

TOSHIBA
Leading Innovation >>>



SPI



Inverter Air Conditioning
for Light Commercial Use

SPI is an energy-saving air conditioner for light commercial use that was designed to meet our customers' needs. SPI is able to reduce the refrigerant volume and achieve a high Energy Efficiency Ratio (EER). Due to its compact size, the unit can even be installed in small shops. In addition, the unit is equipped with various standard features, such as an AUTO restart function for blackouts, to ensure stable operation. SPI is a new type of air conditioner which, thanks to the above advantages can be used.

Product Lineup

Equivalent HP		1,5HP	2HP	3HP	4HP
		13,000BTU	18,000BTU	24,000BTU	36,000BTU
Type	4-Way Cassette The wide air flow in all direction Compact sizing				
	Indoor unit	RAV-SE401UP-V1	RAV-SE561UP-V1	RAV-SE801UP-V1	RAS-SE1001UP-V1
	Ceiling Smooth Curve for pliant Shape New Designed Wide Flap				
	Indoor unit	RAV-SE402CP-V	RAV-SE562CP-V	RAV-SE802CP-V	RAV-SE1002CP-V
	Concealed Duct Compact sizing High static pressure Built-in High-lift drain pump Flexible duct is accessible, Allows complete design flexibility				
Indoor unit	RAV-SE401BP-V	RAV-SE561BP-V	RAV-SE801BP-V	RAV-SE1001BP-V	
High-Wall Elegant and slim-line design Optimum air distribution					
Indoor unit		RAV-SE561KRP	RAV-SE801KRP		
Outdoor unit					
		RAV-TE401AP-V	RAV-TE561AP-V	RAV-TE801AP-V	RAV-TE1001AP-V RAV-TE1001A8-V

SPI

5HP
42,000BTU

6HP
48,100BTU



RAV-SE1251UP-V1



RAV-SE1401UP-V1



RAV-SE1252CP-V



RAV-SE1402CP-V



RAV-SE1251BP-V



RAV-SE1401BP-V



RAV-TE1251AP-V
RAV-TE1251A8-V



RAV-TE1401A8-V



Toshiba's unique energy-efficient air conditioning innovations and technologies deliver high energy savings.

Aluminum heat exchanger
High heat exchanger effectiveness

Inverter box

1. Protection circuit
2. Sealed inverter box

Protected center part
SPI has 4 advantages to maintain stable operation.

1. Equipped with a function that detects miswiring of the power supply and protects the circuit. (4&5HP; 3-phase)
2. Almost sealed inverter box to prevent entering of sand and dust-prevents malfunction due to outdoor conditions.
3. Steady operation-maintains stable operation under higher power supply (4&5HP; 3-phase)
4. Special coating for the PC board-prevents malfunction due to sand and dust.

DC fan motor

- Highly efficient DC motor
- Sine wave drive

Bat wing fan*
High-pressure
low-volume fan

Twin-rotary DC compressor
Increased, wide range efficiency is realized.

DC driven motor with rare-earth magnet

- Compact
- Higher efficiency
- Higher power motor torque

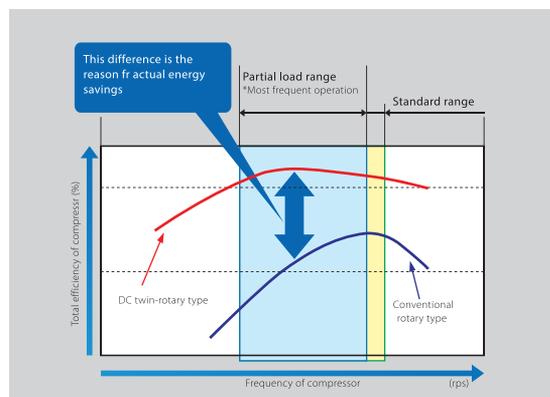
Precise manufacturing technology in the compression parts

- Higher efficiency (in wide range)
- Higher reliability

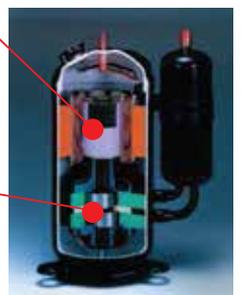


The bat wing fan realizes low sound level.

