTION
2	GAS PIPE CONNECTION PORT	φ12.7 FLARE CONNECTION
3	DRAIN PIPE CONNECTION PORT	φ6.4, 21
4	SWITCH BOX	
5	AIR FILTER	

Unit (mm)

3D038861B

**FXLQ50MA**  
**FXLQ63MA**



NOTE)  
1. LOCATION OF UNIT'S NAME PLATE:  
OUTSIDE SURFACE OF RIGHT SIDE PLATE.

NUMBER	NAME	DESCRIPTION
1	LQUID PIPE CONNECTION	FLARE CONNECTION
2	GAS PIPE CONNECTION	FLARE CONNECTION
3	DRAIN PIPE CONNECTION PORT	0, 0, 21
4	SWITCH BOX	
5	AIR FILTER	

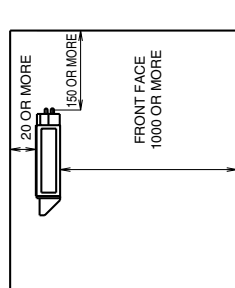
Unit (mm)

3D038862B

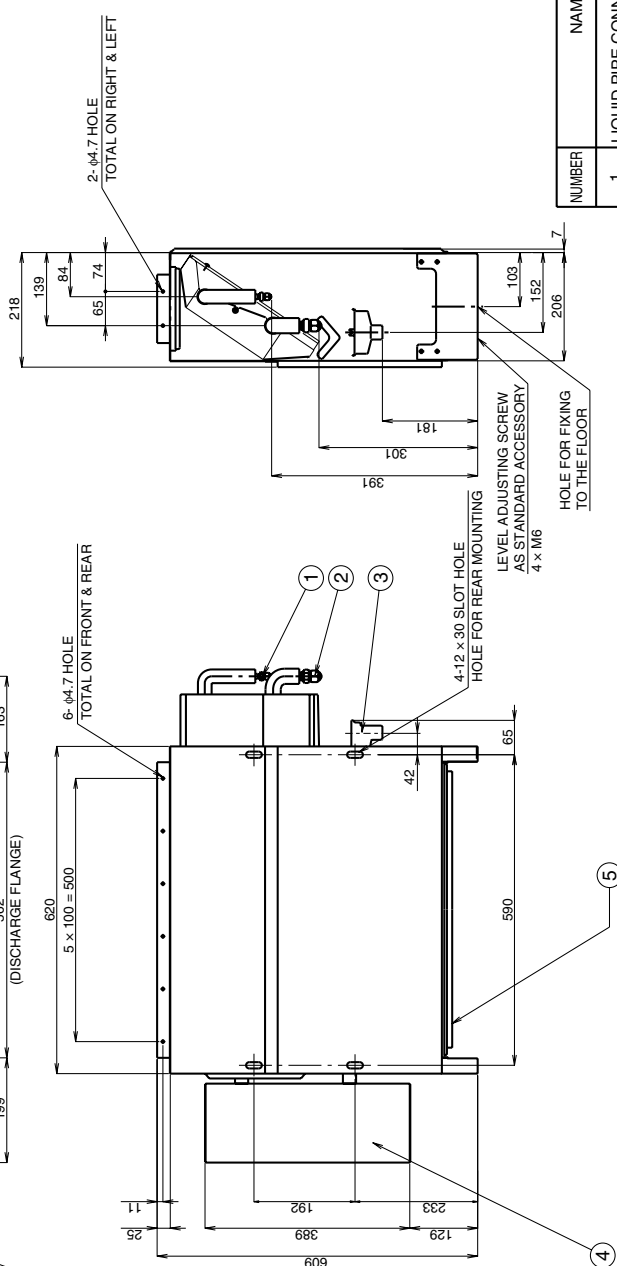
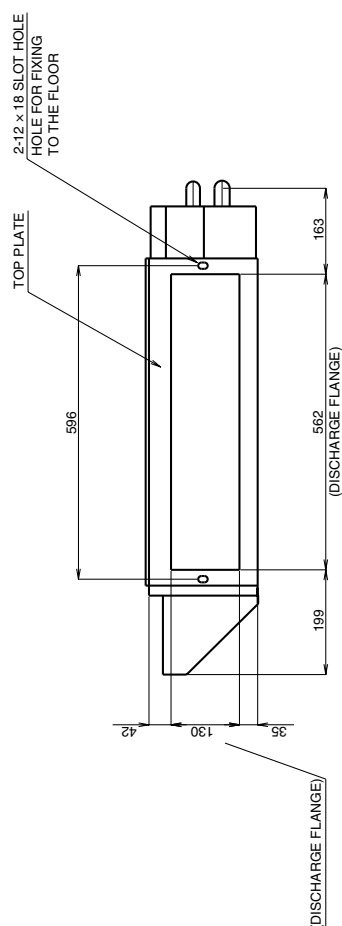
### 3.2 FXNQ-MA

**FXNQ20MA****FXNQ25MA**

Unit (mm)



## REQUIRED INSTALLATION SPACE



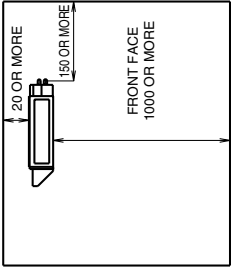
NUMBER	NAME	DESCRIPTION
1	LIQUID PIPE CONNECTION PORT	ø6.4 FLARE CONNECTION
2	GAS PIPE CONNECTION PORT	ø12.7 FLARE CONNECTION
3	DRAIN PIPE CONNECTION PORT	O.D.21
4	SWITCH BOX	
5	AIR FILTER	

(NOTE)  
1. LOCATION OF UNIT'S NAME PLATE:  
THE RIGHT LOWER CORNER OF FRONT PLATE

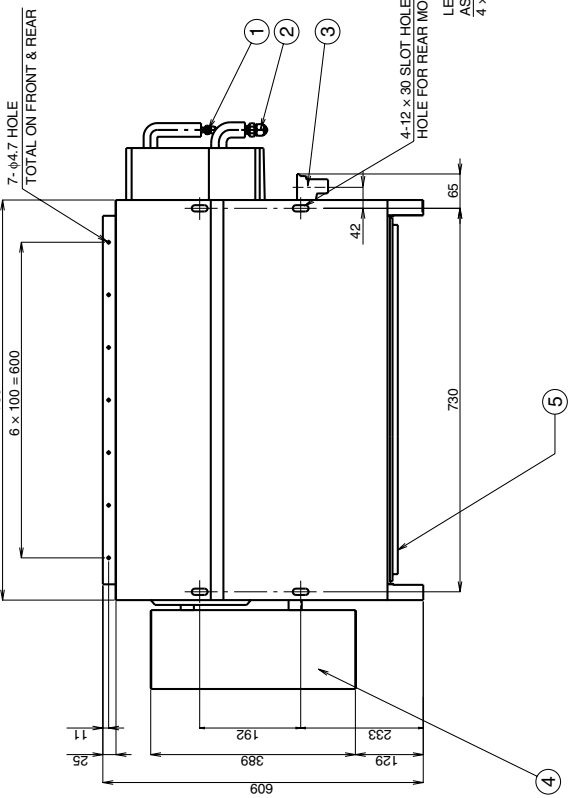
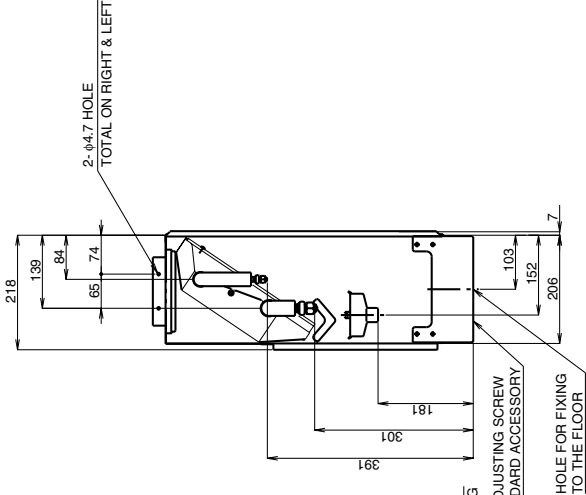
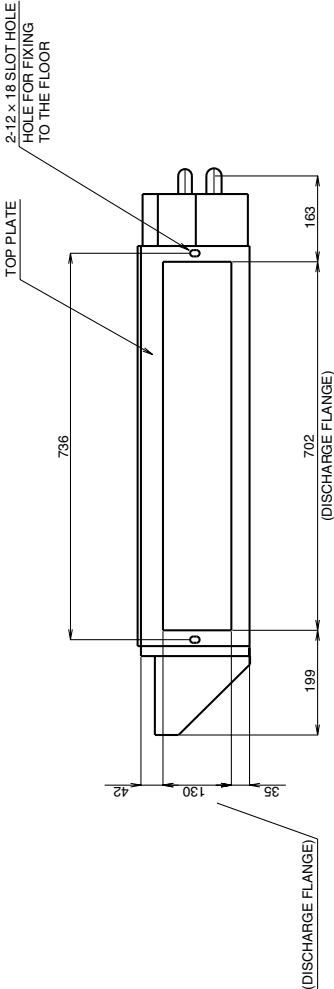
3D038863B

FXNQ32MA  
FXNQ40MA

Unit (mm)



REQUIRED INSTALLATION SPACE

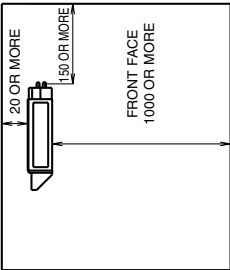


NUMBER	NAME	DESCRIPTION
1	LIQUID PIPE CONNECTION PORT	ø6.4 FLARE CONNECTION
2	GAS PIPE CONNECTION PORT	ø12.7 FLARE CONNECTION
3	DRAIN PIPE CONNECTION PORT	O.D.21
4	SWITCH BOX	
5	AIR FILTER	

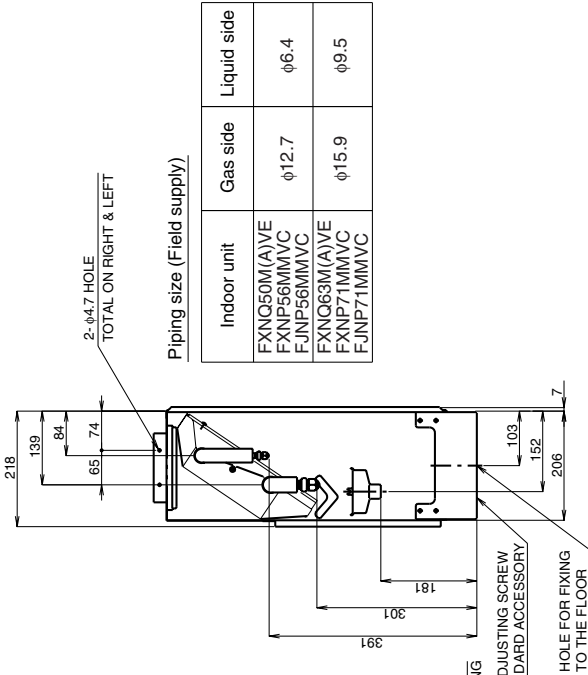
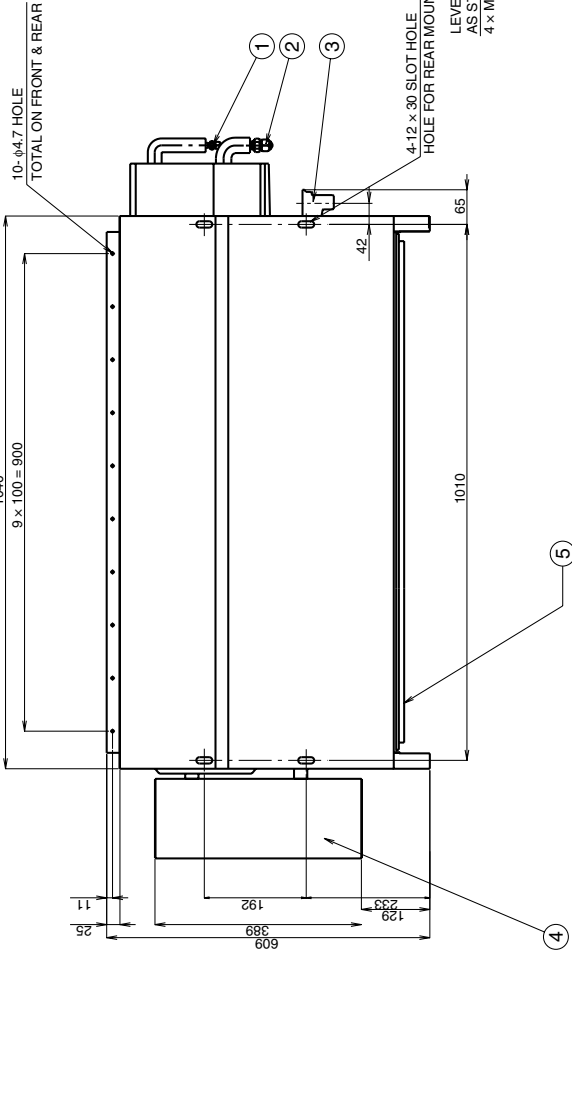
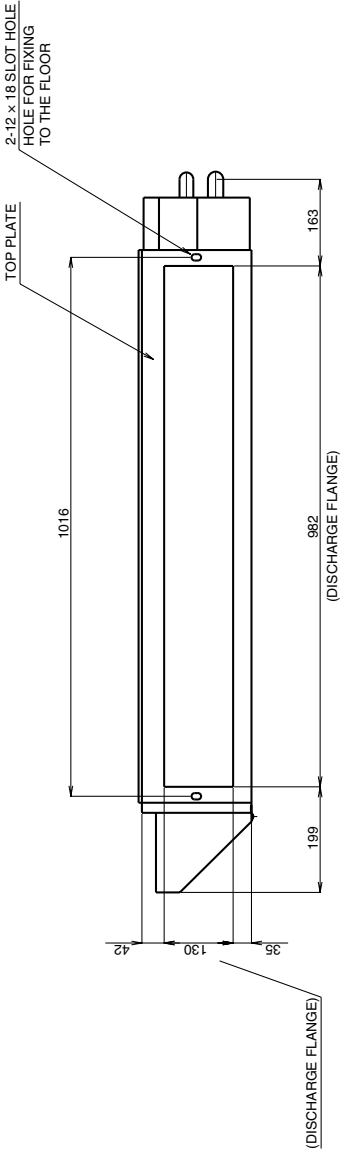
3D038864C

NOTE)  
1. LOCATION OF UNIT'S NAME PLATE:  
THE RIGHT LOWER CORNER OF FRONT PLATE

FXNQ50MA  
FXNQ63MA



REQUIRED INSTALLATION SPACE



Piping size (Field supply)

Indoor unit	Gas side	Liquid side
FXNQ50M(A)VE	φ12.7	φ6.4
FXNP56MMVC		
FJNP56MMVC		
FXNQ63M(A)VE	φ15.9	φ9.5
FXNP71MMVC		
FJNP71MMVC		

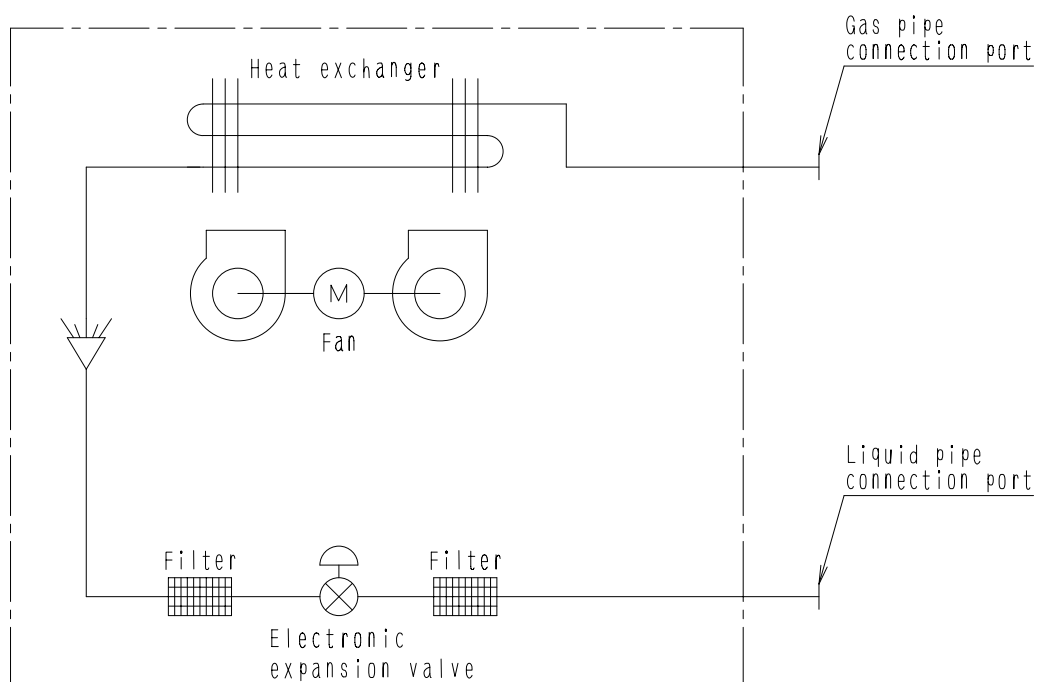
NUMBER	NAME	DESCRIPTION
1	LIQUID PIPE CONNECTION PORT	FLARE CONNECTION
2	GAS PIPE CONNECTION	FLARE CONNECTION
3	DRAIN PIPE CONNECTION	O.D.21
4	SWITCH BOX	
5	AIR FILTER	

Unit (mm)

3D038865C

1. LOCATION OF UNIT'S NAME PLATE:  
THE RIGHT LOWER CORNER OF FRONT PLATE

## 4. Piping Diagrams



10

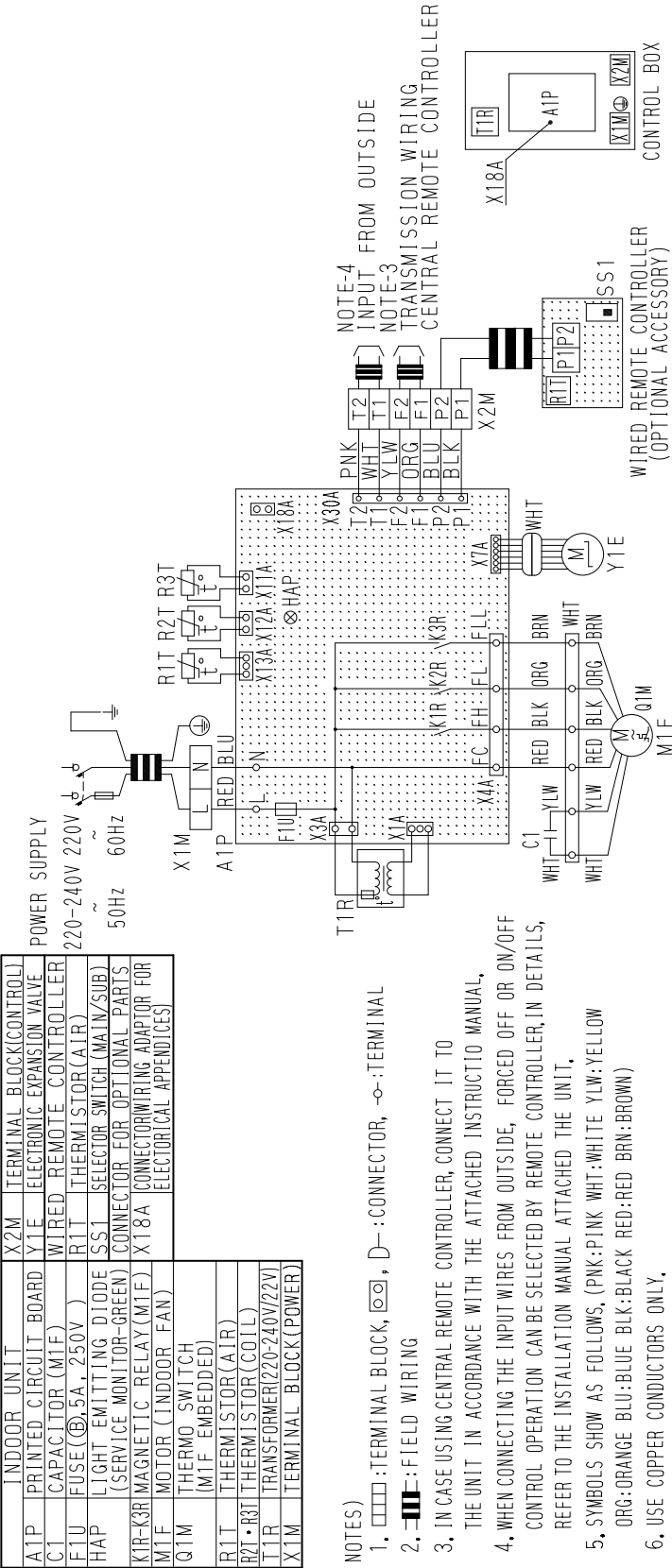
4D034245A

### ■ Refrigerant pipe connection port diameters

Model	(mm)	
	Gas	Liquid
FXLQ20 · 25 · 32 · 40 · 50MA FXNQ20 · 25 · 32 · 40 · 50MA	φ12.7	φ6.4
FXLQ63MA FXNQ63MA	φ15.9	φ9.5

5. Wiring Diagrams

FXLQ20 · 25 · 32 · 40 · 50 · 63MAVE  
FXNQ20 · 25 · 32 · 40 · 50 · 63MAVE



3D039826D

## 6. Electric Characteristics

Units				Power supply		IFM		Input(W)	
Model	Hz	Volts	Voltage range	MCA	MFA	KW	FLA	Cooling	Heating
FXLQ・FXNQ20MAVE	50	220-240	MAX. 264 Min. 198	0.3	15	0.015	0.2	49	49
FXLQ・FXNQ25MAVE				0.3	15	0.015	0.2	49	49
FXLQ・FXNQ32MAVE				0.6	15	0.025	0.5	90	90
FXLQ・FXNQ40MAVE				0.6	15	0.025	0.5	90	90
FXLQ・FXNQ50MAVE				0.6	15	0.035	0.5	110	110
FXLQ・FXNQ63MAVE				0.6	15	0.035	0.5	110	110

### Symbols :

MCA : Min. Circuit Amps (A)  
 MFA : Max. Fuse Amps (See note 5)  
 KW : Fan Motor Rated Output(KW)  
 FLA : Full Load Amps(A)  
 IFM : Indoor Fan Motor

### Note :

#### 1. Voltage range

Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits,

#### 2. Maximum allowable voltage unbalance between phases is 2%.

#### 3. MCA/MFA

$$MCA = 1.25 \times FLA$$

$$MFA \leq 4 \times FLA$$

(Next lower standard fuse rating. Min. 15A)

#### 4. Select wire size based on the MCA.

#### 5. Instead of fuse, use Circuit Breaker.

C : 4D034579B



## 7.1 Cooling Capacity

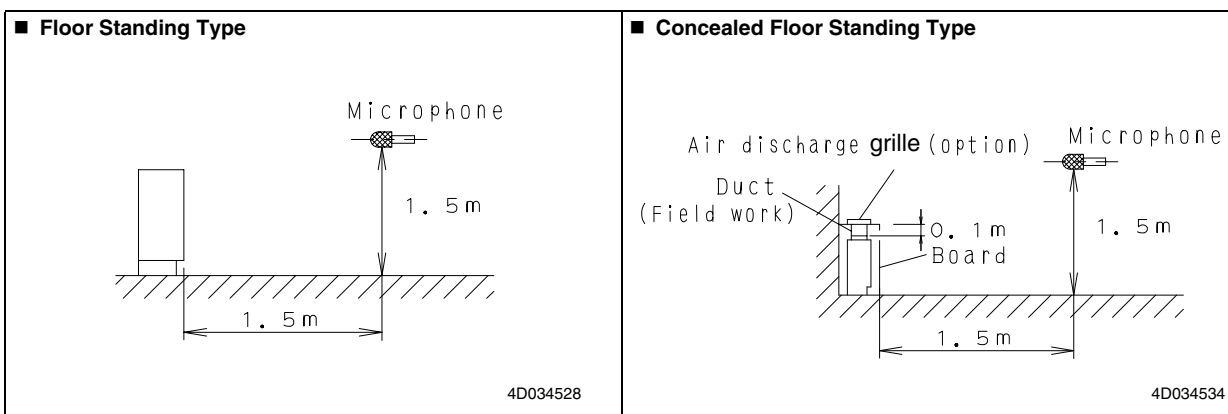
**[50Hz]**

 Refer to Outdoor Unit Capacity Tables : on page 411~, 470~, for the actual performance data of each indoor and outdoor unit combination.



## 8. Sound Levels

### Overall



dBA					dBA				
Model	220V, 50Hz		240V, 50Hz		Model	220V, 50Hz		240V, 50Hz	
	H	L	H	L		H	L	H	L
FXLQ20MA FXLQ25MA FXLQ32MA	35	32	37	34	FXNQ20MA FXNQ25MA FXNQ32MA	35	32	37	34
FXLQ40MA	38	33	40	35	FXNQ40MA	38	33	40	35
FXLQ50MA	39	34	41	36	FXNQ50MA	39	34	41	36
FXLQ63MA	40	35	42	37	FXNQ63MA	40	35	42	37

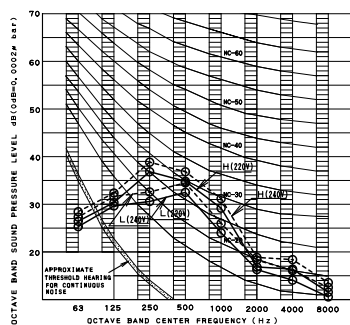
**Note:**

1. The operating conditions are assumed to be standard (JIS conditions).
2. These operating values were obtained in a dead room (conversion values).  
Sound level will vary depending on a range of factors such as the construction (acoustic absorption coefficient) of the particular room in which the equipments installed.

## Octave Band Level

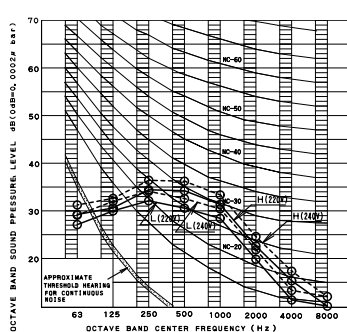
- — ○ 220V 50Hz  
 ○ - - - ○ 240V 50Hz

## FXLQ20 · 25MAVE



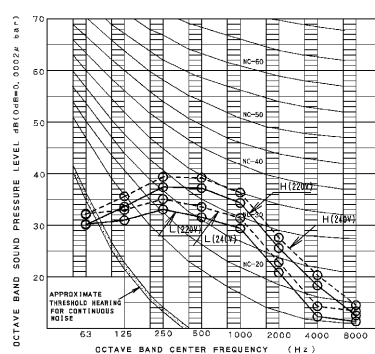
4D034528A

## FXLQ32MAVE



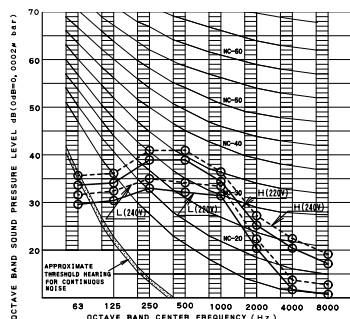
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## FXLQ40MAVE



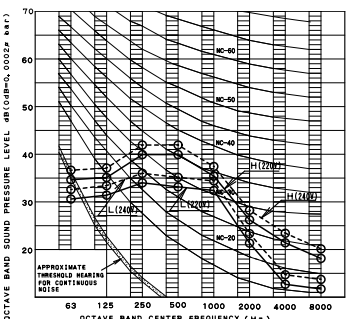
4D034565A

## FXLQ50MAVE



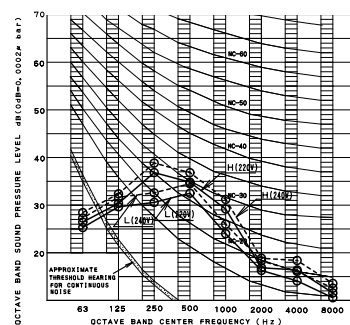
4D034566A

## FXLQ63MAVE



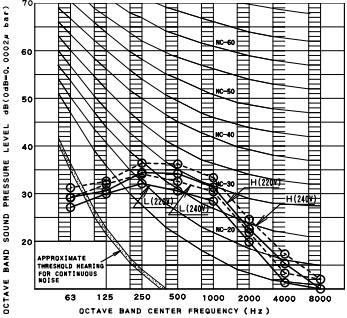
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## FXNQ20 · 25MAVE



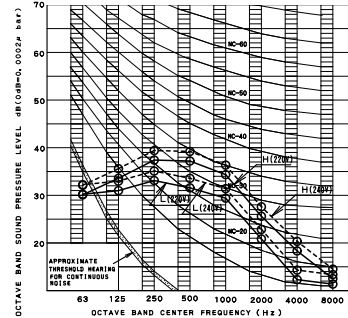
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## FXNQ32MAVE



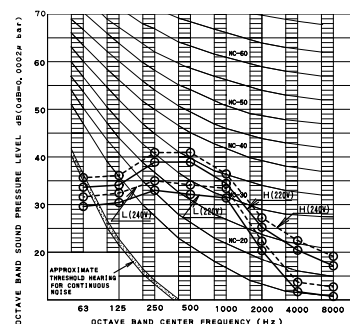
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## FXNQ40MAVE



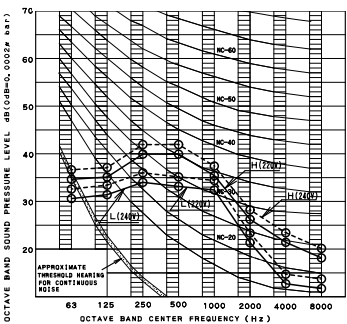
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## FXNQ50MAVE



4D034537A

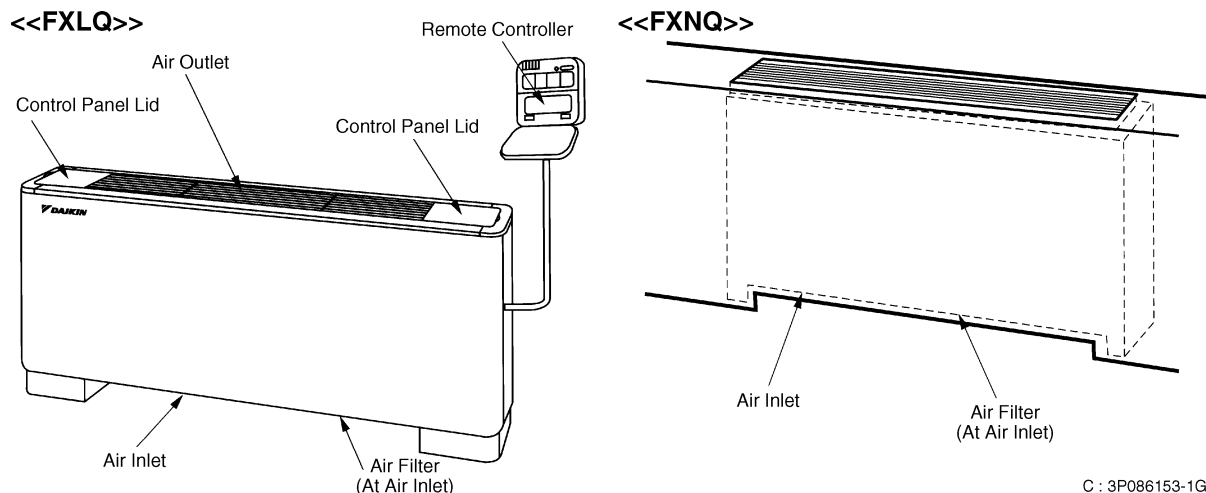
## FXNQ63MAVE



4D034538A

## 9. Installation

### Installation Example



### Service Space

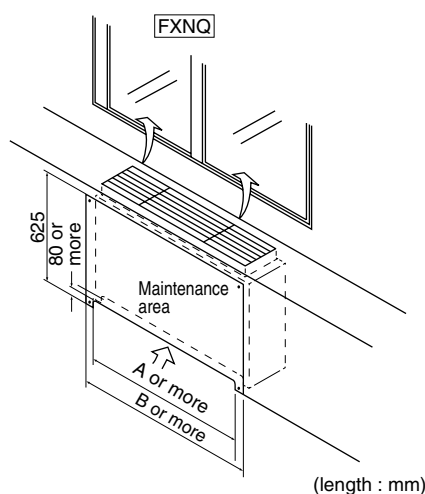
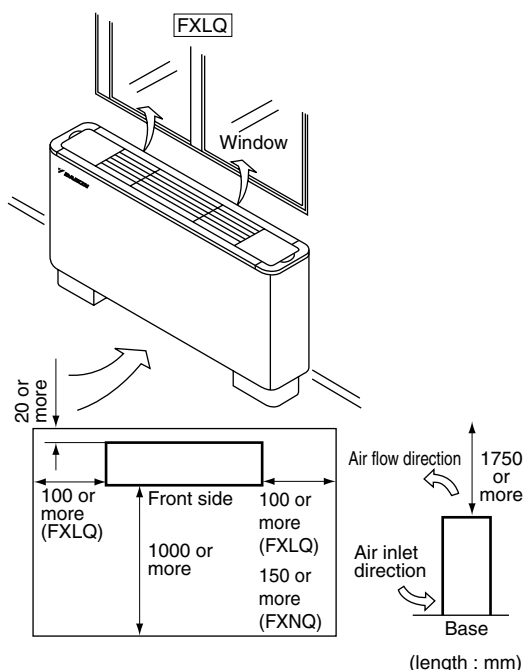
(1) Select an installation site where the following conditions are satisfied and that meets with your customer's approval.

- Where the floor is strong enough to bear the indoor unit weight.
- Where the floor is not significantly inclined.
- Where nothing blocks the air passage.
- Where condensate can be properly drained.
- Where sufficient clearance for installation and maintenance can be ensured.
- Where optimum air distribution can be ensured.
- Where there is no risk of flammable gas leakage.
- Where piping between indoor and outdoor units is possible within the allowable limit. (Refer to the installation manual of the outdoor unit.)



### CAUTION

- Install the indoor and outdoor units, power supply wiring and connecting wires at least 1 meter away from televisions or radios in order to prevent image interference or noise.  
(Depending on the radio waves, a distance of 1 meter may not be sufficient enough to eliminate the noise.)



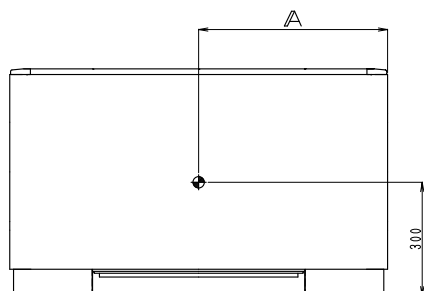
(IMPORTANT) Leave sufficient clearance for air inlet and maintenance.

Model		A (mm)	B (mm)
FXLQ20 · 25MAVE	FXNQ20 · 25MAVE	570	1030
FXLQ32 · 40MAVE	FXNQ32 · 40MAVE	710	1170
FXLQ50 · 63MAVE	FXNQ50 · 63MAVE	990	1450

C : 3P086154-2K

## Center of Gravity

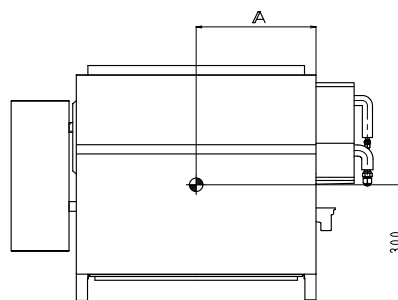
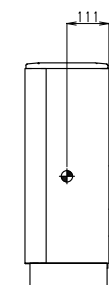
### FXLQ



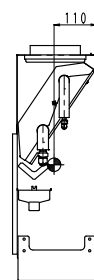
	A
FXLQ20•25MAVE	500
FXLQ32•40MAVE	570
FXLQ50•63MAVE	710

### FXNQ

Unit (mm)



Unit (mm)



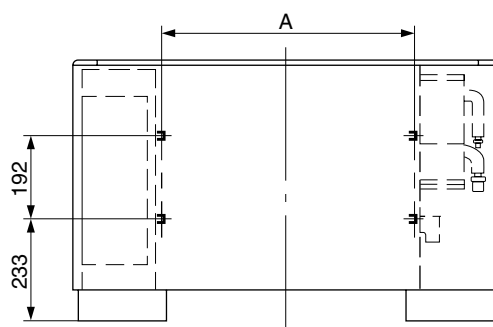
	A
FXNQ20•25MAVE	395
FXNQ32•40MAVE	465
FXNQ50•63MAVE	505

C : 4D034527B

C : 4D034533A

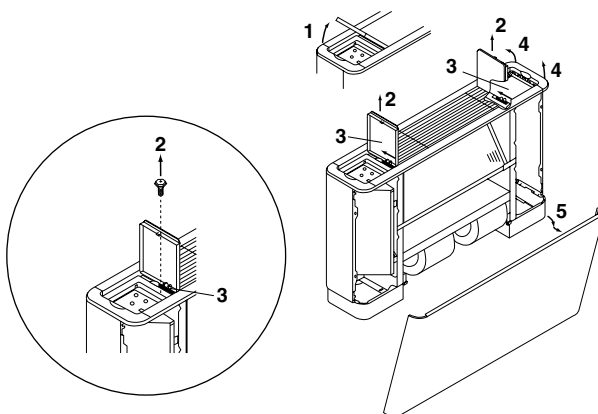
## Bolt Pitch

### (1) Positioning of holes for fastening to the wall



Model	A (mm)
FXNQ20 · 25MAVE	590
FXNQ32 · 40MAVE	730
FXNQ50 · 63MAVE	1010

### (2) How to open / close the front panel



1. Open the lid of control panel (both left and right)
  2. Remove screws (both left and right) that lock the knobs in position.
  3. Push the knobs (both left and right) to the rear.
  4. Lift the front of the top plate.
  5. Lower the front panel towards the front of the unit.
- To close, perform the procedure in opposite order. Pull towards the front unit the knob snaps in place.

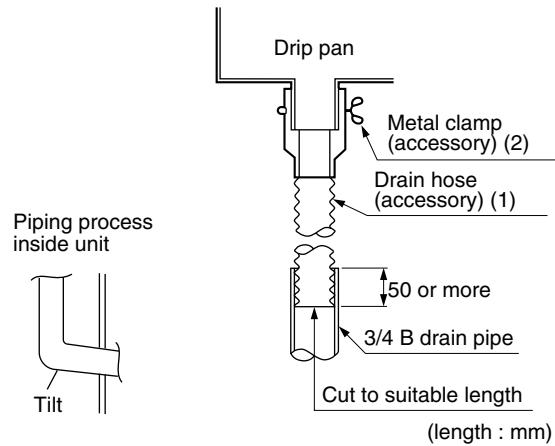
C : 3P086154-2K

## Drain Piping Work

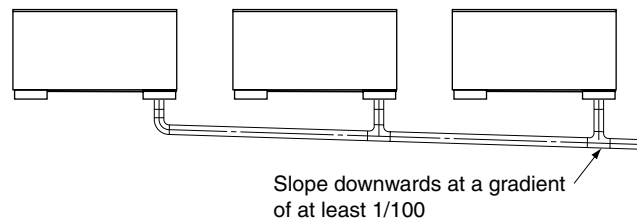
«Rig the drain pipe as shown below and take measures against condensation. Improperly rigged piping could lead to leaks and eventually wet furniture and belongings.»

(1) Carry out the drain piping.

Connect the drain hose (1) using the attached hose and parts, as shown in the right drawing.



- If converging multiple drain pipes, install according to the procedure shown below.



Select converging drain pipes whose gauge is suitable for the operating capacity of the unit.

(2) After piping work is finished, check drainage flows smoothly.

- Add approximately 1 liter of water slowly from the air outlet and check drainage flow.
- (3) Be sure to insulate all indoor pipes.



### CAUTION

- Drain piping connections  
Do not connect the drain piping directly to sewage pipes that smell of ammonia. The ammonia in the sewage might enter the indoor unit through the drain pipes and corrode the heat exchanger.
- Keep in mind that it will become the cause of getting drain pipe blocked if water collects on drain pipe.

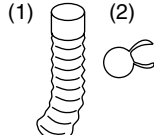



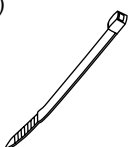
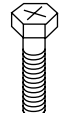
C : 3P086154-2K

## 10. Accessories

### Standard Accessories

FXLQ20~63MA

FXNQ20~63MA

Name	Drain hose	Insulation for fitting	Sealing pad	Clamp	Leveling	[Other] • Operation manual • Installation manual
Quantity	1 set	1 each.	1 pc.	8 pcs.	4 pcs.	
Shape	Hose × 1 Metal clamp × 1 	(3) For gas pipe  (4) For liquid pipe 	(5) 	(6) 	(7) 	

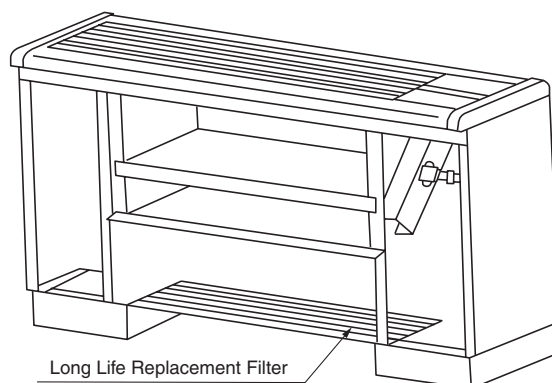
C : 3P086154-2K

### Optional Accessories (For Unit)

No.	Type	FXLQ20MA FXNQ20MA	FXLQ25MA FXNQ25MA	FXLQ32MA FXNQ32MA	FXLQ40MA FXNQ40MA	FXLQ50MA FXNQ50MA	FXLQ63MA FXNQ63MA
1	Long life replacement filter	KAFJ361K28		KAFJ361K45		KAFJ361K71	

C : 4D034574B

### Optional Accessories (For Controls) : Refer to P.561



(V0683)

# **FXUQ-MA**

## **Ceiling Suspended Cassette Type**

### **(Connection Unit Series)**

1. Features .....	302
2. Specifications .....	303
3. Dimensions .....	305
4. Piping Diagrams .....	308
5. Wiring Diagrams .....	309
6. Electric Characteristics .....	311
7. Capacity Tables .....	312
7.1 Cooling Capacity .....	312
8. Air Velocity and Temperature Distributions (Reference Data) .....	313
9. Sound Levels .....	315
10. Installation .....	316
10.1 Indoor Units .....	316
10.2 Connecting Units .....	321
11. Accessories .....	331



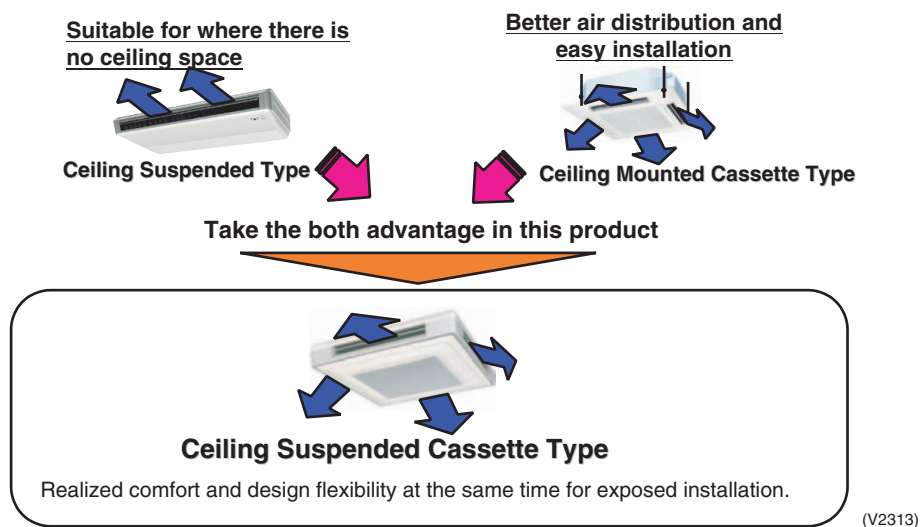
# 1. Features

## Flexibility in installation location

Because the installation location, air flow direction and air flow rate can be selected according to the shape, lighting, and interior design of a room, the Ceiling Suspended Cassette Type air conditioner will create a comfortable environment throughout the room. This is a completely new air conditioning system that produces the comfort level of a four-way air flow, ceiling-mounted cassette type air conditioner with the ease of a ceiling-suspended unit.



## Development back ground of FXUQ-MA



### Flexible Design

- Daikin unique cassette
- Low Silhouette design:  
71 Type - 165mm thickness  
(Current Multi Flow Cassette:338mm)
- Aesthetically pleasing design
- High ceiling up 3.5m
- Flexible air distribution by control of direction and volume

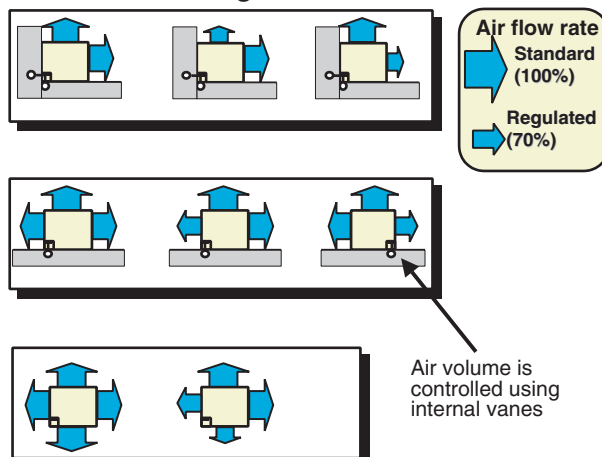
### Easy Installation

- Flexible piping installation  
(3 directions)
- Ceiling space not required

### Easy Maintenance

- Long life filter (standard accessories)
- Drain pump(standard accessories)

### <Variable discharge direction and air volume>



(V2314)

## 2. Specifications

### Ceiling Suspended Cassette Type

Model		Indoor Unit		FXUQ71MAV1	FXUQ100MAV1	FXUQ125MAV1
		Connection	Unit	BEVQ71MAVE	BEVQ100MAVE	BEVQ125MAVE
★1 Cooling Capacity (19.5°CWB)			kcal/h	7,100	10,000	12,500
			Btu/h	28,300	39,600	49,500
			kW	8.3	11.6	14.5
★2 Cooling Capacity (19.0°CWB)			kW	8.0	11.2	14.0
Casing Color				White (10Y9/0.5)	White (10Y9/0.5)	White (10Y9/0.5)
Dimensions: (H×W×D)			mm	165×895×895	230×895×895	230×895×895
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch		mm	3×6×1.5	3×8×1.5	3×8×1.5
	Face Area		m²	0.265	0.353	0.353
Fan	Model			QTS48A10M	QTS50B15M	QTS50B15M
	Type			Turbo Fan	Turbo Fan	Turbo Fan
	Motor Output × Number of Units		W	45×1	90×1	90×1
	Air Flow Rate (H/L)		m³/min	19/14	29/21	32/23
			cfm	671/494	1,024/741	1,130/812
Drive				Direct Drive	Direct Drive	Direct Drive
Temperature Control				Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material				Heat Resistant Foamed Polyethylene, Regular Foamed Polyethylene	Heat Resistant Foamed Polyethylene, Regular Foamed Polyethylene	Heat Resistant Foamed Polyethylene, Regular Foamed Polyethylene
Piping Connections	Liquid Pipes		mm	φ9.5 (Flare Connection)	φ9.5 (Flare Connection)	φ9.5 (Flare Connection)
	Gas Pipes		mm	φ15.9 (Flare Connection)	φ15.9 (Flare Connection)	φ15.9 (Flare Connection)
	Drain Pipe		mm	VP20 (External Dia. 26 Internal Dia. 20)	VP20 (External Dia. 26 Internal Dia. 20)	VP20 (External Dia. 26 Internal Dia. 20)
Machine Weight			kg	25	31	31
★4 Sound Level (H/L) (230V)			dBA	40/35	43/38	44/39
Safety Devices				Thermal Protector for Fan Motor	Thermal Protector for Fan Motor	Thermal Protector for Fan Motor
Standard Accessories				Operation Manual, Installation Manual, Drain Hose, Clamp Metal, Insulation for Fitting, Sealing Pads, Clamps, Screws, Washers, Holding Plate.	Operation Manual, Installation Manual, Drain Hose, Clamp Metal, Insulation for Fitting, Sealing Pads, Clamps, Screws, Washers, Holding Plate.	Operation Manual, Installation Manual, Drain Hose, Clamp Metal, Insulation for Fitting, Sealing Pads, Clamps, Screws, Washers, Holding Plate.
Drawing No.				C : 4D045395A		

#### Notes:

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp.: 35°CDB / Equivalent piping length: 7.5m, level difference: 0m.
- ★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp.: 35°CDB / Equivalent piping length: 7.5m, level difference: 0m.
- 3 Capacities are net, including a deduction for cooling (an additional for heating) for indoor fan motor heat.
- ★4 Anechoic chamber conversion value, measured at a point 1.5m downward from the unit center. These values are normally somewhat higher during actual operation as a result of ambient conditions.
- 5 Refer to page 311 for Fan Motor Input.

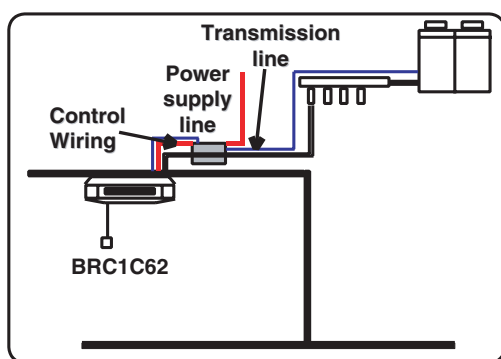
#### Conversion Formulae

kcal/h=kW×860  
 Btu/h=kW×3412  
 cfm=m<sup>3</sup>/min×35.3

## BEV Units

Model			BEVQ71MAVE	BEVQ100MAVE	BEVQ125MAVE
Power Supply			1 Phase 50Hz 220~240V	1 Phase 50Hz 220~240V	1 Phase 50Hz 220~240V
Casing			Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
Dimensions: (HxWxD)		mm	100x350x225	100x350x225	100x350x225
Sound Absorbing Thermal Insulation Material			Flame and Heat Resistant Foamed Polyethylene	Flame and Heat Resistant Foamed Polyethylene	Flame and Heat Resistant Foamed Polyethylene
Piping Connection	Indoor Unit	Liquid Pipes	9.5mm (Flare Connection)	9.5mm (Flare Connection)	9.5mm (Flare Connection)
		Gas Pipes	15.9mm (Flare Connection)	15.9mm (Flare Connection)	15.9mm (Flare Connection)
	Outdoor Unit	Liquid Pipes	9.5mm (Flare Connection)	9.5mm (Flare Connection)	9.5mm (Flare Connection)
		Suction Gas Pipes	15.9mm (Flare Connection)	15.9mm (Flare Connection)	15.9mm (Flare Connection)
Machine Weight (Mass)		kg	3.0	3.0	3.5
Standard Accessories			Installation manual, Gas piping connections, Insulation for fitting, Sealing material, Clamps	Installation manual, Gas piping connections, Insulation for fitting, Sealing material, Clamps	Installation manual, Gas piping connections, Insulation for fitting, Sealing material, Clamps
Drawing No.			4D045387A	4D045387A	4D045388A

## Connection Example



## 1. Wiring Work

- The connecting line between SkyAir Indoor Unit – BEV Unit : 3 cores...like a Transmission Line
- BEV Unit's power supply line;  
Single phase 2 line...like a VRV Indoor unit
- BEV Unit – other VRV indoor unit or outdoor unit – : 2 cores...DIII network wiring (super wiring)

## 2. Piping work

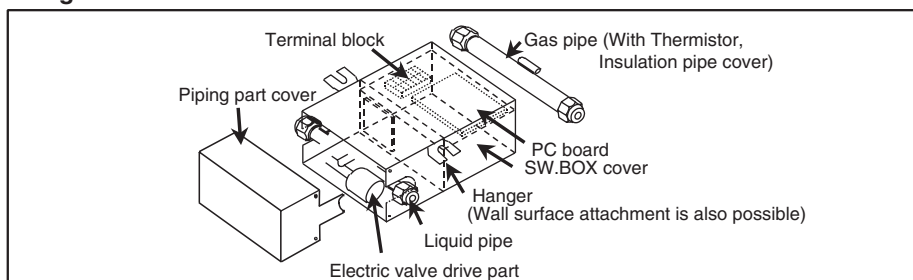
SkyAir side, Outdoor Unit Side, They are both flare connection.

## ■ Consideration matter

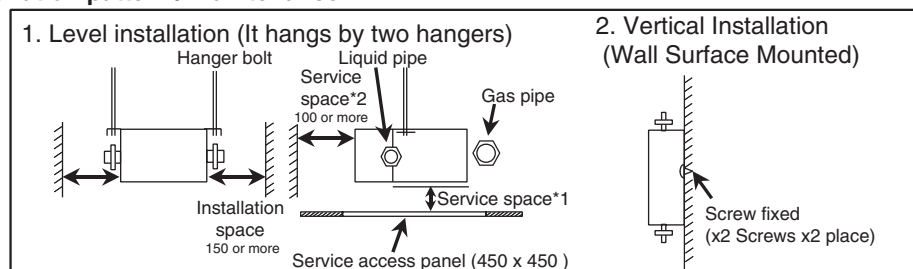
- When connecting centralized-control device, it is necessary to **install an interface adaptor for SkyAir series in an indoor unit.**
- Distance between indoor unit and –BEV unit must be **within 5m.**

(V2315)

## ■ Outline figure



## ■ Installation pattern / maintenance



\*1; Service space for switch box.

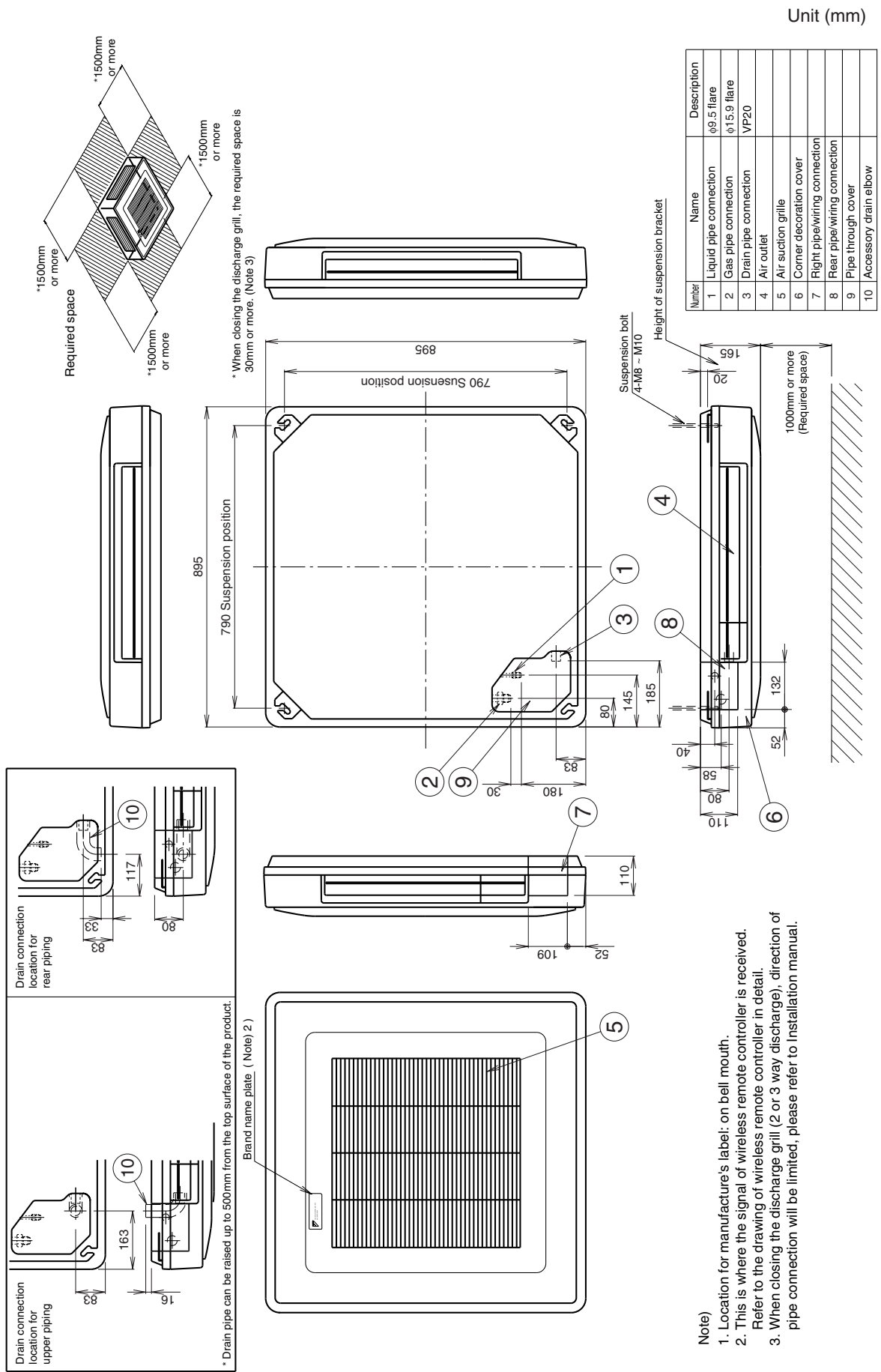
(Service access panel is required for the bottom side. When there is nothing, 350 or more spaces are required.)

\*2; For electric valve drive part's maintenance. (a control box is removed)

(V2316)

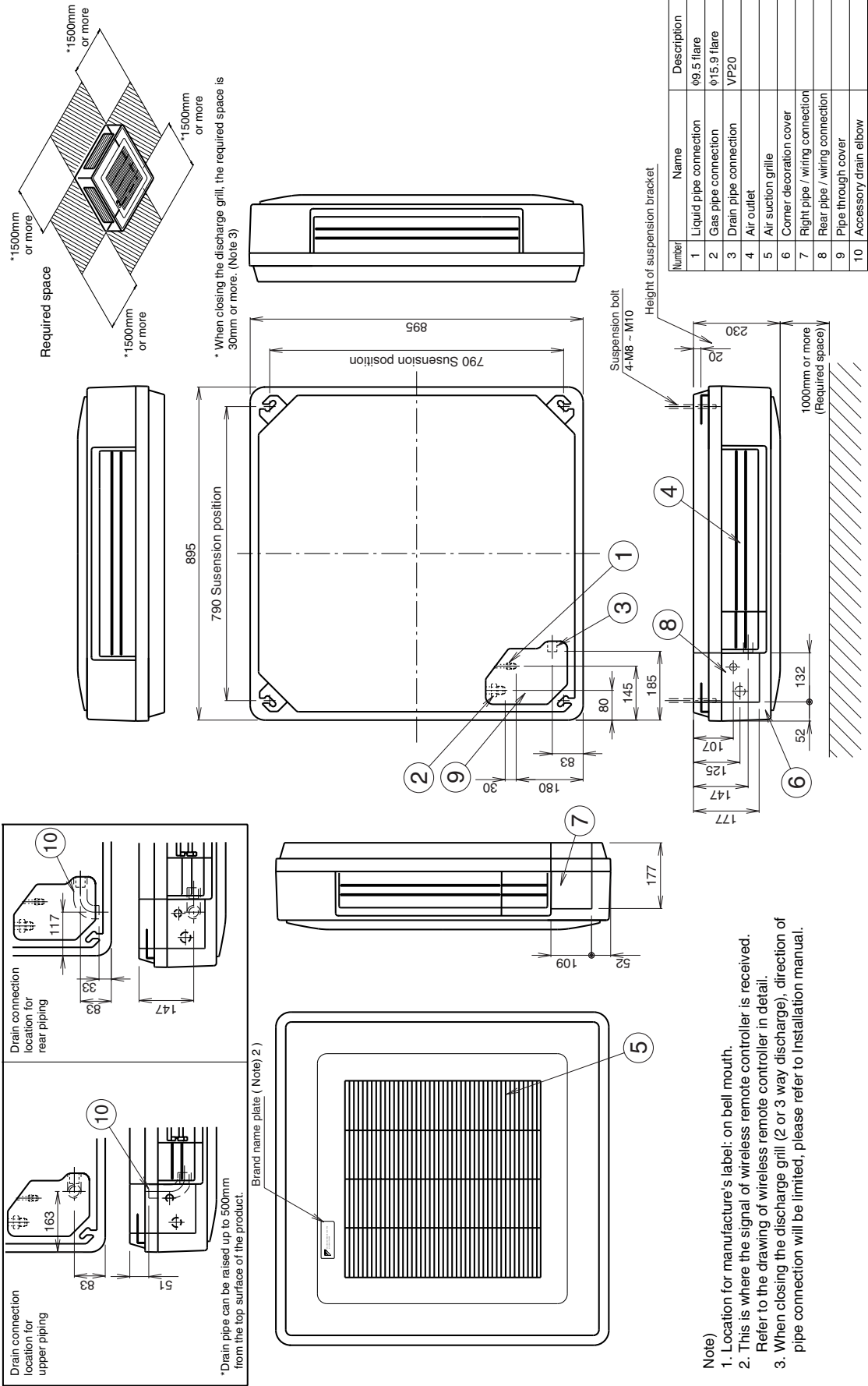
3. Dimensions

FXUQ71MAV1



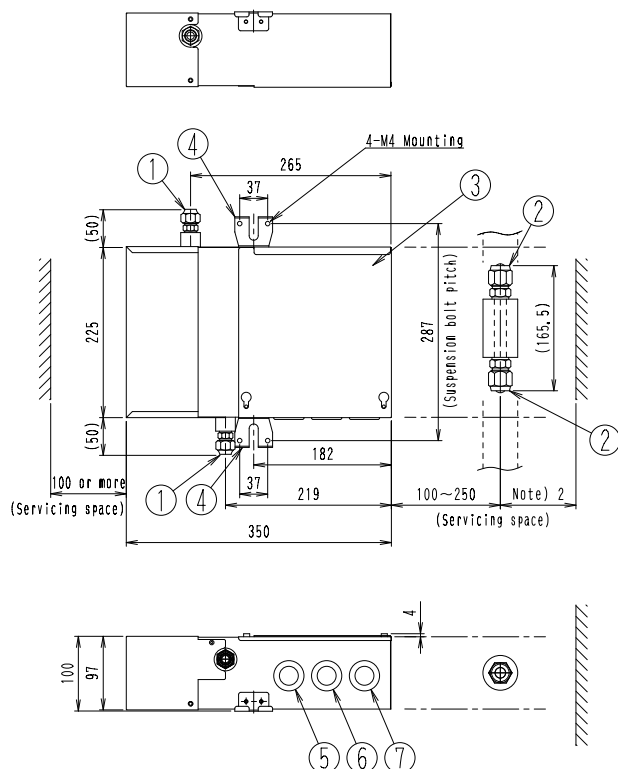
FXUQ100MAV1  
FXUQ125MAV1

Unit (mm)

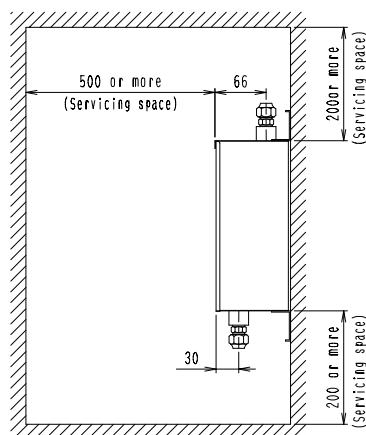


3D044898B

## BEVQ71MA / 100MA / 125MAVE (When installing the unit on wall)



Notes) 1. Be sure to install wire connection port to be sure to become downward.  
2. Be sure to secure the space which can be the tightening work of the flare nut.



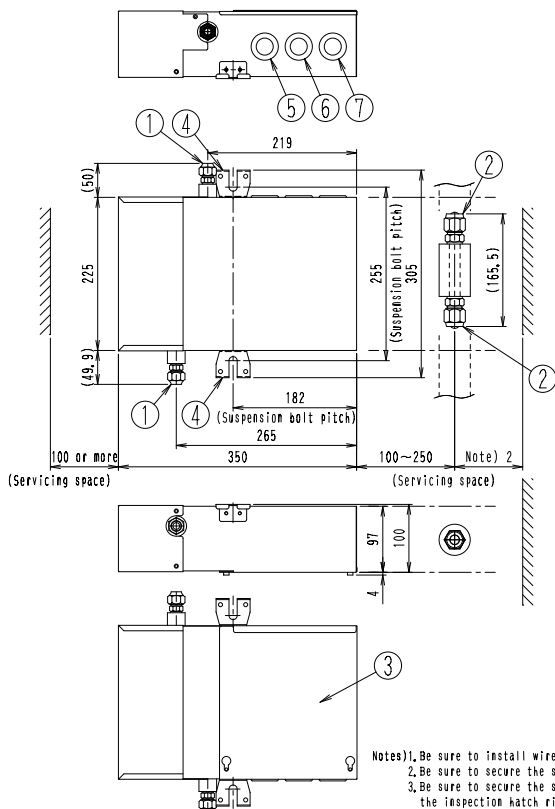
INSTALLATION FIGURE  
(When installing the unit on wall)

7	Wire connection port(Transmission(VRV) - Gas pipe thermistor)	
6	Wire connection port(Power supply - Ground)	
5	Wire connection port(Indoor unit connection)	
4	Suspension bolt	
3	Electric parts box	
2	Gas pipe connection port	φ15.9mm flare connection
1	Liquid pipe connection port	φ 9.5mm flare connection
Number	Part name	Description

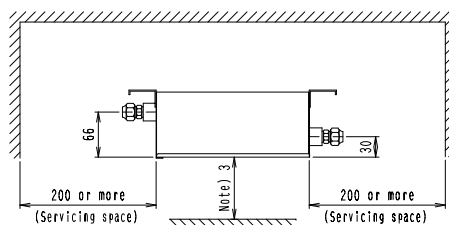
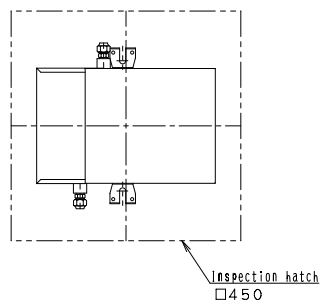
C: 3D045389

11

## BEVQ71MA / 100MA / 125MAVE (When hanging the unit from the ceiling)



Notes) 1. Be sure to install wire connection port to be sure to become downward.  
2. Be sure to secure the space which can be the tightening work of the flare nut.  
3. Be sure to secure the space of 400mm or more when you cannot install the inspection hatch right under the unit.