* 1.5, 2.3 HP

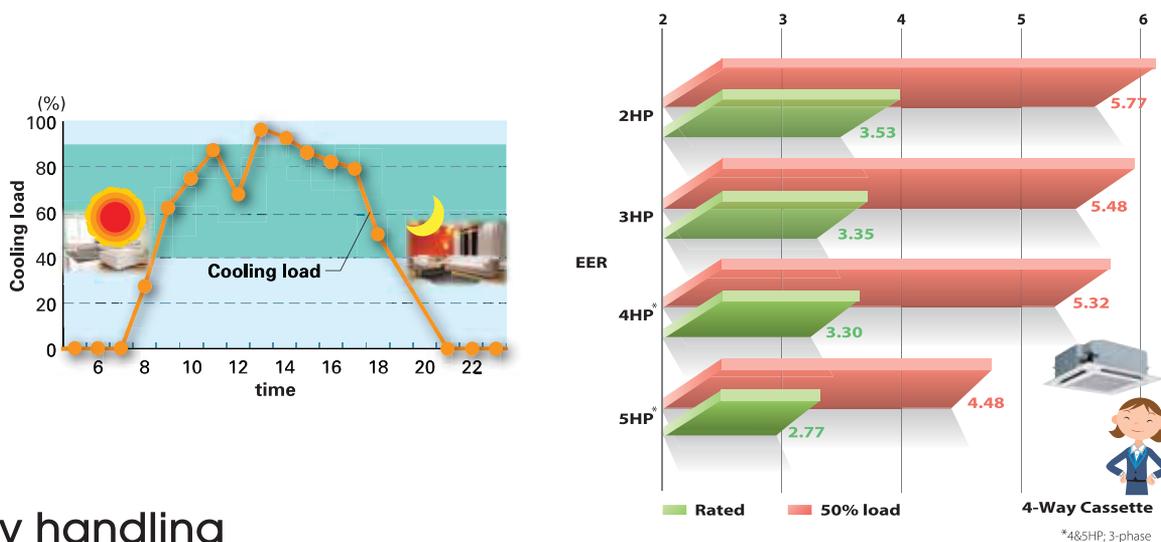


Comparison of DC twin-rotary and conventional rotary compressors



High efficient performance

SPI gives you high cooling performance with low power consumption. SPI is equipped with an inverter, and achieves a high part-load EER value.



Easy handling

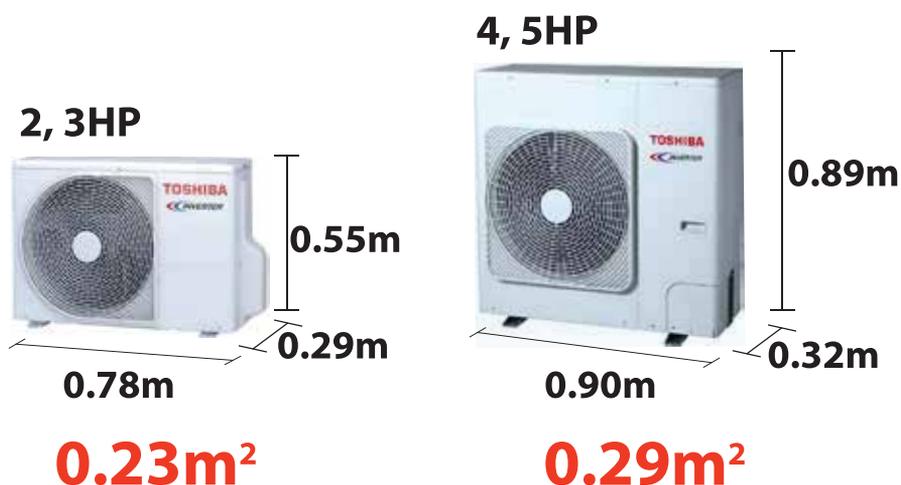
Light-weight, compact, small footprint and easy to carry and installation