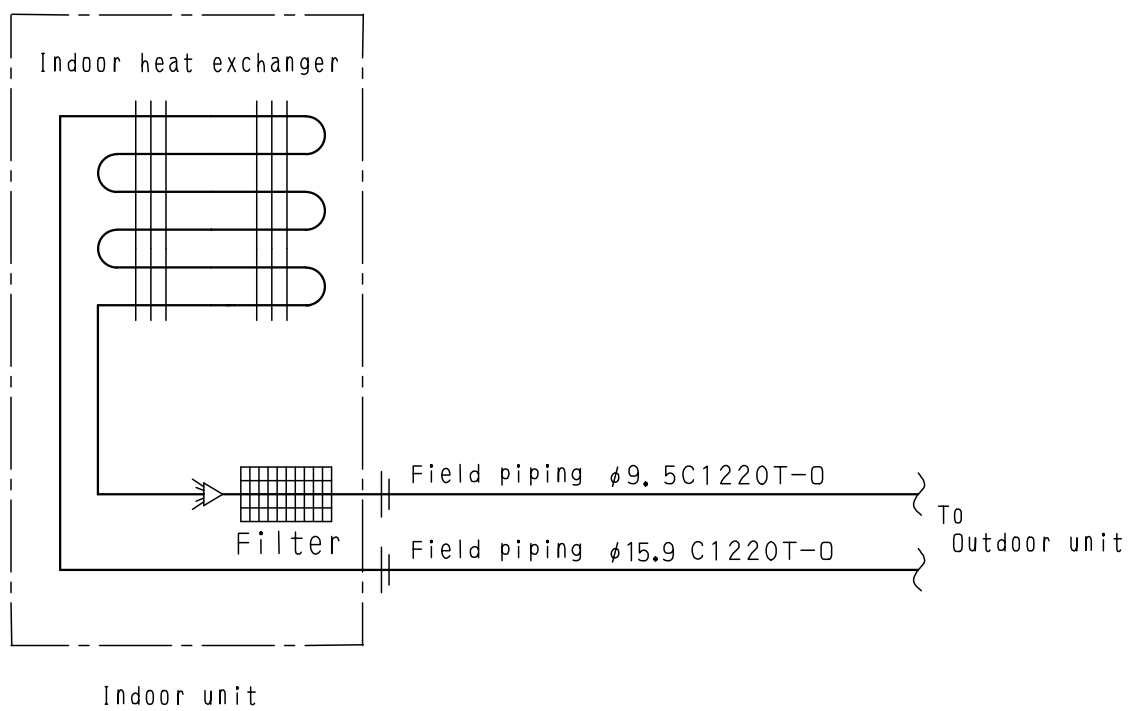
INSTALLATION FIGURE  
(When hanging the unit from the ceiling)

7	Wire connection port(Transmission(VRV) - Gas pipe thermistor)	
6	Wire connection port(Power supply - Ground)	
5	Wire connection port(Indoor unit connection)	
4	Suspension bolt	
3	Electric parts box	
2	Gas pipe connection port	φ15.9mm flare connection
1	Liquid pipe connection port	φ 9.5mm flare connection
Number	Part name	Description

C: 3D045390

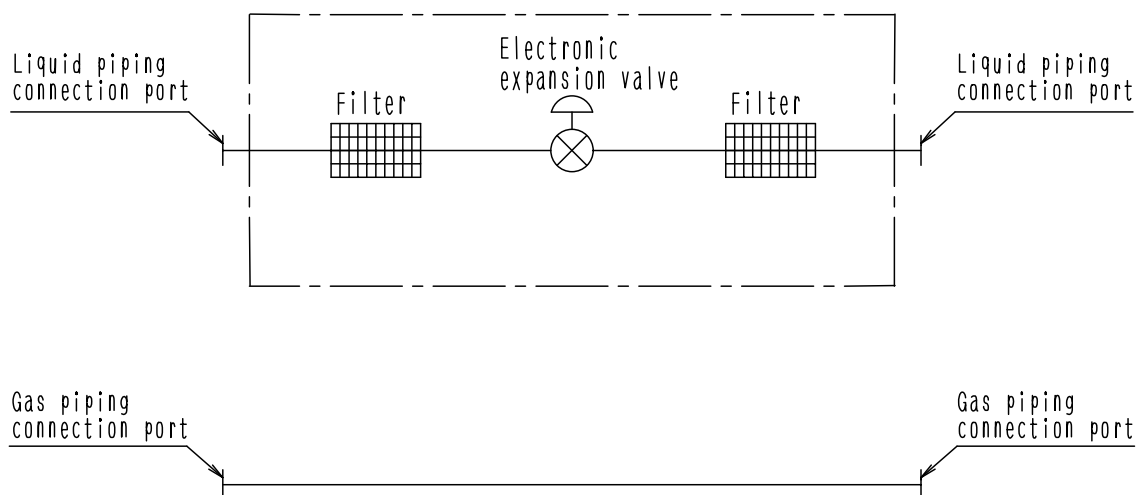
## 4. Piping Diagrams

### Indoor unit



C: 4D037995F

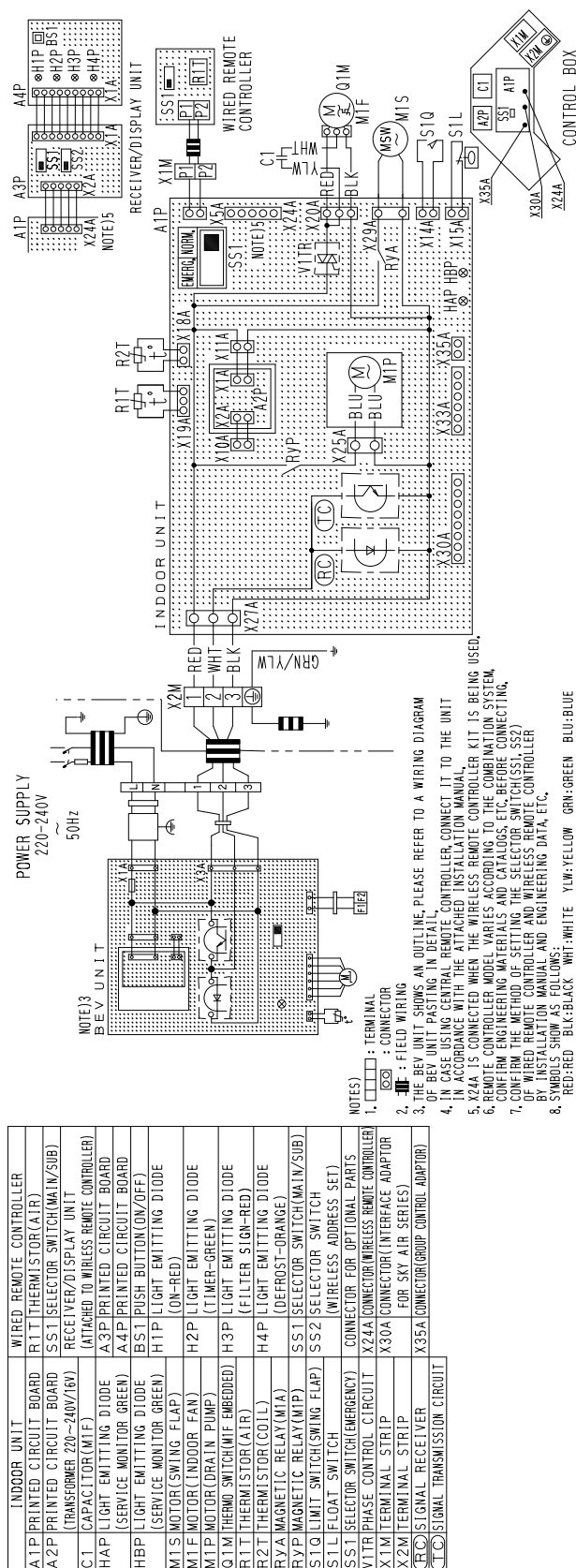
### Connection Unit



4D034127B

## 5. Wiring Diagrams

### FXUQ71MAV1 / FXUQ100MAV1 / FXUQ125MAV1

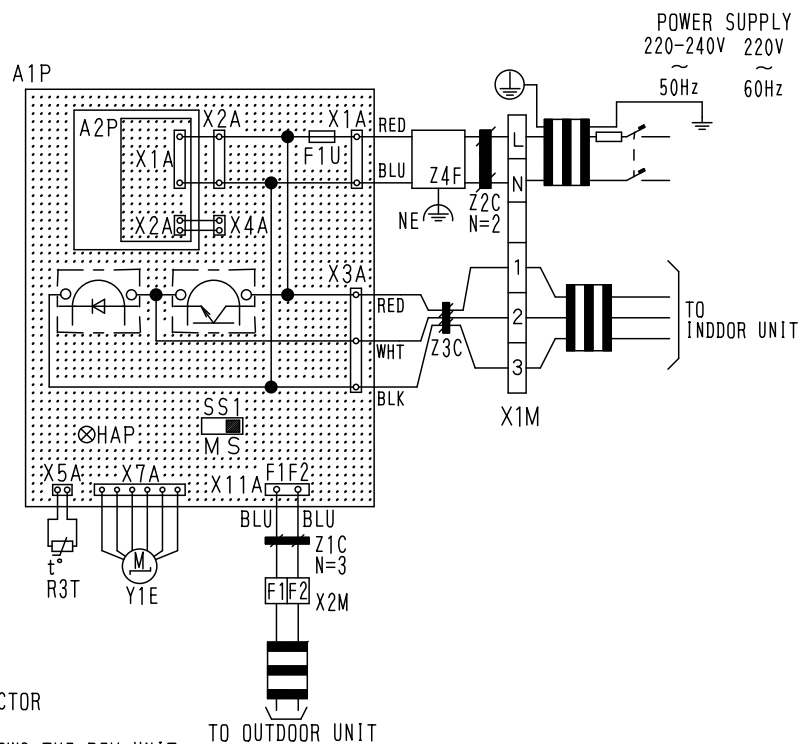
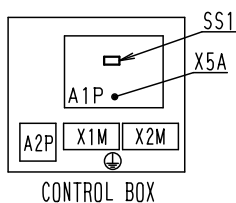


3D044973A



## BEVQ71MAVE / BEVQ100MAVE / BEVQ125MAVE

BEV UNIT	
A1P	PRINTED CIRCUIT BOARD ASSY
A2P	POWER SUPPLY PRINTED CIRCUIT BOARD ASSY(220-240V/16V)
F1U	FUSE(②, 10A, 250V)
HAP	LIGHT EMITTING DIODE (SERVICE MONITOR-GRREN)
R3T	THERMISTOR(GAS)
SS1	SELECTOR SWITCH(M/S)
X1M	TERMINAL STRIP(POWER)
X2M	TERMINAL STRIP(TRANSMISSION)
Y1E	ELECTRONIC EXPANSION VALVE
Z1C • Z2C Z3C • Z4F	NOISE FILTER



- 注) 1. : TERMINAL : CONNECTOR  
 2. : FIELD WIRING  
 3. THIS WIRING DIAGRAM ONLY SHOWS THE BEV UNIT.  
 SEE THE WIRING DIAGRAMS AND INSTALLATION MANUALS FOR THE WIRING AND SETTINGS FOR THE INDOOR, OUTDOOR, AND BS UNITS.  
 4. SEE THE INDOOR UNIT'S WIRING DIAGRAM WHEN INSTALLING OPTIONAL PARTS FOR THE INDOOR UNIT.  
 5. ONLY ONE INDOOR UNIT MAY BE CONNECTED TO THE BEV UNIT.  
 SEE THE INDOOR UNIT'S WIRING DIAGRAM FOR WHEN CONNECTING THE REMOTE CONTROL.  
 6. ALWAYS USE THE SKY AIR CONNECTION ADAPTER FOR THE INDOOR UNIT WHEN USING A CENTRAL CONTROL UNIT.  
 REFER TO THE MANUAL ATTACHED THE UNIT WHEN CONNECTING.  
 7. COOL/HEAT CHANGEOVER OF INDOOR UNITS CONNECTED TO BEV UNIT CANNOT BE CARRIED OUT UNLESS THEY ARE CONNECTED TO BS UNIT.  
 IN CASE OF A SYSTEM WITH BEV UNIT ONLY, COOL/HEAT SELECTOR IS REQUIRED.  
 8. SET THE SS1 TO "M" ONLY FOR THE BEV UNIT CONNECTED TO THE INDOOR UNIT WHICH IS TO HAVE COOL/HEAT SWITCHING CAPABILITY, WHEN CONNECTING THE BS UNIT.  
 THE "M/S" ON THE SS1 STANDS FOR "MAIN/SUB".  
 THIS IS SET TO "S" WHEN SHIPPED FROM THE FACTORY.  
 9. CONNECT THE ATTACHED THERMISTOR TO THE R3T.  
 10. SYMBOLS SHOW AS FOLLOWS.  
 ( BLU:BLUE RED:RED WHT:WHITE BLK:BLACK )

3D044901B

## 6. Electric Characteristics

Units				Power supply		IFM		Input(W)	
Model	Hz	Volts	Voltage range	MCA	MFA	KW	FLA	Cooling	Heating
BEVQ71M(A)VE +FXUQ71M(A)V1	50	220-240	MAX. 264 Min. 198	0.8	15	0.045	0.6	189	169
BEVQ100M(A)VE +FXUQ100M(A)V1				1.3	15	0.090	1.0	298	278
BEVQ125M(A)VE +FXUQ125M(A)V1									

Symbols :

MCA : Min. Circuit Amps (A)  
 MFA : Max. Fuse Amps (See note 5)  
 KW : Fan Motor Rated Output(KW)  
 FLA : Full Load Amps(A)  
 IFM : Indoor Fan Motor

Note :

- Voltage range  
Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.
- Maximum allowable voltage unbalance between phases is 2%.
- MCA/MFA  

$$MCA = 1.25 \times FLA$$

$$MFA \leq 4 \times FLA$$
 (Next lower standard fuse rating. Min. 15A)
- Select wire size based on the MCA.
- Instead of fuse, use Circuit Breaker.

C: 4D034128B

## 7. Capacity Tables

### 7.1 Cooling Capacity

FXUQ-MA

[50Hz]

Unit Size	Outdoor air temp. °CDB	Indoor air temp.												Cooling capacity											
		14.0°CWB 20°CDB				16.0°CWB 23°CDB				18.0°CWB 26°CDB						20.0°CWB 28°CDB				22.0°CWB 30°CDB				24.0°CWB 32°CDB	
		TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC			TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
71	10.0	5.4	4.8	6.4	5.2	7.5	5.8	8.0	6.0	8.5	6.0	9.6	6.2	10.5	6.3										
	12.0	5.4	4.8	6.4	5.2	7.5	5.8	8.0	6.0	8.5	6.0	9.6	6.2	10.4	6.2										
	14.0	5.4	4.8	6.4	5.2	7.5	5.8	8.0	6.0	8.5	6.0	9.6	6.2	10.3	6.2										
	16.0	5.4	4.8	6.4	5.2	7.5	5.8	8.0	6.0	8.5	6.0	9.6	6.2	10.1	6.1										
	18.0	5.4	4.8	6.4	5.2	7.5	5.8	8.0	6.0	8.5	6.0	9.6	6.2	10.0	6.0										
	20.0	5.4	4.8	6.4	5.2	7.5	5.8	8.0	6.0	8.5	6.0	9.6	6.2	9.8	5.9										
	21.0	5.4	4.8	6.4	5.2	7.5	5.8	8.0	6.0	8.5	6.0	9.6	6.2	9.8	5.9										
	23.0	5.4	4.8	6.4	5.2	7.5	5.8	8.0	6.0	8.5	6.0	9.6	6.2	9.6	5.8										
	25.0	5.4	4.8	6.4	5.2	7.5	5.8	8.0	6.0	8.5	6.0	9.6	6.2	9.6	5.8										
	27.0	5.4	4.8	6.4	5.2	7.5	5.8	8.0	6.0	8.5	6.0	9.6	6.2	9.4	5.7										
	29.0	5.4	4.8	6.4	5.2	7.5	5.8	8.0	6.0	8.5	6.0	9.6	6.2	9.2	5.7										
	31.0	5.4	4.8	6.4	5.2	7.5	5.8	8.0	6.0	8.5	6.0	9.6	6.2	9.1	5.6										
33.0	5.4	4.8	6.4	5.2	7.5	5.8	8.0	6.0	8.5	6.0	9.6	6.2	8.9	5.6											
35.0	5.4	4.8	6.4	5.2	7.5	5.8	8.0	6.0	8.5	6.0	9.6	6.2	8.7	5.5											
37.0	5.4	4.8	6.4	5.2	7.5	5.8	8.0	6.0	8.5	6.0	9.6	6.2	8.5	5.4											
39.0	5.4	4.8	6.4	5.2	7.5	5.8	8.0	6.0	8.5	6.0	9.6	6.2	8.3	5.3											
100	10.0	7.6	6.6	9.0	7.1	10.5	8.0	11.2	8.2	11.9	8.3	13.4	8.4	14.7	8.5										
	12.0	7.6	6.6	9.0	7.1	10.5	8.0	11.2	8.2	11.9	8.3	13.4	8.4	14.5	8.4										
	14.0	7.6	6.6	9.0	7.1	10.5	8.0	11.2	8.2	11.9	8.3	13.4	8.4	14.4	8.3										
	16.0	7.6	6.6	9.0	7.1	10.5	8.0	11.2	8.2	11.9	8.3	13.4	8.4	14.2	8.2										
	18.0	7.6	6.6	9.0	7.1	10.5	8.0	11.2	8.2	11.9	8.3	13.4	8.4	14.0	8.1										
	20.0	7.6	6.6	9.0	7.1	10.5	8.0	11.2	8.2	11.9	8.3	13.4	8.4	13.8	8.0										
	21.0	7.6	6.6	9.0	7.1	10.5	8.0	11.2	8.2	11.9	8.3	13.4	8.4	13.7	7.9										
	23.0	7.6	6.6	9.0	7.1	10.5	8.0	11.2	8.2	11.9	8.3	13.2	8.2	13.5	7.8										
	25.0	7.6	6.6	9.0	7.1	10.5	8.0	11.2	8.2	11.9	8.3	13.0	8.1	13.3	7.7										
	27.0	7.6	6.6	9.0	7.1	10.5	8.0	11.2	8.2	11.9	8.3	12.8	8.0	13.1	7.7										
	29.0	7.6	6.6	9.0	7.1	10.5	8.0	11.2	8.2	11.9	8.3	12.6	7.9	12.9	7.6										
	31.0	7.6	6.6	9.0	7.1	10.5	8.0	11.2	8.2	11.9	8.3	12.4	7.8	12.7	7.6										
33.0	7.6	6.6	9.0	7.1	10.5	8.0	11.2	8.2	11.9	8.3	12.2	7.8	12.5	7.6											
35.0	7.6	6.6	9.0	7.1	10.5	8.0	11.2	8.2	11.8	8.3	12.1	7.7	12.3	7.4											
37.0	7.6	6.6	9.0	7.1	10.5	8.0	11.2	8.2	11.6	8.3	11.9	7.7	12.2	7.3											
39.0	7.6	6.6	9.0	7.1	10.5	8.0	11.2	8.2	11.4	8.2	11.7	7.6	12.0	7.3											
125	10.0	9.5	8.0	11.3	9.0	13.1	9.9	14.0	10.4	14.9	10.6	16.8	10.7	18.4	10.8										
	12.0	9.5	8.0	11.3	9.0	13.1	9.9	14.0	10.4	14.9	10.6	16.8	10.7	18.2	10.7										
	14.0	9.5	8.0	11.3	9.0	13.1	9.9	14.0	10.4	14.9	10.6	16.8	10.7	18.0	10.5										
	16.0	9.5	8.0	11.3	9.0	13.1	9.9	14.0	10.4	14.9	10.6	16.8	10.7	17.7	10.4										
	18.0	9.5	8.0	11.3	9.0	13.1	9.9	14.0	10.4	14.9	10.6	16.8	10.7	17.5	10.2										
	20.0	9.5	8.0	11.3	9.0	13.1	9.9	14.0	10.4	14.9	10.6	16.8	10.7	17.2	10.1										
	21.0	9.5	8.0	11.3	9.0	13.1	9.9	14.0	10.4	14.9	10.6	16.8	10.7	17.1	10.0										
	23.0	9.5	8.0	11.3	9.0	13.1	9.9	14.0	10.4	14.9	10.6	16.5	10.5	16.9	9.9										
	25.0	9.5	8.0	11.3	9.0	13.1	9.9	14.0	10.4	14.9	10.6	16.3	10.4	16.6	9.9										
	27.0	9.5	8.0	11.3	9.0	13.1	9.9	14.0	10.4	14.9	10.6	16.1	10.2	16.4	9.8										
	29.0	9.5	8.0	11.3	9.0	13.1	9.9	14.0	10.4	14.9	10.6	15.8	10.1	16.2	9.7										
	31.0	9.5	8.0	11.3	9.0	13.1	9.9	14.0	10.4	14.9	10.6	15.6	10.0	15.9	9.6										
	33.0	9.5	8.0	11.3	9.0	13.1	9.9	14.0	10.4	14.9	10.6	15.3	9.9	15.7	9.6										
	35.0	9.5	8.0	11.3	9.0	13.1	9.9	14.0	10.4	14.6	10.5	15.1	9.9	15.4	9.4										
	37.0	9.5	8.0	11.3	9.0	13.1	9.9	14.0	10.4	14.3	10.2	14.8	9.8	15.2	9.4										
	39.0	9.5	8.0	11.3	9.0	13.1	9.9	14.0	10.4	14.3	10.2	14.8	9.6	15.0	9.3										
TC	Total capacity : kW																								
SC	Sensible capacity : kW																								

TC Total capacity ; kW  
SC Sensible capacity ; kW

Refer to Outdoor Unit Capacity Tables : on page 411 ~, 470~, for the actual performance data of each indoor and outdoor unit combination.

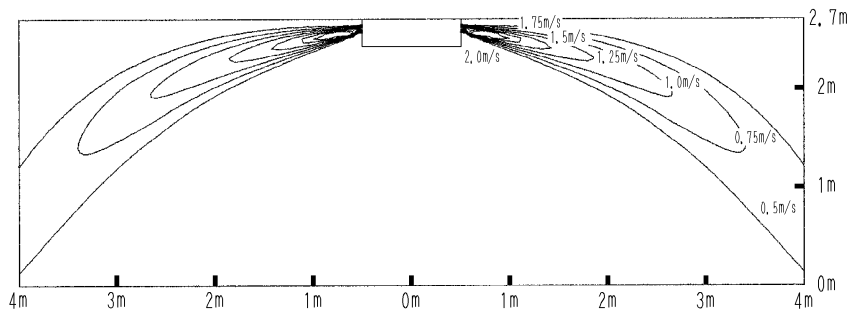


## 8. Air Velocity and Temperature Distributions (Reference Data)

### FXUQ71MA

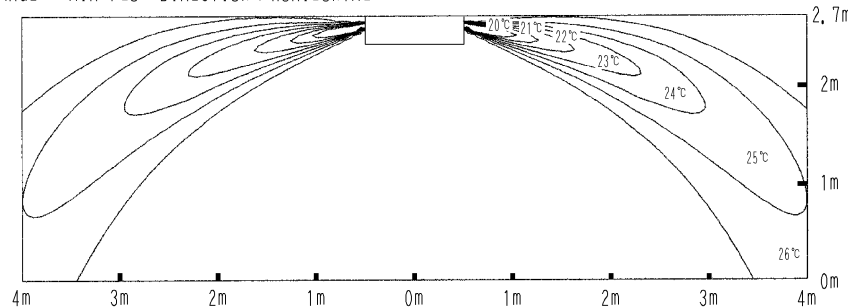
#### COOLING • AIR VELOCITY DISTRIBUTION

4 WAY DISCHARGE AIR FLOW DIRECTION : HORIZONTAL



#### COOLING • AIR TEMPERATURE DISTRIBUTION

4 WAY DISCHARGE AIR FLOW DIRECTION : HORIZONTAL



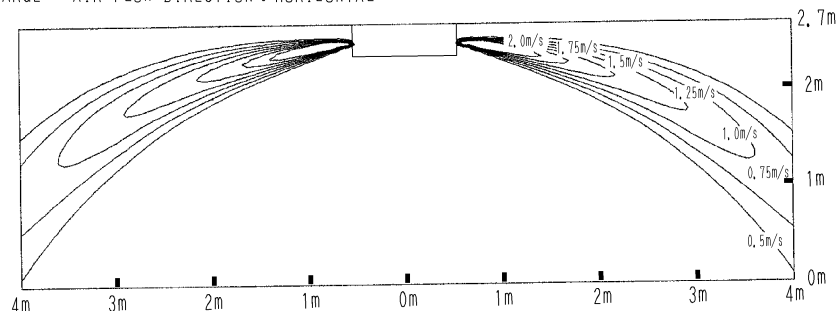
4D028396C

11

### FXUQ100MA

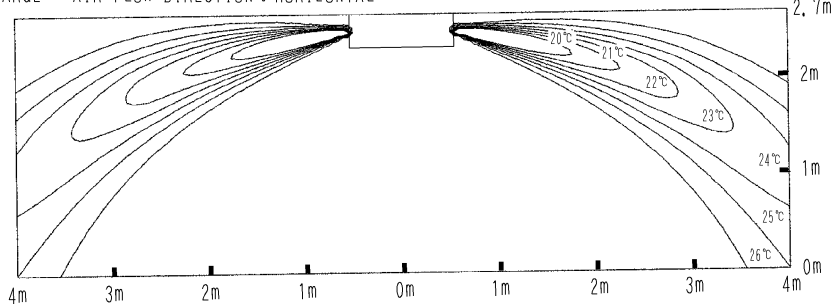
#### COOLING • AIR VELOCITY DISTRIBUTION

4 WAY DISCHARGE AIR FLOW DIRECTION : HORIZONTAL



#### COOLING • AIR TEMPERATURE DISTRIBUTION

4 WAY DISCHARGE AIR FLOW DIRECTION : HORIZONTAL

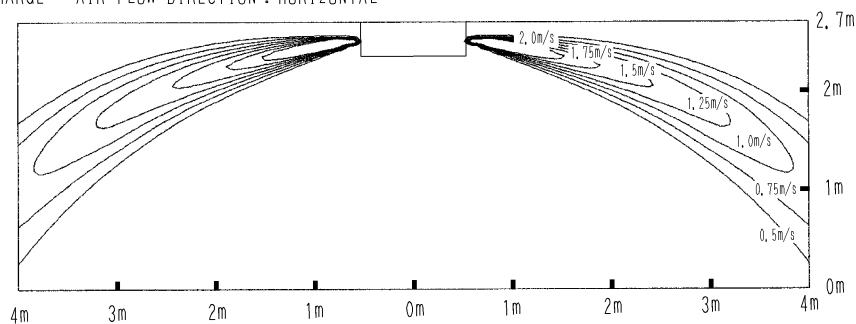


4D028397C

## FXUQ125MA

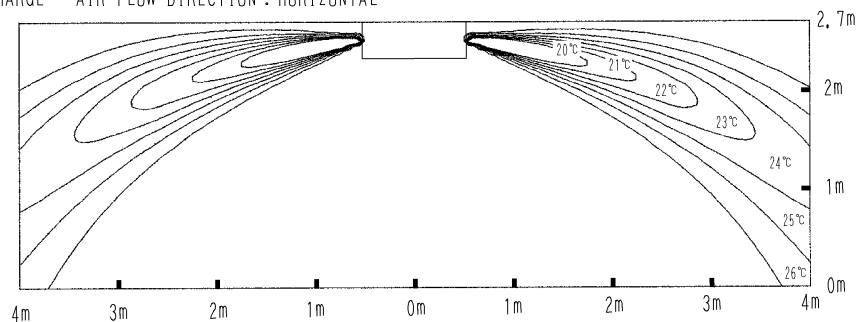
## COOLING • AIR VELOCITY DISTRIBUTION

4 WAY DISCHARGE AIR FLOW DIRECTION : HORIZONTAL



## COOLING • AIR TEMPERATURE DISTRIBUTION

4 WAY DISCHARGE AIR FLOW DIRECTION : HORIZONTAL

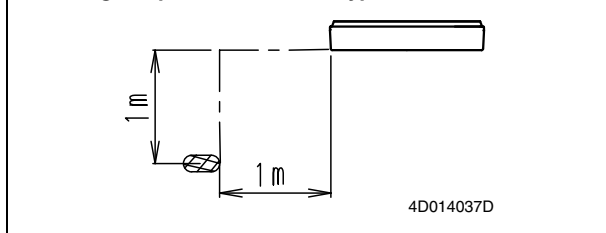


4D028398C

## 9. Sound Levels

### Overall

#### ■ Ceiling Suspended Cassette Type



dBA

Model	230V, 50Hz	
	H	L
FXUQ71MAV1	40	35
FXUQ100MAV1	43	38
FXUQ125MAV1	44	39

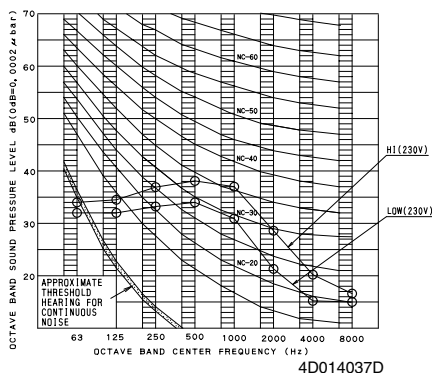
#### Notes:

1. The operating conditions are assumed to be standard (JIS conditions).
2. These operating values were obtained in a dead room (conversion values).  
Sound level will vary depending on a range of factors such as the construction (acoustic absorption coefficient) of the particular room in which the equipments installed.

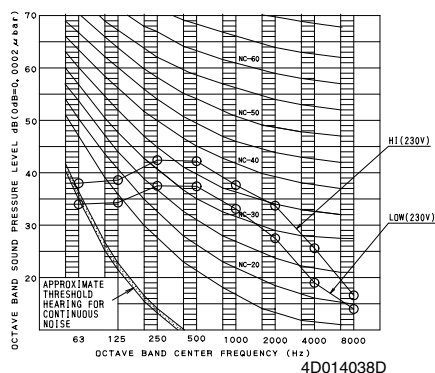
### Octave Band Level

○ — ○ 230V 50Hz

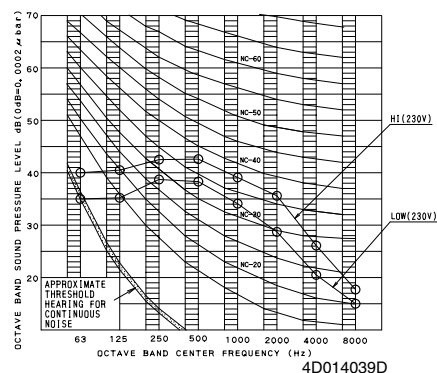
#### FXUQ71MAV1



#### FXUQ100MAV1



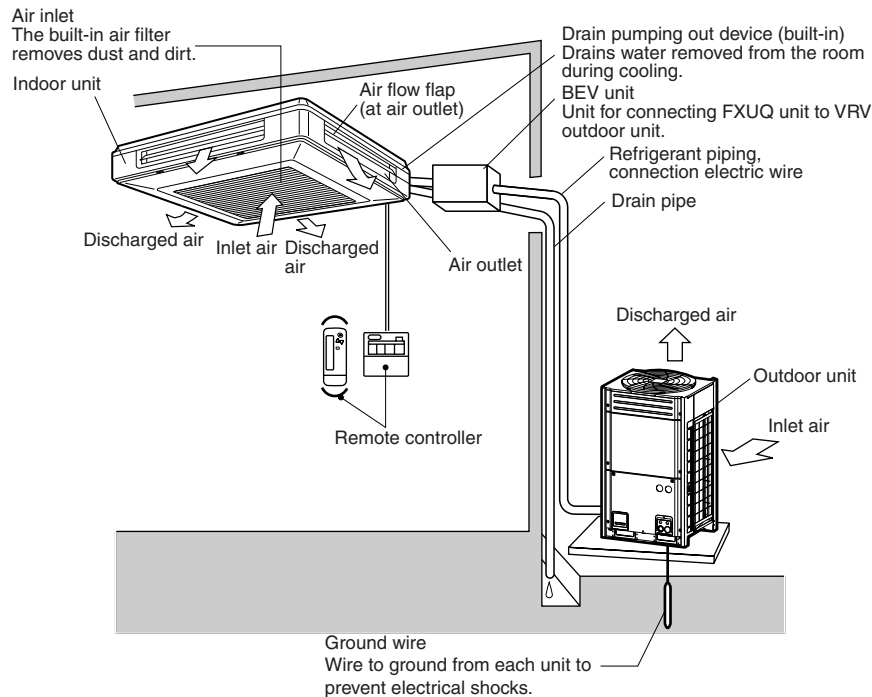
#### FXUQ125MAV1



# 10. Installation

## 10.1 Indoor Units

### Installation Example



### Service Space

Select an installation site where the following conditions are fulfilled and that meets your customer's approval.

- In the upper space (including the back of the ceiling) of the indoor unit where there is no possible dripping of water from the refrigerant pipe, drain pipe, water pipe, etc.
- Where optimum air distribution can be ensured.
- Where nothing blocks air passage.
- Where condensate can be properly drained.
- Where the ceiling is strong enough to bear the indoor unit weight.
- Where the false ceiling is not noticeably on an incline.
- Where sufficient clearance for maintenance and service can be ensured.
- Where there is no risk of flammable gas leakage.
- Where piping between indoor and outdoor units is possible within the allowable limit.

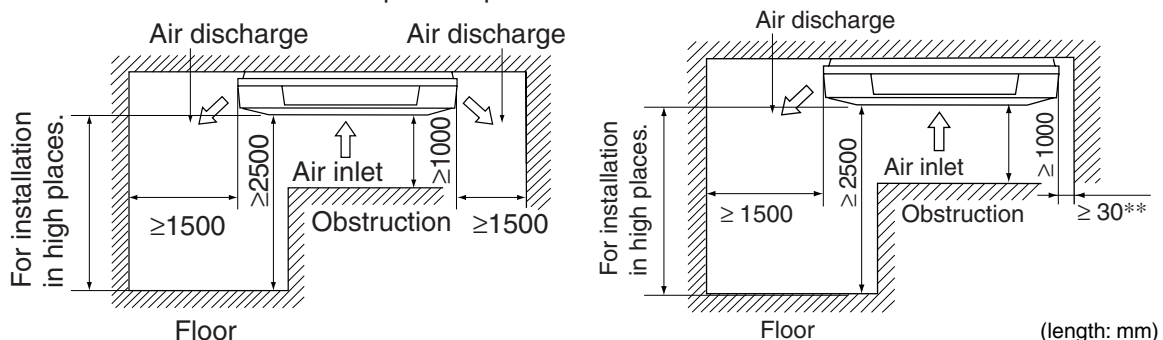
(Refer to the installation manual for the outdoor and BEV units.)

### [ CAUTION ]

Only use the included parts or parts which match the specifications when installing the unit.

- Install the indoor unit no less than 2.5 m above the floor. Where unavoidably lower, take what measures are necessary to keep hands out of the air outlet.

### Space required for installation



\*\* Space is required to attach/detach corner covers.

(V2324)

## Bolt Pitch

## 1. FOR 4-WAY AIR DISCHARGE

## 1. Relation of holes for indoor unit, suspension bolt position, piping and wiring. (Refer to Fig. 2)

(Illustrations seen from ceiling)

\* Dimensions in ( ) for 100 and 125 models

\*\*\* Suspension bolt pitch

## 2. Make holes for suspension bolts, refrigerant and drain piping. (Refer to Fig. 3)

- Refer to the paper patten for the locations.
- Select the location for each of holes and open the holes in the ceiling.

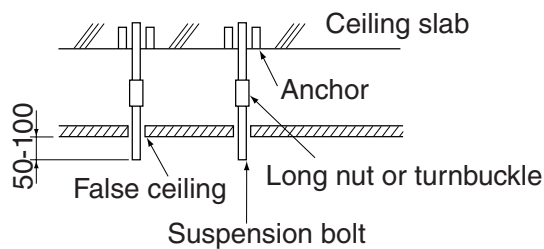


Fig. 3

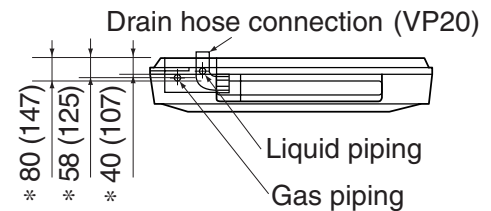
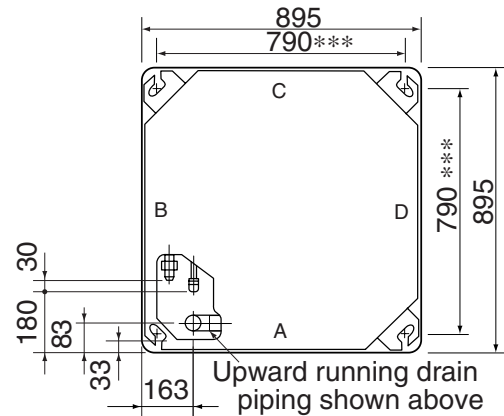


Fig. 2

## NOTE

All the above parts are field supplied.

(V2325)

## 2. FOR 2-WAY OR 3-WAY AIR DISCHARGE

2-way and 3-way air discharge must be set from the remote controller. For details, see FIELD SETTING.

## 1. Relation of holes for indoor unit, suspension bolt position, piping and wiring. (Refer to Fig. 8)

## NOTE

Illustrations seen from ceiling

\* Dimension in ( ) for 100 and 125 models

\*\*\*Suspension bolt pitch

## 2. Make holes for suspension bolts, refrigerant and drain piping. (Refer to Fig. 9)

- Refer to paper pattern for the locations.
- Select the location for each of holes and open the holes in the ceiling.

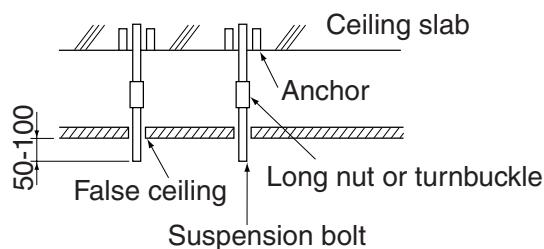


Fig. 9

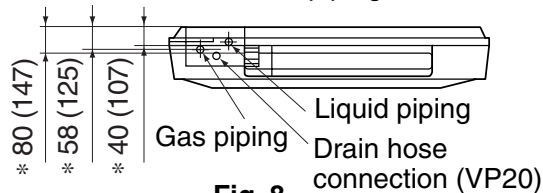
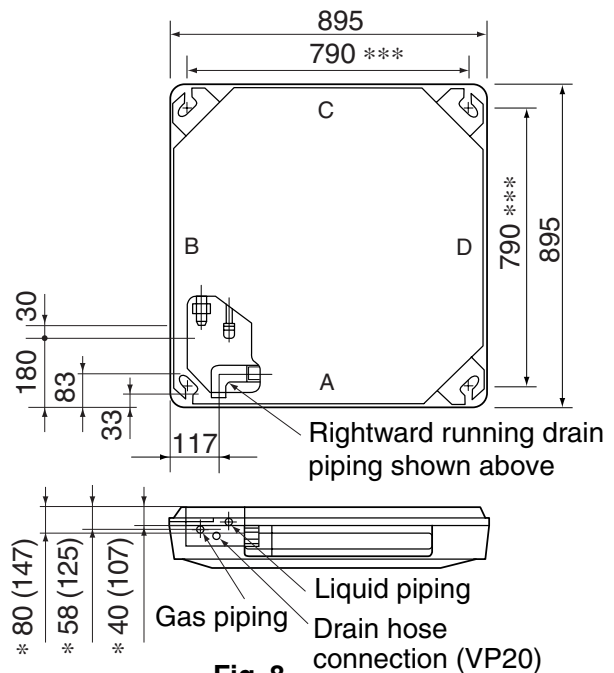


Fig. 8

(V2326)



## Drain Piping Work

### 1. Rig drain piping (Refer to Fig. 26)

As for drain work, perform piping in such a manner that water can be drained properly.

As for drain piping, the connection can be made from three different directions.

- Employ a pipe with either the same diameter or with the diameter larger (excluding the raising section) than that of the connecting pipe (PVC pipe, nominal diameter 20 mm, outside diameter 26 mm).
- Keep the drain pipe short and sloping downwards at a gradient of at least 1/100 to prevent air pockets from forming. (Refer to Fig. 27)



#### CAUTION

Water pooling in the drainage piping can cause the drain to clog.

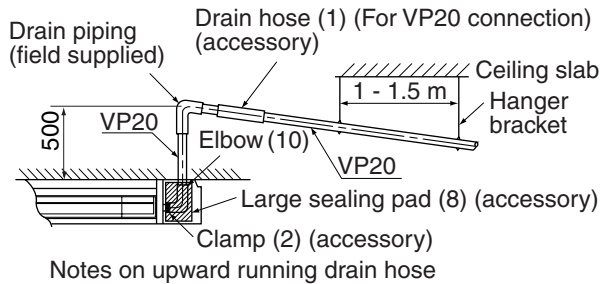


Fig. 26

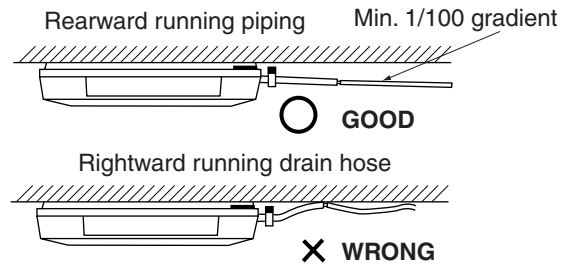


Fig. 27

(V2327)

- To keep the drain hose from sagging, space hanging wires every 1 to 1.5 m. (Refer to Fig. 26)
- Use only the included drain hose (1), (for rightward running drain hose) or elbow (10) (for upward running drain hose) and clamp (2).
- Fit the drain hose (1) or elbow (10) over the drain pipe up to the neck and fasten tight with the clamp (2).
- Insulate the clamp (2) and drain hose or elbow (10) with the included sealing pad (8). (Refer to Fig. 28)
- Make sure that heat insulation work is executed on the following 2 spots to prevent any possible water leakage due to dew condensation.
  - Insulate the drain hose inside the building.
  - Drain socket

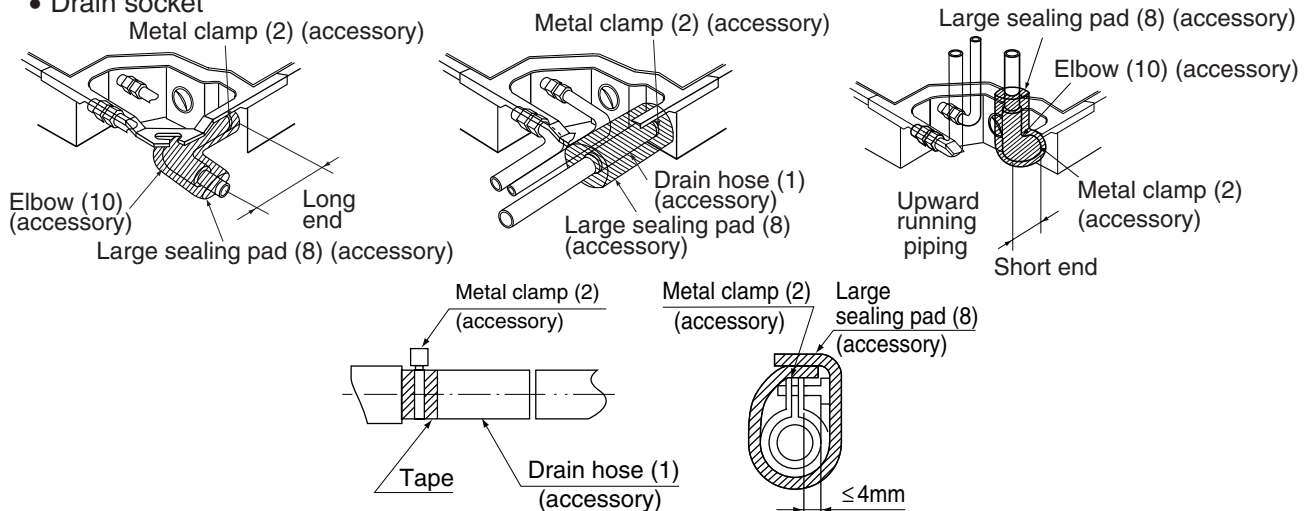


Fig. 28



#### CAUTION

- Do not twist or bend the drain hose (1), so that excessive force is not applied to it, as this could cause leaks.
- If converging multiple drain piping, install according to the procedure shown below. (Refer to Fig. 29)

Select converging drain piping whose gauge is suitable for the operating capacity of the unit.

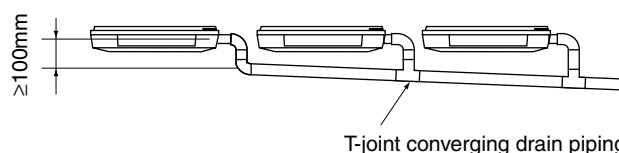
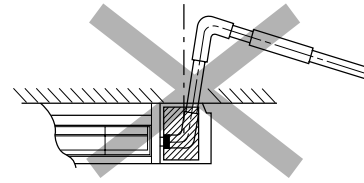


Fig. 29

### PRECAUTIONS FOR UPWARD DRAIN RAISING PIPING

- Install the drain raising pipes at a height of less than 500 mm.
- Install the drain raising pipes at a right angle to the indoor unit. **(Refer to Fig. 30)**



WRONG  
Fig. 30

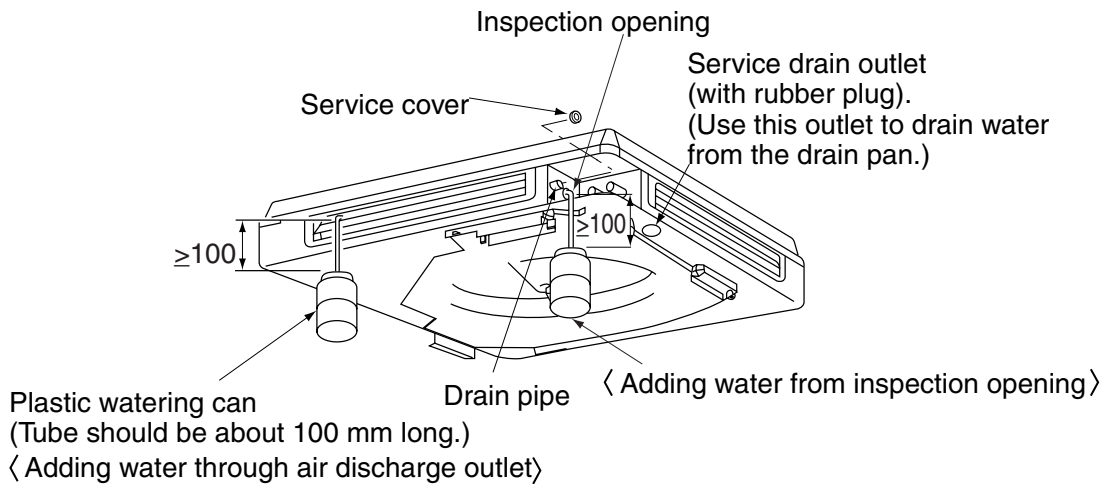
### ! CAUTION

If the upward running drain hose leans at a slant, the float switch will malfunction and water will leak.

(V2328)

## 2. After piping work is finished, check if drainage flows smoothly.

- Open the water inlet lid, add approximately 1 liter of water slowly and check drainage flow. **(Refer to Fig. 31)**



Method of adding water

Fig. 31

(V2329)

### [ Caution ]

Drain piping connections

- Do not connect the drain piping directly to sewage pipes that smell of ammonia. The ammonia in the sewage might enter the indoor unit through the drain pipes and corrode the heat exchanger.

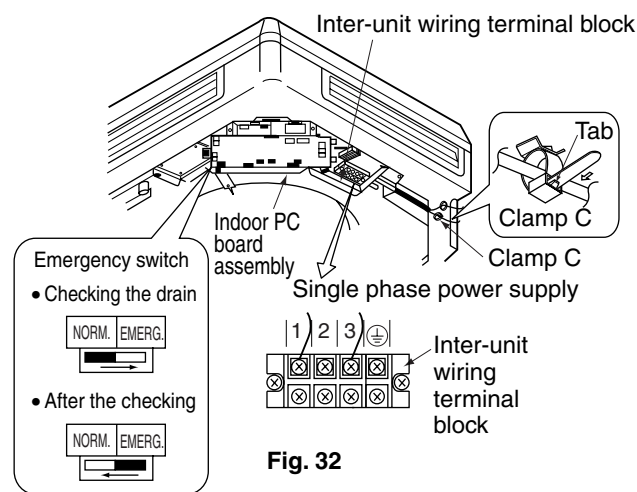
**CAUTION**

- Electrical wiring work should be done by a certified electrician.
- If someone who does not have the proper qualifications performs the work, perform the following after the test run is complete.

- Remove the control box lid and change the emergency switch above the PC board assembly of the indoor unit from "NORM." to "EMERG.". Connect the single-phase power supply (1, 3) and ground wire to the inter-unit wiring (50Hz 220-240V) terminal block and confirm drain operation. Be sure to change the switch before turning on the power. (Refer to Fig. 32)

**CAUTION**

- Clamp solidly to clamp C to tension is not added to the wiring connections.
  - Be aware that the fan will turn during the operation.
- After confirming drainage, turn off the power and be sure to change the emergency switch back to "NORM.".



(V2330)

## 10.2 Connecting Units

### Before Installation

- When moving the unit while removing it from the carton box, be sure to lift it by holding on to the two lifting lugs without exerting any pressure on other parts, especially, the refrigerant piping.
- Be sure to check the type of R-410A refrigerant to be used before installing the unit. (Using an incorrect refrigerant will prevent normal operation of the unit.)
- BEV unit is an electronic expansion valve unit for allowing the indoor unit to be connected to the system for the VRV system.
- BEV unit may only be connected to the models shown in the table below. Do not attempt connection with other models.

Indoor unit
Ceiling Suspended Cassette Type

- See the included installation manuals on the VRV outdoor unit and the ceiling suspended cassette type indoor unit for details.
- For the indoor unit connected to the BEV unit, cooling/heating cannot be switched over with the remote controller.
- When the cooling/heating free system is connected to the BS unit, a cooling/heating selection right is allowed.
- When the ceiling suspended cassette type indoor unit and BEV unit are used for all indoor units, a separate "Cool/Heat SELECTOR" is needed to enable the cooling/heating switchover.

### Service Space.

#### 《 When hanging the unit from the ceiling 》

Install so that the control box lid is facing down.

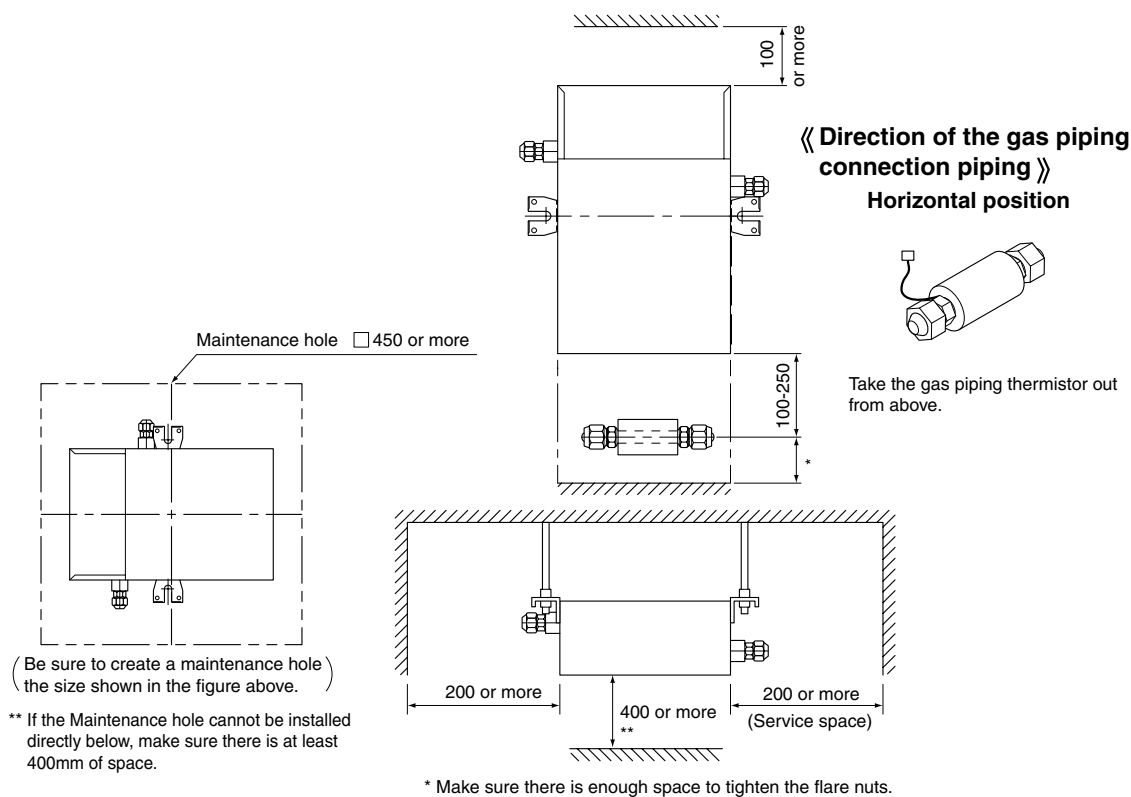
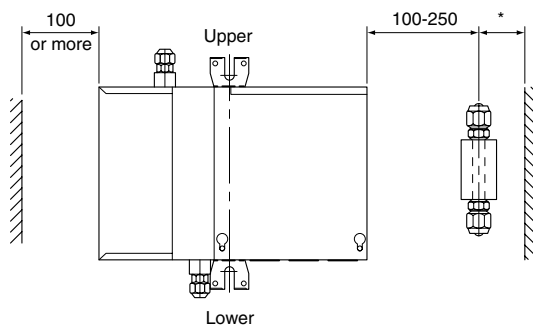


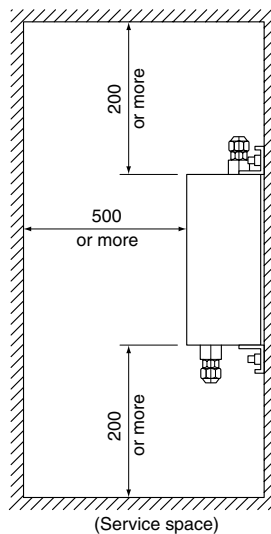
Fig. 1  
(length: mm)

### « When installing the unit on a wall »

Make sure the wiring outlet is facing down, and no other direction.

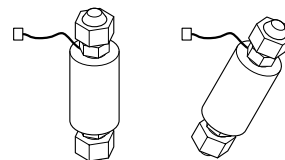


\* Make sure there is enough space to tighten the flare nuts.



### « Direction of the gas piping connection piping »

**Upright and diagonal position**



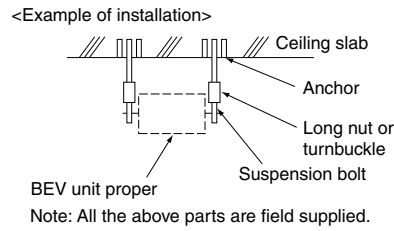
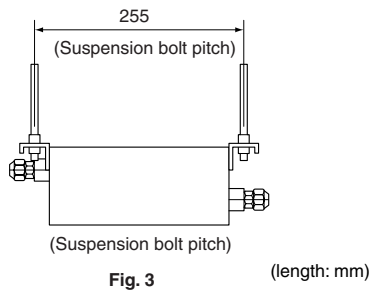
Take the gas piping thermistor out from above.

**Fig. 2**  
(length: mm)

## Bolt Pitch

### 《 When hanging the unit from the ceiling 》

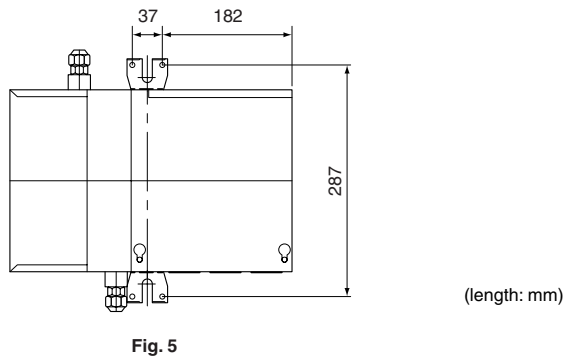
- (1) Check the relative locations of ceiling hole, unit, and hanging bolts.



- (2) Open the eyebolt holes or the holes for passing the piping and wiring out of the unit.
- Set the locations for the above holes, open them up and then lay the piping (refrigerant) and wiring (including both power supply and transmission wiring) up to the piping and wiring connections in the unit.
  - It might be necessary to reinforce the ceiling frame to maintain the levelness and to prevent vibration. Consult an architect or carpenter for details.
- (3) Install the hanging bolts. (Use M8 hanging bolts.)
- If it is pre-set, use hole-in anchors. Otherwise, use embedded inserts or embedded foundation bolts to make sure that the weight of the unit can be supported. Adjust the distance to the ceiling beforehand.

### 《 When installing the unit on a wall 》

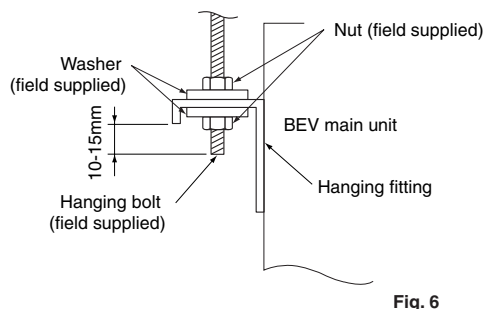
- (1) Check the relative locations of ceiling hole, unit, and hanging bolts.



- Use only accessories and parts which are of the designated specification when installing.

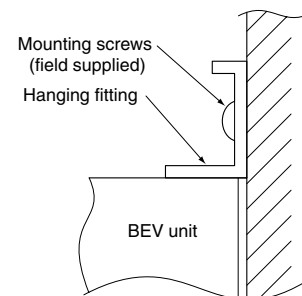
### 《 When hanging the unit from the ceiling 》

- (1) Temporarily install the BEV unit.
- Mount the hanging fittings to hanging bolts. Secure the hanging fittings on the top and the bottom with nuts (M8, field supplied) and washers (M8: Outside diameter size 24 to 28 mm) (field supplied).
- (2) Adjust the height of the main unit with the nut.
- (3) Check that the main unit is installed on the level.
- (4) Tighten the nut on both the top and the bottom to fix securely.



### 《 When installing the unit on a wall 》

- (1) Mount the hanging fittings with the mounting screws (4 pieces).
- (2) Use M4 screws.



## Refrigerant Piping work

〈 This shows the piping method between the outdoor unit and the BEV unit and the indoor unit. Select the pipe size and refrigerant branch kit depending on how the piping will be laid. 〉

〈 For refrigerant piping of outdoor units, see the installation manual attached to the outdoor unit. 〉

〈 Execute heat insulation work completely on both sides of the gas piping and the liquid piping. Otherwise, a water leakage can result sometimes. 〉

〈 When using a heat pump, the temperature of the gas piping can reach up to approximately 120°C, so use insulation which is sufficiently resistant. 〉

〈 Improve the insulation on the refrigerant piping depending on the installation environment. 〉

〈 If the insulation is not sufficient, condensation may form on the surface of the insulation. 〉

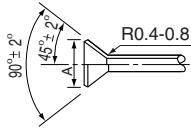
〈 Before refrigerant piping work, check which type of refrigerant is used. Proper operation is not possible if the types of refrigerant are not the same. 〉

### ⚠ CAUTION

- Use a pipe cutter and flare suitable for the type of refrigerant.
- Apply ester oil or ether oil around the flare section before connecting.
- To prevent dust, moisture or other foreign matter from infiltrating the tube, either pinch the end or cover it with tape.
- Do not allow anything other than the designated refrigerant to get mixed into the refrigerant circuit, such as air, etc. If any refrigerant gas leaks while working on the unit, ventilate the room thoroughly right away.

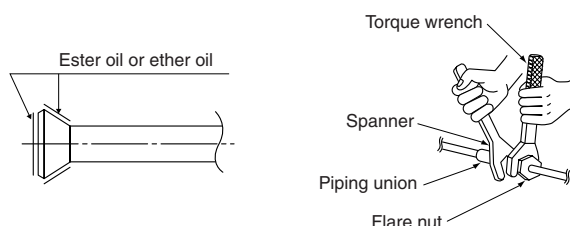
- The outdoor unit is charged with refrigerant.
- For the refrigerant piping and branching, follow the “**piping connection procedure**”.
- Be sure to use both a spanner and torque wrench together, as shown in the drawing, when connecting or disconnecting piping to/from the unit.
- Refer to the Table 1 for the dimensions of flare nut spaces.
- When connecting the flare nut, coat the flare both inside and outside with ester oil or ether oil and initially tighten by hand 3 or 4 turns before tightening firmly.
- Refer to the Table 1 to determine the proper tightening torque.

Table 1

Pipe size	Tightening torque	Flare dimension A (mm)	Flare shape
φ 9.5 (3/8")	32.7 – 39.9N·m (333 – 407 kgf·cm)	12.8 – 13.2	
φ 15.9 (5/8")	61.8 – 75.4N·m (630 – 770 kgf·cm)	19.3 – 19.7	

### NOTE

The flare nuts used must be those included with the main body.



### ⚠ CAUTION

Over-tightening may damage the flare and cause a refrigerant leakage.

### — Not recommendable but in case of emergency —

You must use a torque wrench but if you are obliged to install the unit without a torque wrench, you may follow the installation method mentioned below.

When you keep on tightening the flare nut with a spanner, there is a point where the tightening torque suddenly increases. From that position, further tighten the flare nut the angle shown below:

Table 2

Pipe size	Further tightening angle	Recommended arm length of tool
φ 9.5 (3/8")	60 to 90 degrees	Approx. 200mm
φ 15.9 (5/8")	30 to 60 degrees	Approx. 300mm

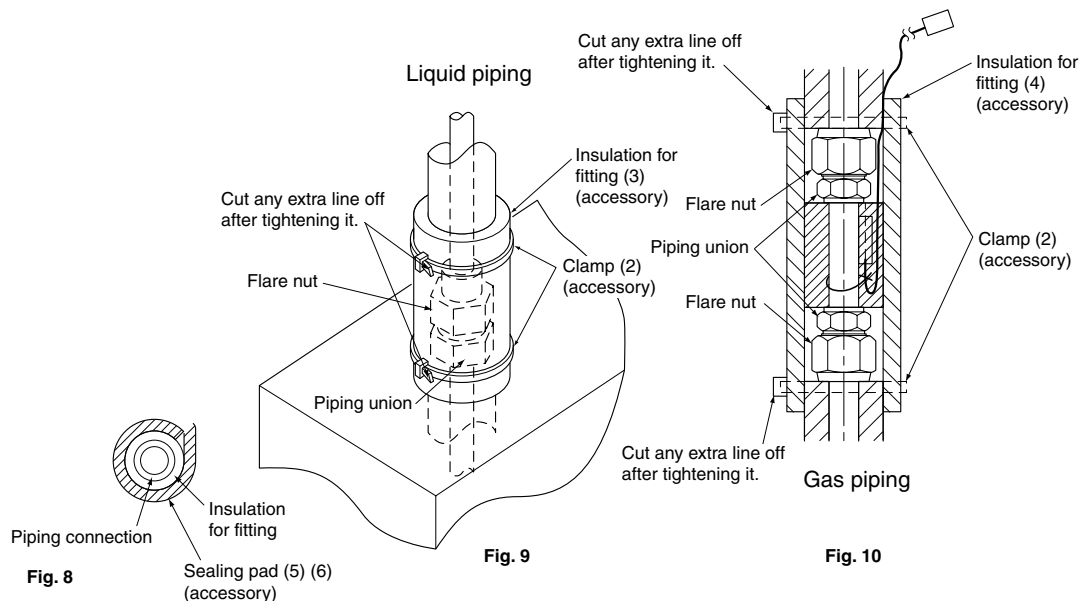
**After the work is finished, make sure to check that there is no gas leak.**

- Make absolutely sure to execute heat insulation works on the pipe-connecting section after checking gas leakage by thoroughly studying the following figure.
- Wrap the insulation for fitting (3) (4) around the insulation for the joints on the liquid piping side and the gas piping side. **(Refer to Fig. 9, 10)**
- When installing the unit onto the ceiling, make sure that the seam between the insulation for fitting (3) (4) faces up. (Fasten both ends with the clamps (2).) (Fig.9, 10 shows the case of installation on the wall.)
- Wrap the included sealing pad (5) (6) around the insulation for fitting (3) (4). **(Refer to Fig. 8)**



### CAUTION

Be sure to insulate any field piping all the way to the piping connection inside the unit. Any exposed piping may cause condensation or burns if touched.



### CAUTION

#### CAUTION TO BE TAKEN WHEN BRAZING REFRIGERANT PIPING

Do not use flux when brazing refrigerant piping. Therefore, use the phosphor copper brazing filler metal (BCuP) which does not require flux.

(Flux has extremely harmful influence on refrigerant piping systems. For instance, if the chlorine based flux is used, it will cause piping corrosion or, in particular, if the flux contains fluorine, it will damage the refrigerant oil.)