- Easy to install outdoor unit on the wall by rack or an angle.
- Easy to install outdoor unit on the balcony.
- Easy to carry which has weighs only 32kg for 2&3HP, 57kg for 4&5HP; 1-phase and 48kg for 4&5HP; 3-phase.
- Easy to transportation regard to compact chassis

Small footprint

The outdoor unit has a small physical footprint of only 0.23m², 0.29m², taking up as little space outside as possible. It is compact and expels exhaust air to the side, so it can be installed even in limited spaces as shown.

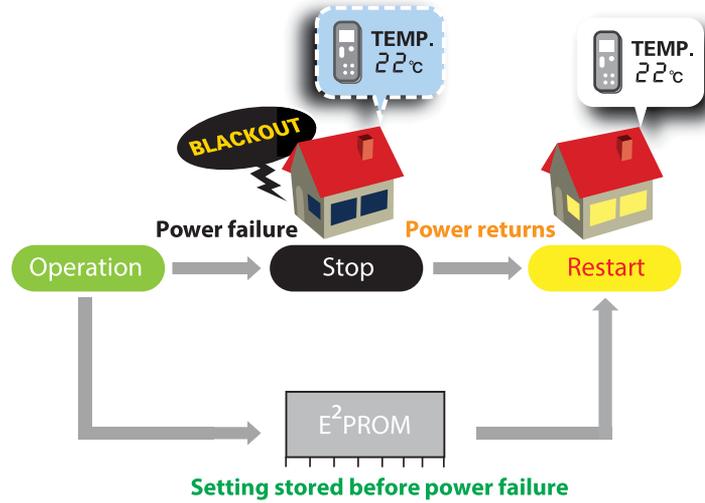




High reliability

Automatic restart even after a blackout

After the blackout ends, SPI restarts automatically with the settings used before the blackout. The settings do not need to be reconfigured using the remote controller.



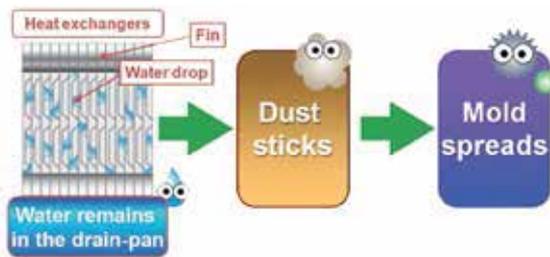
Latest technology

Self-Clean operation-Continuing high performance for energy saving

This enables indoor unit type and Ceiling type to maintain energy efficiency at the time of purchase for a long time.