- Before brazing local refrigerant piping, nitrogen gas shall be blown through the piping to expel air from the piping. If your brazing is done without nitrogen gas blowing, a large amount of oxide film develops inside the piping, and could cause system malfunction.
- When brazing the refrigerant piping, only begin brazing after having carried out nitrogen substitution or while inserting nitrogen into the refrigerant piping. Once this is done, connect the indoor unit with a flared connection.
- Nitrogen should be set to 0.02 MPa (0.2 kg/cm<sup>2</sup>) with a pressure-reducing valve if brazing while inserting nitrogen into the piping.

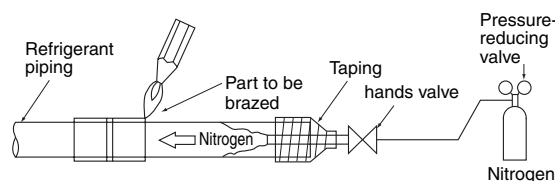


Fig. 11



### CAUTION

Do not use anti-oxidants when brazing the piping joints. Residue can clog piping and break equipment.

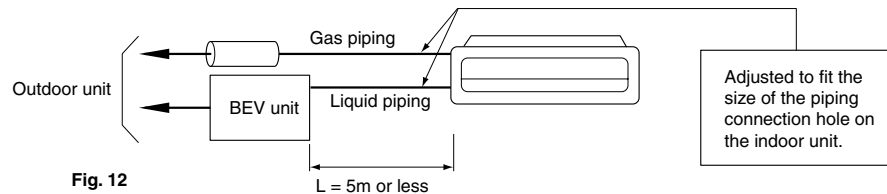


## Piping connection procedure

- Make sure the length of the refrigerant piping between the BEV unit and the indoor unit is no more than 5m and that the difference in height is at least 4m.

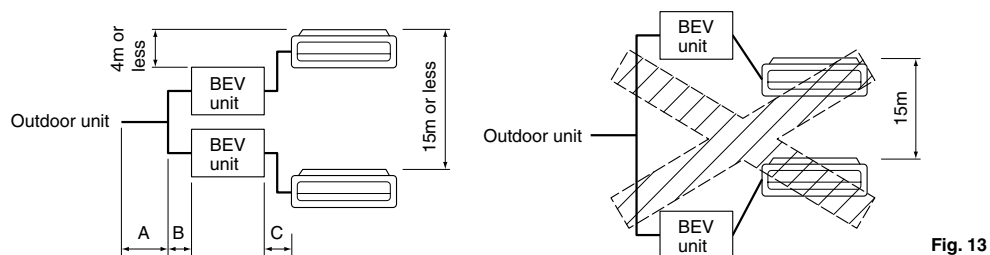
### (1) Connection example for the indoor unit

- Only one indoor unit may be connected to each BEV unit.



### (2) Height difference between indoor units

- Install the BEV unit in the 15m range of difference in height between the indoor units.
- Make sure the difference in height between the BEV unit and the indoor unit is no more than 4m.



### (3) Allowable length after split (actual piping length)

$B+C \leq 35m$  (length from the first branch piping to the indoor unit)

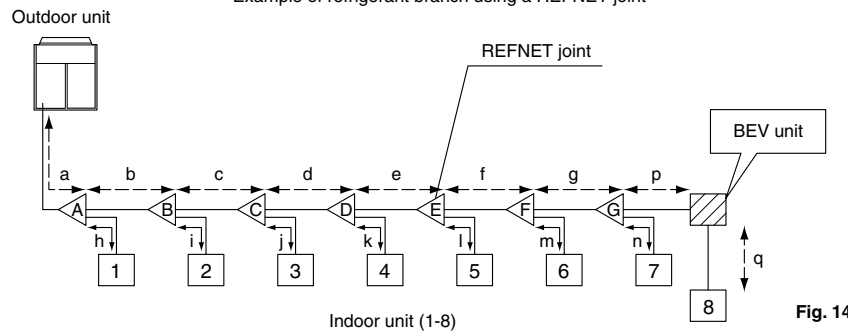
### (4) Additional refrigerant amount

When measuring the amount of additional to refrigerant to fill, include the length of the liquid piping between the BEV unit and the indoor unit.

Additional filling amount =  $a+b+c+d+e+f+g+h+i+j+k+l+m+n+p+q$

Refer also to the installation manual included with the outdoor unit.

Example of refrigerant branch using a REFNET joint



## Wiring Example and How to Set the Remote Controller

### 1 HOW TO CONNECT WIRINGS

- Connect the piping only after finishing the refrigerant piping work.
- Make sure all power supply is shut down to the unit first.
- As shown in the Fig. 16, loosen the two screws in the control box lid, remove it, and do the wiring work.
- Once all wiring is done, attach the control box lid and secure it with the screws.  
If you are using "4. DEF AULT SETTINGS," however, finish that and then attach the control box lid and secure it with the screws.

### 2 THE GAS PIPING THERMISTOR

- Connect to (X5A) on A1P.
- Bundle the gas piping thermistor lead wire and the branch wiring (transmission) using the included clamping material.
- Tension is not added to the gas pipe thermistor lead wire coming out of the unit.
- **Power supply wiring • Ground wire**  
Connect the wiring to R (L) and S (N) on the power supply terminal block (X1M). Also, connect the ground wire to the ground terminal. Take the wiring and the ground wire into the unit through the wiring pass-through hole, and firmly secure them together using the included clamp (1).
- **Indoor unit inter-unit wiring**  
Connect the wires to 1, 2, and 3 on the power supply terminal block (X1M). Take the wires into the unit through the wiring pass-through hole, and firmly secure them using the included clamp (1).
- **Transmission wiring**  
Connect the wires to F1 and F2 on the transmission terminal block (X2M). Take them into the unit through the wiring pass-through hole, and firmly secure the gas piping thermistor lead wire and the transmission wiring using the included clamp (1).

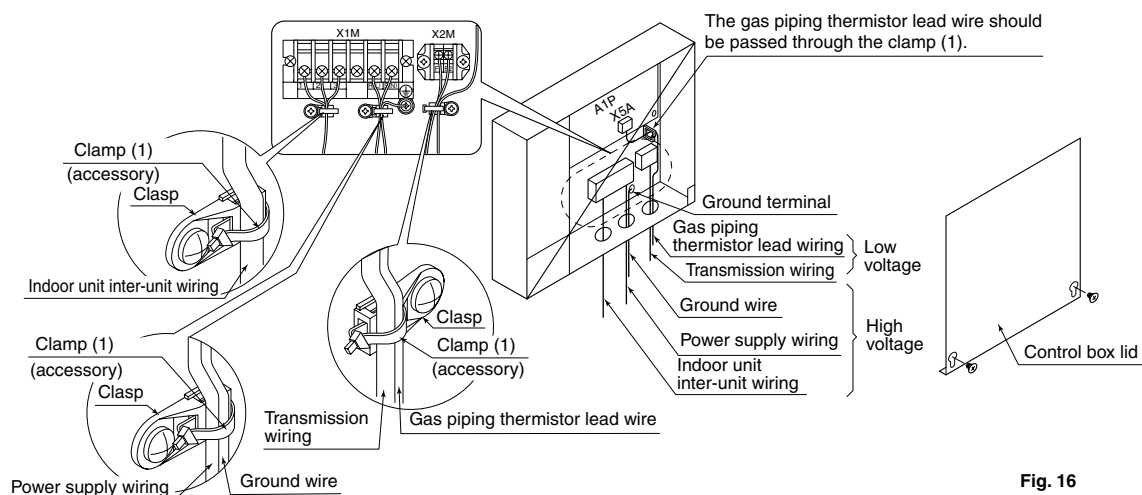


Fig. 16

### [ CAUTIONS ]

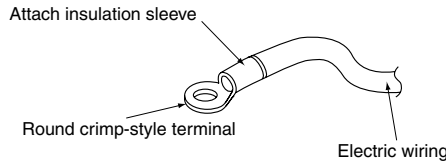
- Do not under any circumstances connect the power supply wiring to the transmission terminal block (F1, F2), as this may cause damage to the entire system.

### ! CAUTION

- When clamping wiring, use the included clamping material to prevent outside pressure being exerted on the wiring connections and clamp firmly. When doing the wiring, make sure the wiring is neat and does not cause the control box lid to stick up, then close the cover firmly.
- When attaching the control box lid, make sure you do not pinch any wires.
- After all the wiring connections are done, fill in any gaps in the through holes with putty or insulation (procured locally) to prevent small animals and insects from entering the unit from outside. (If any do get in, they could cause short circuits in the control box.)
- Outside the machine, separate the weak wiring (gas piping thermistor lead wire, transmission wiring) and strong wiring (power supply wiring, inter-unit wiring, ground wire, and other power wiring) at least 50mm so that they do not pass through the same place together. Proximity may cause electrical interference, malfunctions, and breakage.

## [PRECAUTIONS]

1. Use round crimp-style terminals for connecting wiring to the power supply terminal block.  
If unavailable, observe the following points when wiring.
  - Do not connect wiring of different gauge to the same power supply terminal.  
(Looseness in the connection may cause overheating.)
  - Use the specified electric wiring. Connect the wiring securely to the terminal. Lock the wiring down without applying excessive force to the terminal. (Tightening torque: 131N·cm  $\pm$ 10 %)



### 2. Tightening torque for the terminal screws.

- Use the correct screwdriver for tightening the terminal screws. If the blade of screwdriver is too small, the head of the screw might be damaged, and the screw will not be properly tightened.
- If the terminal screws are tightened too hard, screws might be damaged.
- Refer to the table below for the tightening torque of the terminal screws.

Terminal	Size	Tightening torque
Transmission terminal block (2P)	M3.5	0.79 – 0.97N·m
Power supply and inter-unit wiring terminal block (6P)	M4	1.18 – 1.44N·m
Ground terminal	M4	1.44 – 1.94N·m

3. Do not connect wiring of different gauge to the same grounding terminal. Looseness in the connection may deteriorate protection.
4. Outside of the unit, keep the weak wiring (gas piping thermistor lead wire, transmission wiring) at least 50 mm away from strong wiring (power supply wiring, inter-unit wiring, ground wire, and other power wiring). The equipment may malfunction if subjected to electrical (external) noise.
5. For remote controller wiring, refer to the “INSTALLATION MANUAL OF REMOTE CONTROLLER” attached to the remote controller.
6. **Never connect power supply wiring to the terminal block for remote controller wiring. A mistake of the sort could damage the entire system.**
7. Use only specified wiring and tightly connect wiring to terminals. Be careful wiring do not place external stress on terminals. Keep wiring in neat order and so as not to obstruct other unit such as popping open the control box lid. Make sure the lid closes tight. Incomplete connections could result in overheating, and in worse case, electric shock or fire.

## [ WIRING EXAMPLE ]

- Fit the power supply wiring of each unit with a switch and fuse as shown in the drawing.

### COMPLETE SYSTEM EXAMPLE (3 systems)

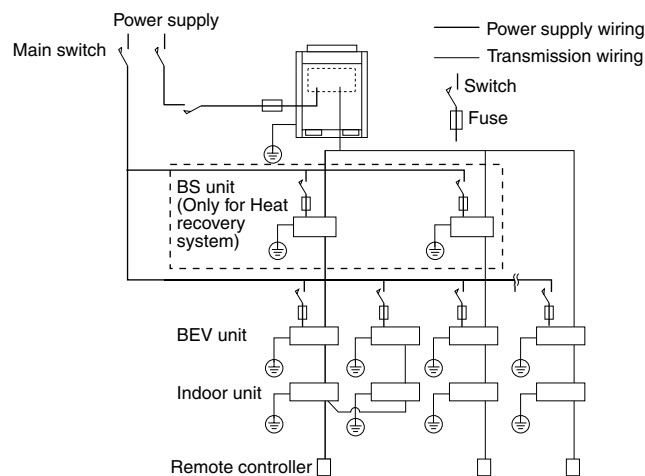


Fig. 17

## 1. When using 1 remote controller for 1 indoor unit. (Normal operation)

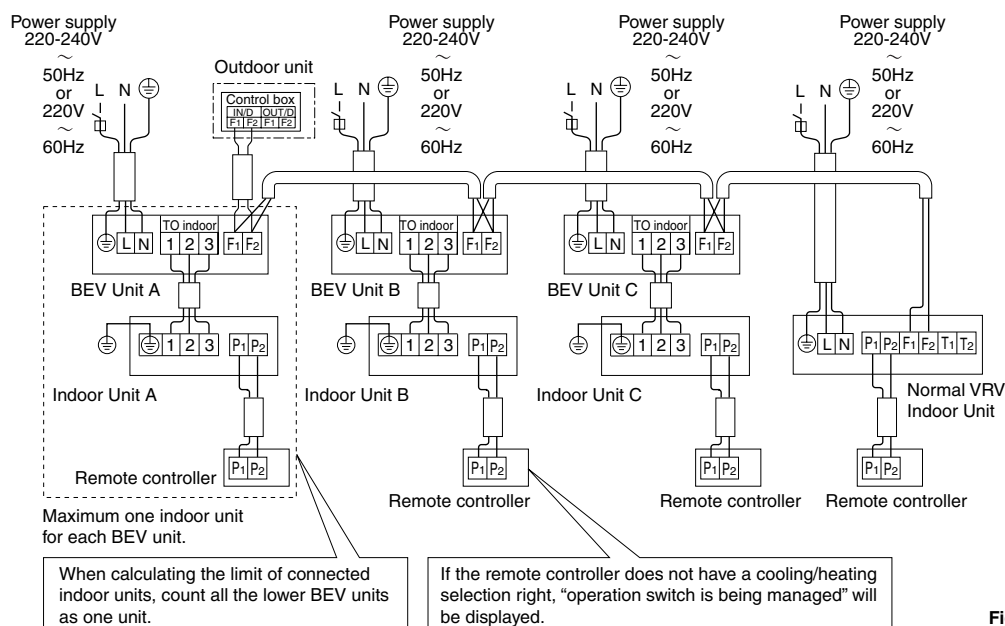


Fig. 18

### <Caution>

Group control is not possible between ceiling suspended cassette type units and normal VRV indoor units.

## 2. For group control or use with 2 remote controllers

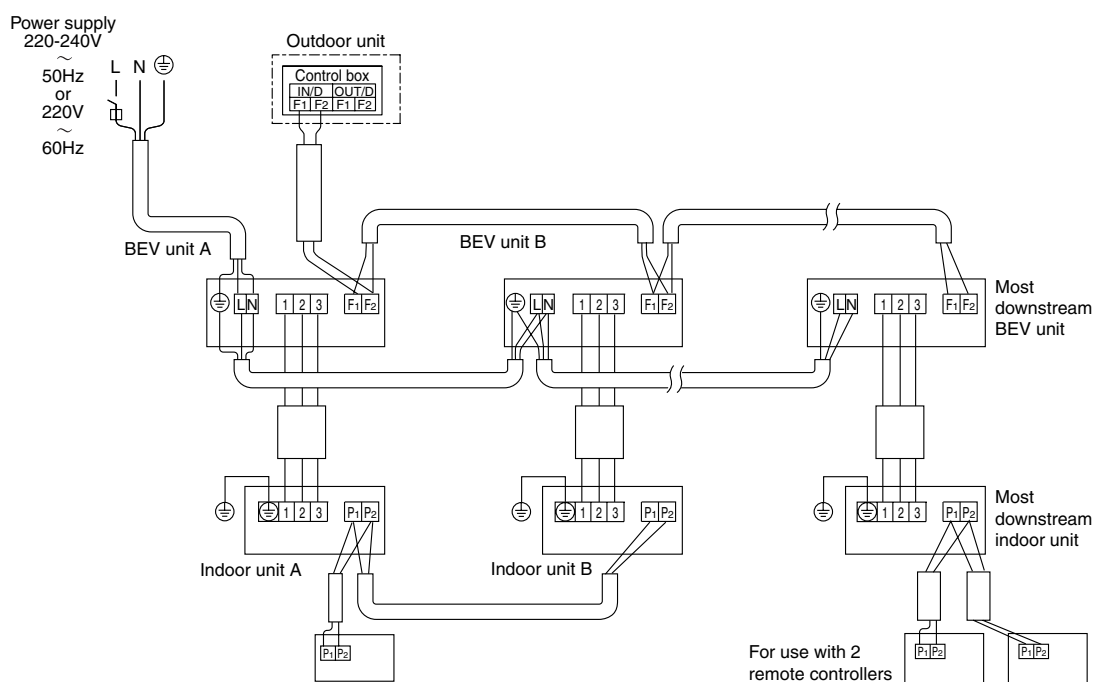


Fig. 19

### 3. When including BS unit

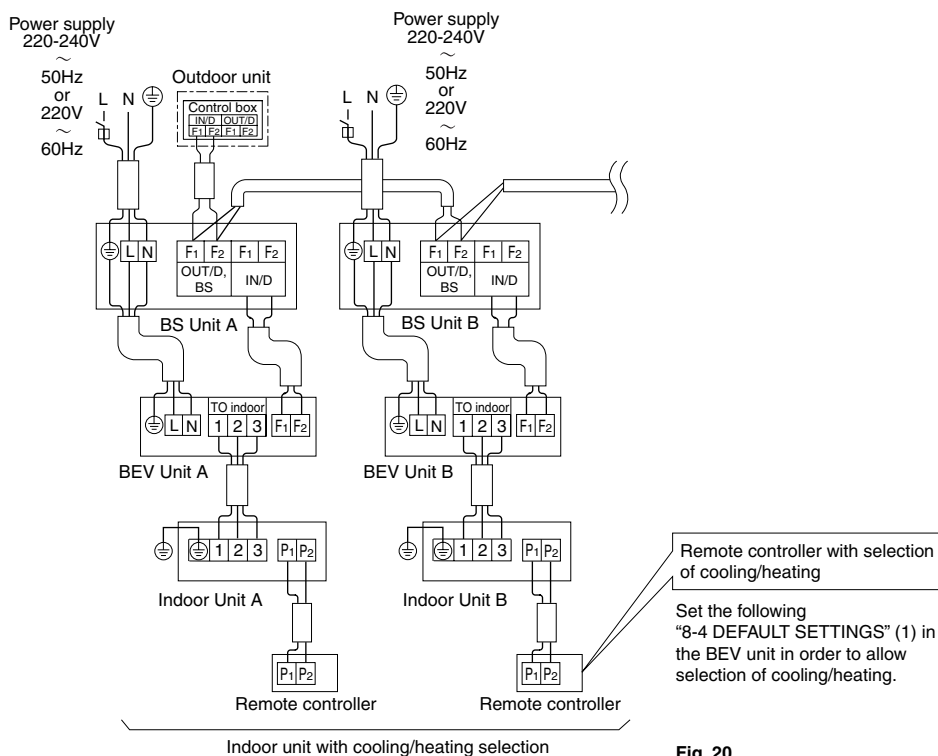


Fig. 20

### 4. DEFAULT SETTINGS








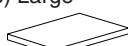







- Once piping work is completed, conduct the following settings as needed.
  - When connecting the BEV unit to the BS unit in the heating/cooling free system, turn the SS1 on the A1P to M (Main) for only one of the BEV units connected to the remote controller on which heating/cooling switching is made possible.  
**(Refer to Fig. 21)**
  - For BEV unit-only systems  
The Cool/Heat SELECTOR is needed.  
Refer to the installation manual included with the Cool/Heat SELECTOR for details on how to set it.
- Once all piping work is done, screw the control box lid shut using the mounting screws.



# 11. Accessories

## Standard Accessories (Indoor Unit)

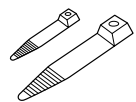
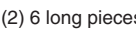
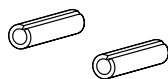
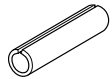

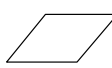
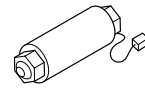


Check the following accessories are included with the unit.

Name	1) Drain hose	2) Metal Clamp	3) Washer for looking hanger	4) Clamp	5) Wahers fixing plate
Quantity	1 pc.	1 pc.	8 pcs.	6 pcs.	4 pcs.
Shape					
Name	Insulation for fitting	Sealing pad	10) Elbow	11) Paper pattern for installation	12) Sealing material
Quantity	1 each	2 pcs.	1 pc.	1 pc.	2 pcs.
Shape	6) For gas pipe  7) For liquid pipe 	8) Large  9) Small 		Also used as packing material 	
Name	13) Retainer for blocking pad	14) Retainer for blocking pad	15) Center retainer for blocking pad	(Other) • Operation manual • Installation manual	
Quantity	2 pcs.	2 pcs.	2 pcs.		
Shape					

(V2331)

## Standard Accessories (Connecting Unit)

Check if the following accessories are included with your unit.

Name	Clamp	Insulation for fitting	Sealing pad	(7) Gas piping connection piping
Quantity	9 pcs.	3 pcs.	3 pcs.	1 pc.
Shape	(1) 3 short pieces  (2) 6 long pieces 	(3) For liquid piping × 2  (4) For gas piping × 1 	(5)  Small × 2 (6)  × 1	
Name	(8) Installation manual	(9) Nameplate		
Quantity	1 pc.	1 pc.		
Shape				

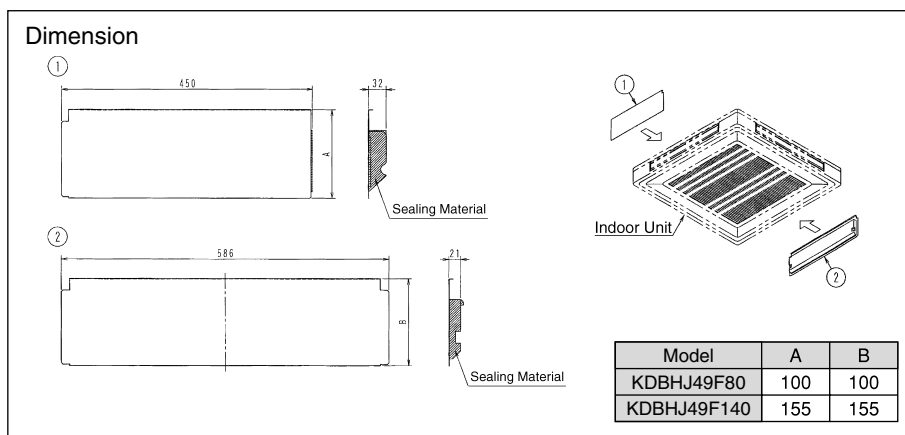
## Optional Accessories (For Indoor Unit)

No.	Type	FXUQ71MAV1	FXUQ100MAV1	FXUQ125MAV1
	Item			
1	Sealing Member of Air Discharge Outlet	KDBHJ49F80	KDBHJ49F140	
2	Decoration Panel for Air Discharge	KDBTJ49F80	KDBTJ49F140	
3	Vertical Flap Kit	KDGJ49F80	KDGJ49F140	
4	Replacement Long Life Filter	KAFJ495F140		
5	L Connection Piping Kit	KHFP49M140		

C: 3D045452A

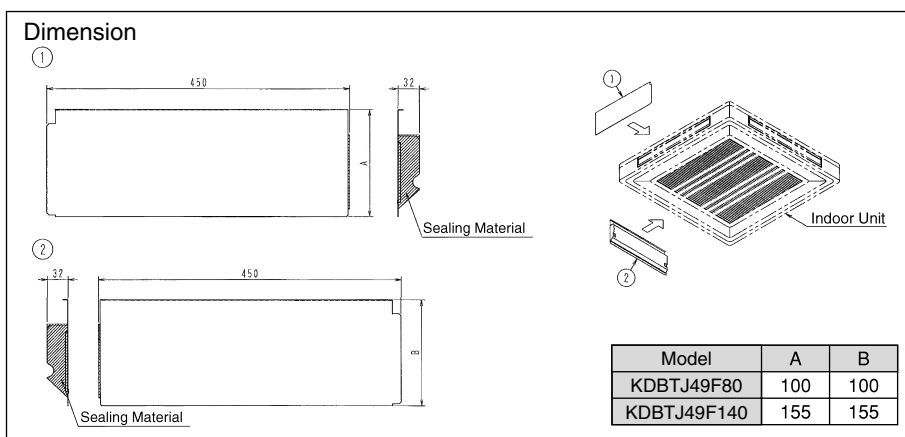
## Optional Accessories (For Controls) Refer to P.561

## Sealing Member of Air Discharge Outlet – KDBHJ49F80 · 140



Model	Material
KDBHJ49F80	Galvanized Steel Plate
KDBHJ49F140	(with Flocking)

## Decoration Panel for Air Discharge – KDBTJ49F80 · 140

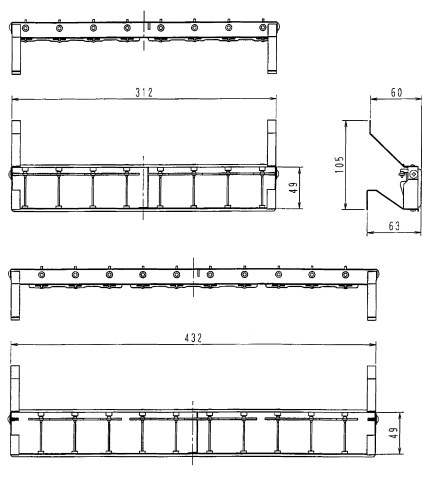


Model	Material
KDBTJ49F80	Galvanized Steel Plate
KDBTJ49F140	(with Flocking)

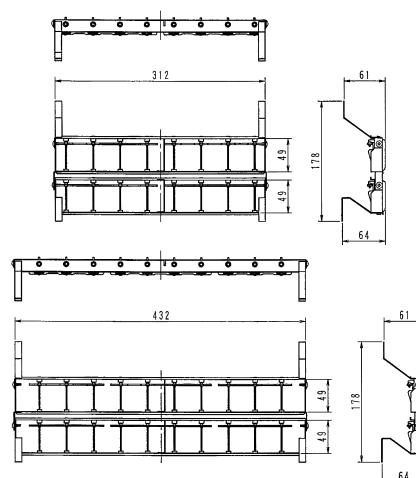
## Vertical Flap Kit – KDGJ49F80 · 140

Dimension

## KDGJ49F80

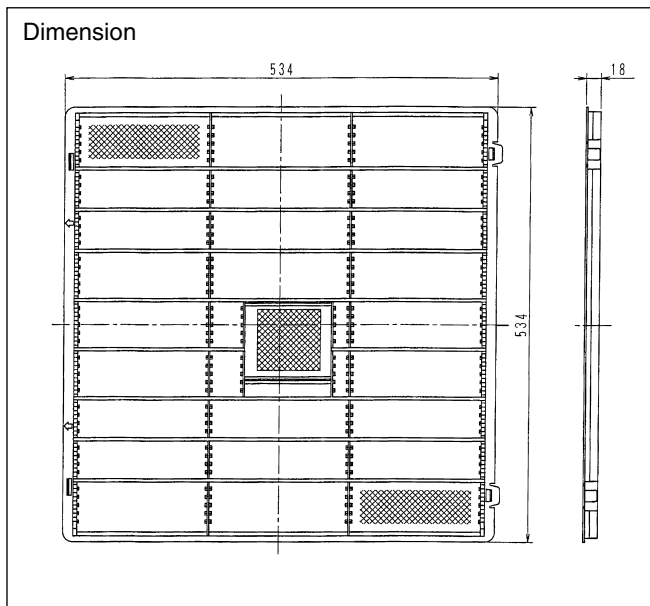


## KDGJ49F140



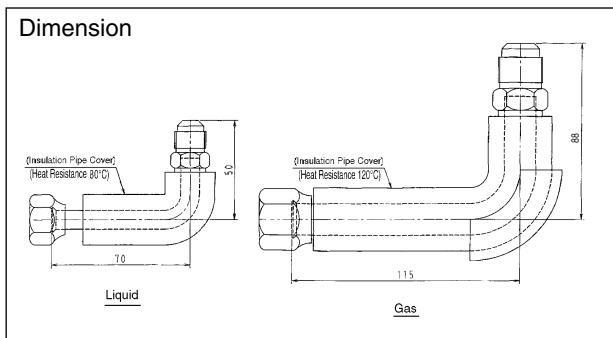
Model	Packing Quantity
KDGJ49F80	4(each 2x2)
KDGJ49F140	

### Replacement Long Life Filter – KAFJ495F140



Model	KAFJ495F140
Item	
Initial Pressure Loss (Pa)	Less Than 7
Final Pressure Loss (Pa)	Less Than 49
Average Efficiency (%)	50 (Gravity Method)
Life Time (h)	2,500 (Dust Particle Concentration at 0.15mg/m <sup>3</sup> )
Filter Pass Air Flow Rate	18.5m <sup>3</sup> /min
Materials	Mildew Proof Resin Net
Number Required Per Model	1
Weight (kg)	0.4

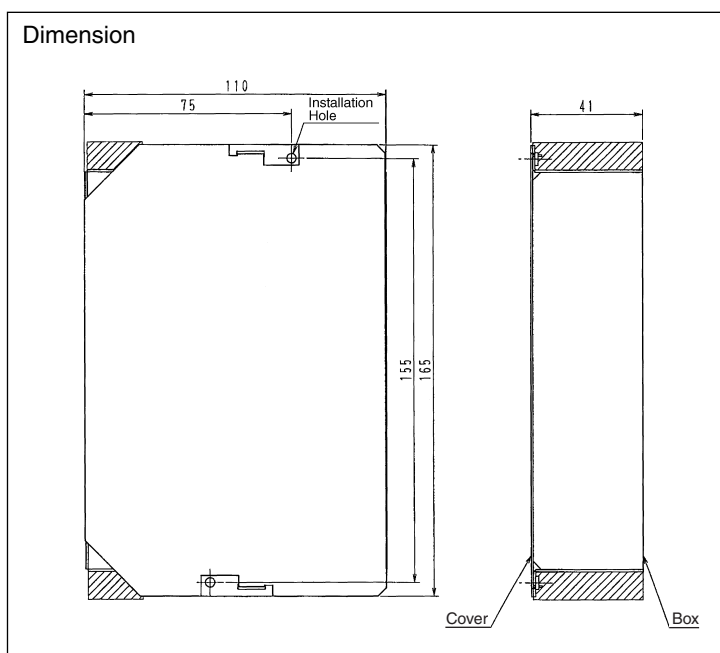
### L Connection Piping Kit – KHFP49M140



Model	Liquid Side	Gas Side
KHFP49M140	φ 9.5	φ 15.9

11

### Installation Box for Adaptor PCB – KRP1B97



Model No.	KRP1B97
Item	
Adaptor for Wiring	KRP4A53





# **Part 3**

# **Outdoor**

# **Air Processing Unit**

## **FXMQ-MF**

**Outdoor Air Processing Unit ..... 337**



# FXMQ-MF

## Outdoor Air Processing Unit

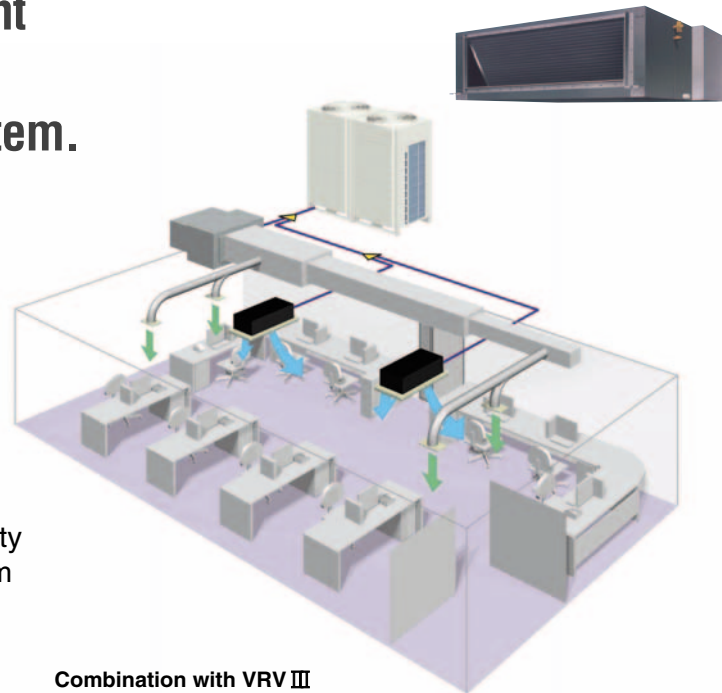
1. Features .....	338
2. Specifications .....	340
3. Dimensions .....	341
3.1 Indoor Units .....	341
3.2 Dimensions with Option.....	343
4. Piping Diagrams.....	345
5. Wiring Diagrams.....	346
6. Capacity Tables .....	347
7. Operation Limit.....	350
8. Electric Characteristics.....	352
9. Sound Levels .....	353
10. Fan Performances.....	354
11. Installation .....	356
12. Accessories .....	369

# 1. Features

## Combine fresh air treatment and air conditioning, supplied from a single system.

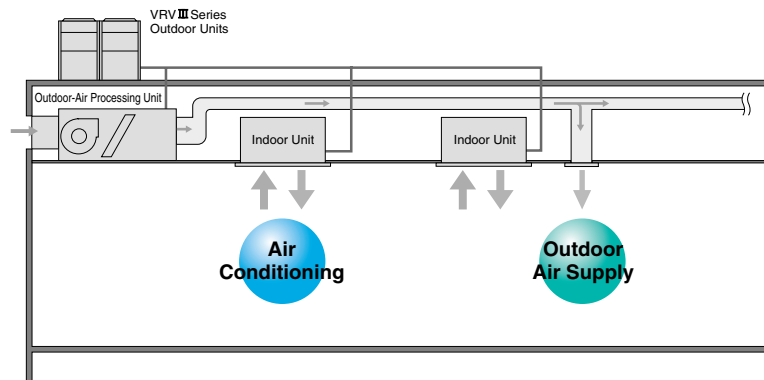
Fresh air treatment and air conditioning can be achieved with a single system by using heat pump technology—without the usual troublesome air supply and air discharge balance design. Fan coil units for air conditioning and an outdoor-air processing unit can be connected to the same refrigerant line. The results are enhanced design flexibility and a significant reduction in total system costs.

Model Numbers  
FXMQ125MFV1, FXMQ200MFV1, FXMQ250MFV1



Combination with VRV III

## Air conditioning and outdoor air processing can be accomplished using a single system.



### Connection Conditions

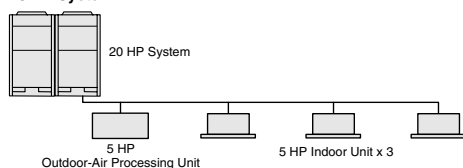
The following restrictions must be observed in order to maintain the indoor units connected to the same system.

- The total connected capacity of the standard indoor units and outdoor-air processing units must be between 50% and 100% of the capacity of outdoor units.
- The connected capacity of the outdoor-air processing unit must not exceed 30% of the capacity of outdoor units.
- An outdoor-air processing unit can be used exclusively. The connected capacity of the outdoor-air processing unit must be between 50% and 100% of the capacity of outdoor units.
- Connectable outdoor units: VRV II and VRV III

### System Example

Check to make sure that your system's connected capacity is within the appropriate range.

#### 20 HP System



Total connected capacity of standard indoor units and outdoor-air processing unit does not exceed 100%.  
**OK, because system capacity of 20 HP = indoor unit capacity of 20 HP.**  
 Connected capacity of outdoor-air processing unit does not exceed 30% of this.  
**OK, because system capacity of 20 HP x 0.3 = 6 HP > outdoor-air processing unit capacity of 5 HP.**

- The unit introduces outdoor air and adjusts the outdoor air temperature via fixed discharge temperature control, thereby reducing the air conditioning load.

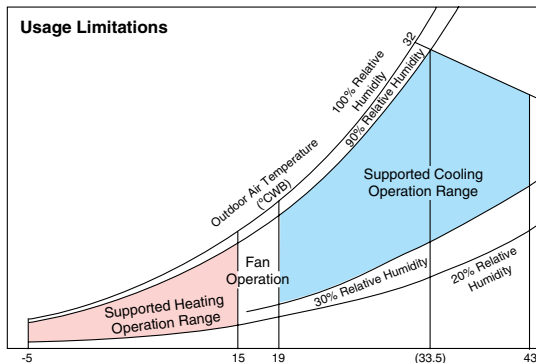
- \* The system can operate with outdoor-air temperatures ranging from -5 to 43°C. Heating performance is somewhat adversely affected when the outdoor-air temperature is 0°C or below.
- \* When shipped from the factory, the thermostat is set at 18°C for cooling and 25°C for heating. The set temperature can be varied within the range of 13-25°C during cooling operation, and 18-30°C during heating operation, in the local setting mode using the wired remote controller. The temperature, however, is not displayed on the remote controller.
- \* While in machine protection mode and depending on outdoor air conditions, discharge air temperature may not be at the set temperature.
- \* The fan stops when operating in defrosting, oil returning and hot start operations. The fan also may stop due to mechanical protection control.

- Ceiling mounted duct units with three differing capacities are available. These can be connected to VRV series outdoor units to meet a variety of different requirements.

#### Air flow rate

FXMQ125MFV1	1,080 m <sup>3</sup> /h
FXMQ200MFV1	1,680 m <sup>3</sup> /h
FXMQ250MFV1	2,100 m <sup>3</sup> /h

- Optional equipment includes long-life filters.
- Compatible with outdoor temperatures from -5°C to 43°C.



#### Notes

- The data shown in the graph illustrates the supported operating ranges under the following conditions.  
Indoor and Outdoor Unit  
Effective piping length: 7.5 m  
Height differential: 0 m
- The discharge temperature can be set using the remote controller. However, the actual temperature may not match the temperature setting under some circumstances due to the outdoor-air processing load or mechanical protection controls.
- The system will not operate in fan mode when the outdoor air temperature is 5°C or below.

- High-performance filters with dust collection efficiencies (JIS calorimetry) of 90% and 65% are also available as options.

- As with the VRV III system, a variety of control systems can be deployed, including remote control from distances of up to 500 m.



BRC1C62  
Wired remote controller  
(optional)

- \* Group control is not possible between this unit and standard type indoor units. Connect remote controllers to each unit.

- The "self-diagnosis function" indicates the occurrence and nature of abnormalities in the system by displaying codes on the remote controller.

- A central control system compatible with the VRV III system can be installed.



DCS302CA61  
Central remote controller  
(optional)

- \* It is not possible to change the discharge air temperature settings from the central control system.
- \* Do not associate this equipment into zones with standard indoor units, as central control will not be possible.

- As with the VRV III system, the equipment employs the "super wiring system" so that the wiring linking indoor and outdoor units can also be utilized for central control.

#### Notes:

- \* Linked control of the product and the HRV is not supported.
- \* This equipment is intended for the treatment of outdoor air only. It is not to be used for maintaining indoor air temperature. Install and use with standard indoor units. Be sure to position the air discharge openings of the product in positions where the airflow will not blow on people directly. When outdoor-air processing is in excess, the unit switches to thermo-off mode, and outdoor air flows into the room directly.
- \* For outdoor ducts, be sure to provide heat insulation to prevent condensation.
- \* Group control of the product and the standard indoor units is not supported. A separate remote controller should be connected to each individual unit.
- \* The system will not operate in fan mode when the outdoor air temperature is 5°C or below.
- \* If the product is allowed to operate 24 hours a day, maintenance (part replacement, etc.) must be performed periodically.
- \* Temperature setting and Power Proportional Distribution (P.P.D.) are not possible even if the intelligent Touch Controller or the intelligent Manager ECO21 is installed.
- \* The remote controller wired to the outdoor-air processing unit must not be set as the master remote controller. Otherwise, when set to "Auto," the operation mode will switch according to the outdoor air conditions, regardless of the indoor temperature.

## 2. Specifications

Model			FXMQ125MFV1	FXMQ200MFV1	FXMQ250MFV1
★1 Cooling Capacity	kcal/h		12,000	19,300	24,100
	Btu/h		47,800	76,400	95,500
	kW		14.0	22.4	28.0
Casing			Galvanized Steel Plate	Galvanized Steel Plate	Galvanized Steel Plate
Dimensions: (H×W×D)			470×744×1,100	470×1,380×1,100	470×1,380×1,100
Coil (Cross Fin Coil)	Rows×Stages×Fin Pitch	mm	3×26×2.0	3×26×2.0	3×26×2.0
	Face Area	m <sup>2</sup>	0.28	0.65	0.65
Fan	Model		D13/4G2DA1	D13/4G2DA1	D13/4G2DA1
	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor Output × Number of Units	W	380×1	380×1	380×1
	Air Flow Rate (H/L)	m <sup>3</sup> /min	18	28	35
		cfm	635	988	1,236
	External Static Pressure ★4	Pa	185	225	205
	Drive		Direct Drive	Direct Drive	Direct Drive
Temperature Control			Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating	Microprocessor Thermostat for Cooling and Heating
Sound Absorbing Thermal Insulation Material			Glass Fiber	Glass Fiber	Glass Fiber
Air Filter			★2	★2	★2
Piping Connections	Liquid Pipes		9.5mm (Flare Connection)	9.5mm (Flare Connection)	9.5mm (Flare Connection)
	Gas Pipes		15.9mm (Flare Connection)	19.1mm (Brazing Connection)	22.2mm (Brazing Connection)
	Drain Pipe	(mm)	PS1B (female thread)	PS1B (female thread)	PS1B (female thread)
Machine Weight (Mass)		kg	86	123	123
Sound Level (220V) ★3,★4		dBA	42	47	47
Safety Devices			Fuse Thermal Protector for Fan Motor	Fuse Thermal Protector for Fan Motor	Fuse Thermal Protector for Fan Motor
Refrigerant Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Standard Accessories			Operation Manual, Installation Manual, Sealing Pads, Screws, Clamps.	Operation Manual, Installation Manual, Sealing Pads, Connection Pipes, Screws, Clamps.	Operation Manual, Installation Manual, Sealing Pads, Connection Pipes, Screws, Clamps.
Connectable Outdoor Units ★5,★6			RXQ8-54PY1	RXQ8-54PY1	RXQ10-54PY1
Drawing No.			C : 3D046147A	C : 3D046147A	C : 3D046147A

### Notes:

★1. Specifications are based on the following conditions:

- Cooling: Outdoor temp. of 33°CDB, 28°CWB (68% RH). and discharge temp. of 18°CDB
- Equivalent reference piping length: 7.5m (0m Horizontal)
- At 220V

★2. Air intake filter is not supplied, so be sure to install the optional long-life filter or high-efficiency filter.

Please mount it in the duct system of the suction side. Select its colorimetric method (gravity method) 50% or more.

★3. Anechoic chamber conversion value, measured at a point 1.5m downward from the unit center.

These values (measured at 220V) are normally somewhat higher during actual operation as a result of ambient conditions.

★4. Values measured at 220 V.

★5. Within the range that the total capacity of indoor units is 50 to 100%, it is possible to connect to the outdoor unit.

★6. It is not possible to connect to the 5 HP outdoor unit. Not available for Heat Recovery type and VRV III-S series.

- This equipment cannot be incorporated into the remote group control of the VRV III system.

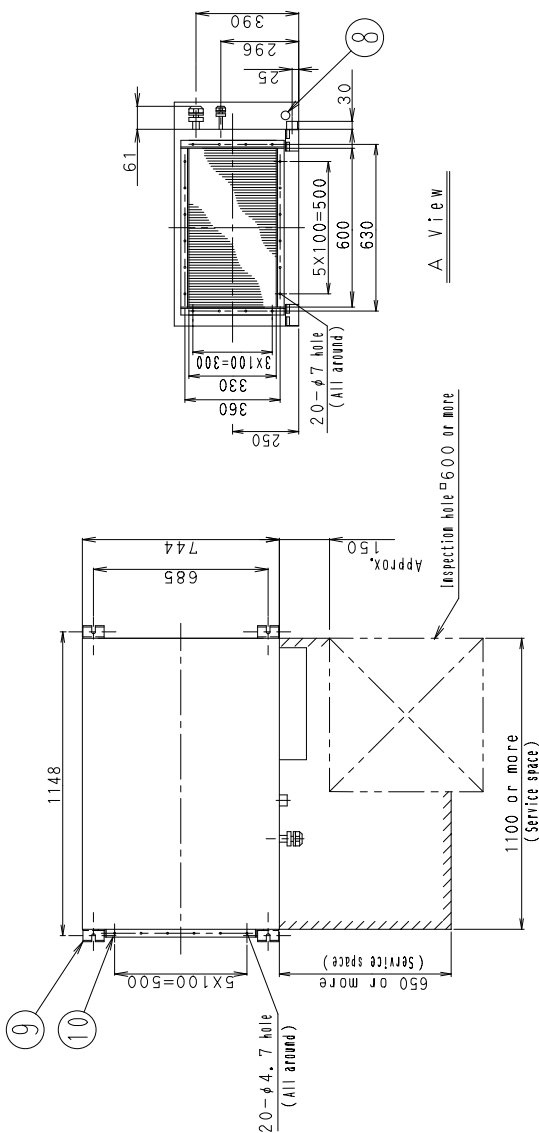
### Conversion Formulae

kcal/h=kW×860  
Btu/h=kW×3412  
cfm=m<sup>3</sup>/min×35.3

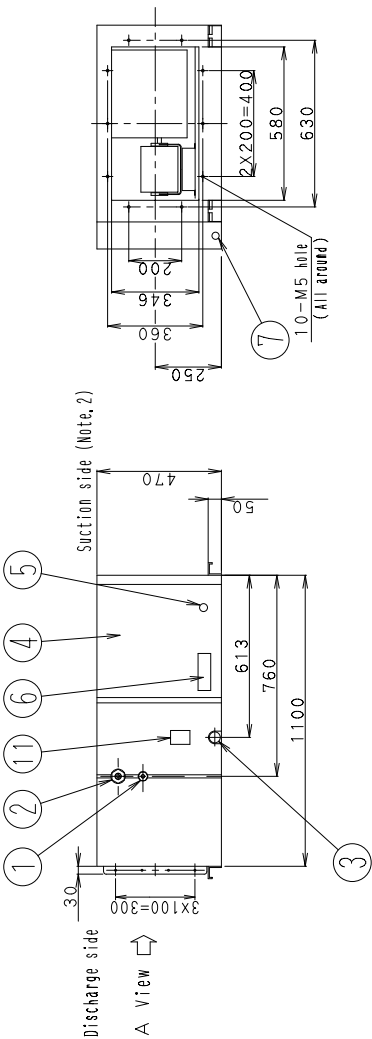
3. Dimensions

3.1 Indoor Units

FXMQ125MFV1



- Notes) 1, Location of unit's Name Plates:  
Electric parts box surface
- 2, Mount the air filter at the suction side,  
(Select its color method (gravity method))  
(50% or more.



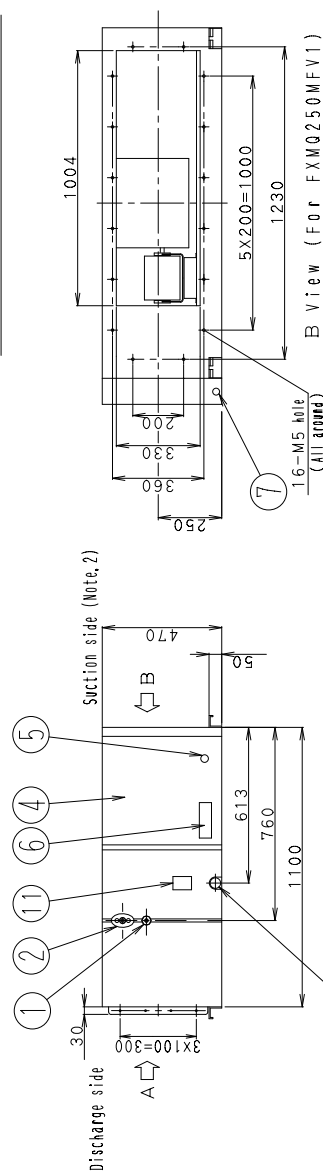
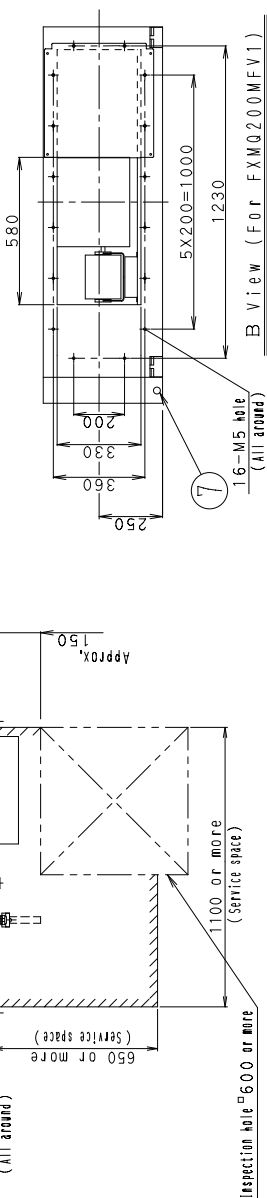
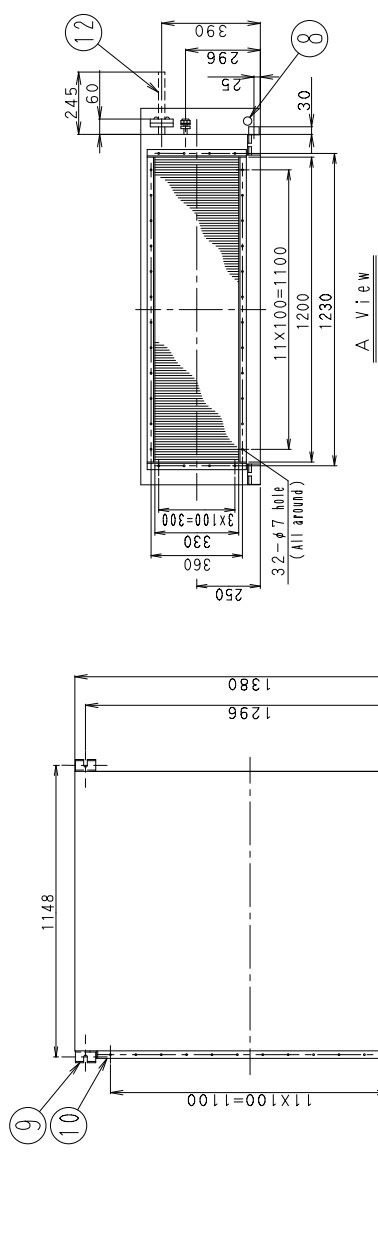
Unit (mm)

Number	Name	Description
1 1	Water supply port	
1 0	Discharge companion flange	
9	Hanger bracket	M10
8	Transmission wiring connection	
7	Power supply wiring connection	
6	Name plate	Note, 1
5	Ground terminal	M5(Inside Electric parts box)
4	Electric parts box	
3	Drain piping connection	PS1B Internal thread Major dia. φ33.349, Minor dia. φ30.391
2	Gas pipe connection	φ15, 9 Flare connection
1	Liquid pipe connection	φ9, 5 Flare connection

3D045129A



**FXMQ200MFV1**  
**FXMQ250MFV1**

Piping size (Field supply)

Indoor unit	Gas side	Liquid side
FXWQ200MEV1	φ 19.1 attached piping	φ 9.5
FXWQ250MEV1	φ 22.2 attached piping	φ 9.5

(Notes) 1. Location of unit's Name Plates:  
Electric parts box surface

2. Mount the air filter at the suction side.  
(Select its color method (gravity method)  
(50% or more.)

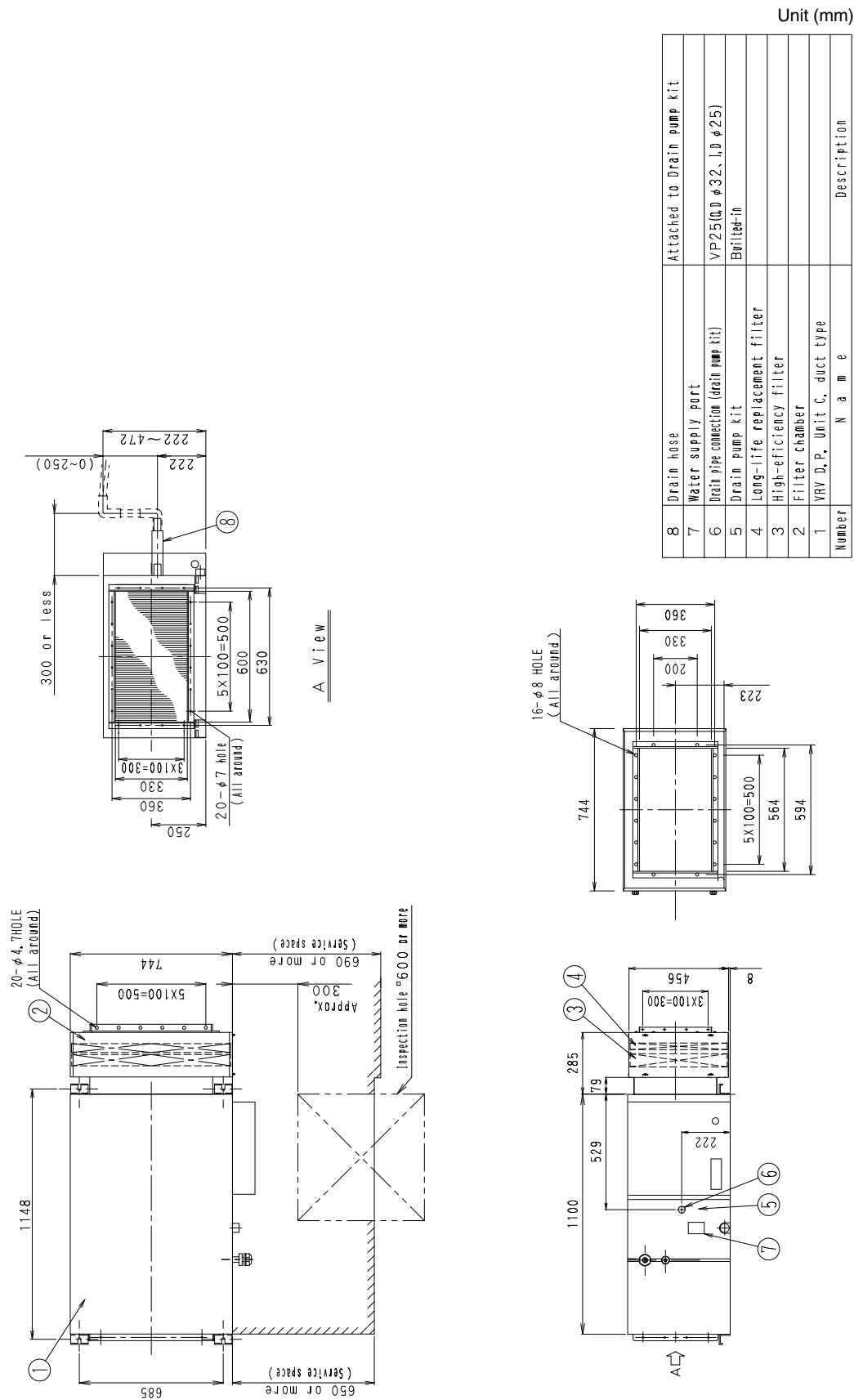
12	Attached piping	Brazing
11	Water supply port	
10	Discharge companion flange	
9	Hanger bracket	M10
8	Transmission wiring connection	
7	Power supply wiring connection	
6	Name plate	Note 1.
5	Ground terminal	MS(Inside Electric parts box)
4	Electric parts box	
3	Drain piping connection	PS1B Internal thread Major dia. $\phi$ 33, 349, Minor dia. $\phi$ 30, 391
2	Gas pipe connection	Attendant piping connection
1	Liquid pipe connection	Flare connection
Number	Name	Description

Unit (mm)

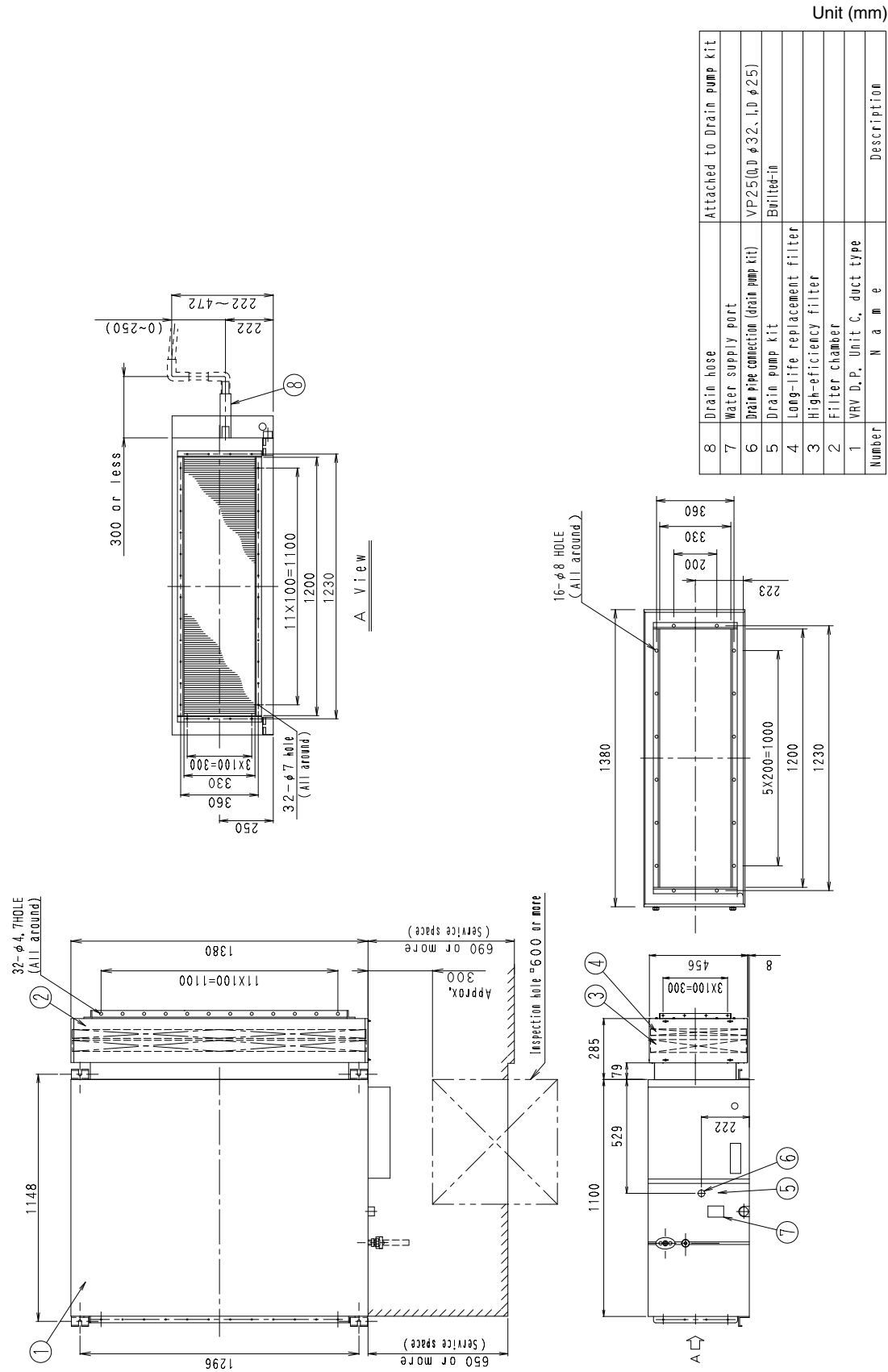
3D045128A

3.2 Dimensions with Option

FXMQ125MFV1

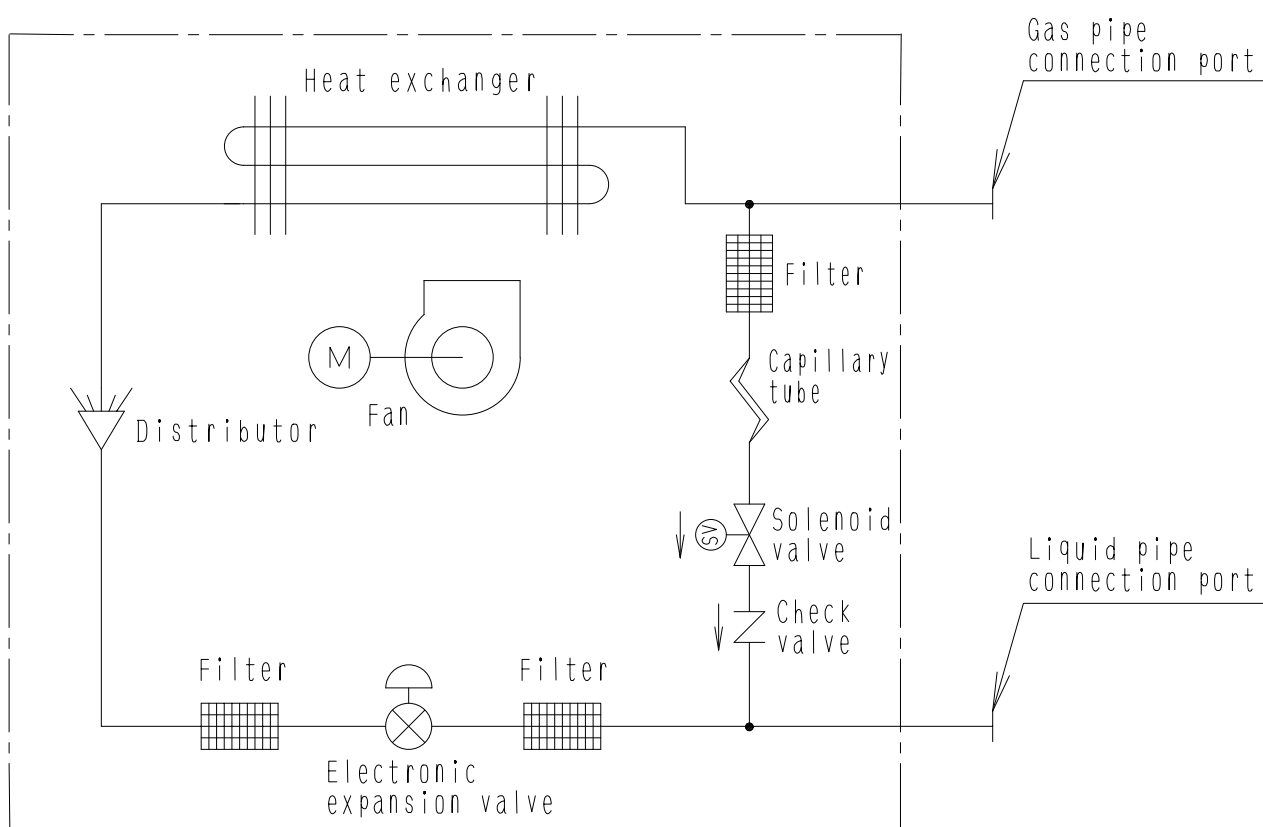


FXMQ200MFV1  
FXMQ250MFV1



3D046154

## 4. Piping Diagrams

**12**

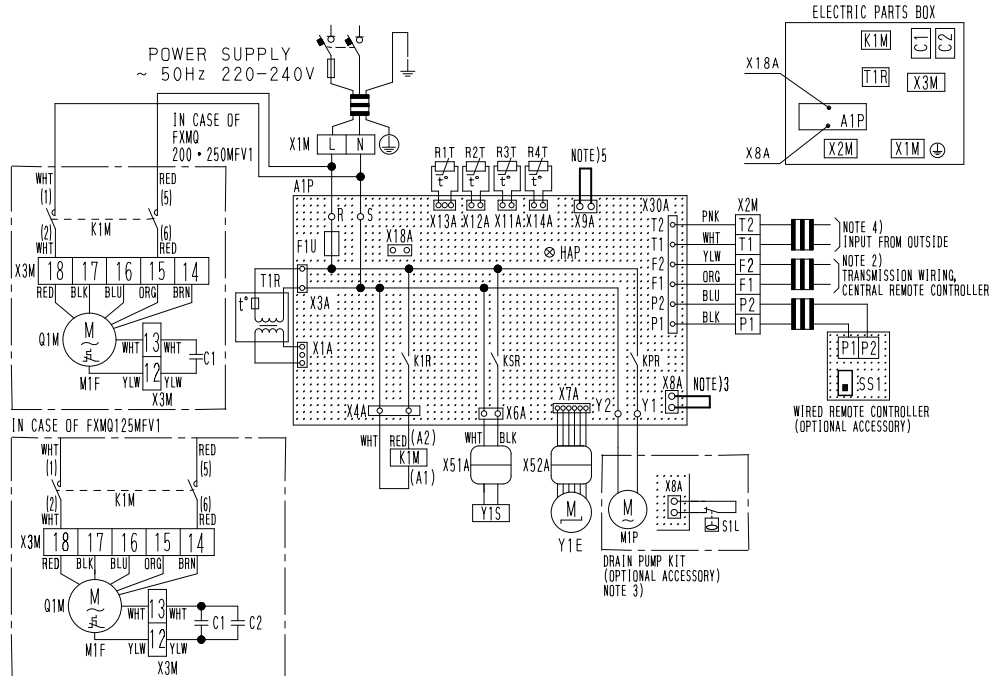
4D018650B

## 5. Wiring Diagrams

FXMQ125MFV1

FXMQ200MFV1

FXMQ250MFV1



INDOOR UNIT		X1M	TERMINAL BLOCK(POWER)
A1P	PRINTED CIRCUIT BOARD	X2M	TERMINAL BLOCK(CONTROL)
C1, C2	CAPACITOR(M1F)	X3M	TERMINAL BLOCK
F1U	FUSE(⊕, 5A, 250V)(A1P)	X51A, X52A	CONNECTOR
HAP	LIGHT EMMITING DIODE (SERVICE MONITOR-GREEN)	Y1E	ELECTRIC EXPANSION VALVE
K1M	MAGNETIC RELAY(M1F)	Y1S	SOLENOID VALVE(HOT GAS)
K1R	MAGNETIC RELAY(M1F)		OPTIONAL PARTS
KPR	MAGNETIC RELAY(M1P)	M1P	MOTOR(DRAIN PUMP)
KSR	MAGNETIC RELAY(Y1S)	S1L	FLOAT SWITCH(DRAIN PUMP)
M1F	MOTOR(FAN)		
Q1M	THERMAL PROTECTOR (M1F EMBEDDED 135℃)		WIRED REMOTE CONTROLLER
R1T	THERMISTOR(SUCTION AIR)	SS1	SELECT SWITCH(MAIN/SUB)
R2T	THERMISTOR(COIL, LIQUID)		
R3T	THERMISTOR(COIL, GAS)		CONNECTOR FOR OPTIONAL PARTS
R4T	THERMISTOR(DISCHARGE AIR)	X18A	CONNECTOR(WIRING ADAPTOR FOR ELECTRICAL APPENDICES)
T1R	TRANSFORMER(220-240V/22V)		

## NOTES

1. □: TERMINAL BLOCK, ⊞, ⊞, ⊞: CONNECTOR, —○—: TERMINAL,  
⊞: SHORT CIRCUIT CONNECTOR, ⊞: FIELD WIRING.
2. IN CASE USING CENTRAL REMOTE CONTROLLER, CONNECT IT TO  
THE UNIT IN ACCORDANCE WITH THE ATTACHED INSTRUCTION MANUAL.
3. IN CASE INSTALLING THE DRAIN PUMP KIT, REMOVE THE SHORT CIRCUIT CONNECTOR  
OF X8A AND EXECUTE THE ADDITIONAL WIRING FOR FLOAT SWITCH AND DRAIN PUMP.
4. IN CASE CONNECTING THE INPUT WIRES FROM OUTSIDE, FORCED OFF OR ON/OFF CONTROL  
OPERATION CAN BE SELECTED BY REMOTE CONTROLLER.  
IN DETAILS, REFER TO THE INSTALLATION MANUAL ATTACHED TO THE UNIT.
5. DO NOT REMOVE SHORT CIRCUIT CONNECTOR OF X9A.