Self-Clean Operation - The mechanism of the wash-off

1. The aqua resin coating prevents dirt from sticking to the fins.

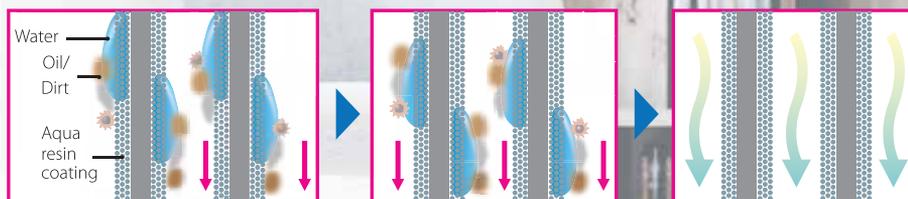


A aqua-resin coated fins in indoor unit

Self-Clean Operation - Continuing high performance for energy saving

2. The condensation water flows and washes away dirt.

3. After washing, a drying operation suppresses the propagation of mold.



Lite-Vision plus Remote controller

Optional accessory

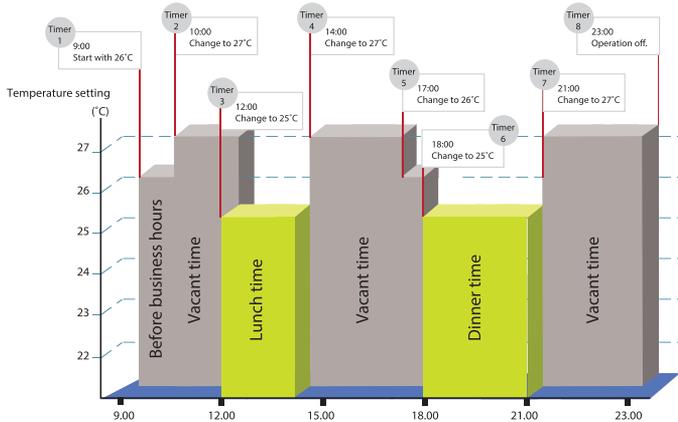
RBC-AMS51E



Modern and desirable controller design with menu driven display. LCD display with backlight, energy saving options and a return back function.

Energy saving

Up to 8 different settings for the run and stop operation and the temperature can be programmed.

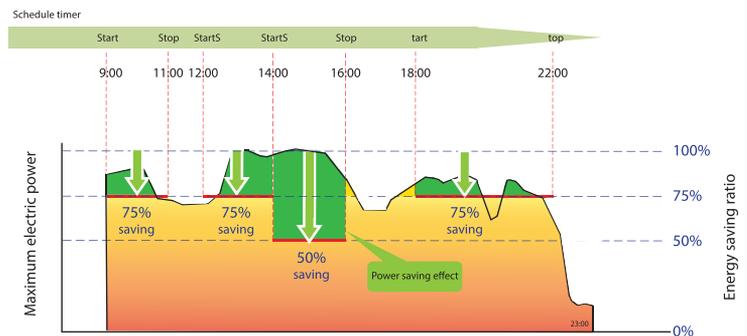


Schedule timer

ON/OFF operation and temperature can be programmed up to 8 different settings per day.

Energy saving ratio function

Manage energy saving by setting of energy saving ratio within the range from 50% to 100% by 1%. The lower the value is set, the higher the power saving effect becomes.



Comfortable

The function of this group are very comfortable and flexibility for your lifestyle. It also can be connected to a single indoor unit or a group of up to 8 indoor units.

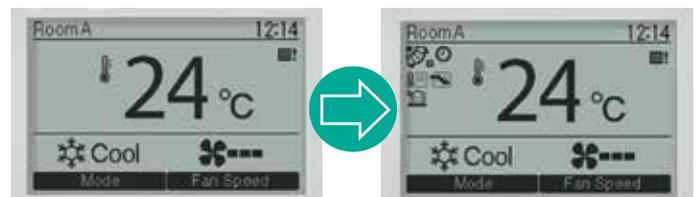


>>> Night operation



- Temperature range restriction
- Operation lock
- Auto-off timer
- Auto-return

User friendly



- Big buttons
- Back-light LED
- Clear symbols
- Easy to see display
- To support multi language



4-Way Cassette type

The wide air flow in all direction



Compact sizing

Compact size especially in height (256 mm), new slimmer chassis offers wide range of installation opportunities to customer.



Standard supply*



Wireless remote controller

Option**



Wired remote controller RBC-AMT32E

* Included with indoor unit
** Available as an option.

Wide flow louver panels



RBC-U31PGXP(W)-IN1

Panel size is same for all models, RBC-U31PGXP(W)-IN. It is easy to maintain a neat appearance when multiple units are installed.

Specifications

Indoor unit		RAV-SE401UP-V1	RAV-SE561UP-V1	RAV-SE801UP-V1	RAV-SE1001UP-V1	RAV-SE1251UP-V1	RAV-SE1001A8-V1	RAV-SE1251A8-V1	RAV-SE1401UP-V1	
Outdoor unit		RAV-TE401AP-V	RAV-TE561AP-V	RAV-TE801AP-V	RAV-TE1001AP-V	RAV-TE1251AP-V	RAV-TE1001A8-V	RAV-TE1251A8-V	RAV-TE1401A8-V	
Cooling*1	Capacity	kW	3.82	5.3	6.2	10.0	12.5	10.0	12.1	14.1
	Range, min-max	kW	1.1 - 4.0	1.2 - 5.6	1.2 - 7.1	4.0 - 11.2	4.0 - 13.0	4.0 - 11.2	4.0 - 12.5	3.0 - 15.4
	Power consumption	kW	1.12	1.50	1.85	3.03	4.51	3.03	4.37	5.03
	EER (Energy Efficiency Ratio)	Capacity 100%	3.41	3.53	3.35	3.30	2.77	3.30	2.77	2.80
	Capacity 80%	4.25	4.41	4.19	4.17	3.50	4.17	3.49	3.50	
	Capacity 50%	5.62	5.77	5.48	5.88	4.96	5.32	4.48	4.55	
Standard air flow (H/M/L)		m ³ /h	1050 / 870 / 780	1050 / 870 / 780	1230 / 960 / 810	1800 / 1530 / 1230	1860 / 1530 / 1230	1800 / 1530 / 1230	1860 / 1530 / 1230	2130/1500/1260
Sound pressure level (H/M/L)		dB(A)	32 / 29 / 28	32 / 29 / 28	35 / 31 / 28	47 / 44 / 39	48 / 44 / 39	47 / 44 / 39	48 / 44 / 39	48/44/39
Main unit dimensions (H/W/D)		mm	256 / 840 / 840				256 / 840 / 840		319/840/840	
Weight		kg	20				20		24	
Panel	Model name	RBC-U31PGXP(W)-IN1						RBC-U31PGXP(W)-IN1		
	Dimensions (H/W/D)	mm	30/950/950				30/950/950			
Power supply		1-phase 50Hz 220 - 240V / 1-phase 60Hz 220 - 230V					3-phase 50Hz 380 - 415V / 3-phase 60Hz 380 - 400V			
Compressor type		DC rotary	DC twin rotary				DC twin rotary			
Connecting pipe dia., Gas/Liquid side		mm	ø12.7 / ø6.4	ø12.7 / ø6.4	ø15.9 / ø9.5	ø15.9 / ø9.5	ø15.9 / ø9.5	ø15.9 / ø9.5		
Standard / Min. pipe length		m	7.5 / 2	7.5 / 2	7.5 / 2	7.5 / 5	7.5 / 5	7.5 / 5		
Max. pipe total length		m	25	25	25	30	30	30	50	
Maximum height difference		m	10	10	10	20	20	20	30	
Outer dimensions (H/W/D)		mm	550 / 780 / 290			890 / 900 / 320		890 / 900 / 320		
Weight		kg	33	32	32	57	57	48	48	57
Sound pressure level		dB(A)	47	52	52	59	60	59	60	60
Operating range		°C	15~46				15~46			

*1 Rated conditions Cooling : Indoor air temperature 27°C DB / 19°C WB, Outdoor air temperature 35°C DB

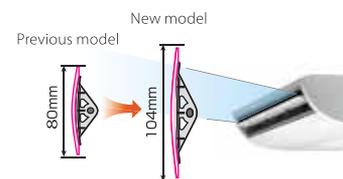
Ceiling type

Smooth Curve for pliant Shape

All-new chassis and new rounded design, This new models have been developed in response to customers' needs for ceiling units that better match their room interiors.

New Designed Wide Flap

The airflow angle is automatically set to the most suitable setting according to your needs, an automatic swing mode enables airflow to reach all areas of the room to create a comfortable ambience.



30% Extension



Option**



Wireless remote controller kit
RBC-ACX33CE1

Option**



Wired remote controller
RBC-AMT32E



New Drain pump kit**

The Drain pump kit makes draining easier. Glass built into Drain Pump Kit helps reduce mould formation.