3D044996C

## 6. Capacity Tables

### FXMQ125MFV1

#### Cooling

Outdoor temperature	°C WB							
°C DB	15.0	17.0	20.0	23.0	26.0	28.0	30.0	32.0
	Capacity							
	kW	kW	kW	kW	kW	kW	kW	kW
20.0	3.6	3.8	—	—	—	—	—	—
22.0	3.6	3.8	5.1	—	—	—	—	—
25.0	3.6	3.8	5.1	6.8	—	—	—	—
27.0	—	3.8	5.1	6.7	—	—	—	—
29.0	—	—	5.1	6.7	11.0	—	—	—
31.0	—	—	5.0	6.6	10.9	14.1	—	—
33.0	—	—	5.0	6.5	10.8	14.0	16.4	—
35.0	—	—	—	6.4	10.7	13.9	16.3	17.4

#### Notes

- The above capacities are based on the following conditions:  
 Air discharge temperature setting: 18°C for cooling operation,  
 25°C for heating (Factory setting)  
 Equivalent piping length: 7.5m  
 Level difference: 0m
- The above capacities values are general average values which can be generated by each compressor operation level.
- A value enclosed in   means rated capacity.

4D046308

## FXMQ200MFV1

## Cooling

Outdoor tempreture	°C W B							
°C D B	15.0	17.0	20.0	23.0	26.0	28.0	30.0	32.0
	Capacity							
	kW	kW	kW	kW	kW	kW	kW	kW
20.0	5.7	6.1	—	—	—	—	—	—
22.0	5.7	6.1	8.2	—	—	—	—	—
25.0	5.7	6.1	8.2	10.8	—	—	—	—
27.0	—	6.1	8.1	10.7	—	—	—	—
29.0	—	—	8.1	10.6	17.6	—	—	—
31.0	—	—	8.0	10.5	17.4	22.6	—	—
33.0	—	—	8.0	10.3	17.3	22.4	26.2	—
35.0	—	—	—	10.2	17.1	22.2	26.1	27.8

## Notes

- The above capacities are based on the following conditions:  
 Air discharge temperature setting: 18°C for cooling operation,  
 25°C for heating (Factory setting)  
 Equivalent piping length: 7.5m  
 Level difference: 0m
- The above capacities values are general average values which can be generated by each compressor operation level.
- A value enclosed in   means rated capacity.

4D046309

## FXMQ250MFV1

## Cooling

Outdoor temperature	°C WB							
°C DB	15.0	17.0	20.0	23.0	26.0	28.0	30.0	32.0
	Capacity							
	kW	kW	kW	kW	kW	kW	kW	kW
20.0	7.1	7.6	—	—	—	—	—	—
22.0	7.1	7.6	10.2	—	—	—	—	—
25.0	7.1	7.6	10.2	13.5	—	—	—	—
27.0	—	7.6	10.1	13.4	—	—	—	—
29.0	—	—	10.1	13.3	22.0	—	—	—
31.0	—	—	10.0	13.1	21.8	28.2	—	—
33.0	—	—	10.0	12.9	21.6	28.0	32.8	—
35.0	—	—	—	12.8	21.4	27.8	32.6	34.8

## Notes

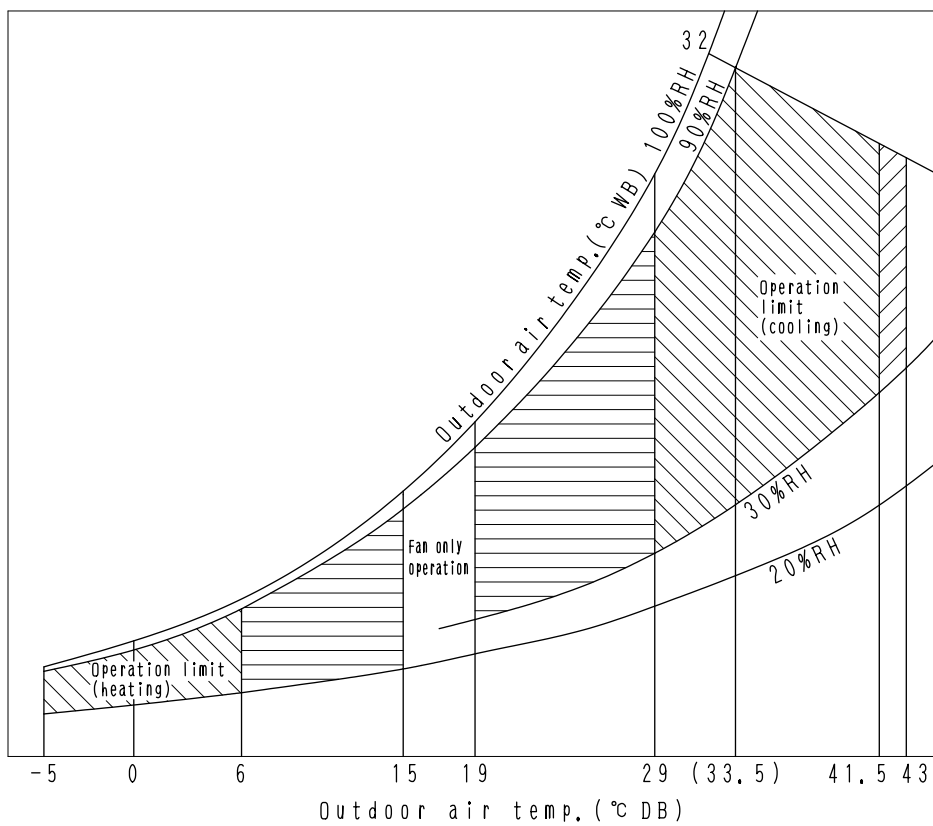
- The above capacities are based on the following conditions:  
 Air discharge temperature setting: 18°C for cooling operation,  
 25°C for heating (Factory setting)  
 Equivalent piping length: 7.5m  
 Level difference: 0m
- The above capacities values are general average values which can be generated by each compressor operation level.
- A value enclosed in   means rated capacity.

4D046310



## 7. Operation Limit

### FXMQ125MFV1

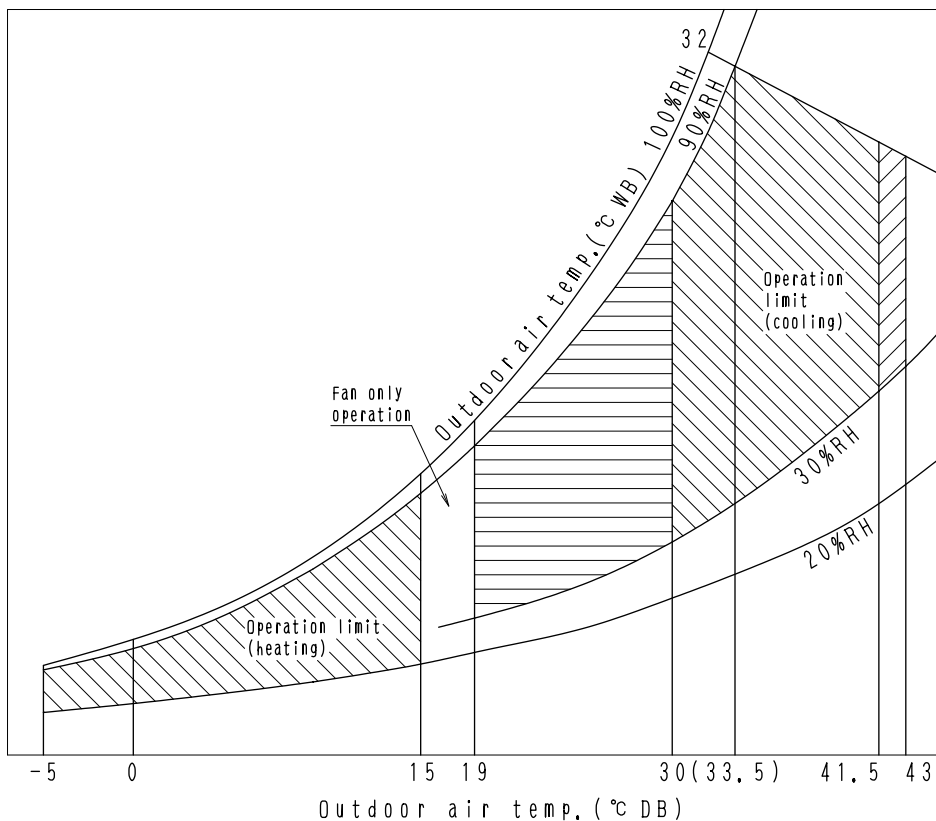


## NOTE

- These figures assume the following operating conditions, (Indoor and outdoor units)  
Equivalent pipe length: 7.5m  
Level difference: 0m
- The discharge air temperature may not match the temperature setting for too large outdoor-air processing capacity. Thermostat OFF may be carried out.
- The discharge air temperature may not match the temperature setting for too small outdoor-air processing capacity.
- The system will not operate in fan mode when the outdoor-air temperature is 5°C or below.

3D046312

### FXMQ200MFV1

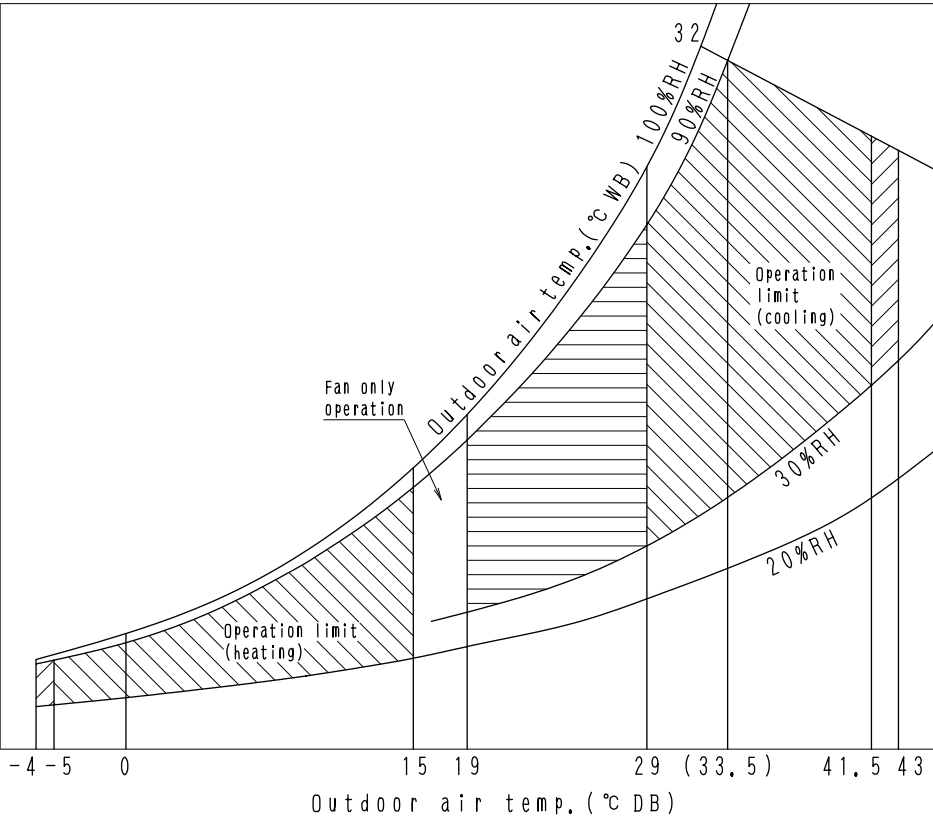




## NOTE

- These figures assume the following operating conditions, (Indoor and outdoor units)  
Equivalent pipe length: 7.5m  
Level difference: 0m
- The discharge air temperature may not match the temperature setting for too large outdoor-air processing capacity. Thermostat OFF may be carried out.
- The discharge air temperature may not match the temperature setting for too small outdoor-air processing capacity.
- The system will not operate in fan mode when the outdoor-air temperature is 5°C or below.

3D047750

FXMQ250MFV1



- NOTE
- 1) These figures assume the following operating conditions, (Indoor and outdoor units)  
Equivalent pipe length: 7.5m  
Level difference: 0m
  - 2) : The discharge air temperature may not match the temperature setting for too large outdoor-air processing capacity, Thermostat OFF may be carried out.
  - 3) : The discharge air temperature may not match the temperature setting for too small outdoor-air processing capacity.
  - 4) The system will not operate in fan mode when the outdoor-air temperature is 5°C or below.

3D046313

## 8. Electric Characteristics

Units					Power supply		IFM		Input (W)	
Model	Type	Hz	Volts	Voltage range	MCA	MFA	KW	FLA	Cooling	Heating
FXMQ125MFV1	V1	50	220-240	MAX. 264 Min. 198	1.9	15	0.380	1.5	359	359
FXMQ200MFV1					3.3	15	0.380	2.6	548	548
FXMQ250MFV1					3.8	15	0.380	3.0	638	638

Symbols :

MCA : Min. Circuit Amps (A)

MFA : Max. Fuse Amps (See note 5)

KW : Fan Motor Rated Output(KW)

FLA : Full Load Amps(A)

IFM : Indoor Fan Motor

Note :

1. Voltage range

Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits,

2. Maximum allowable voltage unbalance between phases is 2%.

3. MCA/MFA

$$MCA = 1.25 \times FLA$$

$$MFA \leq 4 \times FLA$$

(Next lower standard fuse rating. Min. 15A)

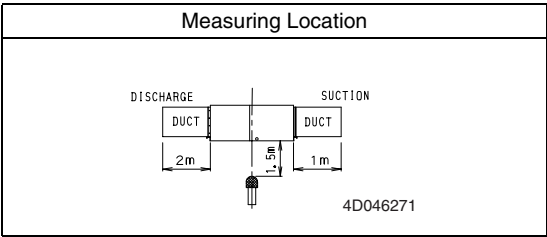
4. Select wire size based on the MCA.

5. Instead of fuse, use Circuit Breaker.

4D046146A

9. Sound Levels

Overall



Notes:

- 1. The operating conditions are assumed to be standard (JIS conditions)
- 2. These operating values were obtained in a dead room (conversion values).  
Sound level will vary depending on a range of factors such as the construction (acoustic absorption coefficient) of the particular room in which the equipments installed.

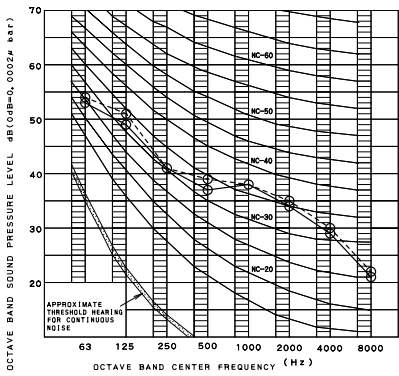
dBA

Model	50Hz	
	220V	240V
FXMQ125MFV1	42	43
FXMQ200MFV1	47	48
FXMQ250MFV1	47	48

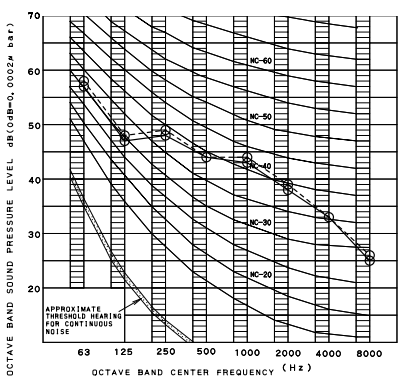
Octave Band Level

- — ○ 220V
- - - - ○ 240V

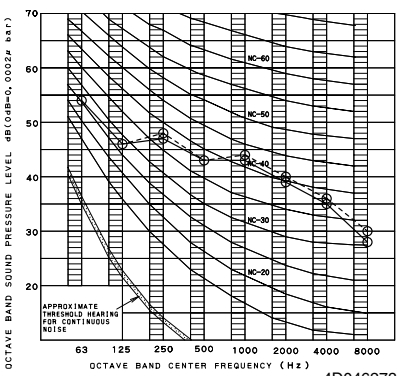
FXMQ125MFV1



FXMQ200MFV1

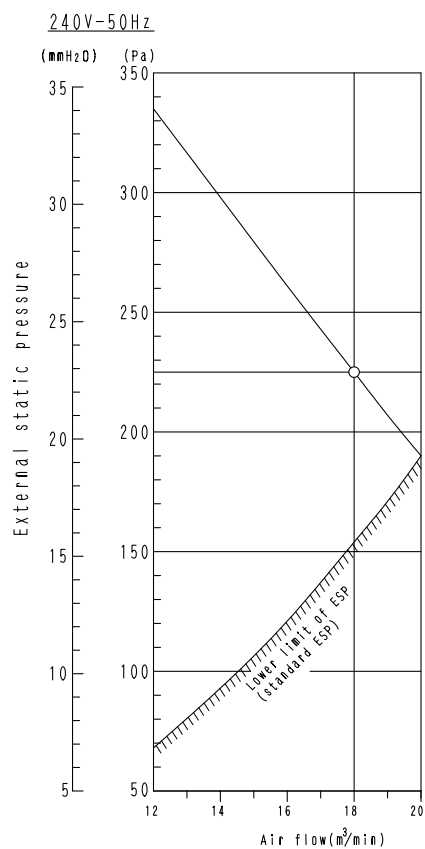
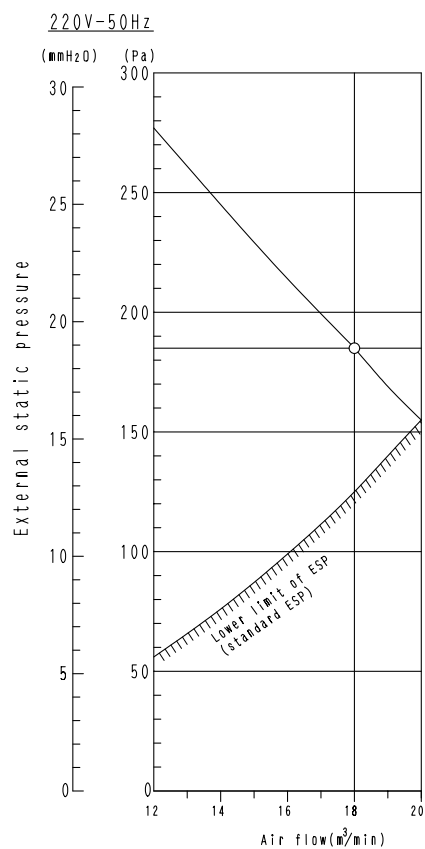


FXMQ250MFV1



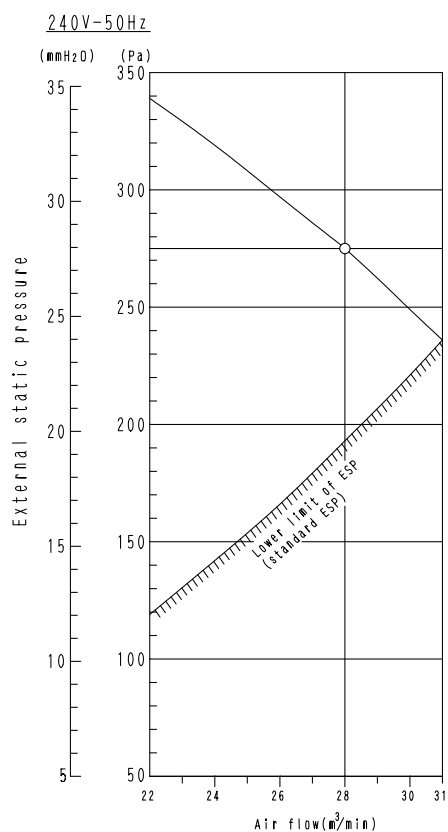
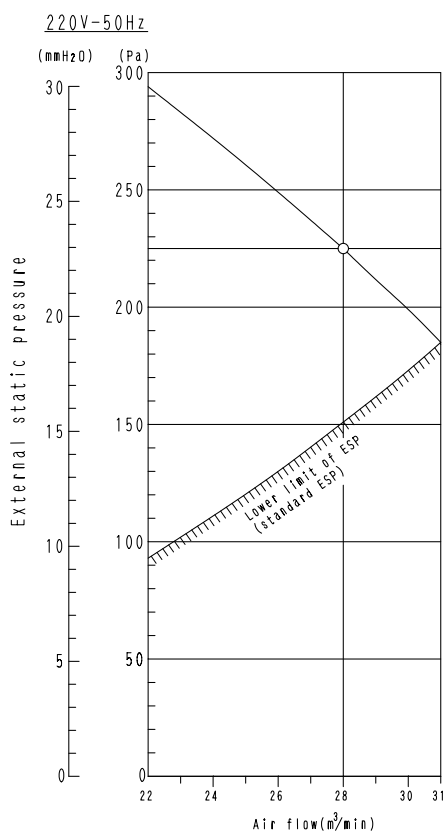
# 10. Fan Performances

## FXMQ125MFV1



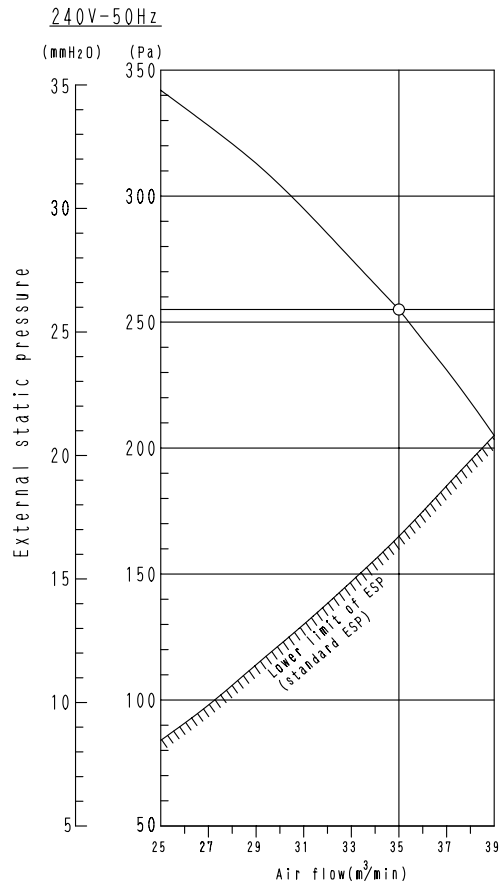
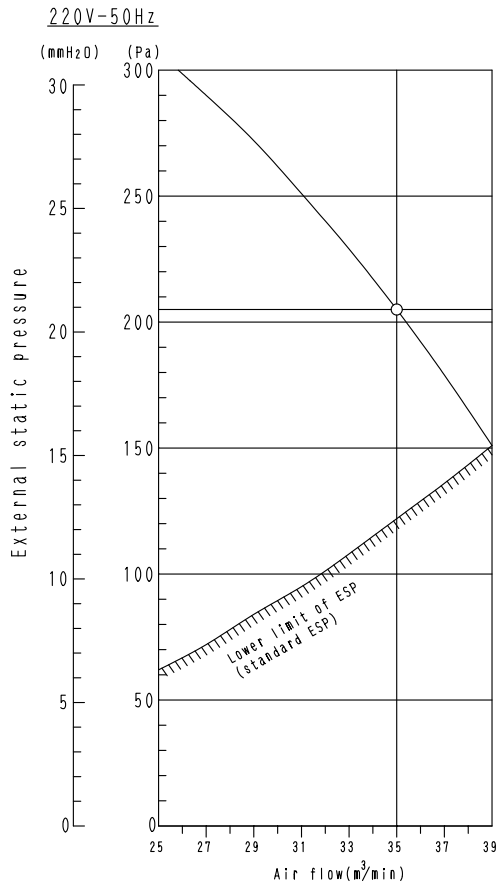
3D046267

## FXMQ200MFV1



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FXMQ250MFV1



3D046265

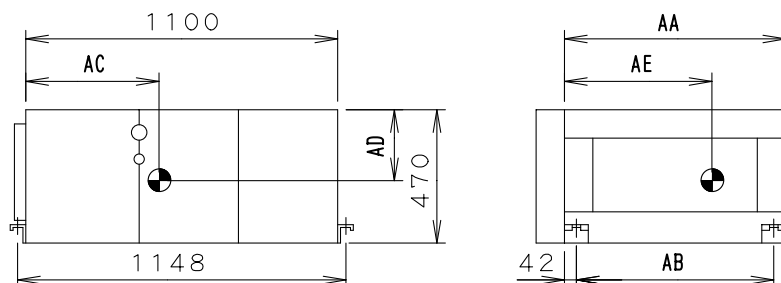
# 11. Installation

## Center of Gravity

FXMQ125MFV1

FXMQ200MFV1

FXMQ250MFV1



MODEL	PRODUCT WEIGHT (Mass)	AA	AB	AC	AD	AE
FXMQ125MFV1	86Kg	780	696	600	250	330
FXMQ200MFV1	123Kg	1380	1296	570	250	600
FXMQ250MFV1	123Kg	1380	1296	570	250	600

C: 4D046143B

## Service Space

### Selecting Installation Site

When it may exceed 30°C and RH80% in the ceiling or fresh air is inducted into the ceiling, an additional insulation (Thickness 10mm or more of glass wool or polyethylene form) is required.

1. Select an installation site where the following conditions are fulfilled and that meets with your customer's approval.

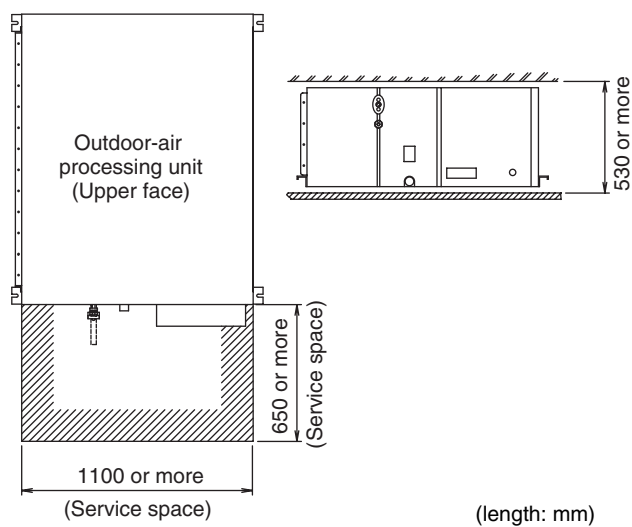
- Where is resistible against weight of the unit.
- In the upper space (including the back of the ceiling) of the unit where there is no possible dripping of water from the refrigerant pipe, drain pipe, water pipe, etc.
- Where optimum air distribution can be ensured.
- Where nothing blocks the air passage.
- Where condensate can be properly drained.
- If supporting structural members are not strong enough to take the unit's weight, the unit could fall out of place and cause serious injury.
- Where the false ceiling is not noticeably on an incline.
- Where there is no risk of combustible gas leakage.
- Where sufficient clearance for maintenance and service can be ensured. **(Refer to Fig. 1)**
- Where the total piping length involving indoor unit and outdoor unit is below the allowable piping length. (See the installation manual included with the outdoor unit for "Refrigerant Piping Work")
- Locations where a maintenance hole can be installed. **(Refer to Fig. 2)**



### CAUTION

- Install the indoor and outdoor units, power supply wires and transmission wires at least 1 meter away from televisions or radios in order to prevent image interference or noise. (Depending on the radio waves, a distance of 1 meter may not be sufficient enough to eliminate the noise.)

2. Use suspension bolts for installation. Check whether the ceiling is strong enough to support the weight of the unit or not. If there is a risk, reinforce the ceiling before installing the unit.

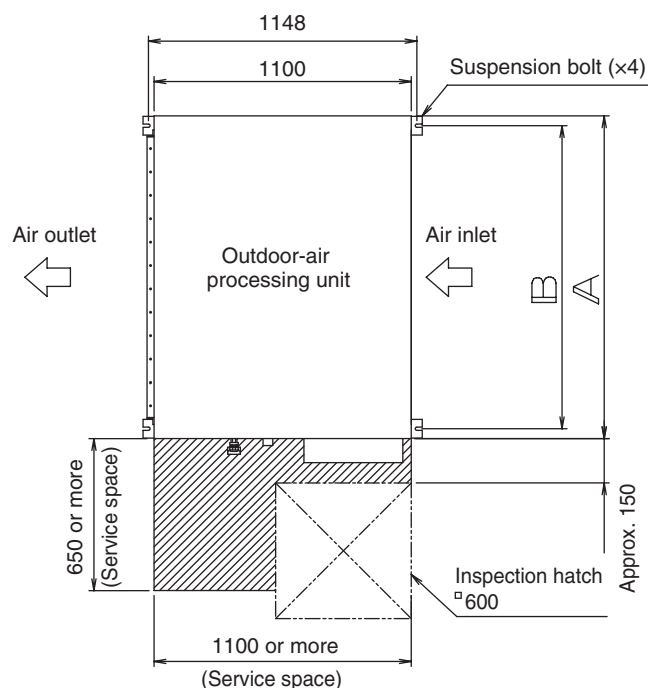
**Fig. 1**



## Bolt Pitch

### Preparations Before Installation

1. Relative positions of the unit and suspension bolt. (Refer to Fig. 2).



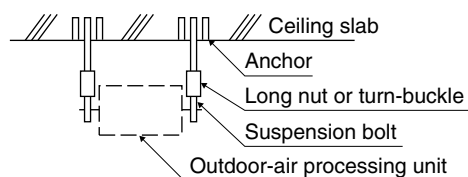
Unit	A	B
FXMQ125MFV1	744	685
FXMQ200-250MFV1	1380	1296

Fig. 2

(length: mm)

2. Install a canvas duct to the air outlet and air inlet so that vibration from the unit isn't transmitted to the duct or ceiling. You should also apply acoustic (insulation material) to the inside of the duct, and vibration insulation rubber to the suspension bolts.
3. Open the installation hole. (Pre-set ceilings)
  - Once the installation hole is opened in the ceiling where the unit is to be installed, pass refrigerant and drain pipe and the power supply, transmission, and remote controller wire to the unit's pipe and wire connection ports.
  - After opening the ceiling hole, it might be necessary to reinforce the ceiling frame to prevent shaking or to maintain the levelness of the ceiling. Consult an architect or carpenter for details.
4. Install suspension bolts. (Use bolts of 10 mm diameter.)
  - Install the unit where supporting structures are strong enough to bear the unit's weight. Use embedded inserts or anchor bolts with new buildings and hole-in-anchors with old buildings. Adjust the distance to the ceiling beforehand.

#### 〈 Installation example 〉



Note) All the above parts are field supplied.

Fig. 3

## Installation

### Unit Installation

Installing optional accessories before installing the unit is easier. See the installation manuals included with the optional accessories.

As for the parts to be used for installation work, be sure to use the provided accessories and specified parts designated by our company.

1. Temporarily install the unit.

- Mount the hanger brackets to suspension bolts. Secure the hanger brackets on the top and the bottom with nuts <1>~<3> (M10, field supplied) and washers (M10, accessory 9)).

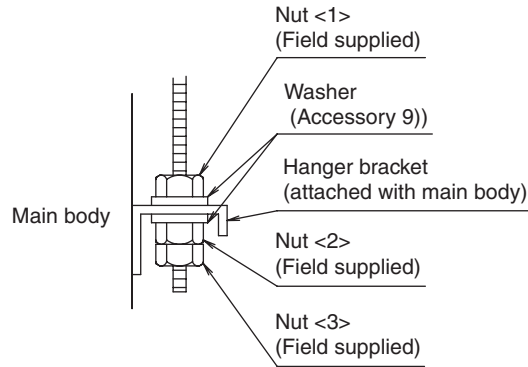


Fig. 4

2. Adjust the height of the unit with the nut <2>.

(Refer to Fig. 4)

3. Make sure the unit is level.

- Use a level or a vinyl tube filled with water to make sure that the unit is level and that the tilt (downward slope) to the drain socket and air inlet side is within 1°.

(Refer to Fig. 5)

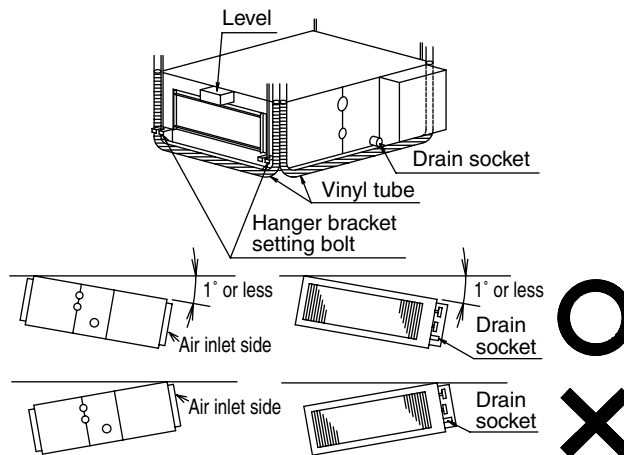


Fig. 5

4. Tighten both upper and lower nuts <1>, <3>.

(Refer to Fig. 4)

5. Insulate the four hanger brackets with the sealing pad. (accessory 5) Insulate the hanger brackets so that the surface and edges of the hanger brackets cannot be seen. (Refer to Fig. 6)

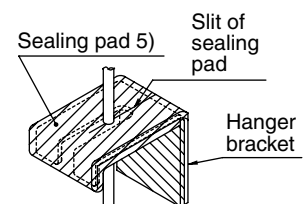


Fig. 6



### CAUTION

Setting the unit at an angle opposite to the drain socket or air inlet side might cause leaks.

### Refrigerant Piping Work

<For refrigerant piping between outdoor unit and this unit, see the installation manual attached to the outdoor unit. (Refer to Table 1)>

<Execute heat insulation work completely on both sides of the gas pipe and the liquid pipe. Otherwise, a water leakage can result sometimes.>

<When using a heat pump, the temperature of the gas pipe can reach up to approximately 120°C, so use insulation which is sufficiently resistant.>

<Improve the insulation on the refrigerant piping depending on the installation environment. If the insulation is not sufficient, condensate may form on the surface of the insulation.>

<Before refrigerant piping work, check which type of refrigerant is used. Proper operation is not possible if the types of refrigerant are not the same.>

### CAUTION

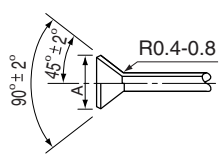
- Use a pipe cutter and flare suitable for the type of refrigerant.
- Apply ester oil or ether oil around the flare portions before connecting. (Refer to Fig. 7)
- To prevent dust, moisture or other foreign matter from infiltrating the tube, either pinch the end or cover it with tape.
- Do not allow anything other than the designated refrigerant to get mixed into the refrigerant circuit, such as air, etc. If any refrigerant gas leaks while working on the unit, ventilate the room thoroughly right away.

- The outdoor unit is charged with refrigerant.
- Be sure to use both a spanner and torque wrench together, as shown in the drawing, when connecting or disconnecting pipes to/from the unit. (Refer to Fig. 8)
- Refer to Table 2 for the dimensions of flare nut spaces.
- When connecting the flare nut, coat the flare section (both inside and outside) with ester oil or ether oil, rotate three or four times first, then screw in. (Refer to Fig. 7)
- Refer to Table 2 for tightening torque.

Table 1

Unit to be connected	Gas pipe diameter	Liquid pipe diameter
FXMQ125MFV1	15.9	φ9.5
FXMQ200MFV1	19.1 Use attached pipe.	φ9.5
FXMQ250MFV1	22.2 Use attached pipe.	φ9.5

Table 2

Pipe size	Tightening torque	Flare dimensions A (mm)	Flare shape
φ 9.5 (3/8")	32.7 – 39.9N·m (333 – 407 kgf·cm)	12.8 – 13.2	
φ 15.9 (5/8")	61.8 – 75.4N·m (630 – 770 kgf·cm)	19.3 – 19.7	

### Note:

Use the flare nuts attached with the unit.

### CAUTION

Over-tightening may damage the flare and cause a refrigerant leakage.

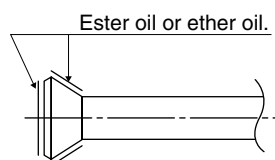


Fig. 7

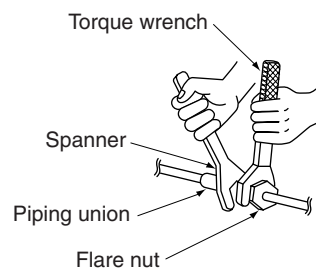


Fig. 8

**Not recommendable but in case of emergency**

You must use a torque wrench but if you are obliged to install the unit without a torque wrench, you may follow the installation method mentioned below.

**After the work is finished, make sure to check that there is no gas leak.**

When you keep on tightening the flare nut with a spanner, there is a point where the tightening torque suddenly increases. From that position, further tighten the flare nut the angle shown below:

Table 3

Pipe size	Further tightening angle	Recommended arm length of tool
9.5 (3/8")	60 to 90 degrees	Approx. 200mm
15.9 (5/8")	30 to 60 degrees	Approx. 300mm

- After checking the pipe-connection for gas leakage, be sure to insulate the liquid and gas pipe, referring to Fig.9, 10 and the following points.

**FXMQ125MFV1**

1. Insulate the liquid and gas pipes using the insulation for fitting (Accessory 2, 3)) (Tighten both edges with clamping material.)
2. Make sure the insulation for fitting (Accessory 3)) on the gas pipe has its seams facing up.
3. For the gas pipe, wrap the sealing pad (Accessory 4)) around the insulation for fitting (Accessory 3)) (flare nut part).

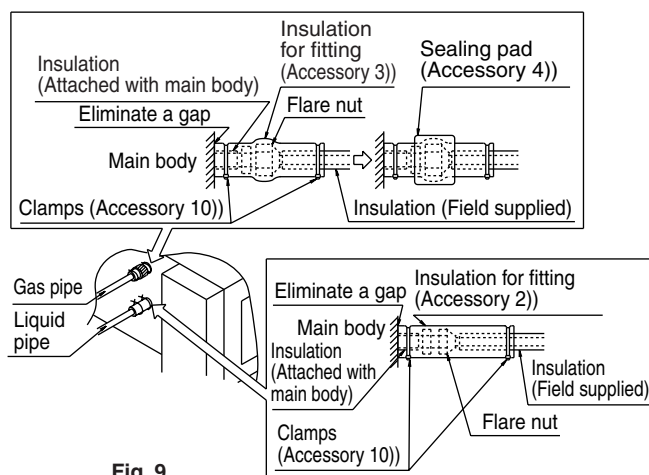


Fig. 9

**FXMQ200 · 250MFV1**

1. Insulate the liquid pipe using the insulation for fitting (Accessory 2)). (Tighten both edges with clamping material.)
2. Use the attached pipe (Accessory 1)) for connecting the gas pipes and make sure to insulate the gas pipes (using field supplied insulation) all the way to the base where they connect to the unit.
3. The turning torque of the hexagon head bolts (Accessory 7)) to connect the attached pipe (Accessory 1)) to the unit is 21.5 – 28.9 N/m.

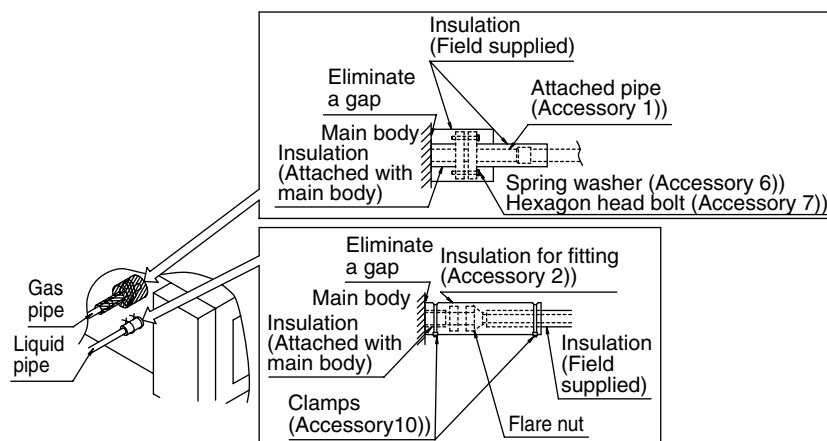


Fig. 10

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**CAUTION**

Be sure to insulate any field pipe all the way to the pipe connection inside the unit. Any exposed pipe may cause condensate or burns if touched.

---

---

**CAUTION****CAUTION TO BE TAKEN WHEN BRAZING REFRIGERANT PIPING**

Do not use flux when brazing refrigerant piping. Therefore, use the phosphor copper brazing filler metal (BCuP-2:JIS z 3264/B-Cu93P-710/795: ISO 3677) which does not require flux.

(Flux has extremely harmful influence on refrigerant piping systems. For instance, if the chlorine based flux is used, it will cause pipe corrosion or, in particular, if the flux contains fluorine, it will damage the refrigerant oil.)

---

- Before brazing local refrigerant piping, nitrogen gas shall be blown through the piping to expel air from the piping. If your brazing is done without nitrogen gas blowing, a large amount of oxide film develops inside the piping, and could cause system malfunction.
- When brazing the refrigerant piping, only begin brazing after having carried out nitrogen substitution or while inserting nitrogen into the refrigerant piping. Once this is done, connect the unit with a flared or a flanged connection.
- Nitrogen should be set to 0.02 MPa (0.2 kg/cm<sup>2</sup>) with a pressure-reducing valve if brazing while inserting nitrogen into the piping.

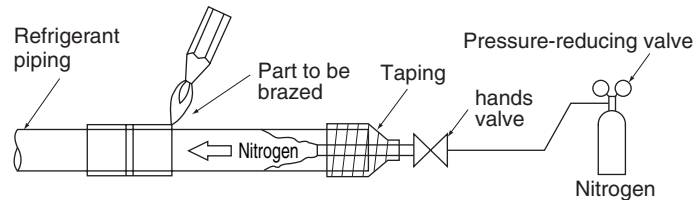


Fig. 11

## Drain Piping Work

<<Rig the drain pipe as shown below and take measures against condensate. Improperly rigged piping could lead to leaks and eventually wet furniture and belongings.>>

<<Insulate the drain pipes inside the building and the drain sockets.>>

1. Carry out the drain piping.

- The drain pipe should be short with a downward slope lower than 1/100 and should prevent air pockets from forming.
- The diameter of the pipe is the same as that of the connecting pipe (PS1B), and should be kept equal to or greater than that of the connecting pipe.

### Note:

- If converging multiple drain pipes, install according to the procedure shown below. (Select an appropriate central drain pipe thickness for the units they will be connected to.)

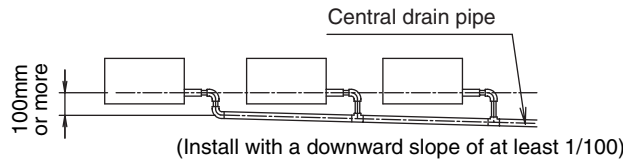


Fig. 12

2. After piping work is finished, check drainage flow smoothly.

- Open the water supply port, add approximately 1 liter of water slowly into the drain pan and check drainage flow.

(Refer to Fig. 13)

Pools of drainage can cause the drain pipes to clog.

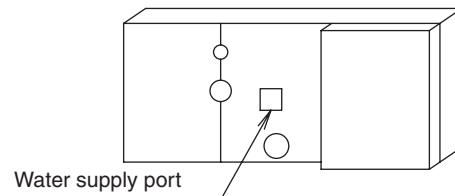


Fig. 13



## CAUTION

- Do not connect the drain pipe directly to sewage pipes that smell of ammonia. The ammonia in the sewage might enter the unit through the drain pipes and corrode the heat exchanger.

## Electric Wiring Work

### GENERAL INSTRUCTIONS

- All field supplied parts and materials and electric works must conform to local codes.
- Use copper wire only.
- For electric wiring work, refer to also "WIRING DIAGRAM" label attached to the electric parts box lid.
- For remote controller wiring details, refer to the installation manual attached to the remote controller.
- All wiring must be performed by an authorized electrician.
- This system consists of multiple indoor units. Mark each indoor unit as unit A, unit B..., and be sure the terminal board wiring to the outdoor unit is properly matched. If wiring and piping between the outdoor unit and the indoor unit are mismatched, the system may cause a malfunction.
- A circuit breaker capable of shutting down power supply to the entire system must be installed.
- Refer to the installation manual attached to the outdoor unit for the size of power supply wire connected to the outdoor unit, the capacity of the circuit breaker and switch, and wire instructions.
- Be sure to ground the unit.
- Do not connect the ground wire to gas and water pipes, lightning rods, or telephone ground wires.
  - Gas pipes : might cause explosions or fire if gas leaks.
  - Water pipes : no grounding effect if hard vinyl piping is used.
  - Telephone ground wires or lightning rods : might cause abnormally high electric potential in the ground during lightning.

## ELECTRICAL CHARACTERISTICS

Model	Units			Power supply		Fan motor	
	Hz	Volts	Voltage range	MCA	MFA	KW	FLA
FXMQ125MFV1	50	220 - 240	Max. 264 Min. 198	1.9	15	0.380	1.5
FXMQ200MFV1				3.3	15	0.380	2.6
FXMQ250MFV1				3.8	15	0.380	3.0


MCA: Min. Circuit Amps (A);

MFA: Max. Fuse Amps (A)

KW: Fan Motor Rated Output (kW);

FLA: Full Load Amps (A)

## SPECIFICATIONS FOR FIELD SUPPLIED FUSES AND WIRE

Model	Power supply wiring			Transmission wiring	
	Field fuses 	Wire	Size	Wire	Size
FXMQ125MFV1	15A	H05VV-U3G	Size must comply with local codes.	Sheathed wire (2 wire)	0.75 - 1.25 mm²
FXMQ200MFV1					
FXMQ250MFV1					

### NOTES

- Select the particular size of electrical wire for power supply wire in accordance with the standards of the given nation and region.
- Allowable length of transmission wire between indoor/out-door units and between the indoor unit and the remote con-troller is as follows.
  - (1) Outdoor unit – Indoor unit:  
Max. 1000 m (Total wiring length: 2000 m)
  - (2) Indoor unit – Remote controller:  
Max. 500 m
  - (3) Max. branches No. of branches :16
- Insulated thickness: 1mm or more
- Up to 16 branches are possible for unit-to unit cabling. No branch is allowed after first branch. **(Refer to Fig. 15)**

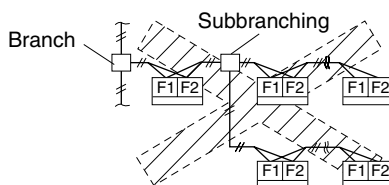


Fig. 15

### Wiring Example And How To Set The Remote Controller

**HOW TO CONNECT WIRINGS (Remove the electric parts box lid and wire as shown in the figure below.)**

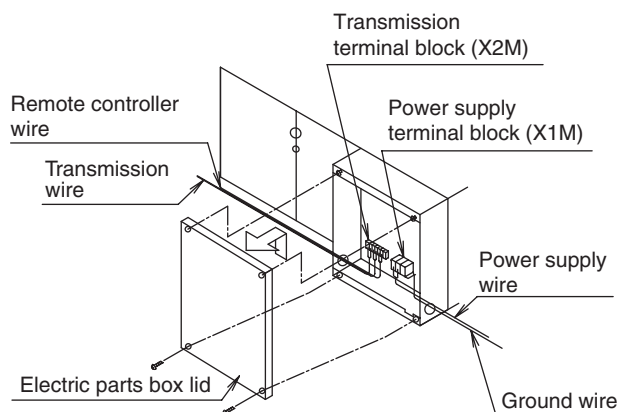


Fig. 16

### ■ Power supply wire, Ground wire (Refer to Fig. 17)

Connect the wire to L and N on the power supply terminal block (X1M). Also, connect the ground wire to the ground terminal. Take the power supply wire and the ground wire into the unit through the wiring through hole <1>, and firmly secure them together using the clamp (Accessory 10)).

### ■ Transmission wire, Remote controller wire (Refer to Fig. 17)

Connect the transmission wire to F1 and F2 on the transmission terminal block (X2M). Connect the remote controller wire to P1 and P2 on the transmission terminal block (X2M). Take them into the unit through the wiring through hole <2>, and firmly secure the wires using the clamp (Accessory 10)).

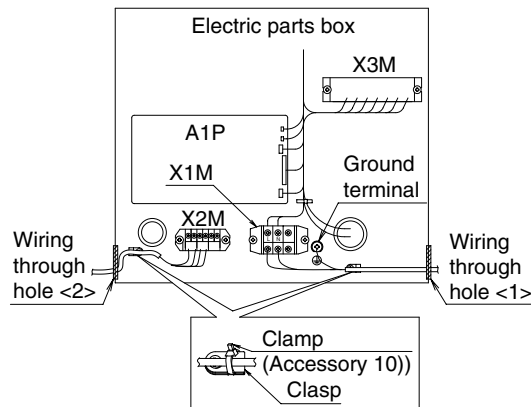


Fig. 17

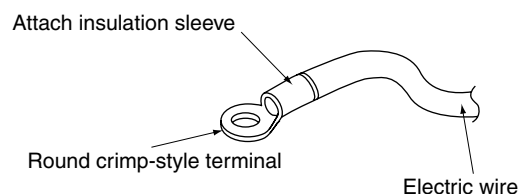


## CAUTION

- Wire the electric parts box so that the wiring is at least 10 mm above the bottom of the electric parts box.
- Be sure to attach the sealing material or putty (field supplied) to the wiring through holes to prevent the infiltration of water as well as any insects and other small creatures from outside. Otherwise a short-circuit may occur inside the electric parts box.
- When clamping the wires, be sure no pressure is applied to the wire connections by using the included clamping material to make appropriate clamps. Also, when wiring, make sure the lid on the electric parts box fits snugly by arranging the wires neatly and attaching the electric parts box lid firmly. When attaching the electric parts box lid, make sure no wires get caught in the edges. Pass wire through the wiring through holes to prevent damage to them.
- Make sure the remote controller wire, the transmission wire and power supply wire, ground wire do not pass through the same locations outside of the unit, separating them by at least 50mm, otherwise electrical noise (external static) could cause mistaken operation or breakage.

## PRECAUTIONS

1. Use round crimp-style terminals for connecting wires to the power supply terminal block. If unavailable, observe the following points when wiring.
  - Do not connect wires of different gauge to the same power supply terminal. (Looseness in the connection may cause overheating.)
  - Use the specified electric wire. Connect the wire securely to the terminal. Lock the wire down without applying excessive force to the terminal.



2. Tightening torque for the terminal screws.

- Use the correct screwdriver for tightening the terminal screws. If the blade of screwdriver is too small, the head of the screw might be damaged, and the screw will not be properly tightened.
- If the terminal screws are tightened too hard, screws might be damaged.



- Refer to the table below for the tightening torque of the terminal screws.

Terminal	Size	Tightening torque
Transmission terminal block (X2M)	M3.5	0.79 – 0.97 N·m
Power supply terminal block (X1M)	M4	1.18 – 1.44 N·m
Ground terminal	M5	3.02 – 4.08 N·m

- Do not connect wires of different gauge to the same ground terminal. Looseness in the connection may deteriorate protection.
- Outside of the unit, keep transmission wire and remote controller wire at least 50 mm away from power supply wire and ground wire. The unit may malfunction if subjected to electrical noise (external static).
- For remote controller wiring, refer to the “INSTALLATION MANUAL OF REMOTE CONTROLLER” attached to the remote controller.
- Never connect power supply wire to the transmission terminal block (X2M). A mistake of the sort could damage the entire system.
- Use only specified wire and tightly connect wires to terminals. Be careful wires do not place external stress on terminals. Keep wiring in neat order and so as not to obstruct other equipment such as the electric parts box lid. Make sure the lid closes tight. Incomplete connections could result in overheating, and in worse case, electric shock or fire.

## WIRING EXAMPLE

Fit the power supply wiring of each unit with a switch and fuse as shown in the drawing.

### COMPLETE SYSTEM EXAMPLE (3 SYSTEMS)

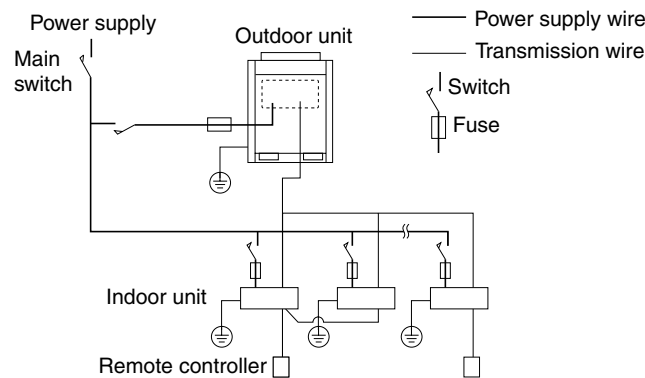


Fig. 18

- When using 1 remote controller for 1 indoor unit. (Normal operation)
- For group control or control by 2 remote controllers

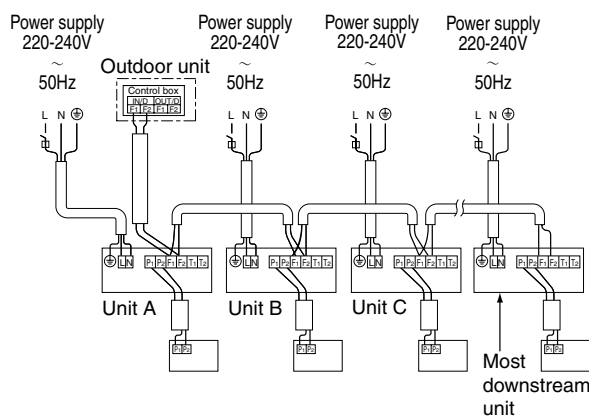


Fig. 19

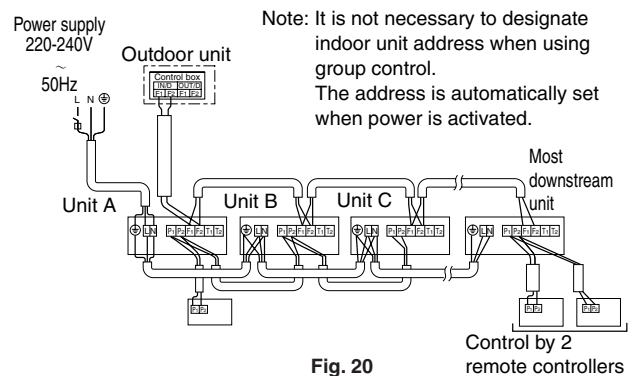
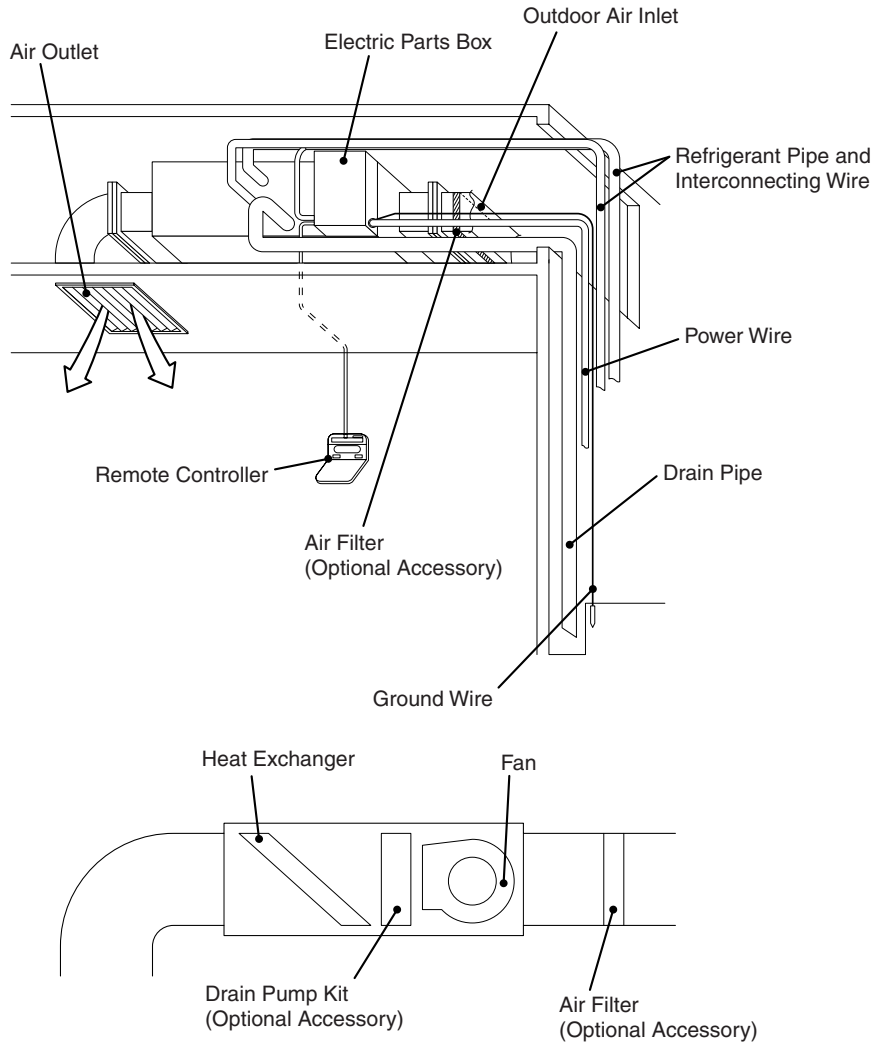


Fig. 20

### [ PRECAUTIONS ]

- A single switch can be used to supply power to units on the same system. However, branch switches and branch circuit breakers must be selected carefully.

Name of Each Part



3P086155-6G-3

Operation Range

Use the system in the following temperature and humidity ranges for safe and effective operation.

COOLING			[°C]
OUTDOOR TEMPERATURE			
TEMPERATURE		HUMIDITY	
DB	19 to 43 (Notes)	30% to 90%	
WB	32 or below	Long time operation in a humidity over 90% may cause condensation on the unit and dripping.	

DB: Dry Bulb Temperature  
WB: Wet Bulb Temperature

- Notes:**
- The FAN OPERATION mode is set automatically for DB temperatures of 19°C and below.
  - Do not use the COOLING OPERATION or FAN OPERATION modes when outdoor temperature is 5°C or lower. The unit will stop running to protect itself against cold damage. In such case, set the AUTOMATIC OPERATION or HEATING OPERATION mode.

HEATING [°C]

OUTDOOR TEMPERATURE	
DB	-5 to 15 (Note)

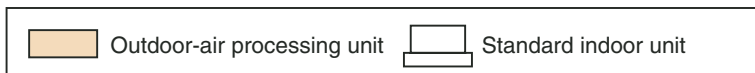
DB: Dry Bulb Temperature

**Note:**

The FAN OPERATION mode is set automatically for DB temperature of 15°C and above.

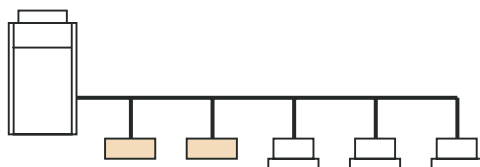
If the temperature or the humidity is beyond these conditions, safety devices may work and the air conditioner may not operate.

## ■ Restrictions in case of mixture connection with standard indoor units



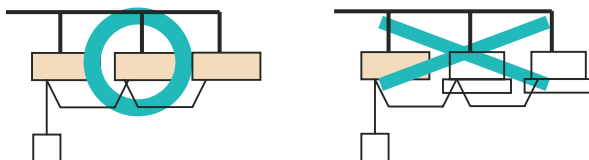
### 1. Restrictions of the refrigerant piping system

- 1) The total capacity of standard indoor units + Outdoor-air processing units should be **50-100%** of Outdoor unit capacity. (In case of using only outdoor-air processing units, it is same.)
- 2) The capacity of outdoor-air processing units should be less than **30%** of the outdoor unit capacity.

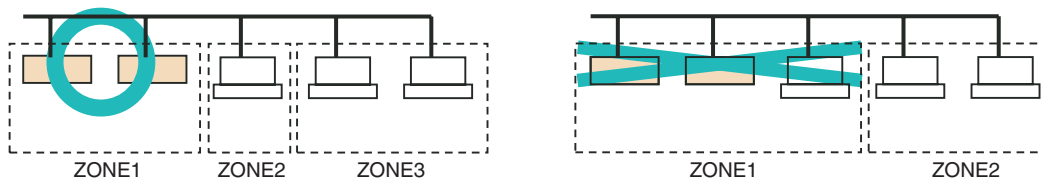


### 2. Restrictions of the control system

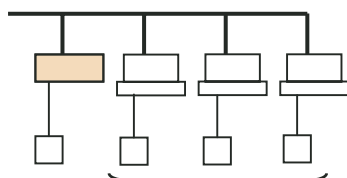
- 1) In case of wiring is mixed with standard indoor units, group control by remote controller is not available, because the setting temperature are different.



- 2) When using the central remote controller, mixture of indoor units & Outdoor-air Processing units in the same zone is not available, because the setting temperature are different.





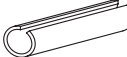
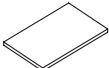
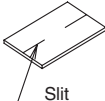
- 3) Don't set the R/C of Outdoor-air processing unit as the master remote controller.



Set one of these remote controllers as the master remote controller.

## 12. Accessories

### Standard Accessories

Name	Attached pipe	Insulation for fitting	Sealing pad	Sealing pad	Others
Quantity	1	1 each	1	4	
Shape	1)  (Only FXMQ200 · 250MFV1)	2) for liquid pipe  Inside diameter $\phi 25.4$ 3) for gas pipe  Inside diameter $\phi 31.8$ (Only FXMQ125MFV1)	4)  (Only FXMQ125MFV1)	5)  Slit	6) Spring washer (M10) (2 pieces only for FXMQ200 · 250MFV1) 7) Hexagon head bolt (M10×40) (2 pieces only for FXMQ200 · 250MFV1) 8) Screws for flange connection (M5) (16 pieces for FXMQ125MFV1, 28 pieces for FXMQ200 250MFV1) 9) Washers (8 pieces) 10) Clamps (6 pieces) 11) Installation manual 12) Operation manual

3P086156-11Q-2

### Optional Accessories (For Unit)

No.	Item	Type	FXMQ125MFV1	FXMQ200MFV1	FXMQ250MFV1
1	Drain pump kit		KDU30L250VE		
2	High efficiency filter	65%	KAFJ372L140	KAFJ372L280	
		90%	KAFJ373L140	KAFJ373L280	
3	Filter chamber ★1		KDJ3705L140	KDJ3705L280	
4	Long life replacement filter		KAFJ371L140	KAFJ371L280	

3D046270

#### Notes:

- ★1. Filter chamber has a suction-type flange. (Main unit does not have.)
- Dimensions and weight of the equipment may vary depending on the options used.
- Some options may not be usable due to the equipment installation conditions, so please confirm prior to ordering.
- Some options may not be used in combination.
- Operating sound may increase somewhat depending on the options used.

### Optional Accessories (For Operation Controls)

No.	Item	Type	FXMQ-MF
1	Wired remote controller		BRC1C62
2	Central remote controller		DCS302CA61
3	Unified ON/OFF controller		DCS301BA61
4	Schedule timer		DST301BA61
5	Wiring adaptor for electrical appendices (1)		KRP2A61
6	Wiring adaptor for electrical appendices (2)		KRP4A51
7	Adaptor for wiring		KRP1B61



# **Part 4**

## **Outdoor Units**

### **Normal Series**

#### **(Space Saving Series)**

#### **RXQ-P**

**Cooling Only (50Hz) Normal Series**

**(Space Saving Series) .....373**



# RXQ-P

## Cooling Only (50Hz)

### Normal Series

### (Space Saving Series)

1. Specifications .....	374
1.1 Cooling Only 50Hz-Normal Series (Space Saving Series)	
<RXQ-P> .....	374
2. Dimensions .....	387
2.1 Independent Unit .....	387
2.2 Combination Unit .....	390
3. Service Space .....	394
4. Piping Diagrams .....	395
5. Wiring Diagrams .....	399
6. Field Wiring .....	404
7. Electric Characteristics .....	407
7.1 50Hz .....	407
8. Capacity Tables (Cooling Only) .....	411
8.1 Cooling Capacity (RXQ-P) .....	411
8.2 Capacity Correction Factor (RXQ-P) .....	436
9. Operation Limits .....	443
10. Sound Levels .....	444
10.1 50Hz .....	444
11. Accessories .....	445
11.1 Standard Accessories .....	445
11.2 Optional Accessories .....	446
11.3 Digital Pressure Gauge Kit BHGP26A1(E) .....	447
11.4 Central Drain Pan Kit KWC26C160, 280, 450 .....	449



# 1. Specifications

## 1.1 Cooling Only 50Hz-Normal Series (Space Saving Series) <RXQ-P>

Model Name			RXQ5PY1	RXQ8PY1
★1 Cooling Capacity (19.5°CWB)	kcal / h		12,100	19,400
	Btu / h		48,100	76,800
	kW		14.1	22.5
★2 Cooling Capacity (19.0°CWB)	kW		14.0	22.4
Casing Color			Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
Dimensions: (H×W×D)		mm	1680×635×765	1680×930×765
Heat Exchanger			Cross Fin Coil	Cross Fin Coil
Comp.	Type		Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Piston Displacement	m³/h	13.72	13.72
	Number of Revolutions	r.p.m	6300	7980
	Motor Output×Number of Units	kW	2.8×1	3.8×1
	Starting Method		Soft Start	Soft Start
Fan	Type		Propeller Fan	Propeller Fan
	Motor Output	kW	0.35×1	0.75×1
	Air Flow Rate	m³/min	95	180
	Drive		Direct Drive	Direct Drive
Connecting Pipes	Liquid Pipe	mm	φ9.5 (Brazing Connection)	φ9.5 (Brazing Connection)
	Gas Pipe	mm	φ15.9 (Brazing Connection)	φ19.1 (Brazing Connection)
Product Mass (Machine weight)		kg	160	205
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector
Capacity Control		%	28~100	20~100
Refrigerant	Refrigerant Name		R-410A	R-410A
	Charge	kg	6.2	7.7
	Control		Electronic Expansion Valve	Electronic Expansion Valve
Refrigerator Oil			Refer to the nameplate of compressor	Refer to the nameplate of compressor
Standard Accessories			Installation Manual, Operation Manual, Clamps	Installation Manual, Operation Manual, Connection Pipes, Clamps
Drawing No.			C: 4D056532	C: 4D056533

### Notes:

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.  
 ★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.  
 3 The power input (PI) (Comp. + Outdoor Fan Motor) : Refer to P.411~435.

### Conversion Formulae

kcal/h=kW×860  
 Btu/h=kW×3412  
 cfm=m³/min×35.3

The Reference Number  
 C~: Partly corrected drawings.  
 J~: Original drawing is Japanese  
 V~: Printing Convenience

Model Name			RXQ10PY1	RXQ12PY1
★1 Cooling Capacity (19.5°CWB)	kcal / h		24,300	29,000
	Btu / h		96,200	115,000
	kW		28.2	33.7
★2 Cooling Capacity (19.0°CWB)	kW		28.0	33.5
Casing Color			Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
Dimensions: (H×W×D)		mm	1680×930×765	1680×1240×765
Heat Exchanger			Cross Fin Coil	Cross Fin Coil
Comp.	Type		Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Piston Displacement	m³/h	13.72+10.53	13.72+10.53
	Number of Revolutions	r.p.m	6300, 2900	6300, 2900
	Motor Output×Number of Units	kW	(1.2+4.5)×1	(2.5+4.5)×1
	Starting Method		Soft Start	Soft Start
Fan	Type		Propeller Fan	Propeller Fan
	Motor Output	kW	0.75×1	0.35×2
	Air Flow Rate	m³/min	185	233
	Drive		Direct Drive	Direct Drive
Connecting Pipes	Liquid Pipe	mm	φ9.5 (Brazing Connection)	φ12.7 (Brazing Connection)
	Gas Pipe	mm	φ22.2 (Brazing Connection)	φ28.6 (Brazing Connection)
Product Mass (Machine Weight)		kg	249	285
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector
Capacity Control		%	14~100	14~100
Refrigerant	Refrigerant Name		R-410A	R-410A
	Charge	kg	8.4	10.0
	Control		Electronic Expansion Valve	Electronic Expansion Valve
Refrigerator Oil			Refer to the nameplate of compressor	Refer to the nameplate of compressor
Standard Accessories			Installation Manual, Operation Manual, Connection Pipes, Clamps	Installation Manual, Operation Manual, Connection Pipes, Clamps
Drawing No.			C: 4D056534	C: 4D056535

**Notes:**

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.  
 ★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.  
 3 The power input (PI) (Comp. + Outdoor Fan Motor) : Refer to P.411~435.

## Conversion Formulae

kcal/h=kW×860  
 Btu/h=kW×3412  
 cfm=m³/min×35.3

Model Name			RXQ14PY1	RXQ16PY1
★1 Cooling Capacity (19.5°CWB)	kcal / h		34,600	39,000
	Btu / h		137,000	155,000
	kW		40.2	45.3
★2 Cooling Capacity (19.0°CWB)	kW		40.0	45.0
Casing Color			Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
Dimensions: (H×W×D)		mm	1680×1240×765	1680×1240×765
Heat Exchanger			Cross Fin Coil	Cross Fin Coil
Comp.	Type		Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Piston Displacement	m³/h	13.72+10.53+10.53	13.72+10.53+10.53
	Number of Revolutions	r.p.m	6300, 2900×2	6300, 2900×2
	Motor Output×Number of Units	kW	(0.3+4.5+4.5)×1	(1.4+4.5+4.5)×1
	Starting Method		Soft Start	Soft Start
Fan	Type		Propeller Fan	Propeller Fan
	Motor Output	kW	0.35×2	0.35×2
	Air Flow Rate	m³/min	233	233
	Drive		Direct Drive	Direct Drive
Connecting Pipes	Liquid Pipe	mm	φ12.7 (Brazing Connection)	φ12.7 (Brazing Connection)
	Gas Pipe	mm	φ28.6 (Brazing Connection)	φ28.6 (Brazing Connection)
Product Mass (Machine Weight)		kg	329	329
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector
Capacity Control		%	10~100	10~100
Refrigerant	Refrigerant Name		R-410A	R-410A
	Charge	kg	12.3	12.5
	Control		Electronic Expansion Valve	Electronic Expansion Valve
Refrigerator Oil			Refer to the nameplate of compressor	Refer to the nameplate of compressor
Standard Accessories			Installation Manual, Operation Manual, Connection Pipes, Clamps	Installation Manual, Operation Manual, Connection Pipes, Clamps
Drawing No.			C: 4D056536	C: 4D056537

**Notes:**

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.  
 ★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.  
 3 The power input (PI) (Comp. + Outdoor Fan Motor) : Refer to P.411~435.

Conversion Formulae
kcal/h=kW×860 Btu/h=kW×3412 cfm=m³/min×35.3

Model Name (Combination Unit)			RXQ18PY1	RXQ20PY1
Model Name (Independent Unit)			—	RXQ8PY1+RXQ12PY1
★1 Cooling Capacity (19.5°CWB)	kcal / h		42,400	48,300
	Btu / h		168,000	192,000
	kW		49.3	56.2
★2 Cooling Capacity (19.0°CWB)	kW		49.0	55.9
Casing Color			Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
Dimensions: (H×W×D)		mm	1680×1240×765	(1680×930×765)+(1680×1240×765)
Heat Exchanger			Cross Fin Coil	Cross Fin Coil
Comp.	Type		Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Piston Displacement	m³/h	13.72+10.53+10.53	(13.72)+(13.72+10.53)
	Number of Revolutions	r.p.m	7980, 2900, 2900	(7980), (6300, 2900)
	Motor Output×Number of Units	kW	(3.0+4.5+4.5)×1	(3.8×1)+(2.5+4.5)×1
	Starting Method		Soft Start	Soft Start
Fan	Type		Propeller Fan	Propeller Fan
	Motor Output	kW	0.75×2	(0.75×1)+(0.35×2)
	Air Flow Rate	m³/min	239	180+233
	Drive		Direct Drive	Direct Drive
Connecting Pipes	Liquid Pipe	mm	φ15.9 (Brazing Connection)	φ15.9 (Brazing Connection)
	Gas Pipe	mm	φ28.6 (Brazing Connection)	φ28.6 (Brazing Connection)
Product Mass (Machine Weight)		kg	341	205+285
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector
Capacity Control		%	9~100	8~100
Refrigerant	Refrigerant Name		R-410A	R-410A
	Charge	kg	12.7	7.7+12.3
	Control		Electronic Expansion Valve	Electronic Expansion Valve
Refrigerator Oil			Refer to the nameplate of compressor	Refer to the nameplate of compressor
Standard Accessories			Installation Manual, Operation Manual, Connection Pipes, Clamps	Installation Manual, Operation Manual, Connection Pipes, Clamps
Drawing No.			C: 4D056538	

**Notes:**

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.  
 ★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.  
 3 The power input (PI) (Comp. + Outdoor Fan Motor) : Refer to P.411~435.

Conversion Formulae	
kcal/h=	kW×860
Btu/h=	kW×3412
cfm=	m³/min×35.3

Model Name (Combination Unit)			RXQ22PY1	RXQ24PY1
Model Name (Independent Unit)			RXQ10PY1+RXQ12PY1	RXQ8PY1+RXQ16PY1
★1 Cooling Capacity (19.5°CWB)	kcal / h		53,200	58,300
	Btu / h		211,000	231,000
	kW		61.9	67.8
★2 Cooling Capacity (19.0°CWB)	kW		61.5	67.4
Casing Color			Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
Dimensions: (H×W×D)		mm	(1680×930×765)+(1680×1240×765)	(1680×930×765)+(1680×1240×765)
Heat Exchanger			Cross Fin Coil	Cross Fin Coil
Comp.	Type		Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Piston Displacement	m³/h	(13.72+10.53)+(13.72+10.53)	(13.72)+(13.72+10.53+10.53)
	Number of Revolutions	r.p.m	(6,300, 2,900)+(6,300+2,900)	(7980)+(6480, 2900, 2900)
	Motor Output×Number of Units	kW	(1.24+4.5)×1+(2.5+4.5)×1	(3.8×1)+(1.4+4.5+4.5)×1
	Starting Method		Soft Start	Soft Start
Fan	Type		Propeller Fan	Propeller Fan
	Motor Output	kW	(0.75×1)+(0.35×2)	(0.75×1)+(0.35×2)
	Air Flow Rate	m³/min	185+233	180+233
	Drive		Direct Drive	Direct Drive
Connecting Pipes	Liquid Pipe	mm	φ15.9 (Brazing Connection)	φ15.9 (Brazing Connection)
	Gas Pipe	mm	φ28.6 (Brazing Connection)	φ34.9 (Brazing Connection)
Product Mass (Machine Weight)		kg	249+285	205+329
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector
Capacity Control		%	7~100	6~100
Refrigerant	Refrigerant Name		R-410A	R-410A
	Charge	kg	8.4+10.0	7.7+12.5
	Control		Electronic Expansion Valve	Electronic Expansion Valve
Refrigerator Oil			Refer to the nameplate of compressor	Refer to the nameplate of compressor
Standard Accessories			Installation Manual, Operation Manual, Connection Pipes, Clamps	Installation Manual, Operation Manual, Connection Pipes, Clamps
Drawing No.				

**Notes:**

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.  
 ★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.  
 3 The power input (PI) (Comp. + Outdoor Fan Motor) : Refer to P.411~435.

Conversion Formulae	
kcal/h=	kW×860
Btu/h=	kW×3412
cfm=	m³/min×35.3

Model Name (Combination Unit)			RXQ26PY1	RXQ28PY1
Model Name (Independent Unit)			RXQ8PY1+RXQ18PY1	RXQ10PY1+RXQ18PY1
★1 Cooling Capacity (19.5°CWB)	kcal / h		61,700	66,700
	Btu / h		250,000	264,000
	kW		71.8	77.5
★2 Cooling Capacity (19.0°CWB)	kW		71.4	77.0
Casing Color			Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
Dimensions: (H×W×D)		mm	(1680×930×765)+(1680×1240×765)	(1680×930×765)+(1680×1240×765)
Heat Exchanger			Cross Fin Coil	Cross Fin Coil
Comp.	Type		Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Piston Displacement	m³/h	(13.72)+(13.72+10.53+10.53)	(13.72+10.53)+(13.72+10.53+10.53)
	Number of Revolutions	r.p.m	(7980)+(7980, 2900, 2900)	(6300, 2900)+(7980, 2900, 2900)
	Motor Output×Number of Units	kW	(3.8×1)+(3.0+4.5+4.5)×1	(1.2+4.5)×1+(3.0+4.5+4.5)×1
	Starting Method		Soft Start	Soft Start
Fan	Type		Propeller Fan	Propeller Fan
	Motor Output	kW	(0.75×1)+(0.75×2)	(0.75×1)+(0.75×2)
	Air Flow Rate	m³/min	180+239	185+239
	Drive		Direct Drive	Direct Drive
Connecting Pipes	Liquid Pipe	mm	φ19.1 (Brazing Connection)	φ19.1 (Brazing Connection)
	Gas Pipe	mm	φ34.9 (Brazing Connection)	φ34.9 (Brazing Connection)
Product Mass (Machine Weight)		kg	205+341	249+341
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector
Capacity Control		%	6~100	5~100
Refrigerant	Refrigerant Name		R-410A	R-410A
	Charge	kg	7.7+12.7	8.4+12.7
	Control		Electronic Expansion Valve	Electronic Expansion Valve
Refrigerator Oil			Refer to the nameplate of compressor	Refer to the nameplate of compressor
Standard Accessories			Installation Manual, Operation Manual, Connection Pipes, Clamps	Installation Manual, Operation Manual, Connection Pipes, Clamps
Drawing No.				

**Notes:**

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.  
 ★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.  
 3 The power input (PI) (Comp. + Outdoor Fan Motor) : Refer to P.411~435.

Conversion Formulae
kcal/h=kW×860 Btu/h=kW×3412 cfm=m³/min×35.3

Model Name (Combination Unit)			RXQ30PY1		RXQ32PY1	
Model Name (Independent Unit)			RXQ12PY1+RXQ18PY1		RXQ16PY1+RXQ16PY1	
★1 Cooling Capacity (19.5°CWB)		kcal / h	71,400		77,800	
		Btu / h	283,000		309,000	
		kW	83.0		90.5	
★2 Cooling Capacity (19.0°CWB)		kW	82.5		90.0	
Casing Color			Ivory White (5Y7.5/1)		Ivory White (5Y7.5/1)	
Dimensions: (H×W×D)		mm	(1680×1240×765)+(1680×1240×765)		(1680×1240×765)+(1680×1240×765)	
Heat Exchanger			Cross Fin Coil		Cross Fin Coil	
Comp.	Type		Hermetically Sealed Scroll Type		Hermetically Sealed Scroll Type	
	Piston Displacement	m³/h	(13.72+10.53)+(13.72+10.53+10.53)		(13.72+10.53+10.53)+(13.72+10.53+10.53)	
	Number of Revolutions	r.p.m	(6300, 2900)+(7980, 2900, 2900)		(6480, 2900×2)+(6480, 2900, 2900)	
	Motor Output×Number of Units	kW	(2.5+4.5)×1+(3.0+4.5+4.5)×1		(1.4+4.5+4.5)×1+(1.4+4.5+4.5)×1	
	Starting Method		Soft Start		Soft Start	
Fan	Type		Propeller Fan		Propeller Fan	
	Motor Output	kW	(0.35×2)+(0.75×2)		(0.35×2)+(0.35×2)	
	Air Flow Rate	m³/min	233+239		233+233	
	Drive		Direct Drive		Direct Drive	
Connecting Pipes	Liquid Pipe	mm	φ19.1 (Brazing Connection)		φ19.1 (Brazing Connection)	
	Gas Pipe	mm	φ34.9 (Brazing Connection)		φ34.9 (Brazing Connection)	
Product Mass (Machine Weight)		kg	285+341		329+329	
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector	
Capacity Control		%	5~100		5~100	
Refrigerant	Refrigerant Name		R-410A		R-410A	
	Charge	kg	10.0+12.7		12.5+12.5	
	Control		Electronic Expansion Valve		Electronic Expansion Valve	
Refrigerator Oil			Refer to the nameplate of compressor		Refer to the nameplate of compressor	
Standard Accessories			Installation Manual, Operation Manual, Connection Pipes, Clamps		Installation Manual, Operation Manual, Connection Pipes, Clamps	
Drawing No.						

**Notes:**

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.  
 ★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.  
 3 The power input (PI) (Comp. + Outdoor Fan Motor) : Refer to P.411~435.

Conversion Formulae
kcal/h=kW×860 Btu/h=kW×3412 cfm=m³/min×35.3

Model Name (Combination Unit)			RXQ34PY1		RXQ36PY1	
Model Name (Independent Unit)			RXQ16PY1+RXQ18PY1		RXQ18PY1+RXQ18PY1	
★1 Cooling Capacity (19.5°CWB)	kcal / h		81,400		85,100	
	Btu / h		323,000		338,000	
	kW		94.6		99.0	
★2 Cooling Capacity (19.0°CWB)	kW		94.0		98.0	
Casing Color			Ivory White (5Y7.5/1)		Ivory White (5Y7.5/1)	
Dimensions: (H×W×D)		mm	(1680×1240×765)+(1680×1240×765)		(1680×1240×765)+(1680×1240×765)	
Heat Exchanger			Cross Fin Coil		Cross Fin Coil	
Comp.	Type		Hermetically Sealed Scroll Type		Hermetically Sealed Scroll Type	
	Piston Displacement	m³/h	(13.72+10.53+10.53)+(13.72+10.53+10.53)		(13.72+10.53+10.53)+(13.72+10.53+10.53)	
	Number of Revolutions	r.p.m	(6300, 2900, 2900)+(7980, 2900, 2900)		(7980, 2900, 2900)+(7980, 2900, 2900)	
	Motor Output×Number of Units	kW	(1.4+4.5+4.5)×1+(3.0+4.5+4.5)×1		(3.0+4.5+4.5)×1+(3.0+4.5+4.5)×1	
	Starting Method		Soft Start		Soft Start	
Fan	Type		Propeller Fan		Propeller Fan	
	Motor Output	kW	(0.35×2)+(0.75×2)		(0.75×2)+(0.75×2)	
	Air Flow Rate	m³/min	233+239		239+239	
	Drive		Direct Drive		Direct Drive	
Connecting Pipes	Liquid Pipe	mm	φ19.1 (Brazing Connection)		φ19.1 (Brazing Connection)	
	Gas Pipe	mm	φ34.9 (Brazing Connection)		φ41.3 (Brazing Connection)	
Product Mass (Machine Weight)		kg	329+341		341+341	
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector	
Capacity Control		%	5~100		4~100	
Refrigerant	Refrigerant Name		R-410A		R-410A	
	Charge	kg	12.5+12.7		12.7+12.7	
	Control		Electronic Expansion Valve		Electronic Expansion Valve	
Refrigerator Oil			Refer to the nameplate of compressor		Refer to the nameplate of compressor	
Standard Accessories			Installation Manual, Operation Manual, Connection Pipes, Clamps		Installation Manual, Operation Manual, Connection Pipes, Clamps	
Drawing No.						

**Notes:**

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.  
★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.  
3 The power input (PI) (Comp. + Outdoor Fan Motor) : Refer to P.411~435.

Conversion Formulae	
kcal/h=	kW×860
Btu/h=	kW×3412
cfm=	m³/min×35.3



Model Name (Combination Unit)			RXQ38PY1	RXQ40PY1
Model Name (Independent Unit)			RXQ8PY1+RXQ12PY1+RXQ18PY1	RXQ8PY1+RXQ16PY1+RXQ16PY1
★1 Cooling Capacity (19.5°CWB)	kcal / h		91,200	97,200
	Btu / h		362,000	386,000
	kW		106	113
★2 Cooling Capacity (19.0°CWB)	kW		105	112
Casing Color			Ivory White (5Y7.5/1)	Ivory White (5Y7.5/1)
Dimensions: (H×W×D)		mm	(1680×930×765)+(1680×1240×765)+(1680×1240×765)	(1680×930×765)+(1680×1240×765)+(1680×1240×765)
Heat Exchanger			Cross Fin Coil	Cross Fin Coil
Comp.	Type		Hermetically Sealed Scroll Type	Hermetically Sealed Scroll Type
	Piston Displacement	m³/h	(13.72)+(13.72+10.53)+(13.72+10.53+10.53)	(13.72)+(13.72+10.53+10.53)+(13.72+10.53+10.53)
	Number of Revolutions	r.p.m	(7980)+(6300, 2900)+(7980, 2900, 2900)	(7980)+(6480, 2900, 2900)+(6300, 2900, 2900)
	Motor Output×Number of Units	kW	3.8×1+(2.5+4.5)×1+(3.0+4.5+4.5)×1	3.8×1+(1.4+4.5+4.5)×1+(1.4+4.5+4.5)×1
	Starting Method		Soft Start	Soft Start
Fan	Type		Propeller Fan	Propeller Fan
	Motor Output	kW	(0.75×1)+(0.35×2)+(0.75×2)	(0.75×1)+(0.35×2)+(0.35×2)
	Air Flow Rate	m³/min	180+233+239	180+233+233
	Drive		Direct Drive	Direct Drive
Connecting Pipes	Liquid Pipe	mm	φ19.1 (Brazing Connection)	φ19.1 (Brazing Connection)
	Gas Pipe	mm	φ41.3 (Brazing Connection)	φ41.3 (Brazing Connection)
Product Mass (Machine Weight)		kg	205+285+341	205+329+329
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector	High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector
Capacity Control		%	4~100	4~100
Refrigerant	Refrigerant Name		R-410A	R-410A
	Charge	kg	7.7+10.0+12.7	7.7+12.5+12.5
	Control		Electronic Expansion Valve	Electronic Expansion Valve
Refrigerator Oil			Refer to the nameplate of compressor	Refer to the nameplate of compressor
Standard Accessories			Installation Manual, Operation Manual, Connection Pipes, Clamps	Installation Manual, Operation Manual, Connection Pipes, Clamps
Drawing No.				

**Notes:**

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.  
 ★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.  
 3 The power input (PI) (Comp. + Outdoor Fan Motor) : Refer to P.411~435.

Conversion Formulae	
kcal/h=	kW×860
Btu/h=	kW×3412
cfm=	m³/min×35.3

Model Name (Combination Unit)			RXQ42PY1		RXQ44PY1	
Model Name (Independent Unit)			RXQ8PY1+RXQ16PY1+RXQ18PY1		RXQ8PY1+RXQ18PY1+RXQ18PY1	
★1 Cooling Capacity (19.5°CWB)		kcal / h	101,000		104,000	
		Btu / h	399,000		413,000	
		kW	117		121	
★2 Cooling Capacity (19.0°CWB)		kW	116		120	
Casing Color			Ivory White (5Y7.5/1)		Ivory White (5Y7.5/1)	
Dimensions: (H×W×D)		mm	(1680×930×765)+(1680×1240×765)+(1680×1240×765)		(1680×930×765)+(1680×1240×765)+(1680×1240×765)	
Heat Exchanger			Cross Fin Coil		Cross Fin Coil	
Comp.	Type		Hermetically Sealed Scroll Type		Hermetically Sealed Scroll Type	
	Piston Displacement	m³/h	(13.72)+(13.72+10.53+10.53)+(13.72+10.53+10.53)		13.72+(13.72+10.53+10.53)+(13.72+10.53+10.53)	
	Number of Revolutions	r.p.m	(7980)+(6480, 2900, 2900)+(7980, 2900, 2900)		(7980), (7980, 2900, 2900)+(7980, 2900, 2900)	
	Motor Output×Number of Units	kW	3.8×1+(1.4+4.5+4.5)×1+(3.0+4.5+4.5)×1		3.8×1+(3.0+4.5+4.5)×1+(3.0+4.5+4.5)×1	
	Starting Method		Soft Start		Soft Start	
Fan	Type		Propeller Fan		Propeller Fan	
	Motor Output	kW	(0.75×1)+(0.35×2)+(0.75×2)		(0.75×1)+(0.75×2)+(0.75×2)	
	Air Flow Rate	m³/min	180+233+239		180+239+239	
	Drive		Direct Drive		Direct Drive	
Connecting Pipes	Liquid Pipe	mm	φ19.1 (Brazing Connection)		φ19.1 (Brazing Connection)	
	Gas Pipe	mm	φ41.3 (Brazing Connection)		φ41.3 (Brazing Connection)	
Product Mass (Machine Weight)		kg	205+329+341		205+341+341	
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector	
Capacity Control		%	4~100		4~100	
Refrigerant	Refrigerant Name		R-410A		R-410A	
	Charge	kg	7.7+12.5+12.7		7.7+12.7+12.7	
	Control		Electronic Expansion Valve		Electronic Expansion Valve	
Refrigerator Oil			Refer to the nameplate of compressor		Refer to the nameplate of compressor	
Standard Accessories			Installation Manual, Operation Manual, Connection Pipes, Clamps		Installation Manual, Operation Manual, Connection Pipes, Clamps	
Drawing No.						

**Notes:**

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.  
 ★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.  
 3 The power input (PI) (Comp. + Outdoor Fan Motor) : Refer to P.411~435.

Conversion Formulae	
kcal/h=	kW×860
Btu/h=	kW×3412
cfm=	m³/min×35.3

Model Name (Combination Unit)			RXQ46PY1		RXQ48PY1	
Model Name (Independent Unit)			RXQ10PY1+RXQ18PY1+RXQ18PY1		RXQ12PY1+RXQ18PY1+RXQ18PY1	
★1 Cooling Capacity (19.5°CWB)	kcal / h		109,000		114,000	
	Btu / h		433,000		454,000	
	kW		127		133	
★2 Cooling Capacity (19.0°CWB)	kW		126		132	
Casing Color			Ivory White (5Y7.5/1)		Ivory White (5Y7.5/1)	
Dimensions: (H×W×D)		mm	(1680×930×765)+(1680×1240×765)+(1680×1240×765)		(1680×1240×765)+(1680×1240×765)+(1680×1240×765)	
Heat Exchanger			Cross Fin Coil		Cross Fin Coil	
Comp.	Type		Hermetically Sealed Scroll Type		Hermetically Sealed Scroll Type	
	Piston Displacement	m³/h	(13.7+10.53)+(13.72+10.53+10.53)+(13.72+10.53+10.53)		(13.72+10.53)+(13.72+10.53+10.53)+(13.72+10.53+10.53)	
	Number of Revolutions	r.p.m	(6300, 2900)+(7980, 2900, 2900)+(7980, 2900, 2900)		(6300, 2900)+(7980, 2900, 2900)+(7980, 2900, 2900)	
	Motor Output×Number of Units	kW	(1.2+4.5)×1+(3.0+4.5+4.5)×1+(3.0+4.5+4.5)×1		(2.5+4.5)×1+(3.0+4.5+4.5)×1+(3.0+4.5+4.5)×1	
	Starting Method		Soft Start		Soft Start	
Fan	Type		Propeller Fan		Propeller Fan	
	Motor Output	kW	(0.75×1)+(0.75×2)+(0.75×2)		(0.35×2)+(0.75×2)+(0.75×2)	
	Air Flow Rate	m³/min	185+239+239		233+239+239	
	Drive		Direct Drive		Direct Drive	
Connecting Pipes	Liquid Pipe	mm	φ19.1 (Brazing Connection)		φ19.1 (Brazing Connection)	
	Gas Pipe	mm	φ41.3 (Brazing Connection)		φ41.3 (Brazing Connection)	
Product Mass (Machine Weight)		kg	249+341+341		285+341+341	
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector	
Capacity Control		%	3~100		3~100	
Refrigerant	Refrigerant Name		R-410A		R-410A	
	Charge	kg	8.4+12.7+12.7		10.0+12.7+12.7	
	Control		Electronic Expansion Valve		Electronic Expansion Valve	
Refrigerator Oil			Refer to the nameplate of compressor		Refer to the nameplate of compressor	
Standard Accessories			Installation Manual, Operation Manual, Connection Pipes, Clamps		Installation Manual, Operation Manual, Connection Pipes, Clamps	
Drawing No.						

**Notes:**

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.  
 ★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.  
 3 The power input (PI) (Comp. + Outdoor Fan Motor) : Refer to P.411~435.

Conversion Formulae	
kcal/h=	kW×860
Btu/h=	kW×3412
cfm=	m³/min×35.3

Model Name (Combination Unit)			RXQ50PY1		RXQ52PY1	
Model Name (Independent Unit)			RXQ14PY1+RXQ18PY1+RXQ18PY1		RXQ16PY1+RXQ18PY1+RXQ18PY1	
★1 Cooling Capacity (19.5°CWB)		kcal / h	120,000		124,000	
		Btu / h	474,000		491,000	
		kW	139		144	
★2 Cooling Capacity (19.0°CWB)		kW	138		143	
Casing Color			Ivory White (5Y7.5/1)		Ivory White (5Y7.5/1)	
Dimensions: (H×W×D)		mm	(1680×1240×765)+(1680×1240×765)+(1680×1240×765)		(1680×1240×765)+(1680×1240×765)+(1680×1240×765)	
Heat Exchanger			Cross Fin Coil		Cross Fin Coil	
Comp.	Type		Hermetically Sealed Scroll Type		Hermetically Sealed Scroll Type	
	Piston Displacement	m³/h	(13.72+10.53+10.53)+(13.72+10.53+10.53)+(13.72+10.53+10.53)		(13.72+10.53+10.53)+(13.72+10.53+10.53)+(13.72+10.53+10.53)	
	Number of Revolutions	r.p.m	(6300, 2900, 2900)+(7980, 2900, 2900)+(7980, 2900, 2900)		(6300, 2900, 2900)+(7980, 2900, 2900)+(7980, 2900, 2900)	
	Motor Output×Number of Units	kW	(0.3+4.5+4.5)×1+(3.0+4.5+4.5)×1+(3.0+4.5+4.5)×1		(1.4+4.5+4.5)×1+(3.0+4.5+4.5)×1+(3.0+4.5+4.5)×1	
	Starting Method		Soft Start		Soft Start	
Fan	Type		Propeller Fan		Propeller Fan	
	Motor Output	kW	(0.35×2)+(0.75×2)+(0.75×2)		(0.35×2)+(0.75×2)+(0.75×2)	
	Air Flow Rate	m³/min	233+239+239		233+239+239	
	Drive		Direct Drive		Direct Drive	
Connecting Pipes	Liquid Pipe	mm	φ19.1 (Brazing Connection)		φ19.1 (Brazing Connection)	
	Gas Pipe	mm	φ41.3 (Brazing Connection)		φ41.3 (Brazing Connection)	
Product Mass (Machine Weight)		kg	329+341+341		329+341+341	
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector		High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector	
Capacity Control		%	3~100		3~100	
Refrigerant	Refrigerant Name		R-410A		R-410A	
	Charge	kg	12.3+12.7+12.7		12.5+12.7+12.7	
	Control		Electronic Expansion Valve		Electronic Expansion Valve	
Refrigerator Oil			Refer to the nameplate of compressor		Refer to the nameplate of compressor	
Standard Accessories			Installation Manual, Operation Manual, Connection Pipes, Clamps		Installation Manual, Operation Manual, Connection Pipes, Clamps	
Drawing No.						

**Notes:**

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.  
 ★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.  
 3 The power input (PI) (Comp. + Outdoor Fan Motor) : Refer to P.411~435.

**Conversion Formulae**

kcal/h=kW×860  
 Btu/h=kW×3412  
 cfm=m³/min×35.3

Model Name (Combination Unit)			RXQ54PY1		
Model Name (Independent Unit)			RXQ18PY1+RXQ18PY1+RXQ18PY1		
★1 Cooling Capacity (19.5°CWB)		kcal / h	127,000		
		Btu / h	505,000		
		kW	148		
★2 Cooling Capacity (19.0°CWB)		kW	147		
Casing Color			Ivory White (5Y7.5/1)		
Dimensions: (H×W×D)		mm	(1680×1240×765)+(1680×1240×765)+(1680×1240×765)		
Heat Exchanger			Cross Fin Coil		
Comp.	Type		Hermetically Sealed Scroll Type		
	Piston Displacement	m³/h	(13.72+10.53+10.53)+(13.72+10.53+10.53)+(13.72+10.53+10.53)		
	Number of Revolutions	r.p.m	(7980, 2900, 2900)+(7980, 2900, 2900)+(7980, 2900, 2900)		
	Motor Output×Number of Units	kW	((3.0+4.5+4.5)×1)+((3.0+4.5+4.5)×1)+((3.0+4.5+4.5)×1)		
	Starting Method		Soft Start		
Fan	Type		Propeller Fan		
	Motor Output	kW	(0.75×2)+(0.75×2)+(0.75×2)		
	Air Flow Rate	m³/min	239+239+239		
	Drive		Direct Drive		
Connecting Pipes	Liquid Pipe	mm	φ19.1 (Brazing Connection)		
	Gas Pipe	mm	φ41.3 (Brazing Connection)		
Product Mass (Machine Weight)		kg	341+341+341		
Safety Devices			High Pressure Switch, Fan Driver Overload Protector, Over Current Relay, Inverter Overload Protector		
Capacity Control		%	3~100		
Refrigerant	Refrigerant Name		R-410A		
	Charge	kg	12.7+12.7+12.7		
	Control		Electronic Expansion Valve		
Refrigerator Oil			Refer to the nameplate of compressor		
Standard Accessories			Installation Manual, Operation Manual, Connection Pipes, Clamps		
Drawing No.					

**Notes:**

- ★1 Indoor temp. : 27°CDB, 19.5°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.  
 ★2 Indoor temp. : 27°CDB, 19.0°CWB / outdoor temp. : 35°CDB / Equivalent piping length : 7.5m, level difference : 0m.  
 3 The power input (PI) (Comp. + Outdoor Fan Motor) : Refer to P.411~435.

Conversion Formulae
kcal/h=kW×860
Btu/h=kW×3412
cfm=m³/min×35.3

2. Dimensions

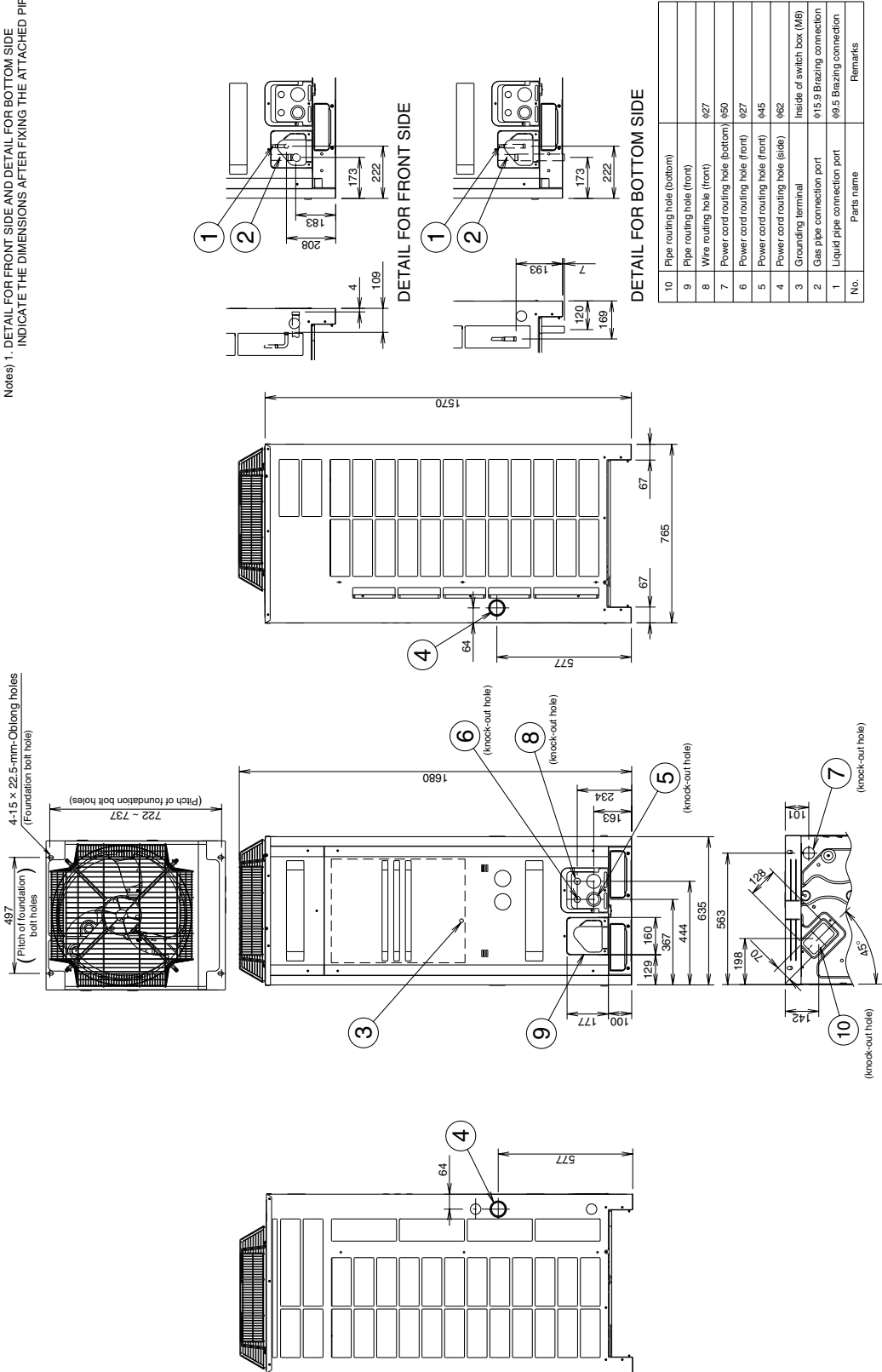
2.1 Independent Unit

RXQ5P

Unit (mm)

3D051448B

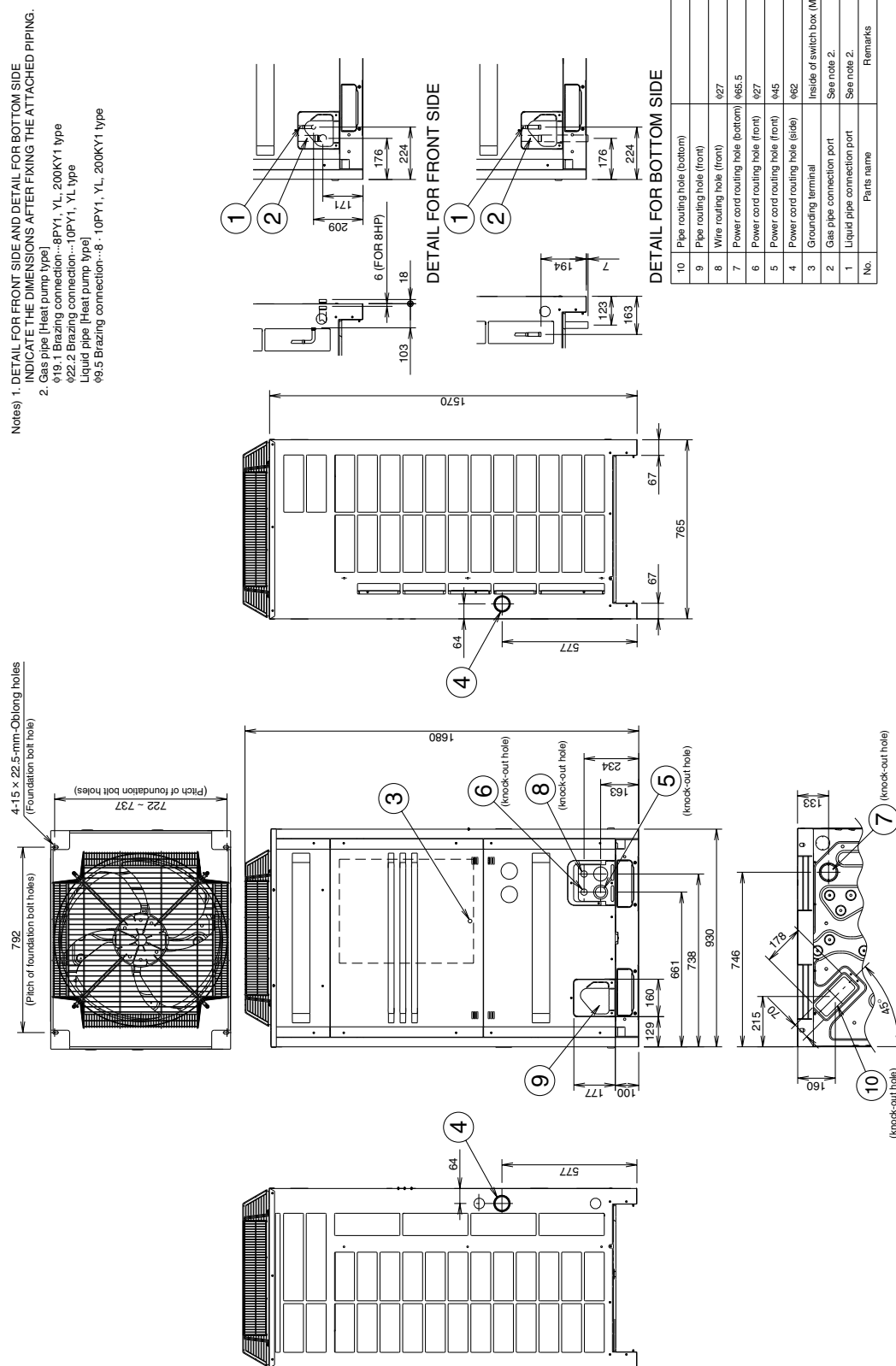
Notes) 1. DETAIL FOR FRONT SIDE AND DETAIL FOR BOTTOM SIDE  
INDICATE THE DIMENSIONS AFTER FIXING THE ATTACHED PIPING.



## RXQ8P, RXQ10P

Unit (mm)

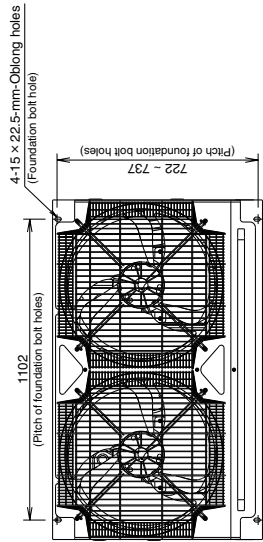
3D051449C



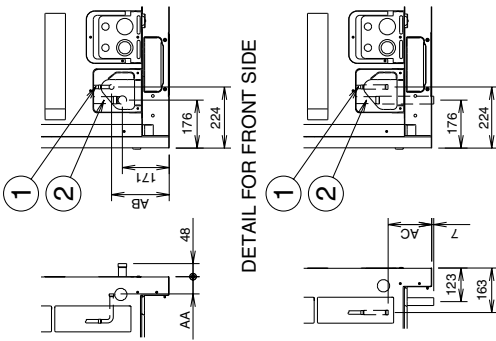
RXQ12P, RXQ14P  
RXQ16P, RXQ18P

Unit (mm)

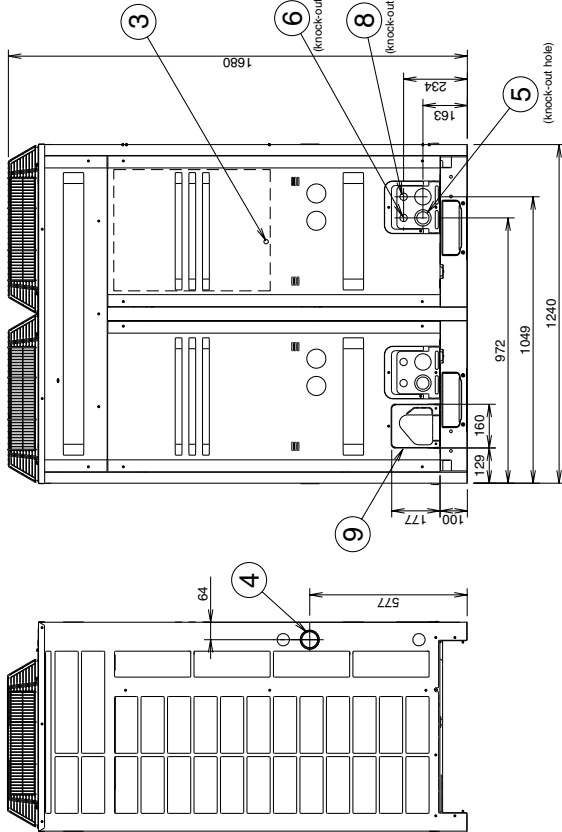
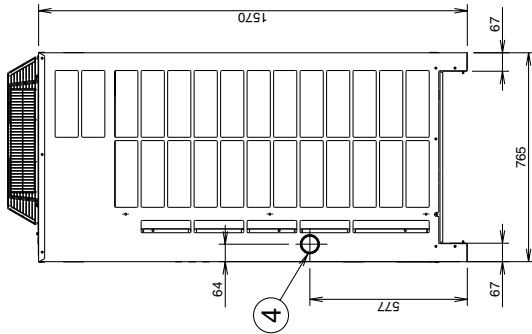
3D051450C



AA	MODEL NAME	AB	MODEL NAME	AC	MODEL NAME
83	RXYQ12 - 14 - 16PY1, YL RXQ12PY1 RQ250KY1	209	RXYQ12PY1, YL RXQ12PY1 RQ250KY1	175	RXYQ12PY1, YL RXQ12PY1 RQ250KY1
63	RXYQ18PY1, YL RXQ18PY1	211	RXYQ14 - 16 - 18PY1, YL RXQ14 - 16 - 18PY1	179	RXYQ14 - 16PY1, YL RXQ14 - 16PY1 RXQ18PY1
				160	RXYQ18PY1, YL RXQ18PY1



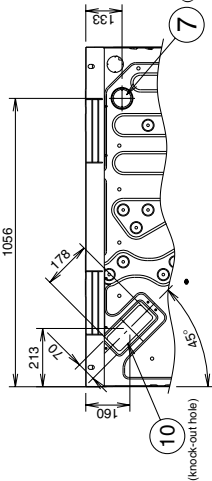
DETAIL FOR FRONT SIDE



DETAIL FOR BOTTOM SIDE

No.	Parts name	Remarks
10	Pipe routing hole (bottom)	
9	Pipe routing hole (front)	
8	Wire routing hole (front)	φ27
7	Power cord routing hole (bottom)	φ65.5
6	Power cord routing hole (front)	φ27
5	Power cord routing hole (front)	φ45
4	Power cord routing hole (side)	φ62
3	Grounding terminal	Inside of switch box (M8)
2	Gas pipe connection port	See note 2.
1	Liquid pipe connection port	See note 2.

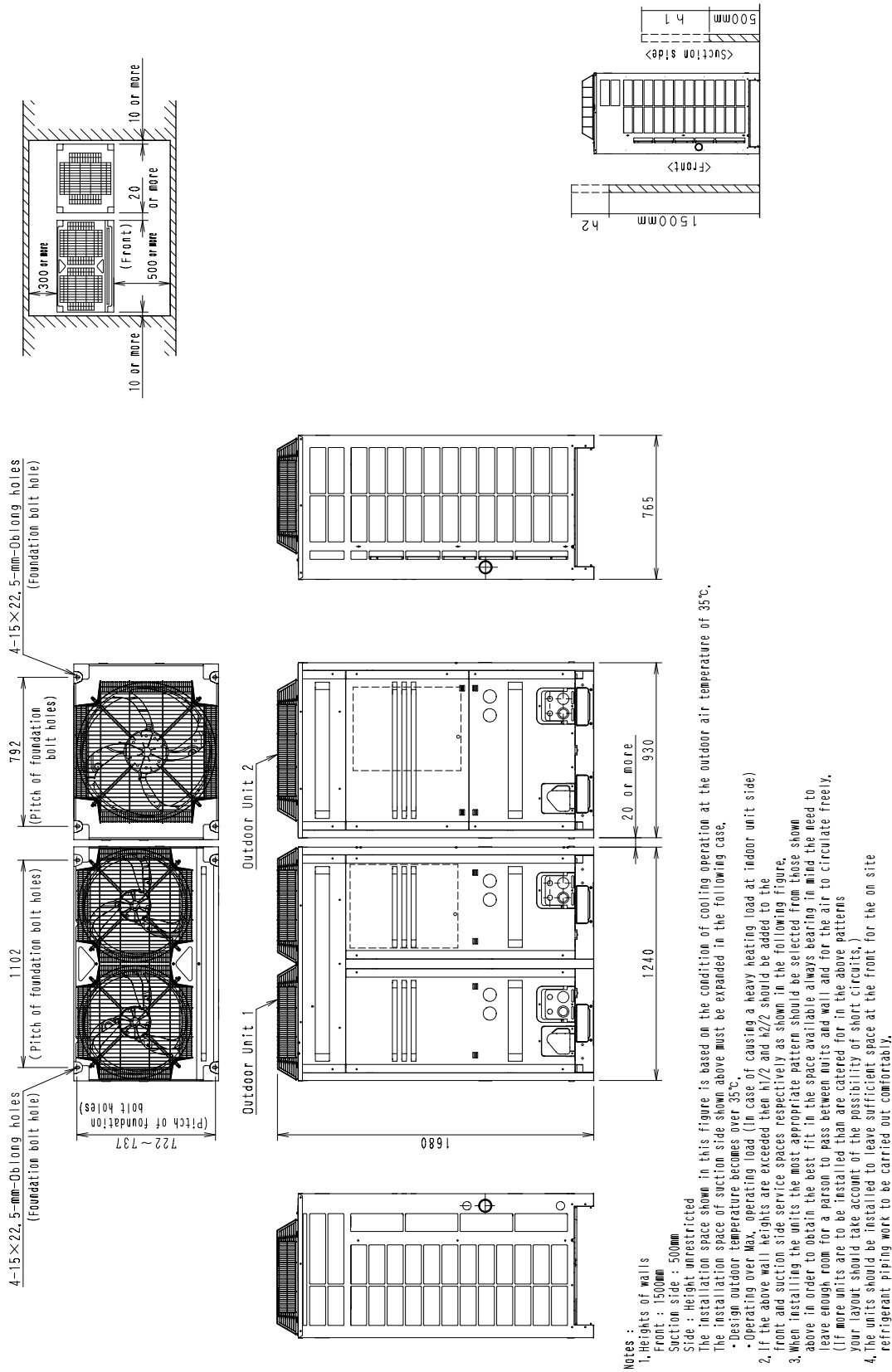
- Notes) 1. DETAIL FOR FRONT SIDE AND DETAIL FOR BOTTOM SIDE  
INDICATE THE DIMENSIONS AFTER FIXING THE ATTACHED PIPING.  
2. Gas pipe [Heat pump type]  
φ28.6 Brazing connection--RXYQ12 - 14 - 16 - 18PY1, YL  
φ22.2 Brazing connection--RQ250KY1  
Liquid pipe [Heat pump type]  
φ15.9 Brazing connection--RXYQ18PY1, YL  
φ12.7 Brazing connection--RXYQ12 - 14 - 16PY1, YL  
φ9.5 Brazing connection--RQ250KY1





2.2 Combination Unit

RXQ20P, RXQ22P, RXQ24P  
RXQ26P, RXQ28P

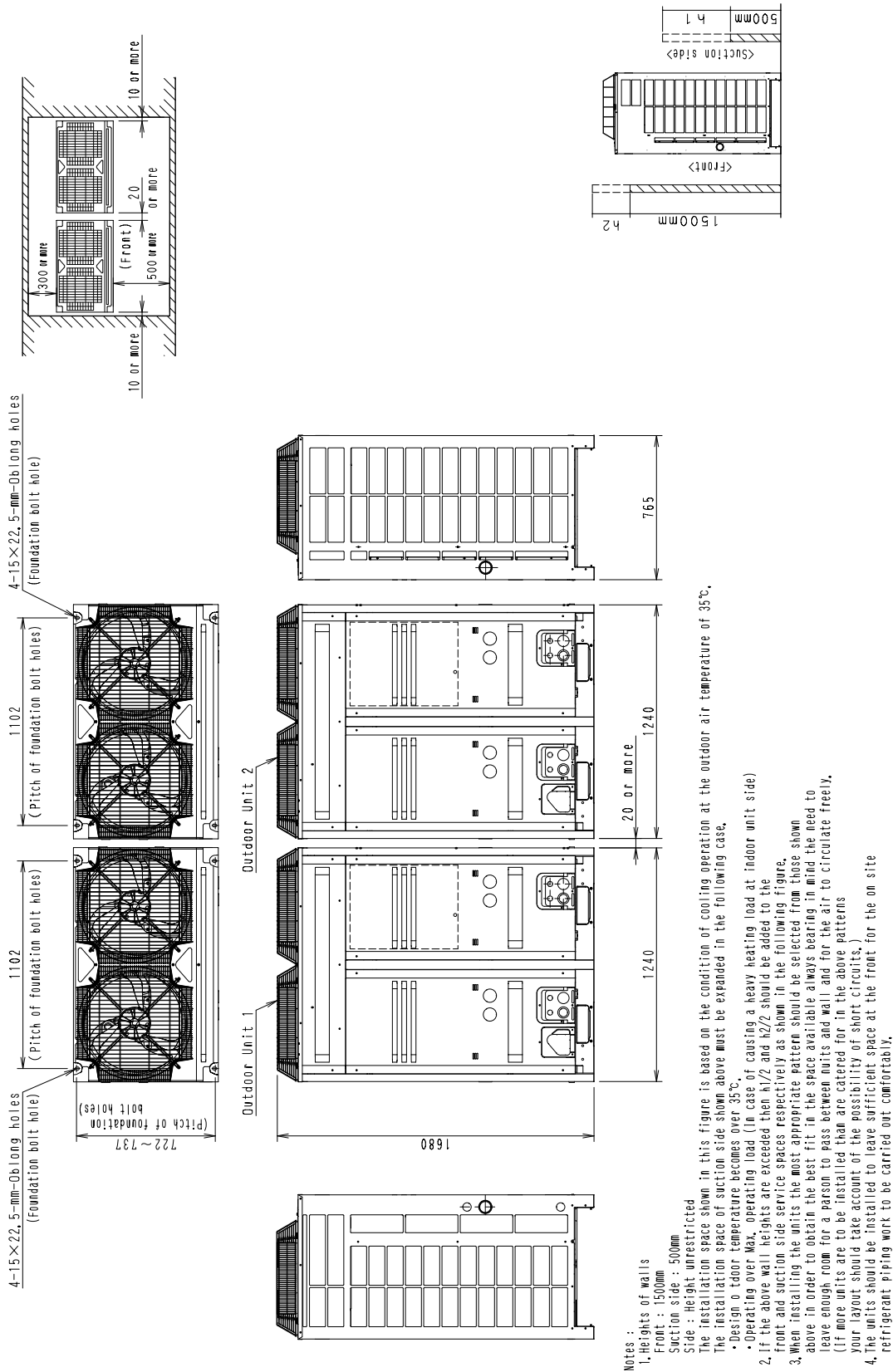


Unit (mm)

Model Name	Outdoor Unit 1	Drawing No.	Outdoor Unit 2	Drawing No.
RXQ20P	RXQ12P	3D051450A	RXQ8P	3D051449A
RXQ22P	RXQ12P	3D051450A	RXQ10P	3D051449A
RXQ24P	RXQ16P	3D051450A	RXQ8P	3D051449A
RXQ26P	RXQ18P	3D051450A	RXQ8P	3D051449A
RXQ28P	RXQ18P	3D051450A	RXQ10P	3D051449A

C : 3D052830A

RXQ30P, RXQ32P, RXQ34P, RXQ36P

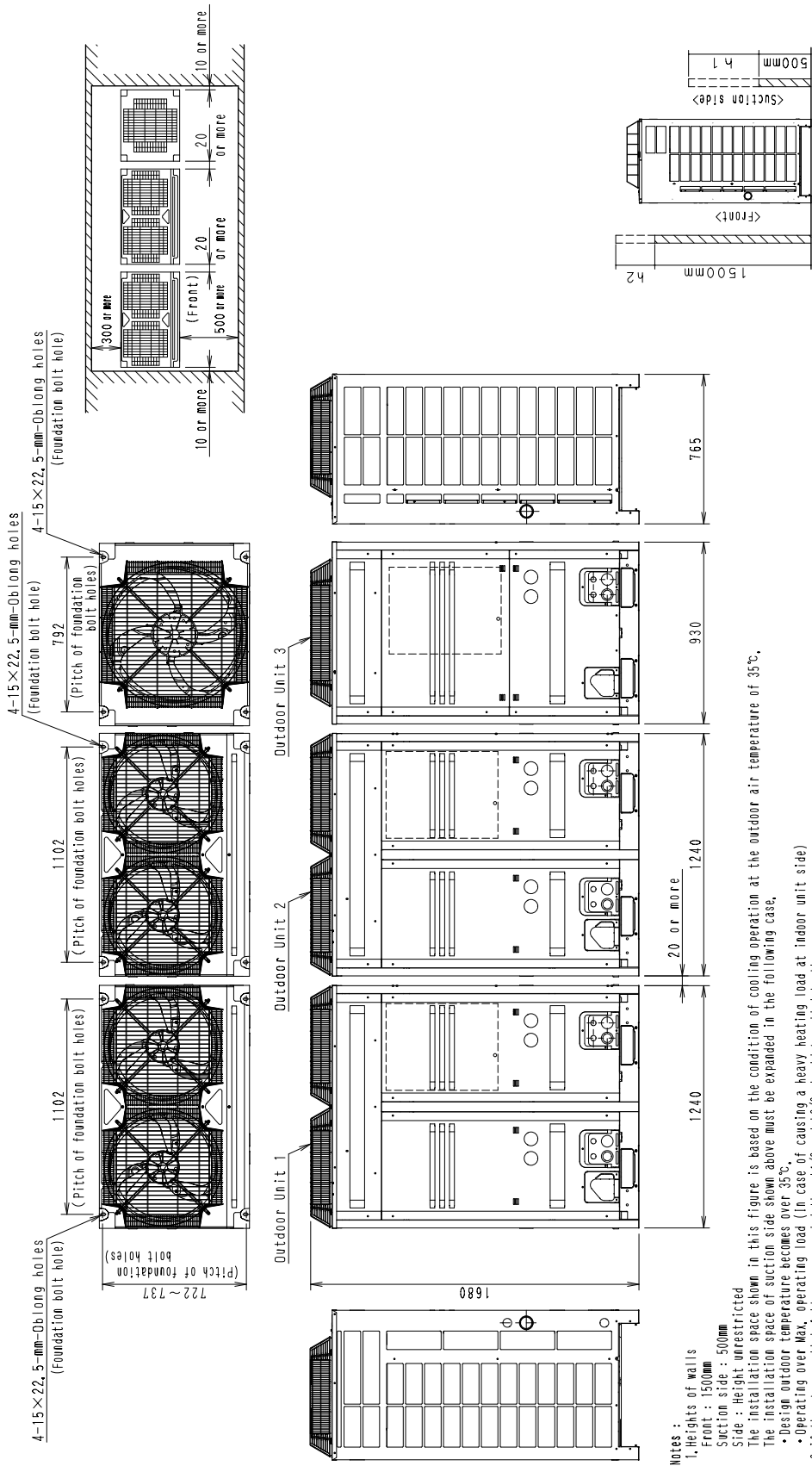


Unit (mm)

C : 3D052931A

Model Name	Outdoor Unit 1	Drawing No.	Outdoor Unit 2	Drawing No.
RXQ30P	RXQ18P	3D051450A	RXQ12P	3D051450A
RXQ32P	RXQ16P	3D051450A	RXQ16P	3D051450A
RXQ34P	RXQ18P	3D051450A	RXQ16P	3D051450A
RXQ36P	RXQ18P	3D051450A	RXQ18P	3D051450A

RXQ38P, RXQ40P, RXQ42P, RXQ44P, RXQ46P



Notes :

1. Heights of walls

Front : 1500mm

Suction Side : 500mm

Side : Height unrestricted

The installation space shown in this figure is based on the condition of cooling operation at the outdoor air temperature of 35°C.

The installation space of suction side shown above must be expanded in the following case,

- Design outdoor temperature becomes over 35°C.
- Operating over Max. operating load (in case of causing a heavy heating load at indoor unit side)

2. If the above wall heights are exceeded then h1/2 and h2/2 should be added to the front and suction side service spaces respectively as shown in the following figure.

3. When installing the units the most appropriate pattern should be selected from those shown above in order to obtain the best fit in the space available always bearing in mind the need to leave enough room for a person to pass between units and wall and for the air to circulate freely. (If more units are to be installed than are catered for in the above patterns your layout should take account of the possibility of short circuits.)

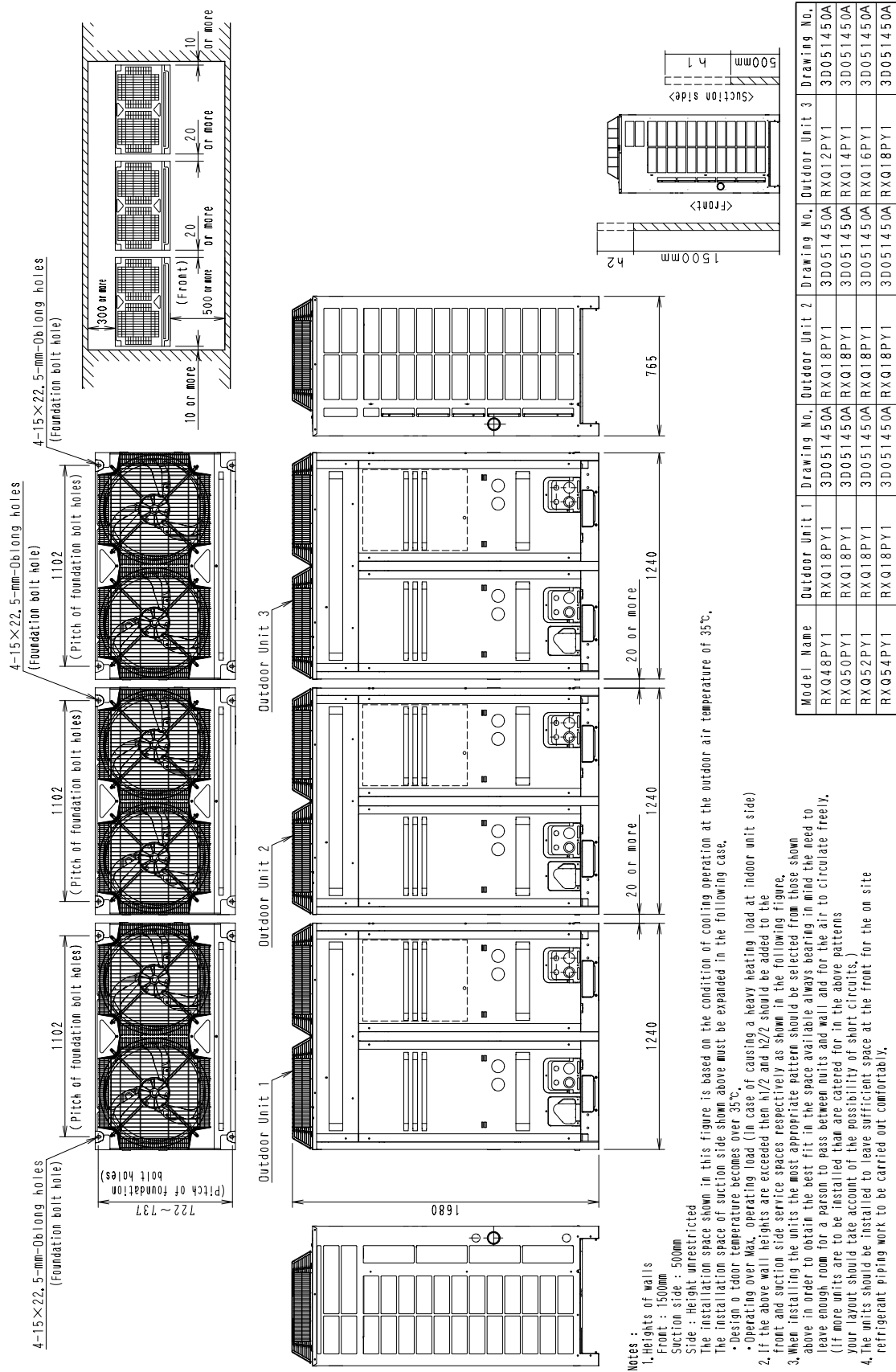
4. The units should be installed to leave sufficient space at the front for the on site refrigerant piping work to be carried out comfortably.