** Available as an option.

Specifications

Indoor unit		RAV-SE402CP-V	RAV-SE562CP-V	RAV-SE802CP-V	RAV-SE1002CP-V	RAV-SE1252CP-V	RAV-SE1002CP-V	RAV-SE1252CP-V	RAV-SE1402CP-V	
Outdoor unit		RAV-TE401AP-V	RAV-TE561AP-V	RAV-TE801AP-V	RAV-TE1001AP-V	RAV-TE1251AP-V	RAV-TE1001A8-V	RAV-TE1251A8-V	RAV-TE1401A8-V	
Cooling*1	Capacity	kW	3.82	5.3	6.6	10.0	12.5	10.0	14.1	
	Range, min-max	kW	1.1 - 4.0	1.2 - 5.6	1.2 - 7.1	4.0 - 11.2	4.0 - 13.0	4.0 - 11.2	4.0 - 12.5	3.0 - 15.4
	Power consumption	kW	1.12	1.54	2.00	3.22	4.58	3.22	4.40	5.03
	EER (Energy Efficiency Ratio)	Capacity 100%		3.41	3.44	3.30	3.11	2.73	3.11	2.73
Capacity 80%			4.25	4.30	4.12	3.92	3.45	4.04	3.44	3.50
Capacity 50%			5.62	5.61	5.39	5.56	4.88	5.15	4.55	4.55
Standard air flow (H/M/L)	m ³ /h	900 / 720 / 540	900 / 720 / 540	1750 / 1520 / 1180	1750 / 1520 / 1180	1860 / 1350 / 1020	1750 / 1520 / 1180	1860 / 1350 / 1020	2040 / 1650 / 1260	
Sound pressure level (H/M/L)	dB(A)	37 / 35 / 28	37 / 35 / 28	50 / 46 / 39	50 / 46 / 39	51 / 47 / 40	50 / 46 / 39	51 / 47 / 40	51 / 47 / 40	
Sound power level (H/M/L)	dB(A)		52 / 50 / 43	65 / 61 / 54	65 / 61 / 54	66 / 62 / 55	65 / 61 / 54	66 / 62 / 55	65 / 61 / 54	
Main unit dimensions (H/W/D)	mm	235 / 952 / 690		235 / 1269 / 690		235 / 1586 / 690		235 / 1269 / 690		
Weight	kg	23		29	30	35	30		35	
Power supply		1-phase 50Hz 220 - 240V / 1-phase 60Hz 220 - 230V					3-phase 50Hz 380 - 415V / 3-phase 60Hz 380 - 400V			
Compressor type		DC rotary	DC twin rotary				DC twin rotary			
Connecting pipe dia., Gas/Liquid side	mm	ø12.7 / ø6.4	ø12.7 / ø6.4	ø15.9 / ø9.5	ø15.9 / ø9.5	ø15.9 / ø9.5	ø15.9 / ø9.5			
Standard / Min. pipe length	m	7.5 / 2	7.5 / 2	7.5 / 2	7.5 / 5	7.5 / 5	7.5 / 5			
Max. pipe total length	m	25	25	25	30	30	30		50	
Maximum height difference	m	10	10	10	20	20	20		30	
Outer dimensions (H/W/D)	mm	550 / 780 / 290			890 / 900 / 320			890 / 900 / 320		
Weight	kg	33	32	32	57	57	48	48	57	
Sound pressure level	dB(A)	47	52	52	59	60	59	60	60	
Operating range	°C	15~46					15~46			

*1 Rated conditions Cooling : Indoor air temperature 27°C DB / 19°C WB, Outdoor air temperature 35°C DB



Concealed Duct type

Wide range of application opportunities

Compact sizing

Compact size especially in height (275 mm), new slimmer chassis offers wide range of installation opportunities to customer.



High static pressure

External static pressure can be raised as high as 120 Pa, so that all areas of the room can be reached for even temperature distribution, no matter how complex the layout.