Unit (mm)

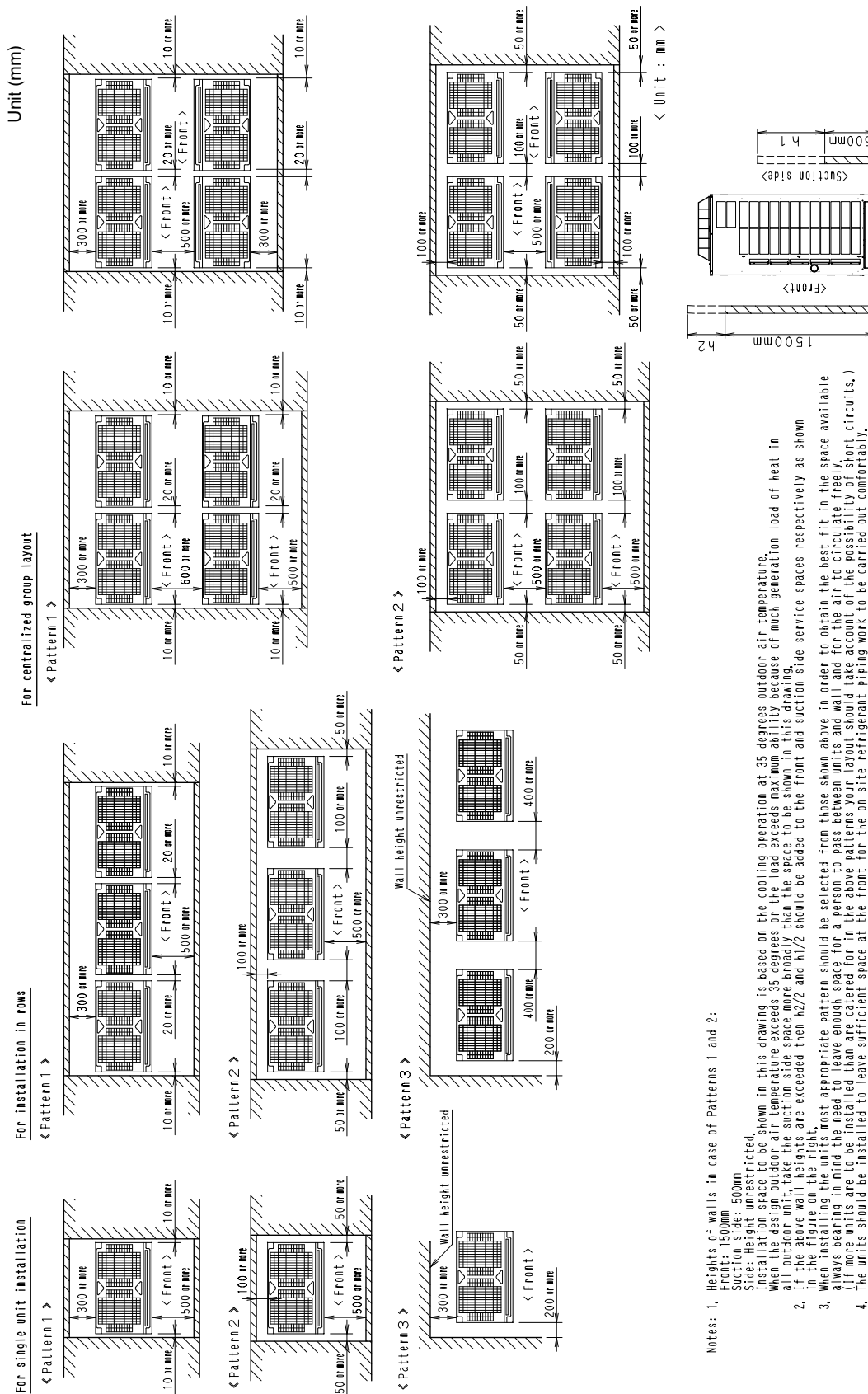
Model Name	Outdoor Unit 1	Outdoor Unit 2	Outdoor Unit 3	Drawing No.	Drawing No.	Drawing No.
RXQ38PY1	RXQ18PY1	3D051450A	RXQ12PY1	3D051450A	3D051450A	3F051449A
RXQ40PY1	RXQ16PY1	3D051450A	RXQ16PY1	3D051450A	3D051450A	3F051449A
RXQ42PY1	RXQ18PY1	3D051450A	RXQ16PY1	3D051450A	3D051450A	3F051449A
RXQ44PY1	RXQ18PY1	3D051450A	RXQ18PY1	3D051450A	3D051450A	3F051449A
RXQ46PY1	RXQ18PY1	3D051450A	RXQ18PY1	3D051450A	3D051450A	3F051449A

C : 3D052932A

RXQ48P, RXQ50P, RXQ52P, RXQ54P



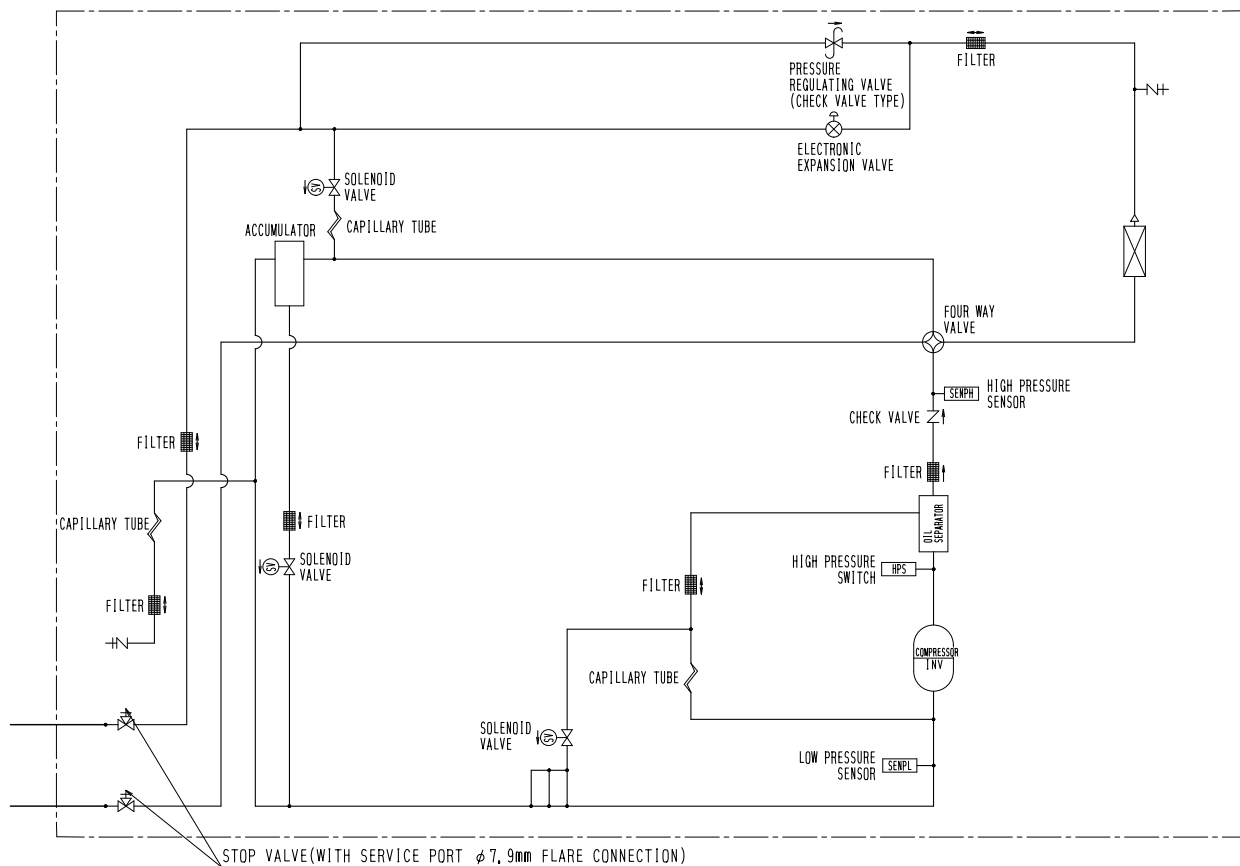
### 3. Service Space



3D051451C

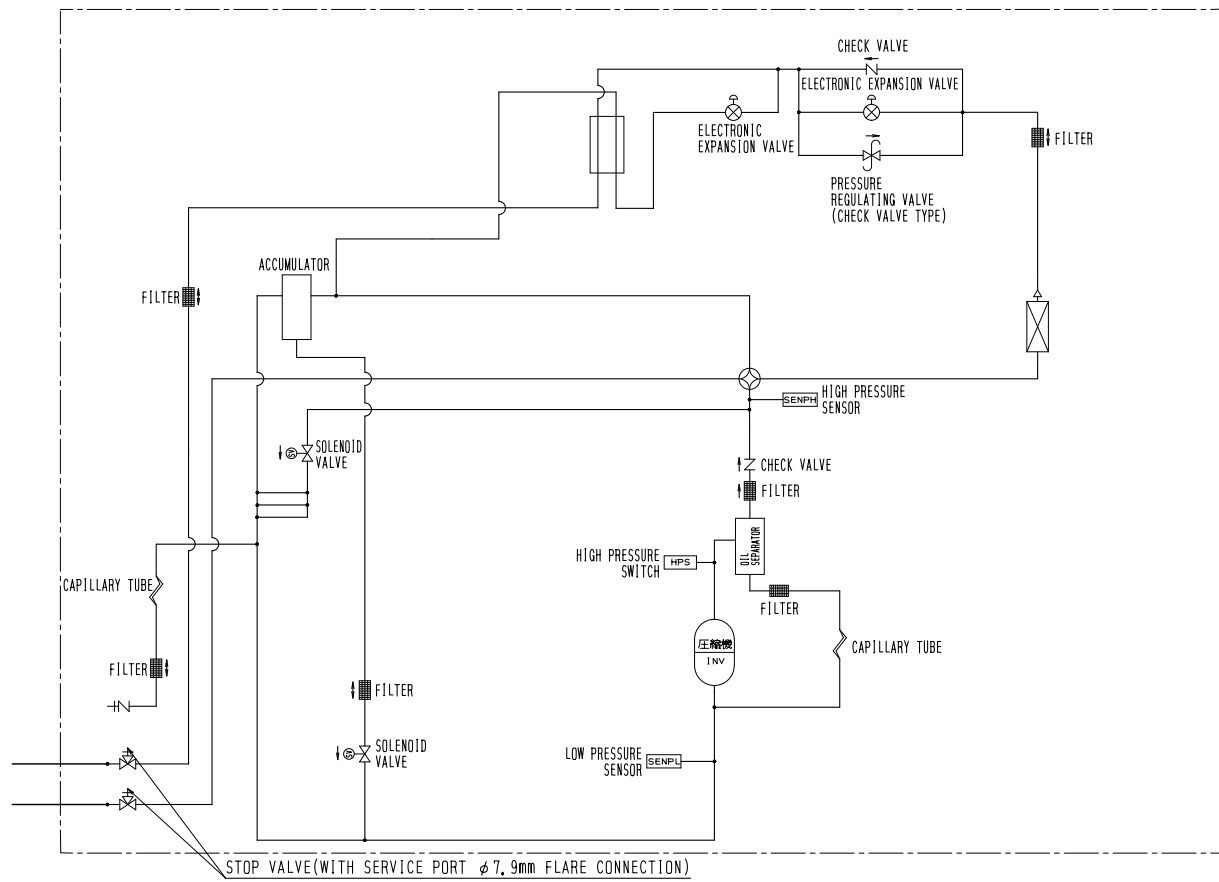
## 4. Piping Diagrams

### RXQ5PY1



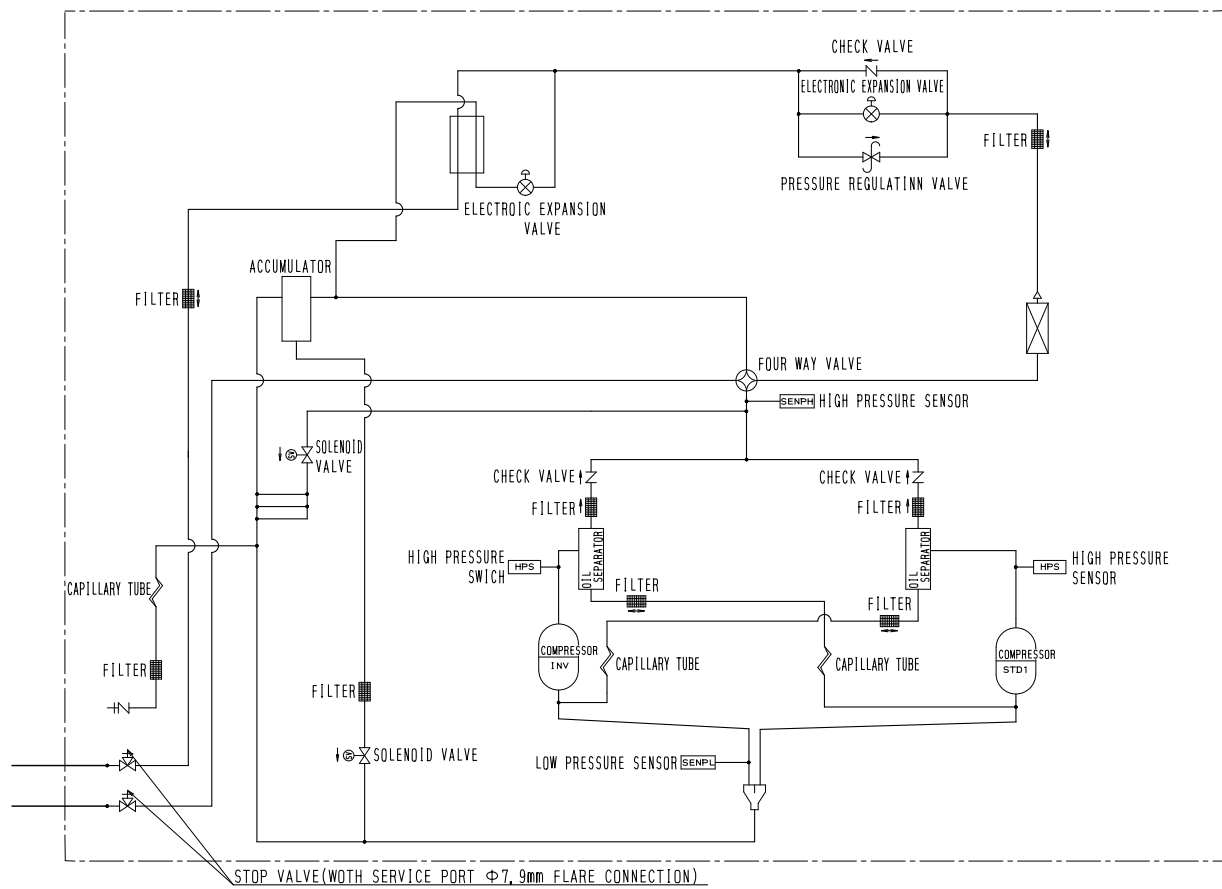
3D050782

## RXQ8PY1



3D050783

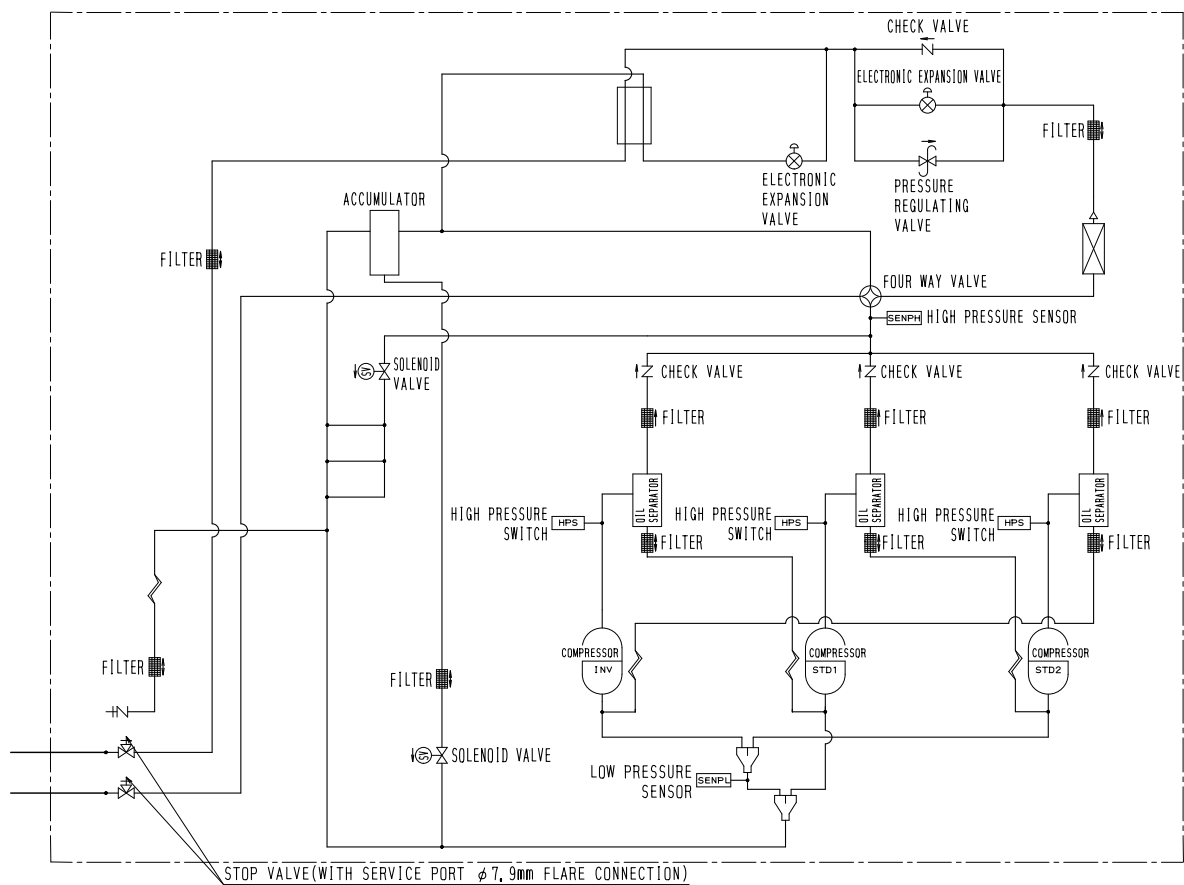
## RXQ10PY1, RXQ12PY1



3D050784



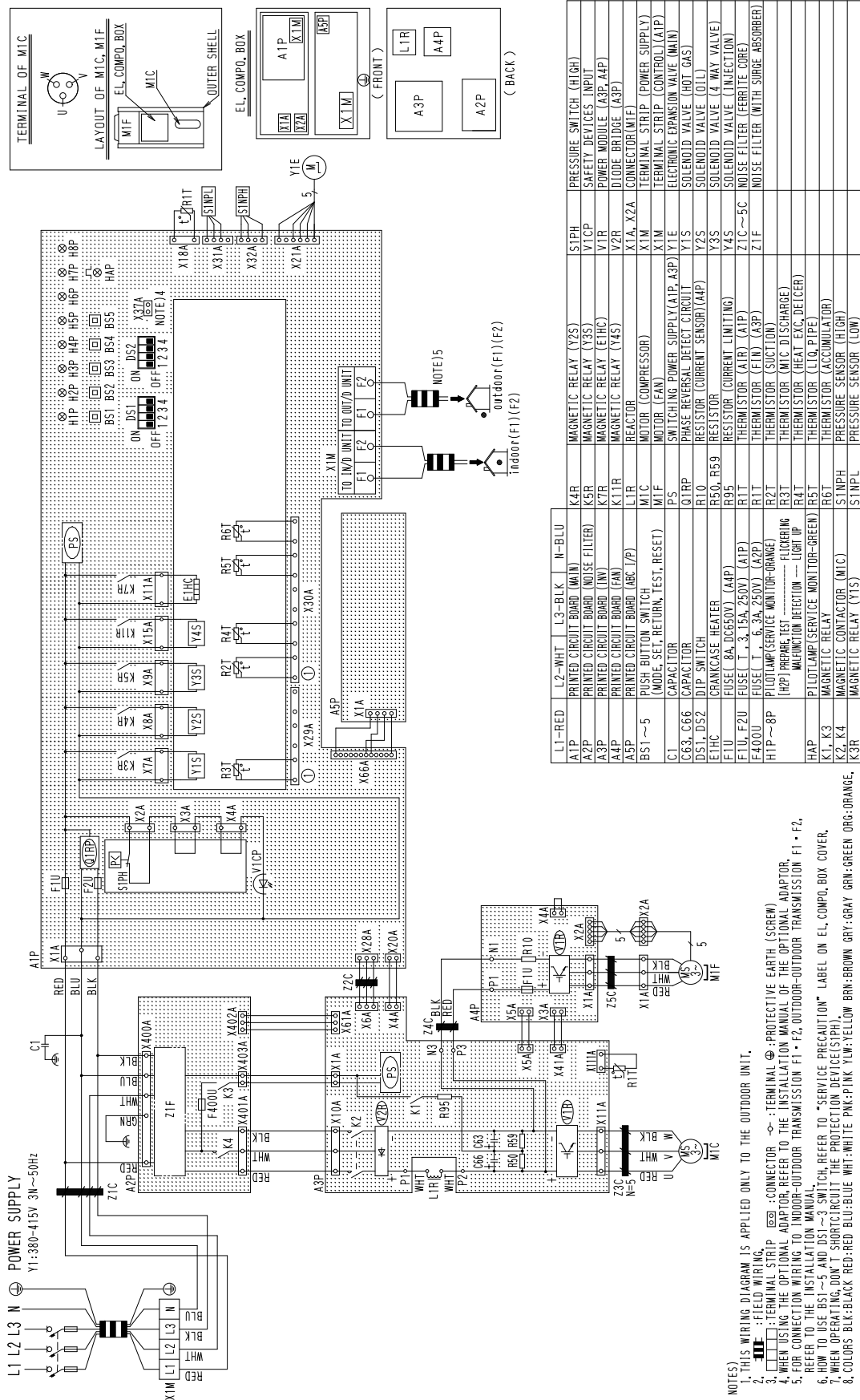
## RXQ14PY1, RXQ16PY1, RXQ18PY1



3D050785A

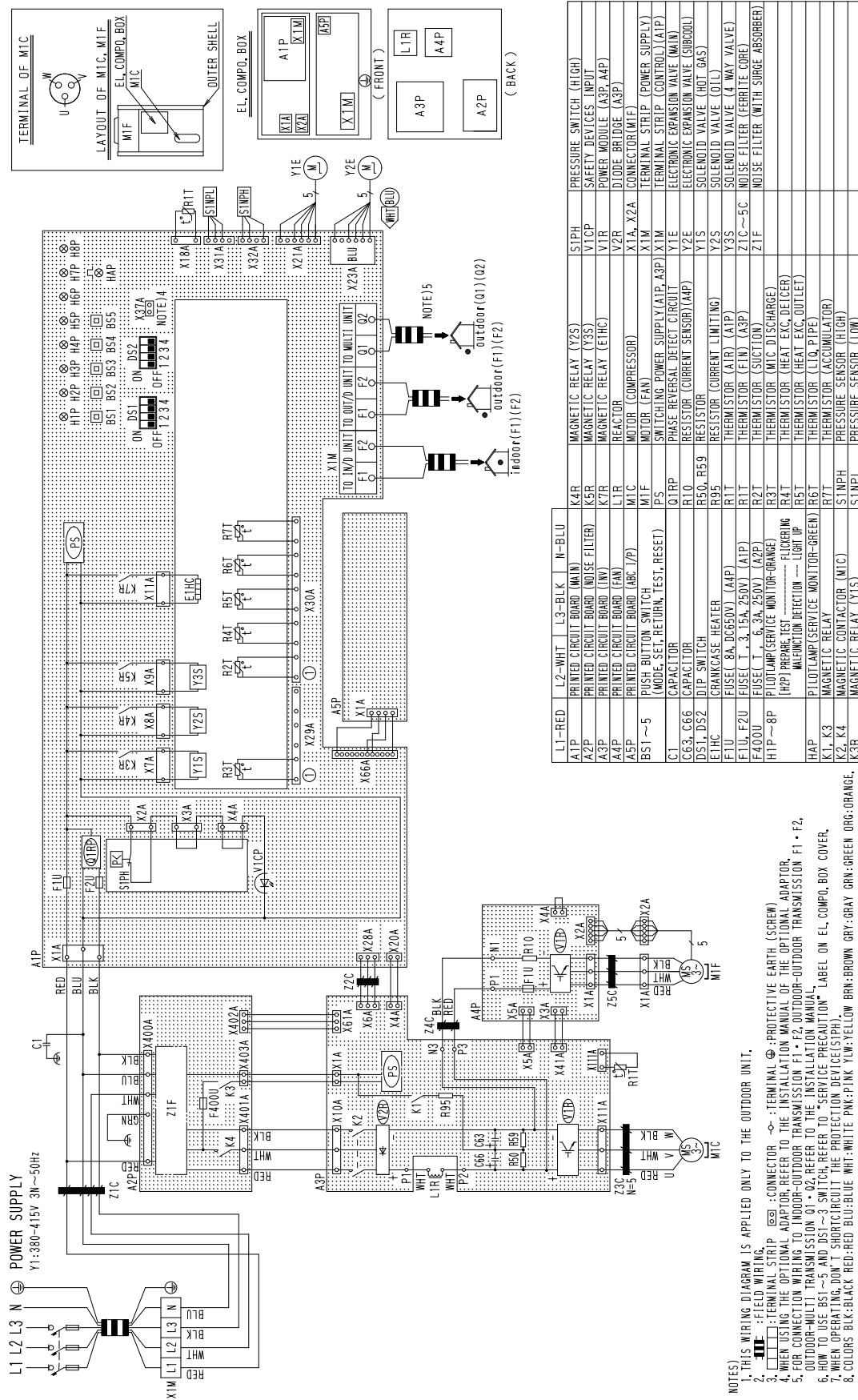
## 5. Wiring Diagrams

### RXQ5PY1

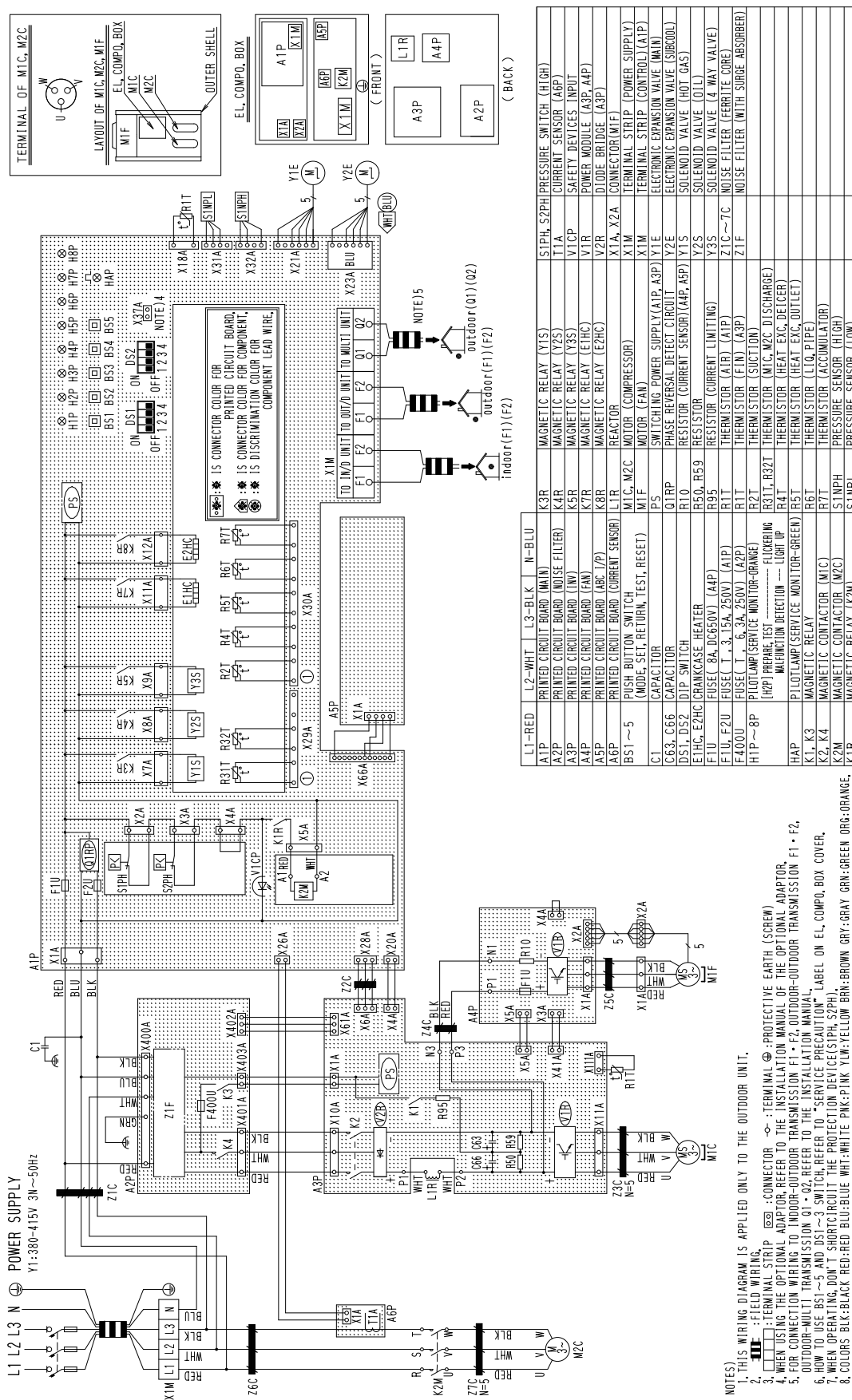


3D055257A

## RXQ8PY1

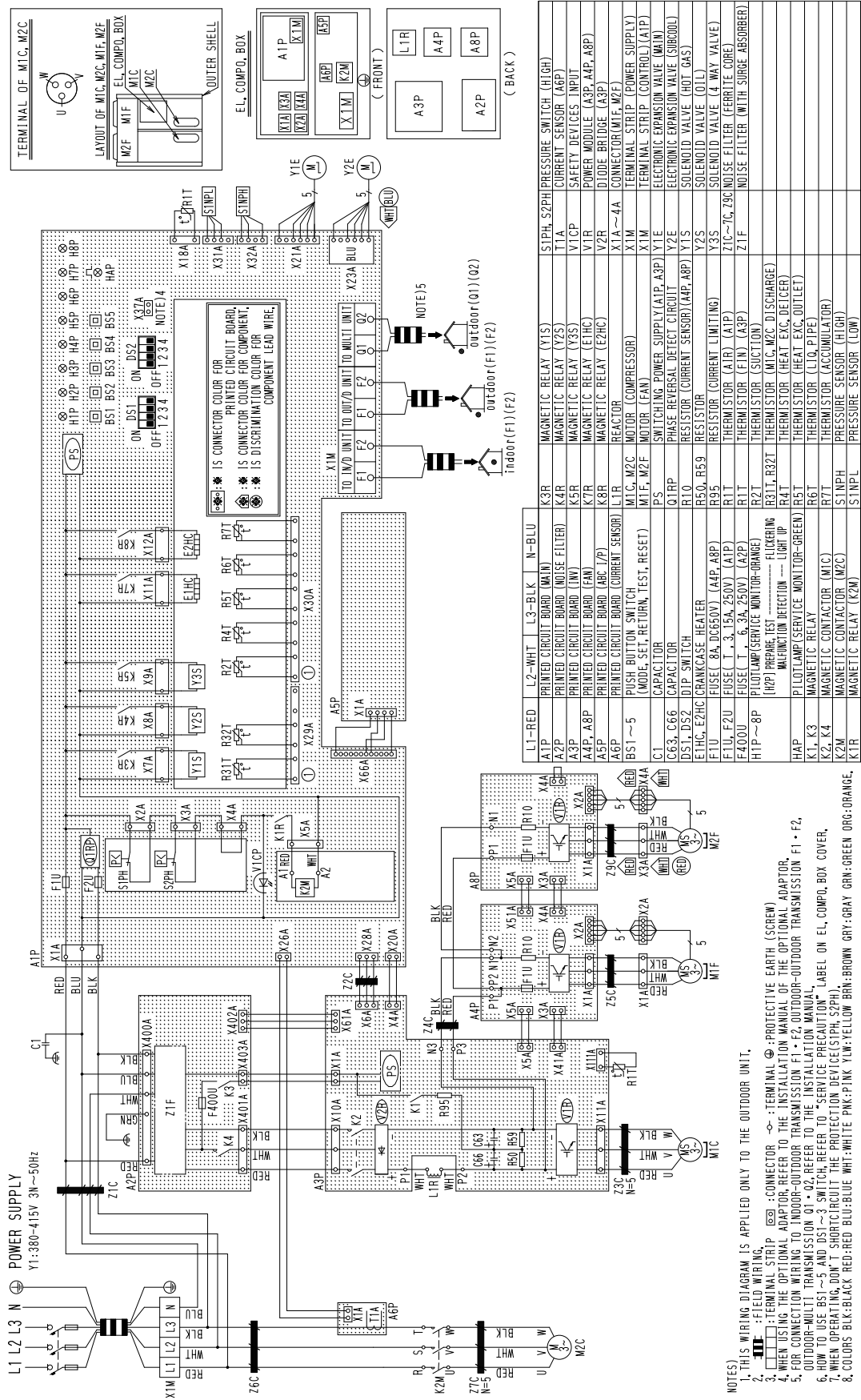


3D065258A

**RXQ10PY1**

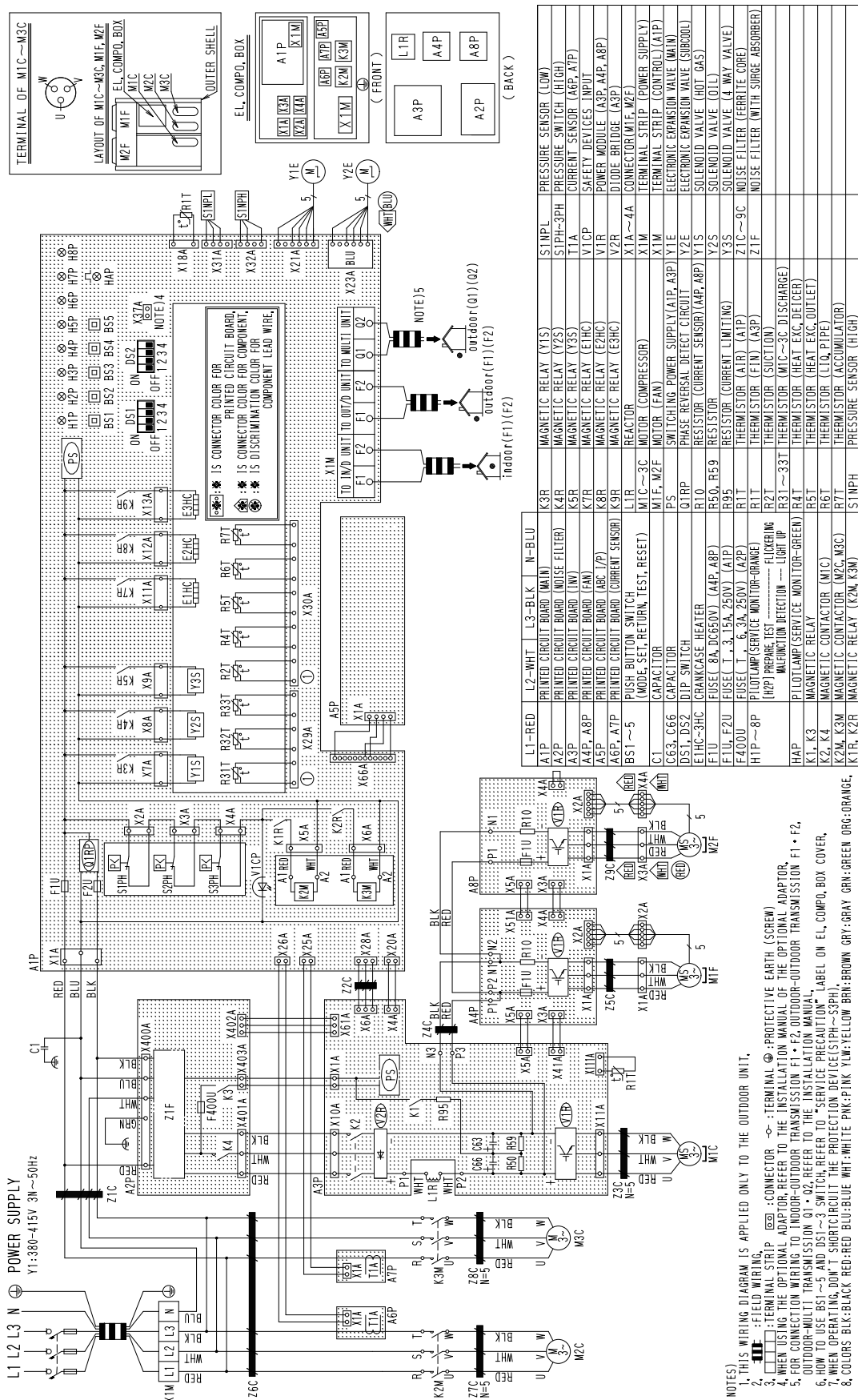
3D055259A

## RXQ12PY1



3D055260A

**RXQ14PY1, RXQ16PY1, RXQ18PY1**

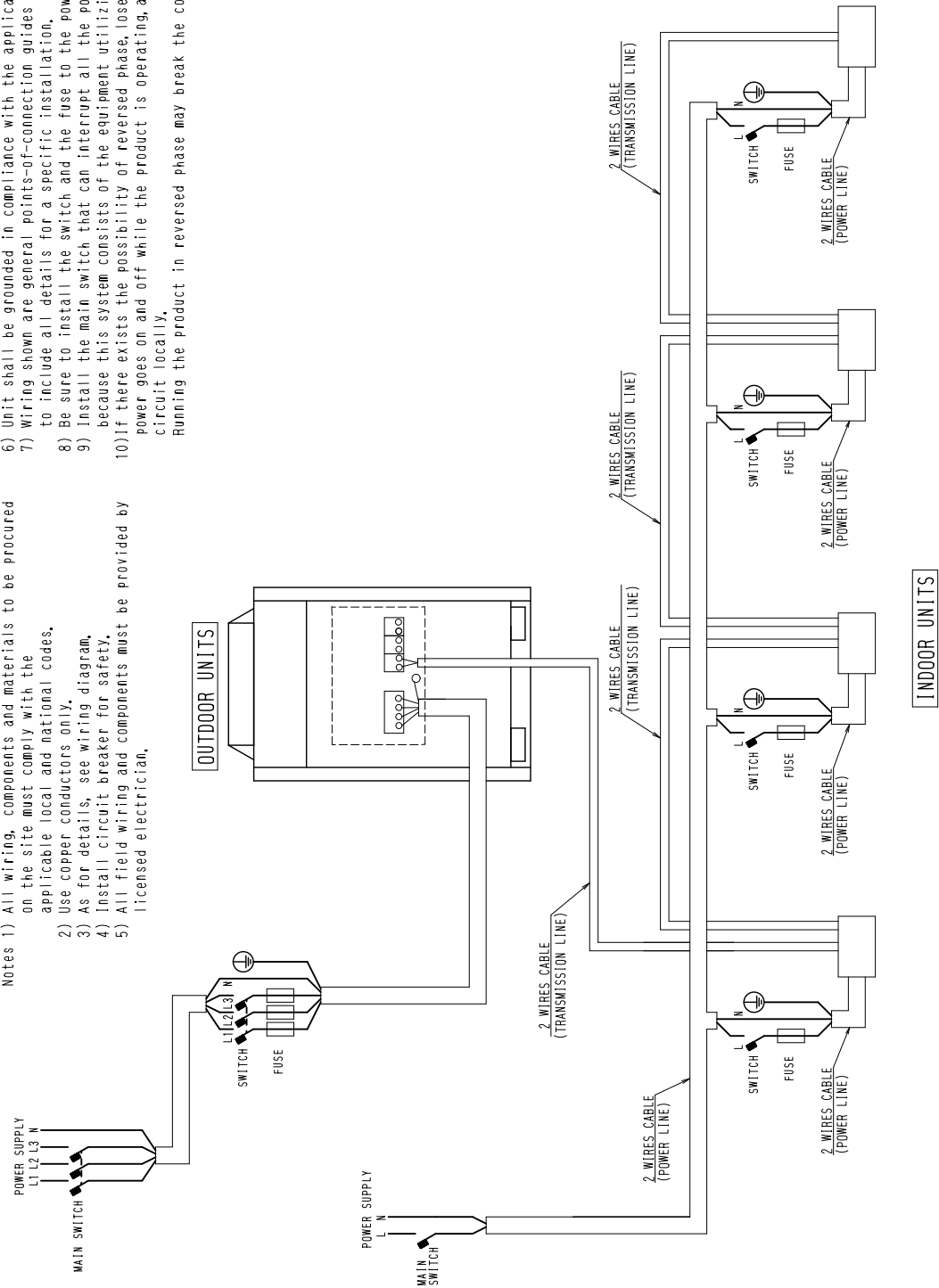


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# 6. Field Wiring

RXQ5P, 8P, 10P, 12P, 14P, 16P, 18PY1

- Notes 1) All wiring, components and materials to be procured on the site must comply with the applicable local and national codes, to include all details for a specific installation.
- 2) Use copper conductors only.
- 3) As for details, see wiring diagram.
- 4) Install circuit breaker for safety.
- 5) All field wiring and components must be provided by licensed electrician.
- 6) Unit shall be grounded in compliance with the applicable local and national codes.
- 7) Wiring shown are general points-of-connection guides only and are not intended for or to include all details for a specific installation.
- 8) Be sure to install the switch and the fuse to the power line of each equipment.
- 9) Install the main switch that can interrupt all the power sources in an integrated manner because this system consists of the equipment utilizing the multiple power sources.
- 10) If there exists the possibility of reversed phase, lose phase, momentary blackout or the power goes on and off while the product is operating, attach a reversed phase protection circuit locally.
- Running the product in reversed phase may break the compressor and other parts.



3D051452D

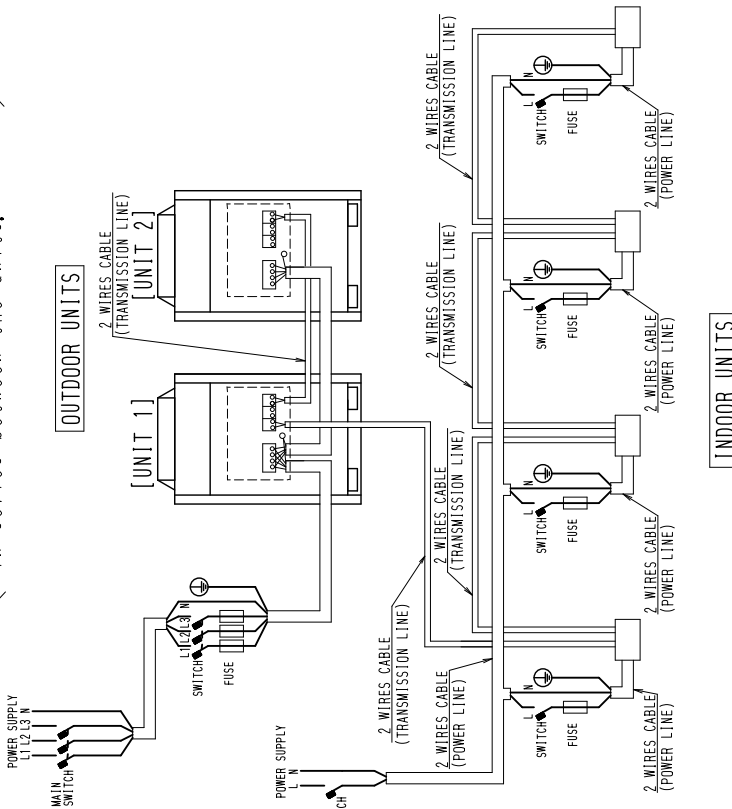
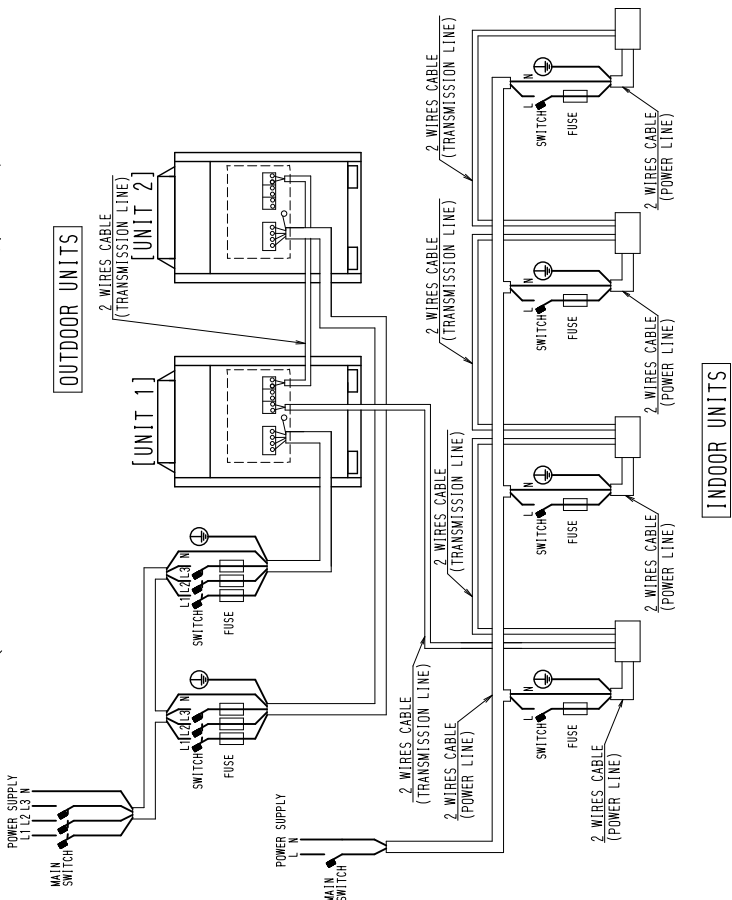
RXQ20P, 22P, 24P, 26P, 28P, 30P, 32P, 34P, 36PY1

- Notes 1) All wiring, components and materials to be procured on the site must comply with the applicable local and national codes.
- 2) Use copper conductors only.
- 3) As for details, see wiring diagram.
- 4) Install circuit breaker for safety.
- 5) All field wiring and components must be provided by licensed electrician.

- 6) Unit shall be grounded in compliance with the applicable local and national codes.
- 7) Wiring shown are general points-of-connection guides only and are not intended for or to include all details for a specific installation.
- 8) Be sure to install the switch and the fuse to the power line of each equipment.
- 9) Install the main switch that can interrupt all the power sources in an integrated manner because this system consists of the equipment utilizing the multiple power sources.
- 10) The capacity of UNIT1 must be larger than UNIT2
- 11) If there exists the possibility of reversed phase, lose phase, momentary blackout or the power goes on and off while the product is operating, attach a reversed phase protection circuit locally.
- Running the product in reversed phase may break the compressor and other parts.

When the power source is supplied to each outdoor unit individually.

When the power source is connected in series between the units.



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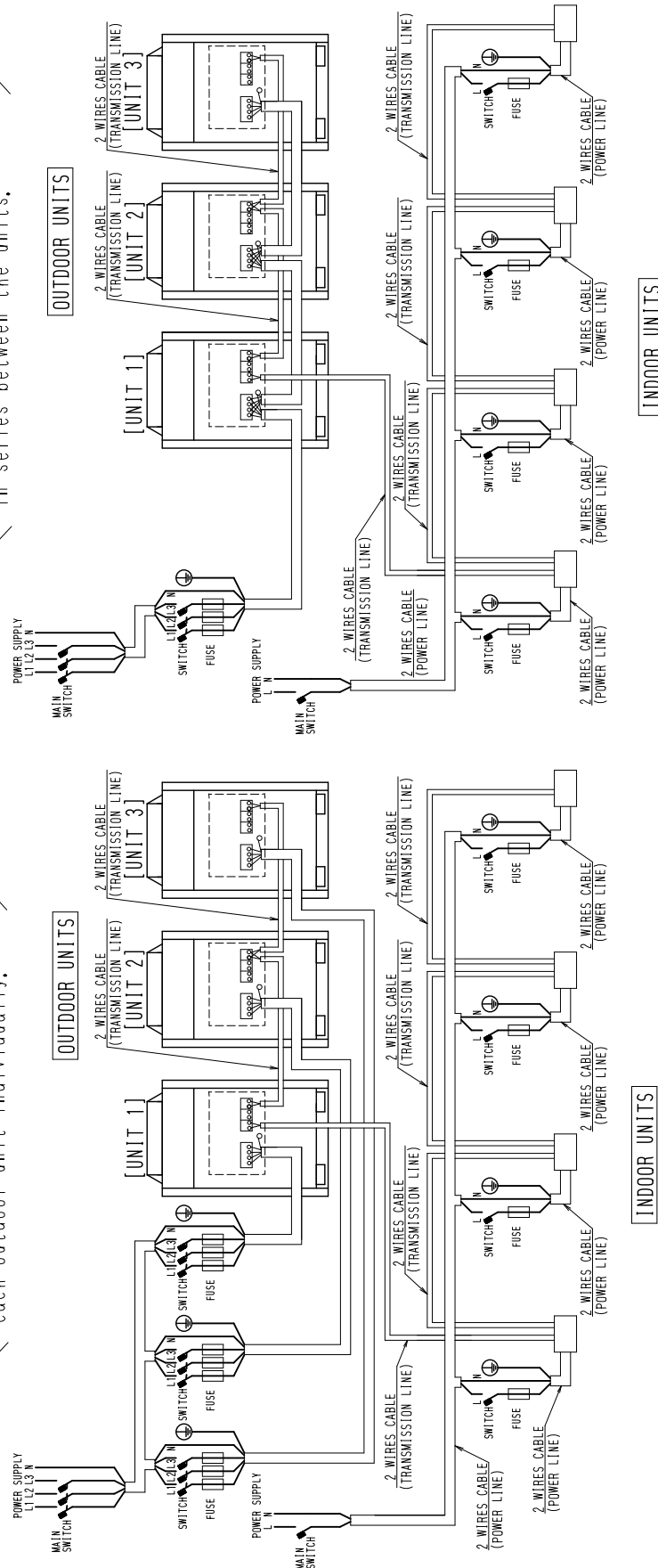
## RXQ38P, 40P, 42P, 44P, 46P, 48P, 50P, 52P, 54PY1

- Notes 1) All wiring, components and materials to be procured on the site must comply with the applicable local and national codes.
- 2) Use copper conductors only.
- 3) As for details, see wiring diagram.
- 4) Install circuit breaker for safety.
- 5) All field wiring and components must be provided by licensed electrician.

- 6) Unit shall be grounded in compliance with the applicable local and national codes.
- 7) Wiring shown are general points-of-connection guides only and are not intended for or to include all details for a specific installation.
- 8) Be sure to install the switch and the fuse to the power line of each equipment.
- 9) Install the main switch that can interrupt all the power sources in an integrated manner because this system consists of the equipment utilizing the multiple power sources.
- 10) The capacity of UNIT1 must be larger than UNIT2.
- 11) If the power source is connected in series between the units, when there exists the possibility of reversed phase, lose phase, momentary blackout or the power goes on and off while the product is operating, attach a reversed phase protection circuit locally.
- Running the product in reversed phase may break the compressor and other parts.

When the power source is supplied to each outdoor unit individually.

When the power source is connected in series between the units.



C: 3D05262B

## 7. Electric Characteristics

### 7.1 50Hz

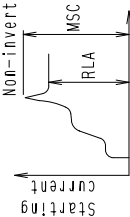
RXQ5, 8, 10, 12, 14, 16, 18PY1

Model Name	Units			Power supply			Comp.		OFM		
	Hz	Volts	Min.	Max.	MCA	TOCA	MFA	MSC	RLA	KW	FLA
RX(Y)Q5PY1	50	380	342	456	11.9	15.6	15	—	6.1	0.35	0.4
		400						—	5.8		
		415						—	5.6		
RX(Y)Q8PY1 RZYQ7PY1 RZYQ8PY1	50	380	342	456	18.5	16.5	25	—	8.6	0.75	0.7
		400						—	8.2		
		415						—	7.9		
RX(Y)Q10PY1 RZYQ10PY1	50	380	342	456	21.6	31.5	25	78	4.7+7.2	0.75	0.9
		400						74	4.5+6.8		
		415						72	4.3+6.6		
RX(Y)Q12PY1	50	380	342	456	22.7	31.5	25	79	6.5+7.0	0.35x2	0.6x2
		400						75	6.2+6.7		
		415						72	6.0+6.4		
RX(Y)Q14PY1	50	380	342	456	31.5	46.4	35	89	3.6+7.9x2	0.35x2	0.6x2
		400						84	3.4+7.5x2		
		415						81	3.3+7.3x2		
RX(Y)Q16PY1	50	380	342	456	31.5	46.4	35	90	6.4+8.0x2	0.35x2	0.6x2
		400						85	6.1+7.6x2		
		415						82	5.9+7.3x2		
RX(Y)Q18PY1	50	380	342	456	32.5	48.3	40	90	9.4+8.3x2	0.75x2	0.7x2
		400						85	9.0+7.8x2		
		415						82	8.6+7.6x2		

Symbols:

MCA : Min. Circuit Amps, (A)  
 TOCA : Total Over-current Amps, (A)  
 MFA : Max. Fuse Amps, (A)  
 MSC : Max. Starting current  
 RLA : Rated Load Amps, (A)  
 OFM : Outdoor Fan Motor  
 FLA : Full Load Amps, (A)  
 kW : Rated Motor Output(kw)

(Inverter comp. +  
Non-inverter comp.)



The relationship between the starting time and the starting current.

Notes:

1. RLA is based on the following conditions.  
Indoor temp, 27°C DB/19, 0°C WB  
Outdoor temp, 35°C DB
2. TOCA means the total value of each OC set.
3. MSC means the Max. current during the starting of compressor.
4. Voltage range  
Units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits.

5. Maximum allowable voltage variation between phases is 2%.
6. Select wire size based on the larger value of MCA or TOCA.
7. MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker).

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## RXQ20, 22, 24, 26, 28, 30, 32PY1

Model Name		Units			Power supply			Comp.		OFM		
Combination Unit	Independent Unit	Hz	Volts	Min.	Max.	MCA	TOCA	MFA	MSC	RLA	KW	FLA
RX(Y)Q20PY1	RX(Y)Q8PY1	50	380	342	456	41.2	48.0	50	83	8.6+6.5+7.0	0.75 +0.35x2	0.7 +0.6x2
	400					79	8.2+6.2+6.7					
	415					76	7.9+6.0+6.4					
RX(Y)Q22PY1	RX(Y)Q10PY1	50	380	342	456	44.3	63.0	50	92	4.7+7.2+6.5+7.0	0.75 +0.35x2	0.9 +0.6x2
	400					88	4.5+6.8+6.2+6.7					
	415					84	4.3+6.6+6.0+6.4					
RX(Y)Q24PY1	RX(Y)Q8PY1	50	380	342	456	50.0	63.0	60	93	8.6+6.4+8.0x2	0.75 +0.35x2	0.7 +0.6x2
	400					89	8.2+6.1+7.6x2					
	415					86	7.9+5.9+7.3x2					
RX(Y)Q26PY1	RX(Y)Q8PY1	50	380	342	456	51.0	64.8	60	93	8.6+9.4+8.3x2	0.75 +0.75x2	0.7 +0.7x2
	400					89	8.2+9.0+7.8x2					
	415					86	7.9+8.6+7.6x2					
RX(Y)Q28PY1	RX(Y)Q10PY1	50	380	342	456	54.1	79.8	60	103	4.7+7.2+9.4+8.3x2	0.75 +0.75x2	0.9 +0.7x2
	400					98	4.5+6.8+9.0+7.8x2					
	415					94	4.3+6.6+8.6+7.6x2					
RX(Y)Q30PY1	RX(Y)Q12PY1	50	380	342	456	55.2	79.8	70	103	6.5+7.0+9.4+8.3x2	0.35x2 +0.75x2	0.6x2 +0.7x2
	400					98	6.2+6.7+9.0+7.8x2					
	415					95	6.0+6.4+8.6+7.6x2					
RX(Y)Q32PY1	RX(Y)Q16PY1	50	380	342	456	63.0	92.8	70	115	(6.4x8.0x2)x2	(0.35x2)x2	(0.6x2)x2
	400					109	(6.1x7.6x2)x2					
	415					105	(5.9x7.3x2)x2					

## Symbols:

MCA :Min. Circuit Amps. (A)

TOCA :Total Over-current Amps. (A)

MFA :Max. Fuse Amps. (A)

MSC :Max. Starting current

RLA :Rated Load Amps. (A)

OFM :Outdoor Fan Motor

FLA :Full Load Amps. (A)

kW :Rated Motor Output (kW)

(Inverter comp. + Non-Inverter comp.)

Starting time

The relationship between the starting time and the starting current.

## Notes:

1. RLA is based on the following conditions.

Indoor temp. 27°C DB/19.0°C WB

Outdoor temp. 35°C DB

2. TOCA means the total value of each OC set.

3. MSC means the Max. current during the starting of compressor.

4. Voltage range

Units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits.

5. Maximum allowable voltage variation between Phases is 2%.

6. Select wire size based on the larger value of MCA or TOCA.

7. MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker).

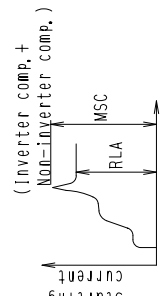
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## RXQ34, 36, 38, 40, 42, 44, 46PY1

Model Name			Units			Power supply			Comp.		OFM	
Combination Unit	Independent Unit	Hz	Volts	Min.	Max.	MCA	TOCA	MFA	MSC	RLA	KW	FLA
RX(Y)Q34PY1	RX(Y)Q16PY1	50	380	342	456	64.0	94.7	80	115	6.4+8.0X2+9.4+8.3X2	0.35X2 +0.75X2	0.6X2 +0.7X2
			400						109	6.1+7.6X2+9.0+7.8X2		
			415						105	5.9+7.3X2+8.6+7.6X2		
RX(Y)Q36PY1	RX(Y)Q18PY1	50	380	342	456	65.0	96.6	80	115	(9.4+8.3X2)X2	(0.75X2)X2 (0.7X2)X2	
			400						109	(9.0+7.8X2)X2		
			415						105	(8.6+7.6X2)X2		
RX(Y)Q38PY1	RX(Y)Q12PY1	50	380	342	456	73.7	96.3	90	107	8.6+6.5+7.0+9.4+8.3X2	0.75 +0.35X2 +0.75X2	0.7 +0.6X2 +0.7X2
			400						102	8.2+6.2+6.7+9.0+7.8X2		
			415						98	7.9+6.0+6.4+8.6+7.6X2		
RX(Y)Q40PY1	RX(Y)Q16PY1	50	380	342	456	81.5	109.4	90	119	8.6+(6.4+8.0X2)X2	0.75 +0.35X2 +0.75X2	0.7 +0.6X2 +0.7X2
			400						113	8.2+(6.1+7.6X2)X2		
			415						109	7.9+(5.9+7.3X2)X2		
RX(Y)Q42PY1	RX(Y)Q16PY1	50	380	342	456	82.5	111.2	100	119	8.6+6.4+8.0X2+9.4+8.3X2	0.75 +0.35X2 +0.75X2	0.7 +0.6X2 +0.7X2
			400						113	8.2+6.1+7.6X2+9.0+7.8X2		
			415						109	7.9+5.9+7.3X2+8.6+7.6X2		
RX(Y)Q44PY1	RX(Y)Q18PY1	50	380	342	456	83.5	113.1	100	119	8.6+(9.4+8.3X2)X2	0.75 +0.35X2 +0.75X2	0.7 +0.6X2 +0.7X2
			400						113	8.2+(9.0+7.8X2)X2		
			415						109	7.9+(8.6+7.6X2)X2		
RX(Y)Q46PY1	RX(Y)Q10PY1	50	380	342	456	86.6	128.1	100	128	4.7+7.2+9.4+8.3X2)X2	0.75 +0.35X2 +0.75X2	0.9 +0.7X2)X2
			400						122	4.5+6.8+9.0+7.8X2)X2		
			415						118	4.3+6.6+8.6+7.6X2)X2		

## Symbols:

MCA :Min. Circuit Amps, (A)  
 TOCA :Total Over-current Amps, (A)  
 MFA :Max. Fuse Amps, (A)  
 MSC :Max. Starting current  
 RLA :Rated Load Amps, (A)  
 OFM :Outdoor Fan Motor  
 FLA :Full Load Amps, (A)  
 kW :Rated Motor Output(kw)



The relationship between the starting time and the starting current.

## Notes:

1. RLA is based on the following conditions.  
 Indoor temp. 27°C DB/19.0°C WB  
 Outdoor temp. 35°C DB
2. TOCA means the total value of each OC set.
3. MSC means the Max. current during the starting of compressor.
4. Voltage range

Units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits.

5. Maximum allowable voltage variation between phases is 2%.
6. Select wire size based on the larger value of MCA or TOCA.
7. MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker).

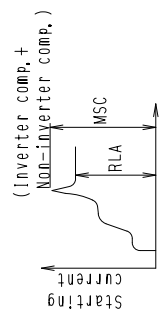
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## RXQ48, 50, 52, 54PY1

Model Name		Units			Power supply			Comp.		OFM	
Combination Unit	Independent Unit	Hz	Volts	Min.	Max.	MCA	TOCA	MFA	MSC	RLA	KW
RX(Y)Q48PY1	RX(Y)Q12PY1	50	380	342	456	87.7	128.0	100	129	6, 5+7, 0+(9, 4+8, 3X2)X2	0.35x2 +(0.75x2)x2
	RX(Y)Q18PY1		400						122	6, 2+6, 7+(9, 0+7, 8X2)X2	
	RX(Y)Q18PY1		415						118	6, 0+6, 4+(8, 6+7, 6X2)X2	
RX(Y)Q50PY1	RX(Y)Q14PY1	50	380	342	456	96.5	143.0	110	139	3, 6+7, 9X2+(9, 4+8, 3X2)X2	0.35x2 +(0.75x2)x2
	RX(Y)Q18PY1		400						132	3, 4+7, 5X2+(9, 0+7, 8X2)X2	
	RX(Y)Q18PY1		415						127	3, 3+7, 3X2+(8, 6+7, 6X2)X2	
RX(Y)Q52PY1	RX(Y)Q16PY1	50	380	342	456	96.5	143.0	110	141	6, 4+8, 0X2+(9, 4+8, 3X2)X2	0.35x2 +(0.75x2)x2
	RX(Y)Q18PY1		400						134	6, 1+7, 6X2+(9, 0+7, 8X2)X2	
	RX(Y)Q18PY1		415						129	5, 9+7, 3X2+(8, 6+7, 6X2)X2	
RX(Y)Q54PY1	RX(Y)Q18PY1	50	380	342	456	97.5	144.8	110	141	(9, 4+8, 3X2)X3	(0.75x2)x3 (0.7x2)x3
	RX(Y)Q18PY1		400						134	(9, 0+7, 8X2)X3	
	RX(Y)Q18PY1		415						129	(8, 6+7, 6X2)X3	

## Symbols:

MCA :Min. Circuit Amps, (A)  
 TOCA :Total Over-current Amps, (A)  
 MFA :Max. Fuse Amps, (A)  
 MSC :Max. Starting Current  
 RLA :Rated Load Amps, (A)  
 OFM :Outdoor Fan Motor  
 FLA :Full Load Amps, (A)  
 kW :Rated Motor Output(kw)



The relationship between the starting time and the starting current,

## Notes:

1. RLA is based on the following conditions,  
Indoor temp. 27°C DB/19.0°C WB  
Outdoor temp. 35°C DB
2. TOCA means the total value of each OC set.
3. MSC means the Max. current during the starting of compressor.
4. Voltage range  
Units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits.
5. Maximum allowable voltage variation between phases is 2%.
6. Select wire size based on the larger value of MCA or TOCA.
7. MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker).

3D052402A

# 8. Capacity Tables (Cooling Only)

## 8.1 Cooling Capacity (RXQ-P)

1. This table indicates the situation of 50~130% combination of indoor units.
2. If connecting the indoor units over 130% of outdoor unit capacity, capacity of indoor unit will decrease.

RXQ5PY1

[50Hz]

Cooling capacity		Outdoor air temp. °CDB		Indoor air temp.												Cooling capacity																					
				14.0°CWB						18.0°CWB								22.0°CWB						24.0°CWB													
Combin ation (Capacity index)	Outdoor air temp. °CDB	14.0°CWB		16.0°CWB		18.0°CWB		20.0°CWB		22.0°CWB		24.0°CWB		14.0°CWB		16.0°CWB		18.0°CWB		20.0°CWB		22.0°CWB		24.0°CWB		14.0°CWB		16.0°CWB		18.0°CWB		20.0°CWB		22.0°CWB		24.0°CWB	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI		
90 (112.5)	10	8.50	1.09	10.1	1.31	11.8	1.55	13.4	1.79	15.1	2.05	16.7	2.31	18.3	2.57	19.9	2.83	21.5	3.07	23.1	3.31	24.7	3.57	26.3	3.83	27.9	4.09	29.5	4.35	31.1	4.61	32.7	4.87	34.3	5.13		
	11	8.50	1.09	10.1	1.31	11.8	1.55	13.4	1.79	15.1	2.05	16.7	2.31	18.3	2.57	19.9	2.83	21.5	3.07	23.1	3.31	24.7	3.57	26.3	3.83	27.9	4.09	29.5	4.35	31.1	4.61	32.7	4.87	34.3	5.13		
	12	8.50	1.09	10.1	1.31	11.8	1.55	13.4	1.79	15.1	2.05	16.7	2.31	18.3	2.57	19.9	2.83	21.5	3.07	23.1	3.31	24.7	3.57	26.3	3.83	27.9	4.09	29.5	4.35	31.1	4.61	32.7	4.87	34.3	5.13		
	13	8.50	1.09	10.1	1.31	11.8	1.55	13.4	1.79	15.1	2.05	16.7	2.31	18.3	2.57	19.9	2.83	21.5	3.07	23.1	3.31	24.7	3.57	26.3	3.83	27.9	4.09	29.5	4.35	31.1	4.61	32.7	4.87	34.3	5.13		
	14	8.50	1.09	10.1	1.31	11.8	1.55	13.4	1.79	15.1	2.05	16.7	2.31	18.3	2.57	19.9	2.83	21.5	3.07	23.1	3.31	24.7	3.57	26.3	3.83	27.9	4.09	29.5	4.35	31.1	4.61	32.7	4.87	34.3	5.13		
	15	8.50	1.09	10.1	1.31	11.8	1.55	13.4	1.79	15.1	2.05	16.7	2.31	18.3	2.57	19.9	2.83	21.5	3.07	23.1	3.31	24.7	3.57	26.3	3.83	27.9	4.09	29.5	4.35	31.1	4.61	32.7	4.87	34.3	5.13		
	16	8.50	1.09	10.1	1.31	11.8	1.55	13.4	1.79	15.1	2.05	16.7	2.31	18.3	2.57	19.9	2.83	21.5	3.07	23.1	3.31	24.7	3.57	26.3	3.83	27.9	4.09	29.5	4.35	31.1	4.61	32.7	4.87	34.3	5.13		
	17	8.50	1.09	10.1	1.31	11.8	1.55	13.4	1.79	15.1	2.05	16.7	2.31	18.3	2.57	19.9	2.83	21.5	3.07	23.1	3.31	24.7	3.57	26.3	3.83	27.9	4.09	29.5	4.35	31.1	4.61	32.7	4.87	34.3	5.13		
	18	8.50	1.09	10.1	1.31	11.8	1.55	13.4	1.79	15.1	2.05	16.7	2.31	18.3	2.57	19.9	2.83	21.5	3.07	23.1	3.31	24.7	3.57	26.3	3.83	27.9	4.09	29.5	4.35	31.1	4.61	32.7	4.87	34.3	5.13		
	19	8.50	1.09	10.1	1.31	11.8	1.55	13.4	1.79	15.1	2.05	16.7	2.31	18.3	2.57	19.9	2.83	21.5	3.07	23.1	3.31	24.7	3.57	26.3	3.83	27.9	4.09	29.5	4.35	31.1	4.61	32.7	4.87	34.3	5.13		
80 (100)	10	7.56	0.96	9.02	1.15	10.5	1.36	12.1	1.57	13.7	1.79	15.3	2.01	16.9	2.23	18.5	2.45	20.1	2.67	21.7	2.89	23.3	3.11	24.9	3.33	26.5	3.55	28.1	3.77	29.7	3.99	31.3	4.21	32.9	4.43	34.5	4.65
	11	7.56	0.96	9.02	1.15	10.5	1.36	12.1	1.57	13.7	1.79	15.3	2.01	16.9	2.23	18.5	2.45	20.1	2.67	21.7	2.89	23.3	3.11	24.9	3.33	26.5	3.55	28.1	3.77	29.7	3.99	31.3	4.21	32.9	4.43	34.5	4.65
	12	7.56	0.96	9.02	1.15	10.5	1.36	12.1	1.57	13.7	1.79	15.3	2.01	16.9	2.23	18.5	2.45	20.1	2.67	21.7	2.89	23.3	3.11	24.9	3.33	26.5	3.55	28.1	3.77	29.7	3.99	31.3	4.21	32.9	4.43	34.5	4.65
	13	7.56	0.96	9.02	1.15	10.5	1.36	12.1	1.57	13.7	1.79	15.3	2.01	16.9	2.23	18.5	2.45	20.1	2.67	21.7	2.89	23.3	3.11	24.9	3.33	26.5	3.55	28.1	3.77	29.7	3.99	31.3	4.21	32.9	4.43	34.5	4.65
	14	7.56	0.96	9.02	1.15	10.5	1.36	12.1	1.57	13.7	1.79	15.3	2.01	16.9	2.23	18.5	2.45	20.1	2.67	21.7	2.89	23.3	3.11	24.9	3.33	26.5	3.55	28.1	3.77	29.7	3.99	31.3	4.21	32.9	4.43	34.5	4.65
	15	7.56	0.96	9.02	1.15	10.5	1.36	12.1	1.57	13.7	1.79	15.3	2.01	16.9	2.23	18.5	2.45	20.1	2.67	21.7	2.89	23.3	3.11	24.9	3.33	26.5	3.55	28.1	3.77	29.7	3.99	31.3	4.21	32.9	4.43	34.5	4.65
	16	7.56	0.96	9.02	1.15	10.5	1.36	12.1	1.57	13.7	1.79	15.3	2.01	16.9	2.23	18.5	2.45	20.1	2.67	21.7	2.89	23.3	3.11	24.9	3.33	26.5	3.55	28.1	3.77	29.7	3.99	31.3	4.21	32.9	4.43	34.5	4.65
	17	7.56	0.96	9.02	1.15	10.5	1.36	12.1	1.57	13.7	1.79	15.3	2.01	16.9	2.23	18.5	2.45	20.1	2.67	21.7	2.89	23.3	3.11	24.9	3.33	26.5	3.55	28.1	3.77	29.7	3.99	31.3	4.21	32.9	4.43	34.5	4.65
	18	7.56	0.96	9.02	1.15	10.5	1.36	12.1	1.57	13.7	1.79	15.3	2.01	16.9	2.23	18.5	2.45	20.1	2.67	21.7	2.89	23.3	3.11	24.9	3.33	26.5	3.55	28.1	3.77	29.7	3.99	31.3	4.21	32.9	4.43	34.5	4.65
	19	7.56	0.96	9.02	1.15	10.5	1.36	12.1	1.57	13.7	1.79	15.3	2.01	16.9	2.23	18.5	2.45	20.1	2.67	21.7	2.89	23.3	3.11	24.9	3.33	26.5	3.55	28.1	3.77	29.7	3.99	31.3	4.21	32.9	4.43	34.5	4.65
70 (87.5)	10	6.61	0.82	7.89	1.01	9.16	1.17	10.43	1.34	11.70	1.55	13.00	1.73	14.27	1.91	15.54	2.09	16.81	2.21	18.02	2.32	19.23	2.43	20.44	2.54	21.65	2.64	22.86	2.74	24.07	2.84	25.28	2.93	26.49	3.02	27.70	3.11
	11	6.61	0.82	7.89	1.01	9.16	1.17	10.43	1.34	11.70	1.55	13.00	1.73	14.27	1.91	15.54	2.09	16.81	2.21	18.02	2.32	19.23	2.43	20.44	2.54	21.65	2.64	22.86	2.74	24.07	2.84	25.28	2.93	26.49	3.02	27.70	3.11
	12	6.61	0.82	7.89	1.01	9.16	1.17	10.43	1.34	11.70	1.55	13.00	1.73	14.27	1.91	15.54	2.09	16.81	2.21	18.02	2.32	19.23	2.43	20.44	2.54	21.65	2.64	22.86	2.74	24.07	2.84	25.28	2.93	26.49	3.02	27.70	3.11
	13	6.61	0.82	7.89	1.01	9.16	1.17	10.43	1.34	11.70	1.55	13.00	1.73	14.27	1.91	15.54	2.09	16.81	2.21	18.02	2.32	19.23	2.43	20.44	2.54	21.65	2.64	22.86	2.74	24.07	2.84	25.28	2.93	26.49	3.02	27.70	3.11
	14	6.61	0.82	7.89	1.01	9.16	1.17	10.43	1.34	11.70	1.55	13.00	1.73	14.27	1.91	15.54	2.09	16.81	2.21	18.02	2.32	19.23	2.43	20.44	2.54	21.65	2.64	22.86	2.74	24.07	2.84	25.28	2.93	26.49	3.02	27.70	3.11
	15	6.61	0.82	7.89	1.01	9.16	1.17	10.43	1.34	11.70	1.55	13.00	1.73	14.27	1.91	15.54	2.09	16.81	2.21	18.02	2.32	19.23	2.43	20.44	2.54	21.65	2.64	22.86	2.74	24.07	2.84	25.28	2.93	26.49	3.02	27.70	3.11
	16	6.61	0.82	7.89	1.01	9.16	1.17	10.43	1.34	11.70	1.55	13.00	1.73	14.27	1.91	15.54	2.09	16.81	2.21	18.02	2.32	19.23	2.43	20.44	2.54	21.65	2.64	22.86	2.74	24.07	2.84	25.28	2.93	26.49	3.02	27.70	3.11
	17	6.61	0.82	7.89	1.01	9.16	1.17	10.43	1.34	11.70	1.55	13.00	1.73	14.27	1.91	15.54	2.09	16.81	2.21	18.02	2.32	19.23	2.43	20.44	2.54	21.65	2.64	22.86	2.74	24.07	2.84	25.28	2.93	26.49	3.02	27.70	3.11
	18	6.61	0.82	7.89	1.01	9.16	1.17	10.43	1.34	11.70	1.55	13.00	1.73	14.27	1.91	15.54	2.09	16.81	2.21	18.02	2.32	19.23	2.43	20.44	2.54	21.65	2.64	22.86	2.74	24.07	2.84	25.28	2.93	26.49	3.02	27.70	3.11
	19	6.61	0.82	7.89	1.01	9.16	1.17	10.43	1.34	11.70	1.55	13.00	1.73	14.27	1.91	15.54	2.09	16.81	2.21	18.02	2.32	19.23	2.43	20.44	2.54	21.65	2.64	22.86	2.74	24.07	2.84	25.28	2.93	26.49	3.02	27.70	3.11
60 (75)	10	5.67	0.74	6.76	0.87	7.85	1.02	8.94	1.09	10.03	1.17	11.12	1.25	12.21	1.34	13.28	1.47	14.23	1.56	15.09	1.68	15.94	1.77	16.79	1.86	17.64	1.95	18.49	2.04	19.34	2.13	20.19	2.22	21.04	2.31	21.89	2.40
	11	5.67	0.74	6.76	0.87	7.85	1.02	8.94	1.09	10.03	1.17	11.12	1.25	12.21	1.34	13.28	1.47	14.23	1.56	15.09	1.68	15.94	1.77	16.79	1.86	17.64	1.95	18.49	2.04	19.34	2.13	20.19	2.22	21.04	2.31	21.89	2.40
	12	5.67	0.74	6.76	0.87	7.85	1.02	8.94	1.09	10.03	1.17	11.12	1.25	12.21	1.34	13.28	1.47	14.23	1.56	15.09	1.68	15.94	1.77	16.79	1.86	17.64	1.95	18.49	2.04	19.34	2.13	20.19	2.22	21.04	2.31	21.89	2.40
	13	5.67	0.74	6.76	0.87	7.85	1.02	8.94	1.09	10.03	1.17	11.12	1.25	12.21	1.34	13.28	1.47	14.23	1.56	15.09	1.68	15.94	1.77	16.79	1.86	17.64	1.95	18.49	2.04	19.34	2.13	20.19	2.22	21.04	2.31	21.89	2.40
	14	5.67	0.74	6.76	0.87	7.85	1.02	8.94	1.09	10.03	1.17	11.12	1.25	12.21	1.34	13.28	1.47	14.23	1.56	15.09	1.68	15.94	1.77	16.79	1.86	17.64	1.95	18.49									

TC Total capacity : kW  
PI Power Input : kW(Comp+Outdoor fan motor)  
Note: The above table shows the average value of conditions which may occur.

**[50Hz]**

TC  
P/I  
Note1:  
Total capacity ; kW  
Power Input ; kW(Comp.+Outdoor fan motor)  
The above table shows the average value of conditions which may occur.

[illegible]

RXQ10PY1

[50Hz]

Cooling capacity										
Combi- ation(%) air temp. °CDB	Indoor air temp.									
	14.0°CWB		16.0°CWB		18.0°CWB		20.0°CWB		22.0°CWB	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
90 (225)	10	17.0	2.44	20.3	2.94	23.6	3.47	26.8	4.02	30.1
	11	17.0	2.44	20.3	2.94	23.6	3.47	26.8	4.02	30.1
	12	17.0	2.44	20.3	2.94	23.6	3.47	26.8	4.02	30.1
	13	17.0	2.44	20.3	2.94	23.6	3.47	26.8	4.02	30.1
	14	17.0	2.44	20.3	2.94	23.6	3.47	26.8	4.02	30.1
	15	17.0	2.44	20.3	2.94	23.6	3.47	26.8	4.02	30.1
	16	17.0	2.44	20.3	2.94	23.6	3.47	26.8	4.02	30.1
	17	17.0	2.44	20.3	2.94	23.6	3.47	26.8	4.02	30.1
	18	17.0	2.44	20.3	2.94	23.6	3.47	26.8	4.02	30.1
	19	17.0	2.44	20.3	2.94	23.6	3.47	26.8	4.02	30.1
80 (200)	10	15.1	2.16	18.0	2.59	20.9	3.04	22.4	3.28	24.1
	11	15.1	2.16	18.0	2.59	20.9	3.04	22.4	3.28	24.1
	12	15.1	2.16	18.0	2.59	20.9	3.04	22.4	3.28	24.1
	13	15.1	2.16	18.0	2.59	20.9	3.04	22.4	3.28	24.1
	14	15.1	2.16	18.0	2.59	20.9	3.04	22.4	3.28	24.1
	15	15.1	2.16	18.0	2.59	20.9	3.04	22.4	3.28	24.1
	16	15.1	2.16	18.0	2.59	20.9	3.04	22.4	3.28	24.1
	17	15.1	2.16	18.0	2.59	20.9	3.04	22.4	3.28	24.1
	18	15.1	2.16	18.0	2.59	20.9	3.04	22.4	3.28	24.1
	19	15.1	2.16	18.0	2.59	20.9	3.04	22.4	3.28	24.1
70 (175)	10	13.2	1.90	15.8	2.26	18.3	2.63	20.9	3.03	23.4
	11	13.2	1.90	15.8	2.26	18.3	2.63	20.9	3.03	23.4
	12	13.2	1.90	15.8	2.26	18.3	2.63	20.9	3.03	23.4
	13	13.2	1.90	15.8	2.26	18.3	2.63	20.9	3.03	23.4
	14	13.2	1.90	15.8	2.26	18.3	2.63	20.9	3.03	23.4
	15	13.2	1.90	15.8	2.26	18.3	2.63	20.9	3.03	23.4
	16	13.2	1.90	15.8	2.26	18.3	2.63	20.9	3.03	23.4
	17	13.2	1.90	15.8	2.26	18.3	2.63	20.9	3.03	23.4
	18	13.2	1.90	15.8	2.26	18.3	2.63	20.9	3.03	23.4
	19	13.2	1.90	15.8	2.26	18.3	2.63	20.9	3.03	23.4
60 (150)	10	11.3	1.65	13.5	1.94	15.7	2.25	17.9	2.57	20.1
	11	11.3	1.65	13.5	1.94	15.7	2.25	17.9	2.57	20.1
	12	11.3	1.65	13.5	1.94	15.7	2.25	17.9	2.57	20.1
	13	11.3	1.65	13.5	1.94	15.7	2.25	17.9	2.57	20.1
	14	11.3	1.65	13.5	1.94	15.7	2.25	17.9	2.57	20.1
	15	11.3	1.65	13.5	1.94	15.7	2.25	17.9	2.57	20.1
	16	11.3	1.65	13.5	1.94	15.7	2.25	17.9	2.57	20.1
	17	11.3	1.65	13.5	1.94	15.7	2.25	17.9	2.57	20.1
	18	11.3	1.65	13.5	1.94	15.7	2.25	17.9	2.57	20.1
	19	11.3	1.65	13.5	1.94	15.7	2.25	17.9	2.57	20.1
50 (125)	10	9.45	1.42	11.3	1.65	13.1	1.96	14.9	2.17	16.7
	11	9.45	1.42	11.3	1.65	13.1	1.96	14.9	2.17	16.7
	12	9.45	1.42	11.3	1.65	13.1	1.96	14.9	2.17	16.7
	13	9.45	1.42	11.3	1.65	13.1	1.96	14.9	2.17	16.7
	14	9.45	1.42	11.3	1.65	13.1	1.96	14.9	2.17	16.7
	15	9.45	1.42	11.3	1.65	13.1	1.96	14.9	2.17	16.7
	16	9.45	1.42	11.3	1.65	13.1	1.96	14.9	2.17	16.7
	17	9.45	1.42	11.3	1.65	13.1	1.96	14.9	2.17	16.7
	18	9.45	1.42	11.3	1.65	13.1	1.96	14.9	2.17	16.7
	19	9.45	1.42	11.3	1.65	13.1	1.96	14.9	2.17	16.7
Total capacity : kW Power Input : kW(Comp +Outdoor fan motor) Note: The above table shows the average value of conditions which may occur.										



**[50Hz]**

TC  
PI  
Note1:  
Total capacity ; kW  
Power Input ; kW(Comp.+Outdoor fan motor)  
The above table shows the average value of conditions which may occur.

**[50Hz]**

TC  
PI  
Note1:

[illegible]

**[50Hz]**

TC  
PI  
Note:

RXQ18PY1

[50Hz]

Cooling capacity	Indoor air temp.																												Outdoor air temp.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
	14.0°CWB								16.0°CWB								18.0°CWB								19.0°CWB								20.0°CWB								22.0°CWB								24.0°CWB																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	TC	PI	KW	PI	TC	PI	KW	PI	TC	PI	KW	PI	TC	PI	KW	PI	TC	PI	KW	PI	TC	PI	KW	PI	TC	PI	KW	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI

## RXQ20PY1

[50Hz]

		Indoor air temp.												Cooling capacity	
Combi- ation (%)	Outdoor air temp. °CDB	14.0°CWB			18.0°CWB			20.0°CWB			22.0°CWB			24.0°CWB	
		TC	PI	RW	TC	PI	RW	TC	PI	RW	TC	PI	RW	TC	PI
90 (450)	10	34.0	4.38	40.5	32.8	4.70	42.4	33.6	5.03	44.0	34.4	5.36	44.8	35.2	46.4
	12	34.0	4.38	40.5	32.8	4.70	42.4	33.6	5.03	44.0	34.4	5.36	44.8	35.2	46.4
	14	34.0	4.38	40.5	32.8	4.70	42.4	33.6	5.03	44.0	34.4	5.36	44.8	35.2	46.4
	16	34.0	4.38	40.5	32.8	4.70	42.4	33.6	5.03	44.0	34.4	5.36	44.8	35.2	46.4
	18	34.0	4.38	40.5	32.8	4.70	42.4	33.6	5.03	44.0	34.4	5.36	44.8	35.2	46.4
	20	34.0	4.38	40.5	32.8	4.70	42.4	33.6	5.03	44.0	34.4	5.36	44.8	35.2	46.4
	22	34.0	4.38	40.5	32.8	4.70	42.4	33.6	5.03	44.0	34.4	5.36	44.8	35.2	46.4
	24	34.0	4.38	40.5	32.8	4.70	42.4	33.6	5.03	44.0	34.4	5.36	44.8	35.2	46.4
	26	34.0	4.38	40.5	32.8	4.70	42.4	33.6	5.03	44.0	34.4	5.36	44.8	35.2	46.4
	28	34.0	4.38	40.5	32.8	4.70	42.4	33.6	5.03	44.0	34.4	5.36	44.8	35.2	46.4
80 (400)	10	30.2	3.99	36.0	28.8	4.26	38.4	30.2	4.59	40.8	31.0	4.79	42.2	32.2	43.8
	12	30.2	3.99	36.0	28.8	4.26	38.4	30.2	4.59	40.8	31.0	4.79	42.2	32.2	43.8
	14	30.2	3.99	36.0	28.8	4.26	38.4	30.2	4.59	40.8	31.0	4.79	42.2	32.2	43.8
	16	30.2	3.99	36.0	28.8	4.26	38.4	30.2	4.59	40.8	31.0	4.79	42.2	32.2	43.8
	18	30.2	3.99	36.0	28.8	4.26	38.4	30.2	4.59	40.8	31.0	4.79	42.2	32.2	43.8
	20	30.2	3.99	36.0	28.8	4.26	38.4	30.2	4.59	40.8	31.0	4.79	42.2	32.2	43.8
	22	30.2	3.99	36.0	28.8	4.26	38.4	30.2	4.59	40.8	31.0	4.79	42.2	32.2	43.8
	24	30.2	3.99	36.0	28.8	4.26	38.4	30.2	4.59	40.8	31.0	4.79	42.2	32.2	43.8
	26	30.2	3.99	36.0	28.8	4.26	38.4	30.2	4.59	40.8	31.0	4.79	42.2	32.2	43.8
	28	30.2	3.99	36.0	28.8	4.26	38.4	30.2	4.59	40.8	31.0	4.79	42.2	32.2	43.8
70 (350)	10	26.4	3.62	32.4	25.2	3.90	33.6	26.4	4.22	36.0	26.6	4.42	37.2	32.6	40.2
	12	26.4	3.62	32.4	25.2	3.90	33.6	26.4	4.22	36.0	26.6	4.42	37.2	32.6	40.2
	14	26.4	3.62	32.4	25.2	3.90	33.6	26.4	4.22	36.0	26.6	4.42	37.2	32.6	40.2
	16	26.4	3.62	32.4	25.2	3.90	33.6	26.4	4.22	36.0	26.6	4.42	37.2	32.6	40.2
	18	26.4	3.62	32.4	25.2	3.90	33.6	26.4	4.22	36.0	26.6	4.42	37.2	32.6	40.2
	20	26.4	3.62	32.4	25.2	3.90	33.6	26.4	4.22	36.0	26.6	4.42	37.2	32.6	40.2
	22	26.4	3.62	32.4	25.2	3.90	33.6	26.4	4.22	36.0	26.6	4.42	37.2	32.6	40.2
	24	26.4	3.62	32.4	25.2	3.90	33.6	26.4	4.22	36.0	26.6	4.42	37.2	32.6	40.2
	26	26.4	3.62	32.4	25.2	3.90	33.6	26.4	4.22	36.0	26.6	4.42	37.2	32.6	40.2
	28	26.4	3.62	32.4	25.2	3.90	33.6	26.4	4.22	36.0	26.6	4.42	37.2	32.6	40.2
60 (300)	10	22.6	3.27	27.0	21.6	3.54	23.4	22.6	3.87	31.8	22.8	4.07	32.4	28.2	36.6
	12	22.6	3.27	27.0	21.6	3.54	23.4	22.6	3.87	31.8	22.8	4.07	32.4	28.2	36.6
	14	22.6	3.27	27.0	21.6	3.54	23.4	22.6	3.87	31.8	22.8	4.07	32.4	28.2	36.6
	16	22.6	3.27	27.0	21.6	3.54	23.4	22.6	3.87	31.8	22.8	4.07	32.4	28.2	36.6
	18	22.6	3.27	27.0	21.6	3.54	23.4	22.6	3.87	31.8	22.8	4.07	32.4	28.2	36.6
	20	22.6	3.27	27.0	21.6	3.54	23.4	22.6	3.87	31.8	22.8	4.07	32.4	28.2	36.6
	22	22.6	3.27	27.0	21.6	3.54	23.4	22.6	3.87	31.8	22.8	4.07	32.4	28.2	36.6
	24	22.6	3.27	27.0	21.6	3.54	23.4	22.6	3.87	31.8	22.8	4.07	32.4	28.2	36.6
	26	22.6	3.27	27.0	21.6	3.54	23.4	22.6	3.87	31.8	22.8	4.07	32.4	28.2	36.6
	28	22.6	3.27	27.0	21.6	3.54	23.4	22.6	3.87	31.8	22.8	4.07	32.4	28.2	36.6
50 (250)	10	18.8	2.92	22.5	17.8	3.19	19.8	18.8	3.54	26.4	19.0	3.74	27.0	23.4	31.8
	12	18.8	2.92	22.5	17.8	3.19	19.8	18.8	3.54	26.4	19.0	3.74	27.0	23.4	31.8
	14	18.8	2.92	22.5	17.8	3.19	19.8	18.8	3.54	26.4	19.0	3.74	27.0	23.4	31.8
	16	18.8	2.92	22.5	17.8	3.19	19.8	18.8	3.54	26.4	19.0	3.74	27.0	23.4	31.8
	18	18.8	2.92	22.5	17.8	3.19	19.8	18.8	3.54	26.4	19.0	3.74	27.0	23.4	31.8
	20	18.8	2.92	22.5	17.8	3.19	19.8	18.8	3.54	26.4	19.0	3.74	27.0	23.4	31.8
	22	18.8	2.92	22.5	17.8	3.19	19.8	18.8	3.54	26.4	19.0	3.74	27.0	23.4	31.8
	24	18.8	2.92	22.5	17.8	3.19	19.8	18.8	3.54	26.4	19.0	3.74	27.0	23.4	31.8
	26	18.8	2.92	22.5	17.8	3.19	19.8	18.8	3.54	26.4	19.0	3.74	27.0	23.4	31.8
	28	18.8	2.92	22.5	17.8	3.19	19.8	18.8	3.54	26.4	19.0	3.74	27.0	23.4	31.8

TC Total capacity : kW  
 PI Power input : kW(Comp+Outdoor fan motor)  
 Note: The above table shows the average value of conditions which may occur.

**[50Hz]**

TC  
PI  
Note1:  
Total capacity : kW  
Power Input : kW(Comp.+Outdoor fan motor)  
The above table shows the average value of conditions which may occur.

13

RXQ24PY1

[50Hz]

Cooling capacity		Indoor air temp.												Outdoor air temp.											
		14.0°CWB				16.0°CWB				18.0°CWB				20.0°CWB				22.0°CWB				24.0°CWB			
		TC	PI	KW	PI	TC	PI	KW	PI	TC	PI	KW	PI	TC	PI	KW	PI	TC	PI	TC	PI	TC	PI	TC	PI
Combi- ation (Capacity m³/min)	90 (640)	10	40.9	5.88	48.8	7.22	56.7	8.52	60.7	9.2	64.6	9.9	68.4	10.3	72.5	11.3	76.4	11.7	80.4	12.7	84.9	13.1	88.6	13.5	92.3
		11	41.9	6.09	49.8	7.46	57.7	8.76	61.7	9.5	65.6	10.2	69.4	10.6	73.6	11.6	77.5	12.0	81.2	12.8	85.3	13.2	89.0	13.6	92.7
		12	42.9	6.30	50.8	7.68	58.7	8.97	62.7	9.7	66.6	10.4	70.4	10.8	74.6	11.8	78.5	12.2	82.4	13.0	86.3	13.4	90.0	13.8	93.7
		13	43.9	6.51	51.8	7.89	59.7	9.18	63.7	10.0	67.6	10.7	71.3	11.1	75.4	12.1	79.3	12.5	83.4	13.1	87.3	13.5	91.0	13.9	94.7
		14	44.9	6.72	52.8	8.10	60.7	9.39	64.7	10.2	68.6	10.9	72.3	11.3	76.4	12.3	80.3	12.7	84.4	13.2	88.3	13.6	92.0	14.0	95.7
		15	45.9	6.93	53.8	8.31	61.7	9.60	65.7	10.4	69.6	11.1	73.3	11.5	77.5	12.5	81.3	12.9	85.4	13.3	89.3	13.7	93.0	14.1	96.7
		16	46.9	7.14	54.8	8.52	62.7	9.81	66.7	10.6	70.6	11.3	74.3	11.7	78.5	12.7	82.3	13.1	86.3	13.5	90.3	13.9	94.0	14.3	97.7
		17	47.9	7.35	55.8	8.73	63.7	10.02	67.7	10.8	71.6	11.5	75.3	11.9	79.5	12.9	83.3	13.3	87.3	13.7	91.3	14.1	95.0	14.5	98.7
		18	48.9	7.56	56.8	8.94	64.7	10.23	68.7	11.0	72.6	11.7	76.3	12.1	80.5	13.1	84.3	13.5	88.3	13.9	92.3	14.3	96.0	14.7	100.7
		19	49.9	7.77	57.8	9.15	65.7	10.44	69.7	11.2	73.6	11.9	77.3	12.3	81.5	13.3	85.3	13.7	89.3	14.1	93.3	14.5	97.0	14.9	101.7
Combi- ation (Capacity m³/min)	80 (480)	10	31.8	4.57	38.0	5.84	44.1	6.57	48.1	7.29	52.1	7.99	56.1	8.69	60.1	9.39	64.1	10.09	68.1	10.79	72.1	11.49	76.1	12.19	80.1
		11	32.8	4.78	39.0	5.95	45.1	6.68	49.1	7.40	53.1	8.10	57.1	8.80	61.1	9.50	65.1	10.20	69.1	10.90	73.1	11.60	77.1	12.30	81.1
		12	33.8	4.99	40.0	6.06	46.1	6.79	50.1	7.51	54.1	8.21	58.1	8.91	62.1	9.61	66.1	10.31	70.1	11.01	74.1	11.71	78.1	12.41	82.1
		13	34.8	5.20	41.0	6.17	47.1	6.90	51.1	7.62	55.1	8.32	59.1	9.02	63.1	9.72	67.1	10.42	71.1	11.12	75.1	11.82	79.1	12.52	83.1
		14	35.8	5.41	42.0	6.28	48.1	7.01	52.1	7.73	56.1	8.43	60.1	9.13	64.1	9.83	68.1	10.53	72.1	11.23	76.1	11.93	80.1	12.63	84.1
		15	36.8	5.62	43.0	6.39	49.1	7.12	53.1	7.84	57.1	8.54	61.1	9.24	65.1	9.94	69.1	10.64	73.1	11.34	77.1	12.04	81.1	12.74	85.1
		16	37.8	5.83	44.0	6.50	50.1	7.23	54.1	7.95	58.1	8.65	62.1	9.35	66.1	10.05	70.1	10.75	74.1	11.45	78.1	12.15	82.1	12.85	86.1
		17	38.8	6.04	45.0	6.61	51.1	7.34	55.1	8.06	59.1	8.76	63.1	9.46	67.1	10.16	71.1	10.86	75.1	11.56	79.1	12.26	83.1	12.96	87.1
		18	39.8	6.25	46.0	6.72	52.1	7.45	56.1	8.17	60.1	8.87	64.1	9.57	68.1	10.27	72.1	10.97	76.1	11.67	80.1	12.37	84.1	13.07	88.1
		19	40.8	6.46	47.0	6.83	53.1	7.56	57.1	8.28	61.1	8.98	65.1	9.68	69.1	10.38	73.1	11.08	77.1	11.78	81.1	12.48	85.1	13.18	89.1
Combi- ation (Capacity m³/min)	70 (420)	10	21.8	3.18	28.0	4.45	34.1	4.18	38.1	4.91	42.1	5.64	46.1	6.37	50.1	7.10	54.1	7.83	58.1	8.56	89.1	9.29	96.1	10.02	100.1
		11	22.8	3.39	29.0	4.56	35.1	4.29	39.1	5.02	43.1	5.75	47.1	6.48	51.1	7.21	55.1	7.94	59.1	8.67	90.1	9.40	97.1	10.13	101.1
		12	23.8	3.60	30.0	4.67	36.1	4.40	40.1	5.13	44.1	5.86	48.1	6.59	52.1	7.32	56.1	8.05	60.1	8.78	91.1	9.51	98.1	10.24	102.1
		13	24.8	3.81	31.0	4.78	37.1	4.51	41.1	5.24	45.1	5.97	49.1	6.70	53.1	7.43	57.1	8.16	61.1	8.89	92.1	9.62	99.1	10.35	103.1
		14	25.8	4.02	32.0	4.89	38.1	4.62	42.1	5.35	46.1	6.08	50.1	6.81	54.1	7.54	58.1	8.27	62.1	9.00	93.1	9.73	100.1	10.46	104.1
		15	26.8	4.23	33.0	5.00	39.1	4.73	43.1	5.46	47.1	6.19	51.1	6.92	55.1	7.65	59.1	8.38	63.1	9.11	94.1	9.84	101.1	10.57	105.1
		16	27.8	4.44	34.0	5.11	40.1	4.84	44.1	5.57	48.1	6.30	52.1	7.03	56.1	7.76	60.1	8.49	64.1	9.22	95.1	9.95	102.1	10.68	106.1
		17	28.8	4.65	35.0	5.22	41.1	4.95	45.1	5.68	49.1	6.41	53.1	7.14	57.1	7.87	61.1	8.60	65.1	9.33	96.1	10.06	103.1	10.79	107.1
		18	29.8	4.86	36.0	5.33	42.1	5.06	46.1	5.79	50.1	6.52	54.1	7.25	58.1	7.98	62.1	8.71	66.1	9.44	97.1	10.17	104.1	10.90	108.1
		19	30.8	5.07	37.0	5.44	43.1	5.17	47.1	5.90	51.1	6.63	55.1	7.36	59.1	8.09	63.1	8.82	67.1	9.55	98.1	10.28	105.1	11.01	109.1
Combi- ation (Capacity m³/min)	60 (360)	10	11.8	1.78	14.0	2.05	16.1	2.32	18.1	2.59	20.1	2.86	22.1	3.13	24.1	3.40	26.1	3.67	28.1	3.94	40.1	4.21	42.1	4.48	44.1
		11	12.8	1.99	15.0	2.16	17.1	2.43	19.1	2.70	21.1	2.97	23.1	3.24	25.1	3.51	27.1	3.78	29.1	4.05	41.1	4.32	43.1	4.59	45.1
		12	13.8	2.20	16.0	2.27	18.1	2.54	20.1	2.81	22.1	3.08	24.1	3.35	26.1	3.62	28.1	3.89	30.1	4.16	42.1	4.43	44.1	4.70	46.1
		13	14.8	2.41	17.0	2.38	19.1	2.65	21.1	2.92	23.1	3.19	25.1	3.46	27.1	3.73	29.1	4.00	31.1	4.27	43.1	4.54	45.1	4.81	47.1
		14	15.8	2.62	18.0	2.49	20.1	2.76	22.1	3.03	24.1	3.30	26.1	3.57	28.1	3.84	30.1	4.11	32.1	4.38	44.1	4.65	46.1	4.92	48.1
		15	16.8	2.83	19.0	2.60	21.1	2.87	23.1	3.14	25.1	3.41	27.1	3.68	29.1	3.95	31.1	4.22	33.1	4.49	45.1	4.76	47.1	5.03	49.1
		16	17.8	3.04	20.0	2.71	22.1	2.98	24.1	3.25	26.1	3.52	28.1	3.79	30.1	4.06	32.1	4.33	34.1	4.60	46.1	4.87	48.1	5.14	50.1
		17	18.8	3.25	21.0	2.82	23.1	3.09	25.1	3.36	27.1	3.63	29.1	3.90	31.1	4.17	33.1	4.44	35.1	4.71	47.1	4.98	49.1	5.25	51.1
		18	19.8	3.46	22.0	2.93	24.1	3.20	26.1	3.47	28.1	3.74	30.1	3.91	32.1	4.28	34.1	4.55	36.1	4.82	48.1	5.09	50.1	5.36	52.1
		19	20.8	3.67	23.0	3.04	25.1	3.31	27.1	3.58	29.1	3.85	31.1	4.02	33.1	4.39	35.1	4.66	37.1	4.93	49.1	5.20	51.1	5.47	53.1
Combi- ation (Capacity m³/min)	50 (300)	10	6.8	1.18	8.0	1.45	9.2	1.72	10.4	2.00	11.6	2.27	12.8	2.54	14.0	2.81	15.2	3.08	16.4	3.35	27.6	3.62	38.8	3.89	40.0
		11	7.8	1.39	9.0	1.56	10.2	1.83	11.4	2.11	12.6	2.38	13.8	2.65	15.0	2.92	16.2	3.19	17.4	3.46	28.6	3.73	39.8	4.00	41.0
		12	8.8	1.60	10.0	1.67	11.2	1.94	12.4	2.22	13.6	2.49	14.8	2.76	16.0	3.03	17.2	3.30	18.4	3.57	29.6	3.84	40.8	4.11	42.0
		13	9.8	1.81	11.0	1.78	12.2	2.05	13.4	2.33	14.6	2.60	15.8	2.87	17.0	3.14	18.2	3.41	19.4	3.68	30.6	3.95	41.8	4.22	43.0
		14	10.8	2.02	12.0	1.89	13.2	2.16	14.4	2.44	15.6	2.71	16.8	2.98	18.0	3.25	19.2	3.52	20.4	3.79	31.6	4.06	42.8	4.33	44.0
		15	11.8	2.23	13.0	2.00	14.2	2.27	15.4	2.55	16.6	2.82	17.8	3.09	19.0	3.36	20.2	3.63	21.4	3.90	32.6	4.17	43.8	4.44	45.0
		16	12.8	2.44	14.0	2.11	15.2	2.38	16.4	2.66	17.6	2.93	18.8	3.20	20.0	3.47	21.2	3.74	22.4	4.01	33.6	4.28	44.8	4.55	46.0
		17	13.8	2.65	15.0	2.22	16.2	2.49	17.4	2.77	18.6	3.04	19.8	3.31	21.0	3.58	22.2	3.85	23.4	4.12	34.6	4.39	45.8	4.66	47.0

**[50Hz]**

TC  
PI  
Note1:

13



**[50Hz]**

TC Total capacity : kW  
 PI Power Input : kW(Comp.+Outdoor fan motor)  
 Note1: The above table shows the average value of conditions which may occur.

[illegible]

## RXQ30PY1

[50Hz]

Combi- ation (%) (Capacity index)	Outdoor air temp. °C/DB	Indoor air temp.												Cooling capacity													
		14.0°CWB				16.0°CWB				18.0°CWB						20.0°CWB				22.0°CWB				24.0°CWB			
		TC	PI	KW	PI	TC	PI	KW	PI	TC	PI	KW	PI	TC	PI	KW	PI	TC	PI	KW	PI	TC	PI	TC	PI	KW	PI
90 (675)	10	50.1	7.80	59.8	9.4	69.4	11.1	74.3	12.0	79.1	12.9	88.7	14.7	98	16.6												
	12	50.1	7.94	59.8	9.6	69.4	11.3	74.3	12.2	79.1	13.1	88.7	15.0	98	16.9												
	14	50.1	8.07	59.8	9.8	69.4	11.5	74.3	12.4	79.1	13.4	88.7	15.3	98	17.2												
	16	50.1	8.21	59.8	9.9	69.4	11.7	74.3	12.7	79.1	13.6	88.7	15.6	98	17.5												
	18	50.1	8.36	59.8	10.1	69.4	12.0	74.3	12.9	79.1	13.9	88.7	15.9	96.9	18.1												
	20	50.1	8.52	59.8	10.3	69.4	12.2	74.3	13.2	79.1	14.4	88.7	17.1	95.5	19.4												
	21	50.1	8.50	59.8	10.4	69.4	12.3	74.3	13.3	79.1	14.9	88.7	17.7	94.9	19.9												
	23	50.1	8.8	59.8	10.8	69.4	12.4	74.3	13.6	79.1	16.0	88.7	19.0	93.5	20.3												
	25	50.1	9.2	59.8	11.6	69.4	13.2	74.3	14.6	79.1	17.1	88.7	20.3	92.2	21.1												
	29	50.1	9.8	59.8	12.4	69.4	15.2	74.3	16.7	79.1	18.3	88.7	21.7	90.8	22.0												
80 (600)	10	50.1	10.5	59.8	13.2	69.4	16.2	74.3	17.8	79.1	19.6	87.7	22.8	89.5	22.9												
	31	50.1	11.1	59.8	14.0	69.4	17.4	74.3	19.0	79.1	20.9	86.4	23.6	88.2	23.8												
	33	50.1	11.8	59.8	14.9	69.4	18.4	74.3	20.3	79.1	22.3	85.0	24.5	86.8	24.7												
	35	50.1	12.5	59.8	15.9	69.4	19.6	74.3	21.6	79.1	23.7	83.7	25.4	85.5	25.6												
	37	50.1	13.3	59.8	16.9	69.4	20.9	74.3	23.0	79.1	25.3	82.3	26.3	84.1	26.5												
	39	50.1	14.1	59.8	17.9	69.4	22.4	74.3	24.3	79.1	26.9	80.7	27.2	82.1	26.8												
	16	44.5	6.93	53.1	8.29	61.7	9.7	66.0	10.5	70.3	11.3	78.9	12.8	87.5	14.5												
	18	44.5	7.04	53.1	8.44	61.7	9.9	66.0	10.7	70.3	11.5	78.9	13.1	87.5	14.7												
	19	44.5	7.16	53.1	8.59	61.7	10.1	66.0	10.9	70.3	11.7	78.9	13.3	87.5	15.0												
	21	44.5	7.28	53.1	8.7	61.7	10.3	66.0	11.1	70.3	11.9	78.9	13.6	87.5	15.3												
70 (625)	10	44.5	7.40	53.1	8.9	61.7	10.5	66.0	11.3	70.3	12.1	78.9	13.9	87.5	15.6												
	21	44.5	7.60	53.1	9.2	61.7	10.8	66.0	11.6	70.3	12.6	78.9	14.9	87.5	17.3												
	23	44.5	7.74	53.1	9.3	61.7	11.3	66.0	12.4	70.3	13.5	78.9	15.9	87.5	18.6												
	25	44.5	7.99	53.1	9.9	61.7	12.0	66.0	13.3	70.3	14.5	78.9	17.1	87.5	19.9												
	27	44.5	8.50	53.1	11.6	61.7	12.9	66.0	14.1	70.3	15.5	78.9	18.2	87.5	21.3												
	29	44.5	9.0	53.1	11.3	61.7	13.7	66.0	15.1	70.3	16.5	78.9	19.2	87.5	22.7												
	31	44.5	9.6	53.1	12.0	61.7	14.6	66.0	16.1	70.3	17.6	78.9	20.8	86.1	23.6												
	33	44.5	10.2	53.1	12.7	61.7	15.6	66.0	17.1	70.3	18.7	78.9	22.2	84.8	24.5												
	35	44.5	10.8	53.1	13.5	61.7	16.6	66.0	18.2	70.3	20.0	78.9	23.6	83.4	25.4												
	39	44.5	11.4	53.1	14.4	61.7	17.6	66.0	19.4	70.3	21.2	78.9	25.2	82.1	26.3												
60 (450)	10	39.0	6.09	48.5	7.23	54.0	8.44	57.8	9.2	61.5	9.7	68.0	11.0	76.5	12.4												
	12	39.0	6.18	48.5	7.35	54.0	8.56	57.8	9.4	61.5	9.9	68.0	11.2	76.5	12.6												
	14	39.0	6.28	48.5	7.46	54.0	8.69	57.8	9.6	61.5	10.3	68.0	11.7	76.5	13.1												
	16	39.0	6.38	48.5	7.60	54.0	8.9	57.8	9.9	61.5	10.4	68.0	11.9	76.5	13.4												
	18	39.0	6.49	48.5	7.73	54.0	9.1	57.8	9.7	61.5	10.4	68.0	12.1	76.5	13.8												
	20	39.0	6.59	48.5	7.87	54.0	9.2	57.8	9.9	61.5	10.7	68.0	12.1	76.5	13.8												
	21	39.0	6.65	48.5	7.94	54.0	9.3	57.8	10.0	61.5	10.8	68.0	12.3	76.5	14.3												
	23	39.0	6.77	48.5	8.09	54.0	9.5	57.8	10.4	61.5	11.3	68.0	13.2	76.5	15.3												
	25	39.0	6.89	48.5	8.41	54.0	10.1	57.8	11.1	61.5	12.0	68.0	14.1	76.5	16.3												
	29	39.0	7.28	48.5	9.0	54.0	10.8	57.8	11.8	61.5	12.8	68.0	15.1	76.5	17.5												
50 (375)	10	39.0	7.73	48.5	9.5	54.0	11.5	57.8	12.6	61.5	13.7	68.0	16.1	76.5	18.6												
	21	39.0	8.19	48.5	10.7	54.0	12.7	57.8	13.2	61.5	14.6	68.0	17.2	76.5	19.9												
	23	39.0	8.45	48.5	11.4	54.0	13.2	57.8	14.2	61.5	15.5	68.0	18.2	76.5	21.9												
	25	39.0	8.7	48.5	12.1	54.0	13.8	57.8	15.1	61.5	16.5	68.0	19.4	76.5	23.6												
	29	39.0	9.2	48.5	12.8	54.0	14.7	57.8	16.1	61.5	17.5	68.0	20.7	76.5	25.1												
	31	39.0	10.3	48.5	12.8	54.0	15.6	57.8	17.1	61.5	18.7	68.0	22.0	76.5	26.6												
	10	33.4	5.30	39.8	6.22	46.3	7.31	49.5	7.71	52.7	8.23	59.2	9.3	65.6	10.4												
	12	33.4	5.37	39.8	6.31	46.3	7.44	49.5	7.84	52.7	8.37	59.2	9.4	65.6	10.6												
	14	33.4	5.45	39.8	6.41	46.3	7.54	49.5	7.97	52.7	8.52	59.2	9.6	65.6	10.8												
	16	33.4	5.53	39.8	6.52	46.3	7.56	49.5	8.11	52.7	8.7	59.2	9.8	65.6	11.0												
18	33.4	5.62	39.8	6.63	46.3	7.70	49.5	8.26	52.7	8.8	59.2	10.0	65.6	11.2													
21	33.4	5.75	39.8	6.84	46.3	7.91	49.5	8.49	52.7	9.1	59.2	10.2	65.6	11.6													
23	33.4	5.75	39.8	6.84	46.3	7.91	49.5	8.49	52.7	9.1	59.2	10.2	65.6	11.6													
25	33.4	5.85	39.8	6.92	46.3	8.05	49.5	8.6	52.7	9.3	59.2	10.7	65.6	12.3													
29	33.4	5.94	39.8	7.04	46.3	8.37	49.5	9.1	52.7	9.8	59.2	11.4	65.6	13.1													
31	33.4	6.16	39.8	7.47	46.3	8.9	49.5	9.7	52.7	10.5	59.2	12.2	65.6	14.0													
33	33.4	6.53	39.8	7.92	46.3	9.5	49.5	10.3	52.7	11.2	59.2	13.0	65.6	15.0													
35	33.4	6.91	39.8	8.40	46.3	10.1	49.5	10.9	52.7	11.9	59.2	13.8	65.6	15.9													
39	33.4	7.31	39.8	8.9	46.3	10.7	49.5	11.6	52.7	12.6	59.2	14.7	65.6	17.0													
35	33.4	7.73	39.8	9.4	46.3	11.3	49.5	12.3	52.7	13.4	59.2	15.6	65.6	18.1													
37	33.4	8.17	39.8	10.0	46.3	12.0	49.5	13.1	52.7	14.2	59.2	16.6	65.6	19.2													
39	33.4	8.6	39.8	10.6	46.3	12.7	49.5	13.9	52.7	15.1	59.2	17.7	65.6	20.4													
10	27.8	4.55	33.2	5.25	38.6	6.12	41.3	6.63	43.9	6.84	48.3	7.07	54.7	8.35													
12	27.8	4.61	33.2	5.32	38.6	6.22	41.3	6.63	43.9	6.94																	

**[50Hz]**

424

## RXQ34PY1

[50Hz]

Combin- ation (%) (india)	Outdoor air temp. °CDB	Indoor air temp.						Cooling capacity					
		14.0°CWB			16.0°CWB			18.0°CWB			19.0°CWB		
		TW kW	TD kW	TD kW	TW kW	TD kW	TD kW	TW kW	TD kW	TD kW	TW kW	TD kW	TD kW
90 (765)	10	57.1	9.44	68.1	11.4	79.1	13.4	79.1	13.4	84.6	14.5	90.1	15.6
	12	57.1	9.60	68.1	11.8	79.1	13.9	79.1	13.9	84.6	14.8	90.1	15.9
	14	57.1	9.76	68.1	12.0	79.1	14.2	79.1	14.2	84.6	15.3	90.1	16.2
	16	57.1	9.94	68.1	12.2	79.1	14.5	79.1	14.5	84.6	15.6	90.1	16.8
	18	57.1	10.11	68.1	12.5	79.1	14.8	79.1	14.8	84.6	16.0	90.1	17.5
	20	57.1	10.30	68.1	12.7	79.1	15.0	79.1	15.0	84.6	16.5	90.1	18.1
	21	57.1	10.40	68.1	12.6	79.1	15.1	79.1	15.1	84.6	16.5	90.1	18.1
	23	57.1	10.6	68.1	13.1	79.1	15.6	79.1	15.6	84.6	17.7	90.1	20.7
	25	57.1	11.2	68.1	14.0	79.1	16.5	79.1	16.5	84.6	19.1	90.1	23.0
	29	57.1	12.6	68.1	15.9	79.1	19.6	79.1	19.6	84.6	21.6	90.1	27.5
80 (680)	10	50.8	8.38	60.5	10.03	70.3	11.8	75.2	12.7	80.1	13.6	89.9	15.5
	12	50.8	8.51	60.5	10.20	70.3	12.2	75.2	13.2	80.1	13.9	89.9	15.8
	14	50.8	8.65	60.5	10.38	70.3	12.7	75.2	13.7	80.1	14.1	89.9	16.1
	16	50.8	8.85	60.5	10.6	70.3	13.2	75.2	14.2	80.1	14.7	89.9	16.8
	18	50.8	9.05	60.5	10.9	70.3	13.7	75.2	14.7	80.1	15.0	89.9	17.4
	20	50.8	9.11	60.5	11.0	70.3	13.9	75.2	14.9	80.1	15.0	89.9	17.4
	21	50.8	9.19	60.5	11.1	70.3	13.1	75.2	14.1	80.1	15.3	89.9	18.0
	23	50.8	9.36	60.5	11.3	70.3	13.7	75.2	15.0	80.1	16.4	89.9	19.3
	25	50.8	9.67	60.5	12.0	70.3	14.6	75.2	16.0	80.1	17.5	89.9	20.6
	29	50.8	10.28	60.5	13.6	70.3	16.6	75.2	18.2	80.1	19.9	89.9	23.6
70 (595)	10	44.4	7.37	53.0	8.74	61.5	10.3	65.8	11.2	70.1	11.7	78.6	13.4
	12	44.4	7.48	53.0	8.89	61.5	10.38	65.8	11.4	70.1	12.0	78.6	13.6
	14	44.4	7.60	53.0	9.04	61.5	10.6	65.8	11.6	70.1	12.2	78.6	13.9
	16	44.4	7.72	53.0	9.19	61.5	10.8	65.8	11.8	70.1	12.4	78.6	14.1
	18	44.4	7.84	53.0	9.35	61.5	11.0	65.8	12.0	70.1	12.6	78.6	14.4
	20	44.4	7.98	53.0	9.52	61.5	11.2	65.8	12.0	70.1	12.9	78.6	14.7
	21	44.4	8.04	53.0	9.61	61.5	11.3	65.8	12.1	70.1	13.0	78.6	14.9
	23	44.4	8.18	53.0	9.79	61.5	11.5	65.8	12.5	70.1	13.6	78.6	15.0
	25	44.4	8.33	53.0	10.0	61.5	12.3	65.8	13.3	70.1	14.5	78.6	16.2
	29	44.4	9.35	53.0	11.5	61.5	13.9	65.8	15.2	70.1	16.6	78.6	19.4
60 (510)	10	38.1	6.41	45.4	7.52	52.7	5.7	56.4	6.4	60.1	7.4	67.4	8.2
	12	38.1	6.50	45.4	7.64	52.7	5.7	56.4	6.4	60.1	7.4	67.4	8.2
	14	38.1	6.59	45.4	7.76	52.7	5.7	56.4	6.4	60.1	7.4	67.4	8.2
	16	38.1	6.69	45.4	7.88	52.7	5.7	56.4	6.4	60.1	7.4	67.4	8.2
	18	38.1	6.80	45.4	8.01	52.7	5.7	56.4	6.4	60.1	7.4	67.4	8.2
	20	38.1	6.90	45.4	8.15	52.7	5.7	56.4	6.4	60.1	7.4	67.4	8.2
	21	38.1	6.96	45.4	8.22	52.7	5.7	56.4	6.4	60.1	7.4	67.4	8.2
	23	38.1	7.07	45.4	8.36	52.7	5.7	56.4	6.4	60.1	7.4	67.4	8.2
	25	38.1	7.19	45.4	8.52	52.7	5.7	56.4	6.4	60.1	7.4	67.4	8.2
	29	38.1	7.45	45.4	9.03	52.7	5.7	56.4	6.4	60.1	7.4	67.4	8.2
50 (425)	10	31.7	5.51	37.8	6.37	43.9	7.29	47.0	7.77	50.1	8.26	56.2	6.2
	12	31.7	5.58	37.8	6.46	43.9	7.41	47.0	7.90	50.1	8.40	56.2	6.3
	14	31.7	5.65	37.8	6.56	43.9	7.52	47.0	8.02	50.1	8.54	56.2	6.3
	16	31.7	5.73	37.8	6.66	43.9	7.64	47.0	8.15	50.1	8.68	56.2	6.3
	18	31.7	5.81	37.8	6.76	43.9	7.77	47.0	8.29	50.1	8.83	56.2	6.3
	20	31.7	5.89	37.8	6.86	43.9	7.90	47.0	8.43	50.1	8.98	56.2	6.3
	21	31.7	5.94	37.8	6.92	43.9	7.96	47.0	8.51	50.1	9.06	56.2	6.3
	23	31.7	6.02	37.8	7.03	43.9	8.10	47.0	8.66	50.1	9.23	56.2	6.3
	25	31.7	6.10	37.8	7.10	43.9	8.18	47.0	8.74	50.1	9.31	56.2	6.3
	29	31.7	6.57	37.8	7.84	43.9	9.24	47.0	9.98	50.1	10.7	56.2	6.3
40 (350)	10	25.0	4.44	30.0	5.00	35.0	5.00	35.0	5.00	40.0	5.00	45.0	5.00
	12	25.0	4.44	30.0	5.00	35.0	5.00	35.0	5.00	40.0	5.00	45.0	5.00
	14	25.0	4.44	30.0	5.00	35.0	5.00	35.0	5.00	40.0	5.00	45.0	5.00
	16	25.0	4.44	30.0	5.00	35.0	5.00	35.0	5.00	40.0	5.00	45.0	5.00
	18	25.0	4.44	30.0	5.00	35.0	5.00	35.0	5.00	40.0	5.00	45.0	5.00
	20	25.0	4.44	30.0	5.00	35.0	5.00	35.0	5.00	40.0	5.00	45.0	5.00
	21	25.0	4.44	30.0	5.00	35.0	5.00	35.0	5.00	40.0	5.00	45.0	5.00
	23	25.0	4.44	30.0	5.00	35.0	5.00	35.0	5.00	40.0	5.00	45.0	5.00
	25	25.0	4.44	30.0	5.00	35.0	5.00	35.0	5.00	40.0	5.00	45.0	5.00
	29	25.0	4.44	30.0	5.00	35.0	5.00	35.0	5.00	40.0	5.00	45.0	5.00

TC Total capacity : kW  
 PI Power input : kW(Comp.+Outdoor fan motor)  
 Note1: The above table shows the average value of conditions which may occur.

**[50Hz]**

TC  
PI  
Note1:

[illegible]

RXQ38PY1

[50Hz]

Combi- ation(%) (Capacity index)	Outdoor air temp. °C/DB	14.0°CWB						16.0°CWB						18.0°CWB						20.0°CWB						22.0°CWB						24.0°CWB											
		TC			PI			TC			PI			TC			PI			TC			PI			TC			PI			TC			PI			TC			PI		
		TC	PI	kW	TC	PI	kW	TC	PI	kW	TC	PI	kW	TC	PI	kW	TC	PI	kW	TC	PI	kW	TC	PI	kW	TC	PI	kW	TC	PI	kW	TC	PI	kW	TC	PI	kW						
90 (655)	10	63.7	9.4	76.0	11.4	88.3	13.4	94.4	14.5	101	15.6	113	17.8	125	20.1	18.8	14.0	18.8	14.0	18.8	14.0	18.8	14.0	18.8	14.0	18.8	14.0	18.8	14.0	18.8	14.0	18.8	14.0	18.8	14.0	18.8	14.0						
	12	63.7	9.6	76.0	11.6	88.3	13.9	94.4	15.1	101	16.2	113	18.5	125	20.8	19.0	14.4	19.0	14.4	19.0	14.4	19.0	14.4	19.0	14.4	19.0	14.4	19.0	14.4	19.0	14.4	19.0	14.4	19.0	14.4	19.0	14.4						
	14	63.7	9.8	76.0	11.8	88.3	14.4	94.4	15.6	101	16.8	113	19.3	125	21.6	19.6	14.8	19.6	14.8	19.6	14.8	19.6	14.8	19.6	14.8	19.6	14.8	19.6	14.8	19.6	14.8	19.6	14.8	19.6	14.8	19.6	14.8						
	16	63.7	10.1	76.0	12.2	88.3	14.8	94.4	16.1	101	17.3	113	20.1	125	22.4	19.9	15.1	19.9	15.1	19.9	15.1	19.9	15.1	19.9	15.1	19.9	15.1	19.9	15.1	19.9	15.1	19.9	15.1	19.9	15.1	19.9	15.1						
	18	63.7	10.3	76.0	12.5	88.3	15.1	94.4	16.4	101	17.6	113	20.4	125	22.8	20.0	15.3	20.0	15.3	20.0	15.3	20.0	15.3	20.0	15.3	20.0	15.3	20.0	15.3	20.0	15.3	20.0	15.3	20.0	15.3	20.0	15.3						
	20	63.7	10.6	76.0	12.8	88.3	15.6	94.4	16.7	101	17.9	113	20.7	125	23.2	20.2	15.5	20.2	15.5	20.2	15.5	20.2	15.5	20.2	15.5	20.2	15.5	20.2	15.5	20.2	15.5	20.2	15.5	20.2	15.5	20.2	15.5						
	22	63.7	10.8	76.0	13.1	88.3	16.1	94.4	17.0	101	18.2	113	21.1	125	23.6	20.4	15.7	20.4	15.7	20.4	15.7	20.4	15.7	20.4	15.7	20.4	15.7	20.4	15.7	20.4	15.7	20.4	15.7	20.4	15.7	20.4	15.7						
	24	63.7	11.1	76.0	13.4	88.3	16.6	94.4	17.3	101	18.5	113	21.4	125	24.0	20.6	15.9	20.6	15.9	20.6	15.9	20.6	15.9	20.6	15.9	20.6	15.9	20.6	15.9	20.6	15.9	20.6	15.9	20.6	15.9	20.6	15.9						
	26	63.7	11.4	76.0	13.7	88.3	17.1	94.4	17.6	101	18.8	113	21.7	125	24.4	20.8	16.1	20.8	16.1	20.8	16.1	20.8	16.1	20.8	16.1	20.8	16.1	20.8	16.1	20.8	16.1	20.8	16.1	20.8	16.1	20.8	16.1						
	28	63.7	11.7	76.0	14.0	88.3	17.6	94.4	17.9	101	19.1	113	22.0	125	24.8	21.0	16.3	21.0	16.3	21.0	16.3	21.0	16.3	21.0	16.3	21.0	16.3	21.0	16.3	21.0	16.3	21.0	16.3	21.0	16.3	21.0	16.3						
80 (760)	10	56.6	8.51	67.5	10.7	78.5	12.0	83.9	12.9	89.4	13.9	100	15.3	111	17.8	16.1	11.1	16.1	11.1	16.1	11.1	16.1	11.1	16.1	11.1	16.1	11.1	16.1	11.1	16.1	11.1	16.1	11.1	16.1	11.1	16.1	11.1						
	12	56.6	8.51	67.5	10.7	78.5	12.2	83.9	13.2	89.4	14.1	100	15.4	111	18.0	16.2	11.2	16.2	11.2	16.2	11.2	16.2	11.2	16.2	11.2	16.2	11.2	16.2	11.2	16.2	11.2	16.2	11.2	16.2	11.2	16.2	11.2						
	14	56.6	8.51	67.5	10.7	78.5	12.4	83.9	13.4	89.4	14.4	100	15.6	111	18.2	16.4	11.4	16.4	11.4	16.4	11.4	16.4	11.4	16.4	11.4	16.4	11.4	16.4	11.4	16.4	11.4	16.4	11.4	16.4	11.4	16.4	11.4						
	16	56.6	8.51	67.5	10.7	78.5	12.6	83.9	13.6	89.4	14.6	100	15.8	111	18.4	16.6	11.6	16.6	11.6	16.6	11.6	16.6	11.6	16.6	11.6	16.6	11.6	16.6	11.6	16.6	11.6	16.6	11.6	16.6	11.6	16.6	11.6						
	18	56.6	8.51	67.5	10.7	78.5	12.8	83.9	13.8	89.4	14.8	100	16.0	111	18.6	16.8	11.8	16.8	11.8	16.8	11.8	16.8	11.8	16.8	11.8	16.8	11.8	16.8	11.8	16.8	11.8	16.8	11.8	16.8	11.8	16.8	11.8						
	20	56.6	8.51	67.5	10.7	78.5	13.0	83.9	14.0	89.4	15.0	100	16.2	111	18.8	17.0	12.0	17.0	12.0	17.0	12.0	17.0	12.0	17.0	12.0	17.0	12.0	17.0	12.0	17.0	12.0	17.0	12.0	17.0	12.0	17.0	12.0						
	22	56.6	8.51	67.5	10.7	78.5	13.2	83.9	14.2	89.4	15.2	100	16.4	111	19.0	17.2	12.2	17.2	12.2	17.2	12.2	17.2	12.2	17.2	12.2	17.2	12.2	17.2	12.2	17.2	12.2	17.2	12.2	17.2	12.2	17.2	12.2						
	24	56.6	8.51	67.5	10.7	78.5	13.4	83.9	14.4	89.4	15.4	100	16.6	111	19.2	17.4	12.4	17.4	12.4	17.4	12.4	17.4	12.4	17.4	12.4	17.4	12.4	17.4	12.4	17.4	12.4	17.4	12.4	17.4	12.4	17.4	12.4						
	26	56.6	8.51	67.5	10.7	78.5	13.6	83.9	14.6	89.4	15.6	100	16.8	111	19.4	17.6	12.6	17.6	12.6	17.6	12.6	17.6	12.6	17.6	12.6	17.6	12.6	17.6	12.6	17.6	12.6	17.6	12.6	17.6	12.6	17.6	12.6						
	28	56.6	8.51	67.5	10.7	78.5	13.8	83.9	14.8	89.4	15.8	100	17.0	111	19.6	17.8	12.8	17.8	12.8	17.8	12.8	17.8	12.8	17.8	12.8	17.8	12.8	17.8	12.8	17.8	12.8	17.8	12.8	17.8	12.8	17.8	12.8						
70 (665)	10	49.6	7.37	59.1	8.74	68.7	10.2	73.4	11.0	78.2	11.7	87.8	13.4	97.3	15.0	13.5	10.3	13.5	10.3	13.5	10.3	13.5	10.3	13.5	10.3	13.5	10.3	13.5	10.3	13.5	10.3	13.5	10.3	13.5	10.3	13.5	10.3						
	12	49.6	7.40	59.1	8.89	68.7	10.4	73.4	11.2	78.2	12.0	87.8	13.6	97.3	15.3	13.6	10.4	13.6	10.4	13.6	10.4	13.6	10.4	13.6	10.4	13.6	10.4	13.6	10.4	13.6	10.4	13.6	10.4	13.6	10.4	13.6	10.4						
	14	49.6	7.46	59.1	9.04	68.7	10.6	73.4	11.4	78.2	12.2	87.8	13.9	97.3	15.6	13.7	10.6	13.7	10.6	13.7	10.6	13.7	10.6	13.7	10.6	13.7	10.6	13.7	10.6	13.7	10.6	13.7	10.6	13.7	10.6	13.7	10.6						
	16	49.6	7.52	59.1	9.19	68.7	10.8	73.4	11.6	78.2	12.4	87.8	14.1	97.3	15.9	13.8	10.8	13.8	10.8	13.8	10.8	13.8	10.8	13.8	10.8	13.8	10.8	13.8	10.8	13.8	10.8	13.8	10.8	13.8	10.8	13.8	10.8						
	18	49.6	7.58	59.1	9.34	68.7	11.0	73.4	11.8	78.2	12.6	87.8	14.4	97.3	16.2	13.9	11.0	13.9	11.0	13.9	11.0	13.9	11.0	13.9	11.0	13.9	11.0	13.9	11.0	13.9	11.0	13.9	11.0	13.9	11.0	13.9	11.0						
	20	49.6	7.64	59.1	9.49	68.7	11.2	73.4	12.0	78.2	12.8	87.8	14.7	97.3	16.5	14.0	11.2	14.0	11.2	14.0	11.2	14.0	11.2	14.0	11.2	14.0	11.2	14.0	11.2	14.0	11.2	14.0	11.2	14.0	11.2	14.0	11.2						
	22	49.6	7.70	59.1	9.64	68.7	11.4	73.4	12.2	78.2	13.0	87.8	15.0	97.3	16.8	14.1	11.4	14.1	11.4	14.1	11.4	14.1	11.4	14.1	11.4	14.1	11.4	14.1	11.4	14.1	11.4	14.1	11.4	14.1	11.4	14.1							
	24	49.6	7.76	59.1	9.79	68.7	11.6	73.4	12.4	78.2	13.2	87.8	15.3	97.3	17.1	14.2	11.6	14.2	11.6	14.2	11.6	14.2	11.6	14.2	11.6	14.2	11.6	14.2	11.6	14.2	11.6	14.2	11.6	14.2	11.6	14.2							
	26	49.6	7.82	59.1	9.94	68.7	11.8	73.4	12.6	78.2	13.4	87.8	15.6	97.3	17.4	14.3	11.8	14.3	11.8	14.3	11.8	14.3	11.8	14.3	11.8	14.3	11.8	14.3	11.8	14.3	11.8	14.3	11.8	14.3	11.8	14.3							
	28	49.6	7.88	59.1	10.09	68.7	12.0	73.4	12.8	78.2	13.6	87.8	15.9	97.3	17.7	14.4	12.0	14.4	12.0	14.4	12.0	14.4	12.0	14.4	12.0	14.4	12.0	14.4	12.0	14.4	12.0	14.4	12.0	14.4	12.0	14.4							
60 (570)	10	42.5	6.50	50.7	7.64	58.8	8.85	62.9	9.5	67.0	10.1	75.2	11.3	83.4	12.6	12.6	11.3	12.6	11.3	12.6	11.3	12.6	11.3	83.4	12.6	12.6	11.3	12.6	11.3	12.6	11.3	12.6	11.3	12.6	11.3	12.6	11.3						
	12	42.5	6.50	50.7	7.76	58.8	9.00	62.9	9.6	67.0	10.3	75.2	11.5	83.4	12.8	12.8	11.5	12.8	11.5	12.8	11.5	83.4	12.8	12.8	11.5	12.8	11.5	12.8	11.5	12.8	11.5	12.8	11.5	12.8	11.5	12.8	11.5						
	14	42.5	6.59	50.7	7.88	58.8	9.15	62.9	9.8	67.0	10.5	75.2	11.7	83.4	13.1	12.9	11.7	12.9	11.7	12.9	11.7	83.4	13.1	12.9	11.7	12.9	11.7	12.9	11.7	12.9	11.7	12.9	11.7	12.9	11.7	12.9	11.7						
	16	42.5	6.80	50.7	8.01	58.8	9.3	62.9	10.0	67.0	10.7	75.2	11.9	83.4	13.3	13.0	11.9	13.0	11.9	13.0	11.9	83.4	13.3	13.0	11.9	13.0	11.9	13.0	11.9	13.0	11.9	13.0	11.9	13.0	11.9	13.0	11.9						
	18	42.5	6.90	50.7	8.15	58.8	9.5	62.9	10.2	67.0	10.9	75.2	12.1	83.4	13.6	13.1	12.1	13.1	12.1	13.1	12.1	83.4	13.6	13.1	12.1	13.1	12.1	13.1	12.1	13.1	12.1	13.1	12.1	13.1	12.1	13.1	12.1						
	20	42.5	6.96	50.7	8.22	58.8	9.6	62.9	10.3	67.0	11.0	75.2	12.3	83.4	13.9	13.2	12.3	13.2	12.3	13.2	12.3	83.4																					

Combin. air temp. Capacity (index)		14.0°CWB						16.0°CWB						18.0°CWB						Indoor air temp. 19.0°CWB						20.0°CWB						22.0°CWB						24.0°CWB																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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**[50Hz]**

TC  
PI  
Note 1:

[illegible]

**[50Hz]**

TC  
PI  
Note 1:

TC  
PI  
Note1:



**[50Hz]**

TC  
PI  
Note1:  
Total capacity ; kW  
Power Input ; kW(Comp.+Outdoor fan motor)  
The above table shows the average value of conditions which may occur.

RXQ46PY1

[50Hz]

Combi- ation (Capacity Index)	Outdoor air temp. °C/DB	Indoor air temp.												24.0°CWB																		
		14.0°CWB						16.0°CWB								18.0°CWB						20.0°CWB						22.0°CWB				
		TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	
90 (1035)	10	76.5	12.6	91.3	15.1	106	17.9	113	18.3	121	20.7	136	23.7	150	26.7																	
	12	76.5	12.8	91.3	15.4	106	18.2	113	19.6	121	21.1	136	24.1	150	27.2																	
	14	76.5	13.0	91.3	15.7	106	18.5	113	20.0	121	21.5	136	24.6	150	27.7																	
	16	76.5	13.2	91.3	16.0	106	18.9	113	20.4	121	21.9	136	25.1	150	28.2																	
	18	76.5	13.7	91.3	16.8	106	19.3	113	20.2	121	22.4	136	25.6	148	28.1																	
	20	76.5	13.9	91.3	17.0	106	19.5	113	20.2	121	22.4	136	25.6	148	28.1																	
	21	76.5	13.8	91.3	16.8	106	20.0	113	22.0	121	24.0	136	26.5	145	31.2																	
	23	76.5	14.1	91.3	17.5	106	21.4	113	23.5	121	25.8	136	30.5	143	32.6																	
	25	76.5	14.8	91.3	18.6	106	22.9	113	25.2	121	27.6	136	32.7	141	34.0																	
	29	76.5	15.8	91.3	19.9	106	24.4	113	28.7	121	29.5	136	35.0	139	35.4																	
80 (920)	10	68.0	11.1	81.1	13.3	94.2	15.7	107	18.1	124	20.7	134	23.3	142	26.3																	
	12	68.0	11.3	81.1	13.6	94.2	16.3	107	17.2	107	18.5	120	21.1	134	23.7																	
	14	68.0	11.5	81.1	13.8	94.2	16.6	107	17.5	107	18.8	120	21.5	134	24.2																	
	16	68.0	11.9	81.1	14.1	94.2	16.9	107	17.8	107	19.2	120	21.9	134	24.7																	
	18	68.0	12.1	81.1	14.6	94.2	17.2	107	18.2	107	19.9	120	22.3	134	25.1																	
	21	68.0	12.2	81.1	14.7	94.2	17.4	107	18.7	107	20.3	120	23.9	134	27.9																	
	23	68.0	12.5	81.1	15.0	94.2	18.2	107	19.9	107	21.8	120	25.7	134	29.9																	
	25	68.0	13.7	81.1	15.0	94.2	19.4	107	21.8	107	23.3	120	27.5	134	31.2																	
	29	68.0	14.5	81.1	18.1	94.2	20.7	107	23.8	107	26.9	120	30.3	134	34.2																	
	31	68.0	15.4	81.1	19.3	94.2	23.6	107	25.9	107	28.3	120	33.5	132	38.0																	
70 (805)	10	59.5	9.8	71.0	11.6	82.5	14.6	93.9	16.2	105	18.4	117	21.1	127	24.1																	
	12	59.5	9.9	71.0	11.8	82.5	14.8	93.9	16.5	105	18.5	117	21.2	127	24.2																	
	14	59.5	10.3	71.0	12.0	82.5	15.3	93.9	16.5	105	18.8	117	21.1	127	24.1																	
	16	59.5	10.4	71.0	12.4	82.5	14.8	93.9	16.8	105	19.1	117	21.5	127	24.1																	
	18	59.5	10.6	71.0	12.7	82.5	15.6	93.9	17.1	105	19.5	117	22.1	127	24.1																	
	21	59.5	10.9	71.0	13.0	82.5	15.3	93.9	17.3	105	19.8	117	22.9	127	24.1																	
	23	59.5	11.1	71.0	13.5	82.5	16.3	93.9	18.1	105	19.2	117	24.6	127	26.3																	
	25	59.5	11.7	71.0	14.4	82.5	17.4	93.9	19.4	105	20.5	117	26.3	127	28.1																	
	29	59.5	12.4	71.0	15.3	82.5	18.7	93.9	20.7	105	22.4	117	28.3	127	30.0																	
	31	59.5	13.2	71.0	16.3	82.5	19.7	93.9	22.0	105	25.8	117	30.0	127	32.0																	
60 (690)	10	51.0	8.52	60.9	10.0	70.7	11.6	82.5	14.6	93.9	16.2	105	18.4	117	21.1																	
	12	51.0	8.6	60.9	10.2	70.7	11.8	82.5	14.8	93.9	16.5	105	18.8	117	21.2																	
	14	51.0	8.77	60.9	10.5	70.7	12.0	82.5	15.1	93.9	16.8	105	19.1	117	21.5																	
	16	51.0	9.0	60.9	10.7	70.7	12.4	82.5	15.6	93.9	17.1	105	19.5	117	22.1																	
	18	51.0	9.2	60.9	10.8	70.7	12.5	82.5	15.7	93.9	17.2	105	19.6	117	22.2																	
	20	51.0	9.4	60.9	11.0	70.7	13.0	82.5	16.1	93.9	17.5	105	19.9	117	22.5																	
	23	51.0	9.6	60.9	11.3	70.7	13.5	82.5	16.6	93.9	18.0	105	20.2	117	22.8																	
	25	51.0	9.9	60.9	12.0	70.7	14.3	82.5	17.6	93.9	18.6	105	20.6	117	23.1																	
	29	51.0	10.5	60.9	12.7	70.7	15.2	82.5	18.6	93.9	19.3	105	21.1	117	23.6																	
	31	51.0	11.1	60.9	13.5	70.7	16.2	82.5	19.6	93.9	20.5	117	24.6	127	26.3																	
50 (575)	10	42.5	7.32	50.7	8.68	59.9	9.9	69.9	11.3	75.6	13.9	80.5	14.9	90.3	17.2																	
	12	42.5	7.42	50.7	8.72	59.9	10.0	69.9	11.4	75.6	14.0	80.5	15.0	90.3	17.3																	
	14	42.5	7.52	50.7	8.85	59.9	10.3	69.9	11.5	75.6	14.1	80.5	15.1	90.3	17.4																	
	16	42.5	7.62	50.7	9.0	59.9	10.6	69.9	11.6	75.6	14.2	80.5	15.2	90.3	17.5																	
	18	42.5	7.73	50.7	9.1	59.9	10.9	69.9	11.7	75.6	14.3	80.5	15.3	90.3	17.6																	
	20	42.5	7.84	50.7	9.2	59.9	11.0	69.9	11.8	75.6	14.4	80.5	15.4	90.3	17.7																	
	21	42.5	7.89	50.7	9.2	59.9	10.6	69.9	11.3	75.6	14.0	80.5	15.0	90.3	17.2																	
	23	42.5	8.01	50.7	9.4	59.9	10.8	69.9	11.5	75.6	14.2	80.5	15.2	90.3	17.4																	
	25	42.5	8.13	50.7	9.5	59.9	11.0	69.9	11.6	75.6	14.3	80.5	15.3	90.3	17.5																	
	27	42.5	8.27	50.7	9.6	59.9	11.2	69.9	11.7	75.6	14.4	80.5	15.4	90.3	17.6																	
31	42.5	9.2	50.7	11.0	59.9	13.0	69.9	14.1	75.6	15.2	80.5	16.1	90.3	18.6																		
33	42.5	9.8	50.7	11.7	59.9	13.8	69.9	14.9	75.6	16.1	80.5	16.7	90.3	19.7																		
35	42.5	10.3	50.7	12.4	59.9	14.6	69.9	15.8	75.6	16.8	80.5	17.1	90.3	20.6																		
37	42.5	10.9	50.7	13.1	59.9	15.4	69.9	16.8	75.6	17.7	80.5	18.1	90.3	21.5																		
39	42.5	11.4	50.7	13.8	59.9	16.5	69.9	17.7	75.6	18.7	80.5	19.2	90.3	22.2																		

TC Total capacity : kW  
PI Power Input : kW(Comp +Outdoor fan motor)  
Note1: The above table shows the average value of conditions which may occur.

**[50Hz]**

TC  
PI  
Note1:

[illegible]

## RXQ50PY1

[50Hz]

Combi- ation (Capacity Index)	Outdoor air temp. °C/DB	14.0°CWB												16.0°CWB												18.0°CWB												20.0°CWB												22.0°CWB												24.0°CWB																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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		TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW

## RXQ52PY1

[50Hz]

Combi- ation (%) (Capacity index)	Outdoor air temp. °C/DB	Indoor air temp.												Cooling capacity			
		14.0°CWB				16.0°CWB				18.0°CWB				20.0°CWB			
		TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC	PI	TW	TC
90 (1170)	10	86.9	14.5	103.6	17.5	120	20.6	129	22.3	137	25.3	144	27.3	154	29.3	164	30.8
	12	86.9	15.0	103.6	18.1	120	21.0	129	22.9	137	25.9	144	27.9	154	29.9	164	31.4
	14	86.9	15.5	103.6	18.5	120	21.4	129	23.3	137	26.3	144	28.3	154	30.3	164	32.0
	16	86.9	15.9	103.6	18.9	120	21.8	129	23.7	137	26.7	144	28.7	154	30.7	164	32.6
	18	86.9	16.3	103.6	19.3	120	22.2	129	24.1	137	27.1	144	29.1	154	31.1	164	33.2
	20	86.9	16.7	103.6	19.7	120	22.6	129	24.5	137	27.5	144	29.5	154	31.5	164	33.8
	22	86.9	17.1	103.6	20.1	120	23.0	129	24.9	137	27.9	144	29.9	154	31.9	164	34.4
	24	86.9	17.5	103.6	20.5	120	23.4	129	25.3	137	28.3	144	30.3	154	32.3	164	35.0
	26	86.9	17.9	103.6	20.9	120	23.8	129	25.7	137	28.7	144	30.7	154	32.7	164	35.6
	28	86.9	18.3	103.6	21.3	120	24.2	129	26.1	137	29.1	144	31.1	154	33.1	164	36.2
130 (1690)	10	86.9	14.5	103.6	17.5	120	20.6	129	22.3	137	25.3	144	27.3	154	29.3	164	30.8
	12	86.9	15.0	103.6	18.1	120	21.0	129	22.9	137	25.9	144	27.9	154	29.9	164	31.4
	14	86.9	15.5	103.6	18.5	120	21.4	129	23.3	137	26.3	144	28.3	154	30.3	164	32.0
	16	86.9	15.9	103.6	18.9	120	21.8	129	23.7	137	26.7	144	28.7	154	30.7	164	32.6
	18	86.9	16.3	103.6	19.3	120	22.2	129	24.1	137	27.1	144	29.1	154	31.1	164	33.2
	20	86.9	16.7	103.6	19.7	120	22.6	129	24.5	137	27.5	144	29.5	154	31.5	164	33.8
	22	86.9	17.1	103.6	20.1	120	23.0	129	24.9	137	27.9	144	29.9	154	31.9	164	34.4
	24	86.9	17.5	103.6	20.5	120	23.4	129	25.3	137	28.3	144	30.3	154	32.3	164	35.0
	26	86.9	17.9	103.6	20.9	120	23.8	129	25.7	137	28.7	144	30.7	154	32.7	164	35.6
	28	86.9	18.3	103.6	21.3	120	24.2	129	26.1	137	29.1	144	31.1	154	33.1	164	36.2
50 (650)	10	86.9	14.5	103.6	17.5	120	20.6	129	22.3	137	25.3	144	27.3	154	29.3	164	30.8
	12	86.9	15.0	103.6	18.1	120	21.0	129	22.9	137	25.9	144	27.9	154	29.9	164	31.4
	14	86.9	15.5	103.6	18.5	120	21.4	129	23.3	137	26.3	144	28.3	154	30.3	164	32.0
	16	86.9	15.9	103.6	18.9	120	21.8	129	23.7	137	26.7	144	28.7	154	30.7	164	32.6
	18	86.9	16.3	103.6	19.3	120	22.2	129	24.1	137	27.1	144	29.1	154	31.1	164	33.2
	20	86.9	16.7	103.6	19.7	120	22.6	129	24.5	137	27.5	144	29.5	154	31.5	164	33.8
	22	86.9	17.1	103.6	20.1	120	23.0	129	24.9	137	27.9	144	29.9	154	31.9	164	34.4
	24	86.9	17.5	103.6	20.5	120	23.4	129	25.3	137	28.3	144	30.3	154	32.3	164	35.0
	26	86.9	17.9	103.6	20.9	120	23.8	129	25.7	137	28.7	144	30.7	154	32.7	164	35.6
	28	86.9	18.3	103.6	21.3	120	24.2	129	26.1	137	29.1	144	31.1	154	33.1	164	36.2
100 (1300)	10	86.9	14.5	103.6	17.5	120	20.6	129	22.3	137	25.3	144	27.3	154	29.3	164	30.8
	12	86.9	15.0	103.6	18.1	120	21.0	129	22.9	137	25.9	144	27.9	154	29.9	164	31.4
	14	86.9	15.5	103.6	18.5	120	21.4	129	23.3	137	26.3	144	28.3	154	30.3	164	32.0
	16	86.9	15.9	103.6	18.9	120	21.8	129	23.7	137	26.7	144	28.7	154	30.7	164	32.6
	18	86.9	16.3	103.6	19.3	120	22.2	129	24.1	137	27.1	144	29.1	154	31.1	164	33.2
	20	86.9	16.7	103.6	19.7	120	22.6	129	24.5	137	27.5	144	29.5	154	31.5	164	33.8
	22	86.9	17.1	103.6	20.1	120	23.0	129	24.9	137	27.9	144	29.9	154	31.9	164	34.4
	24	86.9	17.5	103.6	20.5	120	23.4	129	25.3	137	28.3	144	30.3	154	32.3	164	35.0
	26	86.9	17.9	103.6	20.9	120	23.8	129	25.7	137	28.7	144	30.7	154	32.7	164	35.6
	28	86.9	18.3	103.6	21.3	120	24.2	129	26.1	137	29.1	144	31.1	154	33.1	164	36.2

TC Total capacity : kW  
 PI Power Input : kW (Comp + Outdoor fan motor)  
 Note: The above table shows the average value of conditions which may occur.

**[50Hz]**

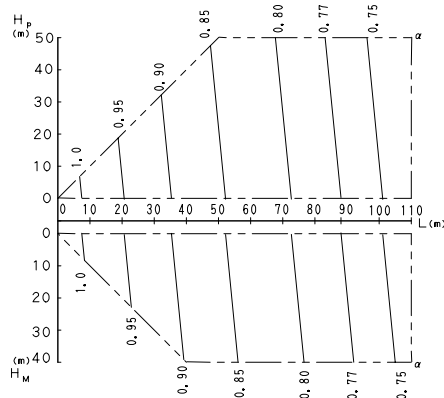
TC  
PFI  
Note1:  
Total capacity : kW  
Power Input : kW(Comp.+Outdoor fan motor)  
The above table shows the average value of conditions which may occur.

13

## 8.2 Capacity Correction Factor (RXQ-P)

### RXQ5PY1

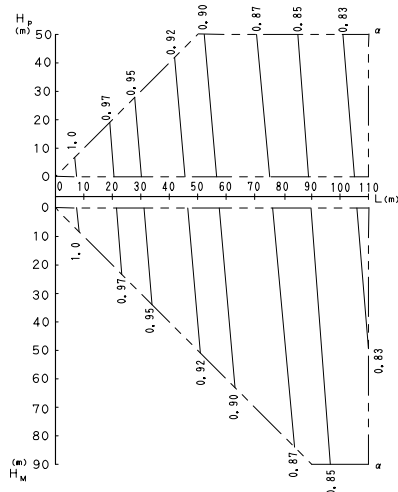
1. Rate of change in cooling capacity



C: 3D056913

### RXQ8PY1

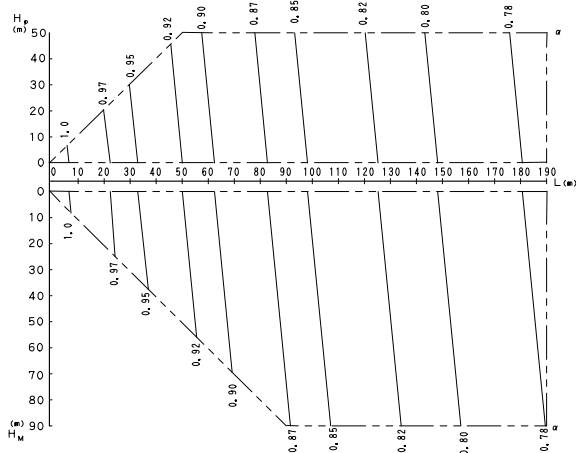
1. Rate of change in cooling capacity



C: 3D056914

### RXQ10PY1

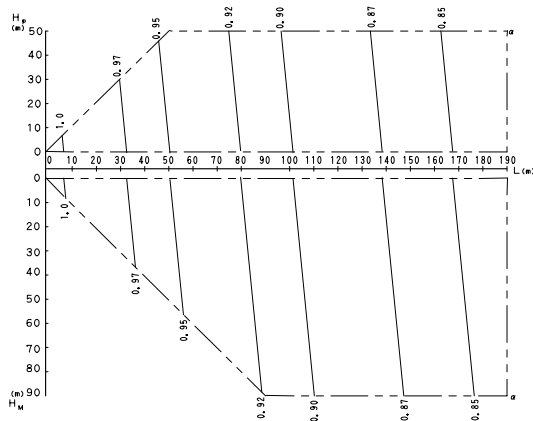
1. Rate of change in cooling capacity



C: 3D056915

## RXQ12PY1 / RXQ14PY1 / RXQ24PY1 / RXQ36PY1

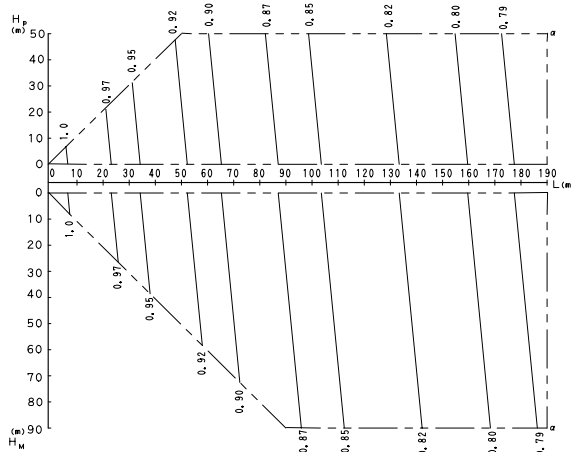
1. Rate of change in cooling capacity



C: 3D056902

## RXQ16PY1

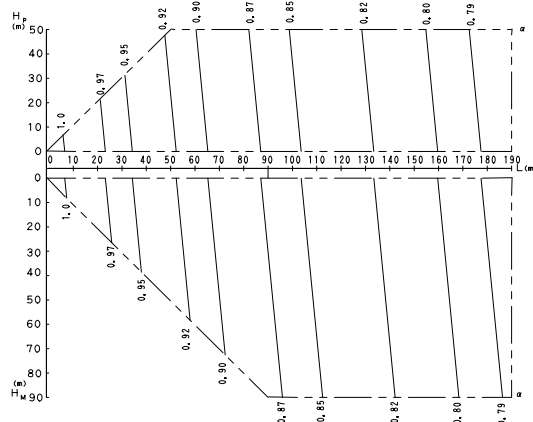
1. Rate of change in cooling capacity



C: 3D056903

## RXQ18PY1 / RXQ26PY1 / RXQ28PY1 / RXQ30PY1 / RXQ38PY1 / RXQ40PY1 / RXQ42PY1 / RXQ44PY1

1. Rate of change in cooling capacity

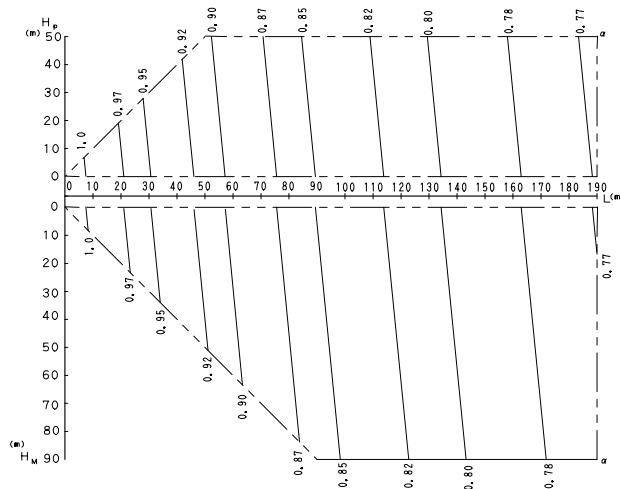


C: 3D056904



## RXQ22PY1

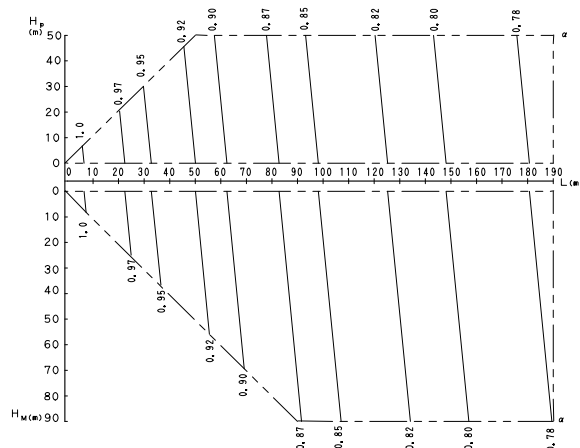
## 1. Rate of change in cooling capacity



C: 3D056905

## RXQ20PY1/ RXQ32PY1 / RXQ34PY1

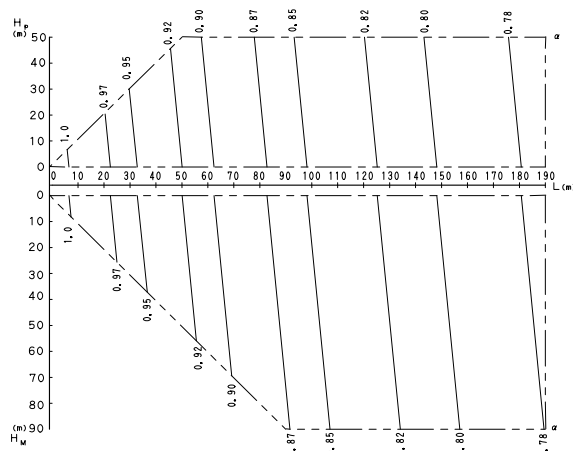
## 1. Rate of change in cooling capacity



C: 3D056906

## RXQ46PY1

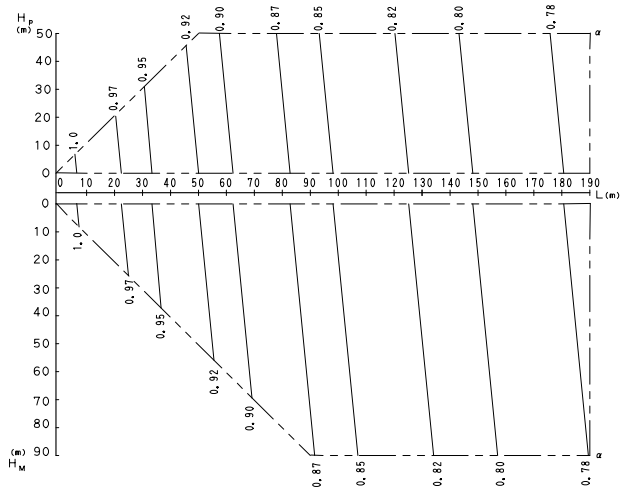
## 1. Rate of change in cooling capacity



C: 3D056907

RXQ48PY1

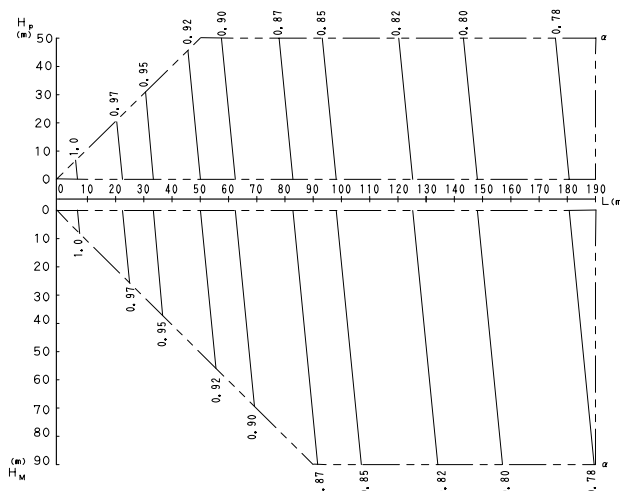
1. Rate of change in cooling capacity



C: 3D056908

RXQ50PY1

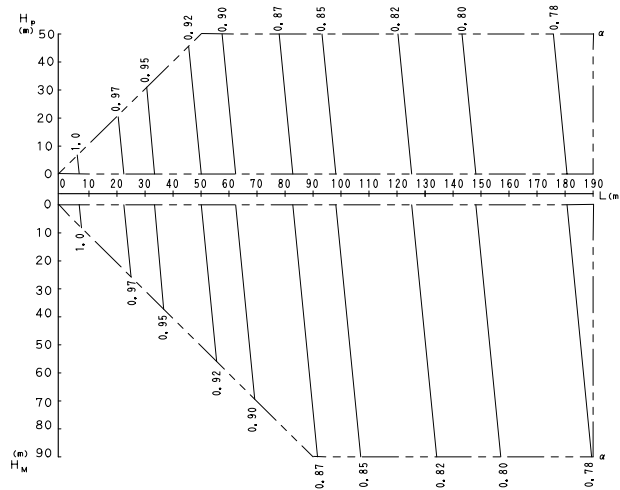
1. Rate of change in cooling capacity



C: 3D056909

RXQ52PY1

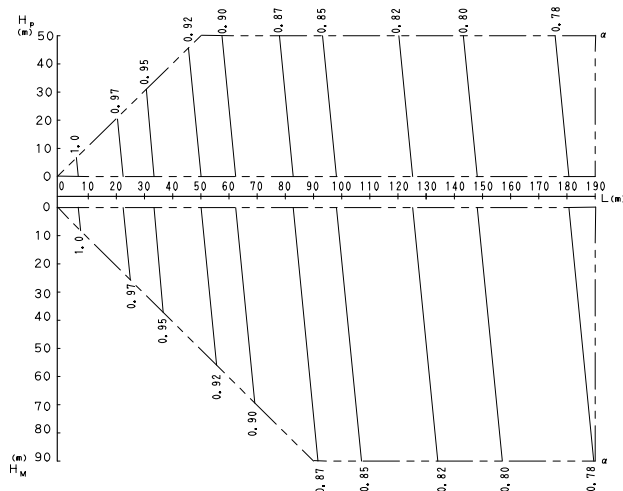
1. Rate of change in cooling capacity



C: 3D056910

## RXQ54PY1

## 1. Rate of change in cooling capacity



C: 3D056911

## [Explanation of symbols]

$H_P$  : Level difference (m) between indoor and outdoor units where indoor unit in inferior position

$H_M$  : Level difference (m) between indoor and outdoor units where indoor unit in superior position

$L$  : Equivalent pipe length (m)

$\alpha$  : Rate of change in cooling/heating capacity

## [Diameters of pipes (Standard size)]

Model	Gas	Liquid
RXQ5PY1	φ15.9	φ9.5
RXQ8PY1	φ19.1	φ9.5
RXQ10PY1	φ22.2	φ9.5
RXQ12PY1	φ28.6	φ12.7
RXQ14PY1	φ28.6	φ12.7
RXQ16PY1	φ28.6	φ12.7

Model	Gas	Liquid
RXQ18PY1	φ28.6	φ15.9
RXQ20PY1	φ28.6	φ15.9
RXQ22PY1	φ28.6	φ15.9
RXQ24PY1	φ34.9	φ15.9
RXQ26PY1	φ34.9	φ19.1
RXQ28PY1	φ34.9	φ19.1

Model	Gas	Liquid
RXQ30PY1	φ34.9	φ19.1
RXQ32PY1	φ34.9	φ19.1
RXQ34PY1	φ34.9	φ19.1
RXQ36PY1	φ41.3	φ19.1
RXQ38PY1	φ41.3	φ19.1
RXQ40PY1	φ41.3	φ19.1

Model	Gas	Liquid
RXQ42PY1	φ41.3	φ19.1
RXQ44PY1	φ41.3	φ19.1
RXQ46PY1	φ41.3	φ19.1
RXQ48PY1	φ41.3	φ19.1
RXQ50PY1	φ41.3	φ19.1
RXQ52PY1	φ41.3	φ19.1
RXQ54PY1	φ41.3	φ19.1

## [ Notes ]

- These figures illustrate the rate of change in capacity of a standard indoor unit system at maximum load (with the thermostat set to maximum) under standard conditions. Moreover, under partial load conditions there is only a minor deviation from the rate of change in capacity shown in the above figures.
- With this outdoor unit, evaporating pressure constant control when cooling, and condensing pressure constant control when heating is carried out.
- Method of calculating A/C (cooling/heating) capacity:  
The maximum A/C capacity of the system will be either the total A/C capacity of the indoor units obtained from capacity characteristic table or the maximum A/C capacity of outdoor units as mentioned below, whichever smaller.

## Calculating A/C capacity of outdoor units

- Condition: Indoor unit combination ratio does not exceed 100%.

$$\text{Maximum A/C capacity of outdoor units} = \left[ \begin{array}{l} \text{A/C capacity of outdoor units obtained from capacity characteristic table at the 100\% combination} \\ \times \text{Capacity change rate due to piping length to the farthest indoor unit} \end{array} \right]$$

- Condition: Indoor unit combination ratio exceeds 100%.

$$\text{Maximum A/C capacity of outdoor units} = \left[ \begin{array}{l} \text{A/C capacity of outdoor units obtained from capacity characteristic table at the combination} \\ \times \text{Capacity change rate due to piping length to the farthest indoor unit} \end{array} \right]$$

- When overall equivalent pipe length is 90m or more, the diameter of the main gas and liquid pipes (outdoor unit-branch sections) must be increased.  
When level difference is 50m or more, the diameter of the main liquid pipe (outdoor unit-branch sections) must be increased.

■ Diameter of above case

Model	Gas	Liquid
RXQ5PY1	φ19.1	Not Increased
RXQ8PY1	φ22.2	φ12.7
RXQ10PY1	φ25.4*	φ12.7
RXQ12PY1	Not Increased	φ15.9
RXQ14PY1	Not Increased	φ15.9
RXQ16PY1	φ31.8	φ15.9

Model	Gas	Liquid
RXQ42PY1	Not Increased	φ22.2
RXQ44PY1	Not Increased	φ22.2
RXQ46PY1	Not Increased	φ22.2
RXQ48PY1	Not Increased	φ22.2
RXQ50PY1	Not Increased	φ22.2
RXQ52PY1	Not Increased	φ22.2
RXQ54PY1	Not Increased	φ22.2

Model	Gas	Liquid
RXQ18PY1	φ31.8	φ19.1
RXQ20PY1	φ31.8	φ19.1
RXQ22PY1	φ31.8	φ19.1
RXQ24PY1	Not Increased	φ19.1
RXQ26PY1	φ38.1*	φ22.2
RXQ28PY1	φ38.1*	φ22.2

\*If available on the site, use this size. Otherwise it can not be increased.

(Unit: mm)

Temper grade	O Type				1/2 Type							
Outer diameter	φ6.4	φ9.5	φ12.7	φ15.9	φ19.1	φ22.2	φ25.4	φ28.6	φ31.8	φ34.9	φ38.1	φ41.3
Minimum Wall Thickness	0.80	0.80	0.80	0.99	0.80	0.80	0.88	0.99	1.10	1.21	1.32	1.43

5. Read cooling / heating capacity rate of change in the above figures based on the following equivalent length.

Overall equivalent length=  
(Equivalent length to main pipe)×Correction factor+(Equivalent length after branching)

Choose a correction factor from the following table.

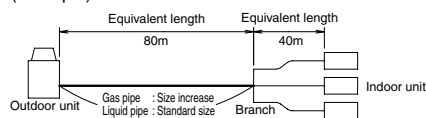
When cooling capacity is calculated : gas pipe size

Rate of change (object piping)	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5

Rate of change (object piping)	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5

Rate of change (object piping)	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5

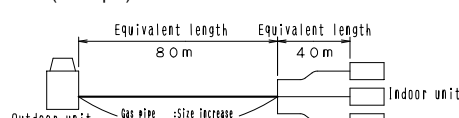
(Example) RXQ5PY1



In the above case  
(Cooling) Overall equivalent length=80m×0.5+40m=80m

The rate of change in  
cooling capacity when Hp=0m is thus approximately 0.79

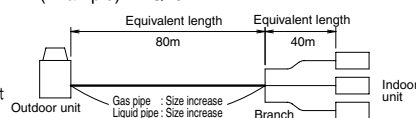
(Example) RXQ8PY1



In the above case  
(Cooling) Overall equivalent length=80m×0.5+40m=80m

The rate of change in  
cooling capacity when Hp=0m is thus approximately 0.86

(Example) RXQ10PY1

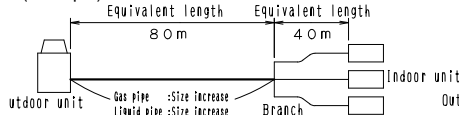


In the above case  
(Cooling) Overall equivalent length=80m×0.5+40m=80m

The rate of change in  
cooling capacity when Hp=0m is thus approximately 0.87

Rate of change (object piping)	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5

(Example) RXQ16PY1

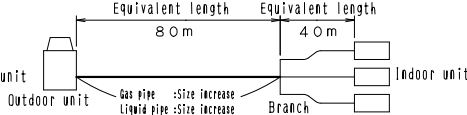


In the above case  
(Cooling) Overall equivalent length=80m×0.5+40m=80m

The rate of change in  
cooling capacity when Hp=0m is thus approximately 0.88

Rate of change (object piping)	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5

(Example) RXQ22PY1

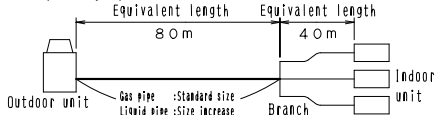


In the above case  
(Cooling) Overall equivalent length=80m×0.5+40m=80m

The rate of change in  
cooling capacity when Hp=0m is thus approximately 0.86

Rate of change (object piping)	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	12 • 14HP 24 • 36HP

(Example) RXQ12, 14, 24, 36PY1

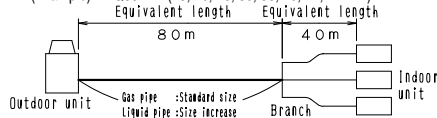


In the above case  
(Cooling) Overall equivalent length=80m×1.0+40m=120m

The rate of change in  
cooling capacity when Hp=0m is thus approximately 0.88

Rate of change (object piping)	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5

(Example) RXQ38PY1 (18, 26, 28, 30, 38, 40, 42, 44PY1)

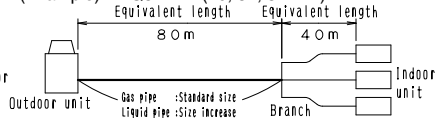


In the above case  
(Cooling) Overall equivalent length =  $80m \times 1.0 + 40m = 120m$

The rate of change in cooling capacity when  $H_p=0m$  is thus approximately 0.83

Rate of change (object piping)	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5

(Example) RXQ32PY1 (20, 32, 34PY1)

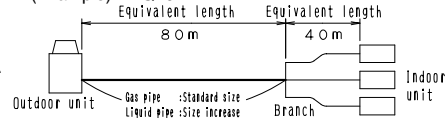


In the above case  
(Cooling) Overall equivalent length =  $80m \times 0.5 + 40m = 80m$

The rate of change in cooling capacity when  $H_p=0m$  is thus approximately 0.87

Rate of change (object piping)	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5

(Example) RXQ46PY1

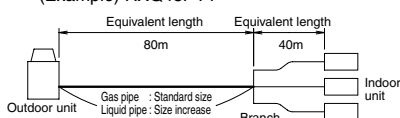


In the above case  
(Cooling) Overall equivalent length =  $80m \times 1.0 + 40m = 120m$

The rate of change in cooling capacity when  $H_p=0m$  is thus approximately 0.82

Rate of change (object piping)	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5

(Example) RXQ48PY1

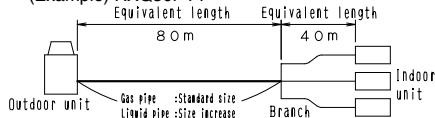


In the above case  
(Cooling) Overall equivalent length =  $80m \times 1.0 + 40m = 120m$

The rate of change in cooling capacity when  $H_p=0m$  is thus approximately 0.82

Rate of change (object piping)	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5

(Example) RXQ50PY1

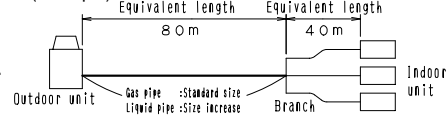


In the above case  
(Cooling) Overall equivalent length =  $80m \times 1.0 + 40m = 120m$

The rate of change in cooling capacity when  $H_p=0m$  is thus approximately 0.82

Rate of change (object piping)	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5

(Example) RXQ52PY1

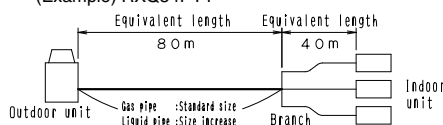


In the above case  
(Cooling) Overall equivalent length =  $80m \times 1.0 + 40m = 120m$

The rate of change in cooling capacity when  $H_p=0m$  is thus approximately 0.82

Rate of change (object piping)	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5

(Example) RXQ54PY1

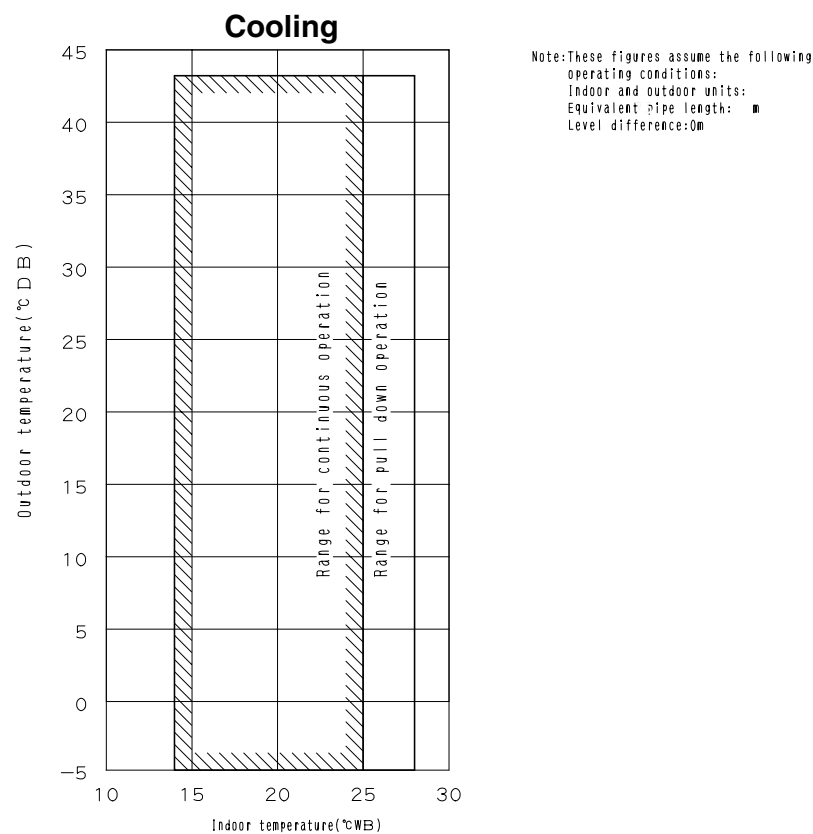


In the above case  
(Cooling) Overall equivalent length =  $80m \times 1.0 + 40m = 120m$

The rate of change in cooling capacity when  $H_p=0m$  is thus approximately 0.82

6. If heat insulation of piping is insufficient, heat loss will become larger and capacity will decrease.

9. Operation Limits



3D041560C

# 10. Sound Levels

## 10.1 50Hz

### Overall

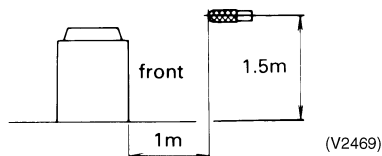
dBA		dBA		dBA	
Power Supply Model	50Hz/380-415V	Power Supply Model	50Hz/380-415V	Power Supply Model	50Hz/380-415V
RXQ5PY1	54	RXQ24PY1	62	RXQ42PY1	65
RXQ8PY1	57	RXQ26PY1	64	RXQ44PY1	67
RXQ10PY1	58	RXQ28PY1	64	RXQ46PY1	67
RXQ12PY1	60	RXQ30PY1	65	RXQ48PY1	67
RXQ14PY1	60	RXQ32PY1	63	RXQ50PY1	67
RXQ16PY1	60	RXQ34PY1	65	RXQ52PY1	67
RXQ18PY1	63	RXQ36PY1	66	RXQ54PY1	68
RXQ20PY1	62	RXQ38PY1	65		
RXQ22PY1	62	RXQ40PY1	64		

(Note)

Sound level:

Anechoic chamber conversion value, measured at a point 1 m in front of the unit at a height of 1.5m.

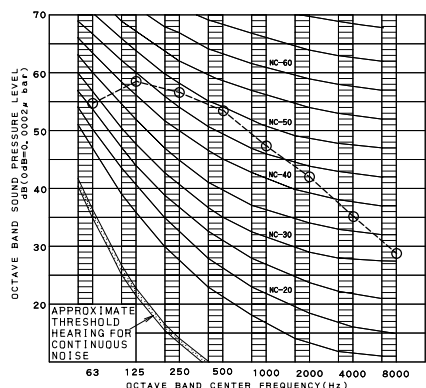
During actual operation, these values are normally somewhat higher as a result of ambient conditions.



### Octave Band Level

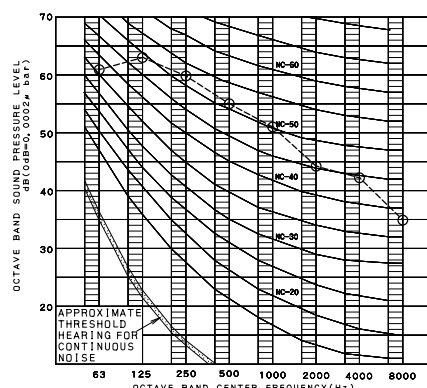
○ - - - - ○ 50Hz

#### RXQ5PY1



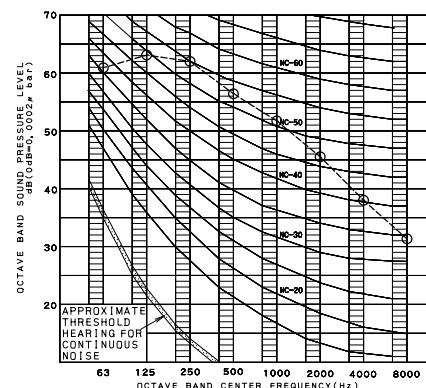
4D052394

#### RXQ8PY1



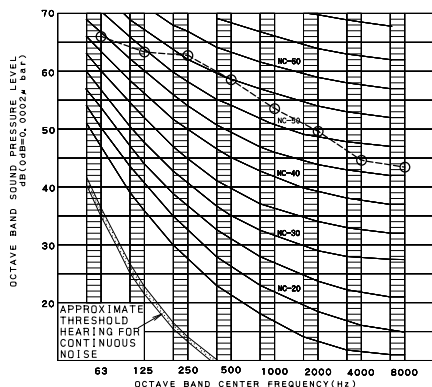
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#### RXQ10PY1



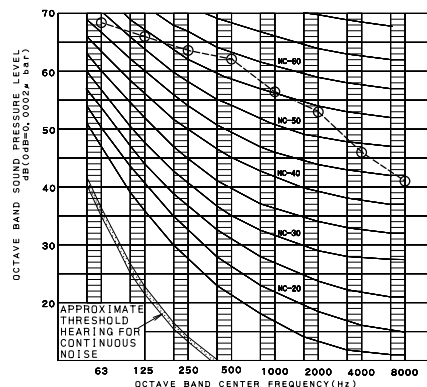
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#### RXQ12, 14, 16PY1



4D052397A





#### RXQ18PY1








4D052398

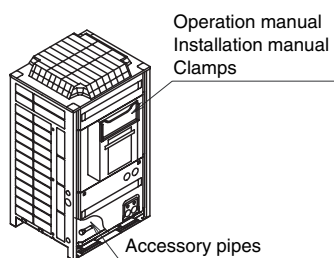
# 11. Accessories

## 11.1 Standard Accessories

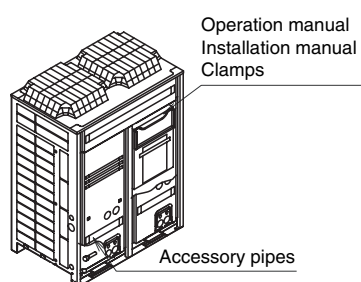
Q5~Q18 type				
Name	Clamp (1)	Clamp (2)	Clamp (3)	Gas side accessory pipe (1)
Quantity	9 pcs.	2 pcs.	1 pc.	1 pc.
Shape	 Small		 Large	

Q5~Q18 type				
Name	Gas side accessory pipe (2)	Liquid side accessory pipe (1)	Liquid side accessory pipe (2)	Others
Quantity	1 pc.	1 pc.	1 pc.	<ul style="list-style-type: none"> <li>• Operation manual</li> <li>• Installation manual</li> <li>• Declaration of conformity (PED) (8-18HP)</li> <li>• "Request for the Indication" label (Installation Records)</li> </ul>
Shape	  5-10 HP type    12-18 HP type		  5-10, 14, 16 HP type    12, 18 HP type	

[ RXQ5 · 8 · 10 type ]



[ RXQ12 · 14 · 16 · 18 type ]





## 11.2 Optional Accessories

### RXQ5 ~ 18PY1

Optional accessories		RXQ5PY1	RXQ8PY1 RXQ10PY1	RXQ12PY1 RXQ14PY1 RXQ16PY1 RXQ18PY1
Distributive Piping	Refnet header	KHRP26M22H (Max. 4 branch)	KHRP26M22H, (Max. 4 branch) KHRP26M33H (Max. 8 branch)	KHRP26M22H, KHRP26M33H, (Max. 4 branch) (Max. 8 branch) KHRP26M72H (Max. 8 branch)
	Refnet joint	KHRP26A22T	KHRP26A22T, KHRP26A33T	KHRP26A22T, KHRP26A33T, KHRP26A72T
Central drain pan kit		KWC26C160	KWC26C280	KWC26C450
Digital Pressure Gauge Kit		BHGP26A1(E)		

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### RXQ20 ~ 36PY1

Optional accessories		RXQ20PY1 RXQ22PY1	RXQ24PY1 RXQ26PY1 RXQ28PY1	RXQ30PY1 RXQ32PY1 RXQ34PY1 RXQ36PY1
Distributive Piping	Refnet header	KHRP26M22H (Max. 4 branch), KHRP26M33H (Max. 8 branch), KHRP26M72H (Max. 8 branch)	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch) (Max. 8 branch)	
	Refnet joint	KHRP26A22T, KHRP26A33T, KHRP26A72T	KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T	
Outdoor unit multi connection piping kit		BHFP22P100		
Pipe size reducer		—	KHRP26M73TP, KHRP26M73HP	
Central drain pan kit		KWC26C280 KWC26C450	KWC26C280 KWC26C450	KWC26C450x2
Digital Pressure Gauge Kit		BHGP26A1(E)		

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### RXQ38 ~ 54PY1

Optional accessories		RXQ38PY1 RXQ40PY1 RXQ42PY1 RXQ44PY1 RXQ46PY1	RXQ48PY1 RXQ50PY1 RXQ52PY1 RXQ54PY1
Distributive Piping	Refnet header	KHRP26M22H, KHRP26M33H, KHRP26M72H, KHRP26M73H (Max. 4 branch) (Max. 8 branch) (Max. 8 branch) (Max. 8 branch)	
	Refnet joint	KHRP26A22T, KHRP26A33T, KHRP26A72T, KHRP26A73T	
Outdoor unit multi connection piping kit		BHFP22P151	
Pipe size reducer		KHRP26M73TP, KHRP26M73HP	
Central drain pan kit		KWC26C280 KWC26C450×2	KWC26C450×3
Digital Pressure Gauge Kit		BHGP26A1(E)	

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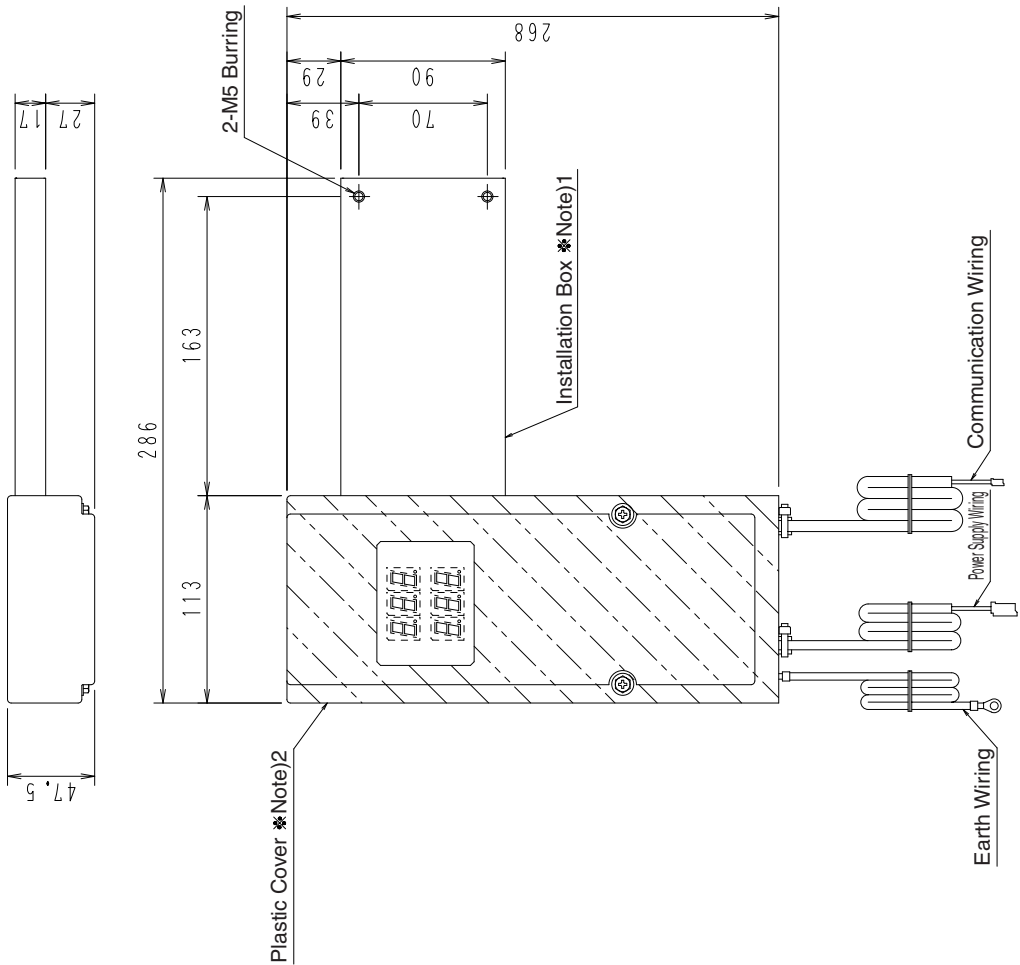
11.3 Digital Pressure Gauge Kit BHGP26A1(E)

Dimensions

	Model Name
Standard Type	BHGP26A1
Anti-Corrosion Type	BHGP26A1E

- Note) 1. Installation Box  
[Materials] : SGCC-Z22 (Standard)  
SGCC-F08 (Anti-Corrosion • Heavy Anti-Corrosion)  
light Camel (Anti-Corrosion)  
gray (Heavy Anti-Corrosion)
2. Plastic Cover  
[Materials] : Methacrylate Resin  
[Finish of Surface] :  flat finish
3. Standard Accessory : Set of Fixing Screw  
Clamp Material  
Gauge Window Name Plate  
Plastic bush  
Fixing manual
4. This kit is assembled on site

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






**DAIKIN Air conditioner** Sold separately

Be sure to read and follow all the instructions in the Installation Manual when installing the product.

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**Installation Manual of Digital Pressure Gauge Kit****BHGP26A1 (E)****Component Parts**

■ This Kit contains the following parts.

Parts name	Digital Pressure Gauge Assembly	Resin bush	Clamps	M5×12 screws	M4×12 screws	Gauge window label
Parts			 			
Number	1	1	6 (Small) 1 (Large)	2	1	1

**Tools required for installation**

Phillips screwdriver    Nippers

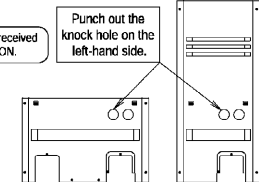
**Cautions**

- The Kit includes accessories required for installation. Do not dispose of these accessories until the product is properly installed.
- Before performing installation work, check with a catalog or technical data sheet that the outdoor unit is compatible with the Kit.

**Installation procedure****Work procedure****Warning Electric Shock Cautions**

Be sure to work with the outdoor unit turned power OFF. An electric shock may be received if your body comes in contact with electric parts with the outdoor unit turned power ON.

1. Turn the outdoor unit power OFF.
2. Remove the front panel. (If the model has two front panels (i.e., one each on the left-hand side and right-hand side), remove the panel on the right-hand side only.)
3. Remove the lid of the electrical box.
4. Refer to the (Installation drawing) and mount the Digital Pressure Gauge Assembly to the panel on the right-hand side. [Parts used: Digital Pressure Gauge Assembly: 1; M5×12 screw: 2]
5. Secure the ground wire to the electrical box with a screw. Refer to section B (detail view) in the (Wiring drawing) for the screwing position. [Parts used: M4×12 screw: 1]
6. Connect the power supply line and communications line of the Digital Pressure Gauge Assembly to the control PCB (A1P) in the electrical box.
  - Power supply line: Connector (white) • X77A
  - Communications line: Connector (blue) • X27A
 At that time, wire the communications line behind the Digital Pressure Gauge Assembly. (Refer to section A (detail view) in the (Wiring drawing).)
7. After connecting the power supply line, communications line, and ground wire, secure the wiring path according to the (Wiring drawing). [Parts used: Clamps: small 6, large 1]
8. Mount the lid of the electrical box.
9. Punch out the knock hole with a diameter of 70 mm on the front panel. (Refer to the mounting dimensions on the upper right-hand side.)
10. Attach the resin bush to the knock hole on the front panel. [Parts used: Resin bush: 1]
11. Mount the front panel.
12. Paste the gauge window label to the front panel. Refer to the (Label pasting drawing) for the pasting position. [Parts used: Gauge window label]

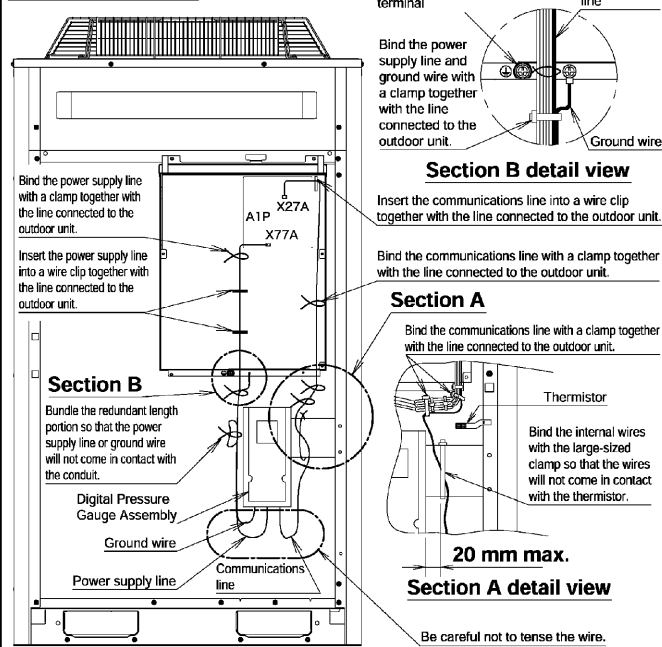
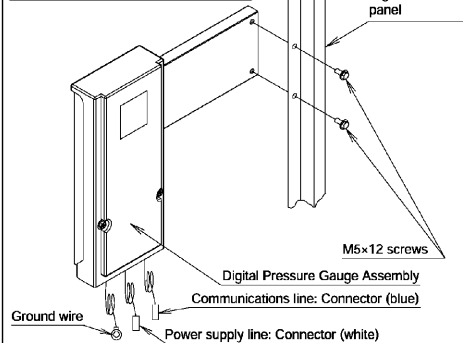
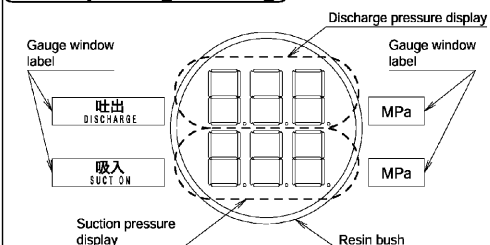
**Knock hole on the front panel****[Troubleshooting]**

Error display	Cause	Remedy
1 The LED indicator is not lit.	Power supply is not provided to the outdoor unit. The connector of the power supply line is unplugged. The power supply line is disconnected or damaged.	Provide power supply to the outdoor unit. Insert the connector of the power supply line. Replace the power supply line.
2 All LEDs blink.	The connector of the communications line is unplugged. The communications line is disconnected or damaged. The outdoor unit is not compatible with the Kit.	Plug in the connector of the communications line. Replace the communications line. Check with a catalog or technical data sheet if the outdoor unit is compatible with the Kit. If the outdoor unit is not compatible, this Kit cannot be used.
3 "□." blinks	The outdoor unit has a defect. There is a high-voltage line generating noise around the communications line.	Refer to the Service Guide and remedy the problem. Noise may be imposed on the communications line. Separate the high-voltage line.

**Operation Check****Warning Electric Shock Cautions**

Close the lid of the electrical box and front panel before turning the product power ON. An electric shock may be received if your body comes in contact with electric parts.

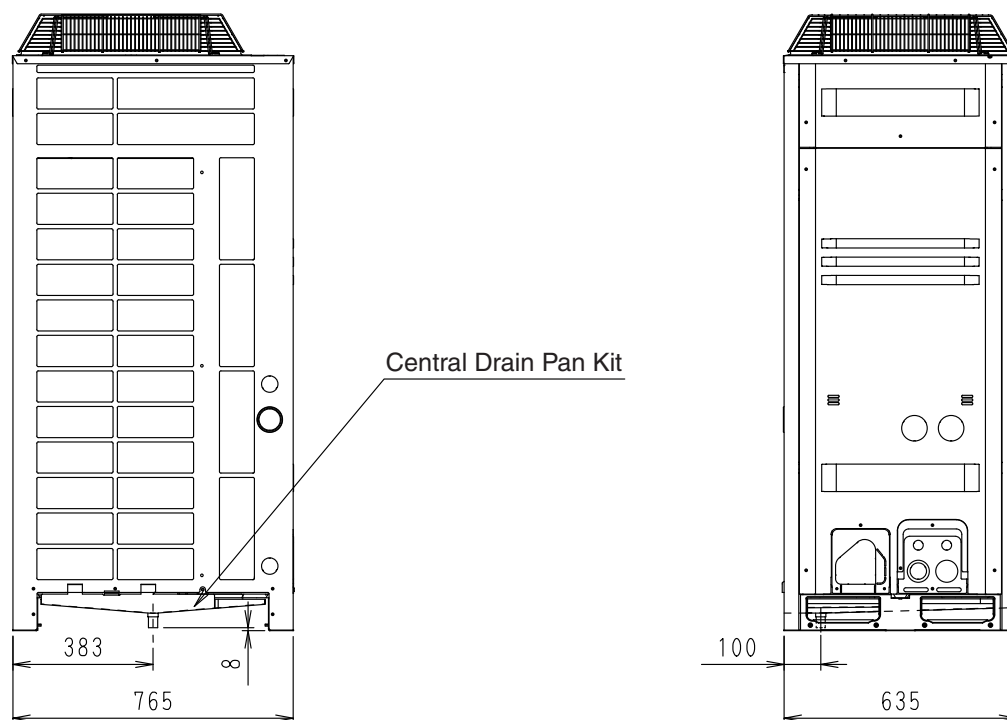
On completion of installation, turn the outdoor unit and indoor unit power ON and make sure that pressures are displayed normally. When figures appear in the discharge pressure display and suction pressure display, the product is working normally. Refer to [Troubleshooting] on the right-hand side and take necessary remedies if no figures are displayed. If the trouble does not fall under any of the items described, contact your Daikin representative.

**Wiring drawing****Installation draw****Label pasting drawing**

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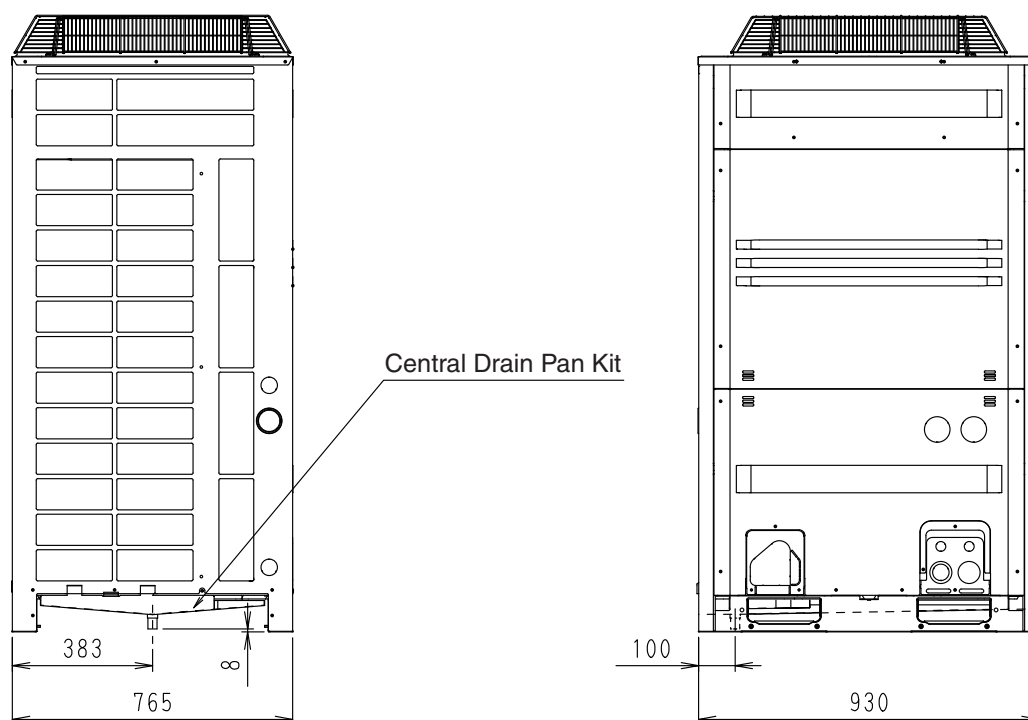
## 11.4 Central Drain Pan Kit KWC26C160, 280, 450

### RXQ5P



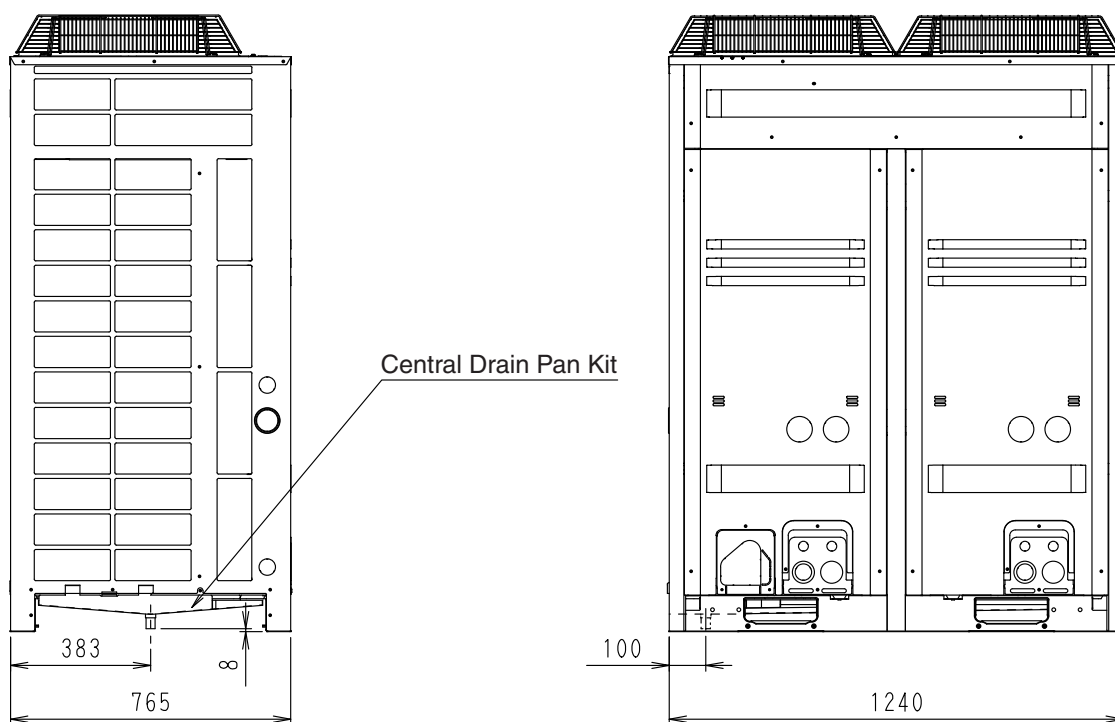
3D052253

### RXQ8,10P



3D052254

## RXQ12, 14, 16, 18P



3D052255