Built-in High-lift drain pump

The flexible piping layout is made possible by an optionally available drain-pump kit that raises the drain piping up to 850 mm from the drain port.

Option**



Wireless remote controller kit
TCB-ACX32E2

Option**



Wired remote controller
RBC-AMT32E

** Available as an option.

Spigot shaped flange**



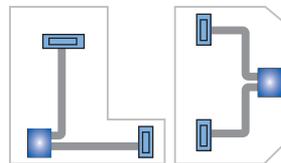
TCB-SF56C6BPE

TCB-SF80C6BPE

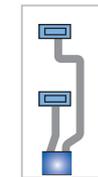


TCB-SF160C6BPE

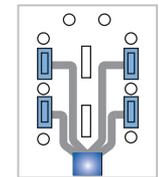
Flexible duct is accessible, Allows complete design flexibility



Polygonal rooms



Narrow rooms



Rooms with fixtures and obstacles

Specifications

Indoor unit		RAV-SE401BP-V	RAV-SE561BP-V	RAV-SE801BP-V	RAV-SE1001BP-V	RAV-SE1251BP-V	RAV-SE1001BP-V	RAV-SE1251BP-V	RAV-SE1401BP-V	
Outdoor unit		RAV-TE401AP-V	RAV-TE561AP-V	RAV-TE801AP-V	RAV-TE1001AP-V	RAV-TE1251AP-V	RAV-TE1001A8-V	RAV-TE1251A8-V	RAV-TE1401A8-V	
Cooling*1	Capacity	kW	3.82	5.3	6.3	10.6	12.6	10.6	14.1	
	Range, min-max	kW	1.1 - 4.0	1.2 - 5.6	1.2 - 7.1	4.0 - 11.2	4.0 - 13.0	4.0 - 11.0	4.0 - 13.0	3.0 - 15.4
	Power consumption	kW	1.12	1.72	1.93	3.40	4.33	3.40	4.20	5.22
	EER (Energy Efficiency Ratio)	Capacity 100%	3.41	3.08	3.26	3.12	2.91	3.12	3.00	2.70
	Capacity 80%	4.25	3.85	4.08	3.93	3.67	3.94	3.79	3.30	
	Capacity 50%	5.62	5.03	5.33	5.58	5.21	5.15	5.29	4.20	
Standard air flow (H/M/L)		m ³ /h	900 / 720 / 540	900 / 720 / 540	1440 / 1220 / 560	1710 / 1260 / 830	2100 / 1650 / 1260	1710 / 1260 / 830	2100 / 1650 / 1260	
External static pressure (factory setting)		Pa	30	30	30	30	50	30	50	
External static pressure-Standard (Upper-Lower)		Pa	30 (120) - 30	30 (120 - 30)	30 (120 - 30)	30 (120 - 30)	50 (120 - 30)	30 (120 - 30)	50 (120 - 30)	
Sound pressure level (H/M/L)		dB(A)	33 / 29 / 25	33 / 29 / 25	41 / 37 / 34	44 / 42 / 39	44 / 42 / 39	44 / 42 / 39	44 / 42 / 39	
Main unit dimensions (H/W/D)		mm	275 / 700 / 750		275 / 1000 / 750		275 / 1400 / 750		275 / 1000 / 750	
Weight		kg	23		30		40		30	
Power supply			1-phase 50Hz 220 - 240V / 1-phase 60Hz 220 - 230V				3-phase 50Hz 380 - 415V / 3-phase 60Hz 380 - 400V			
Compressor type			DC rotary	DC twin rotary			DC twin rotary			
Connecting pipe dia., Gas/Liquid side		mm	ø12.7 / ø6.4	ø12.7 / ø6.4	ø15.9 / ø9.5	ø15.9 / ø9.5	ø15.9 / ø9.5			
Standard / Min. pipe length		m	7.5 / 2	7.5 / 2	7.5 / 2	7.5 / 5	7.5 / 5			
Max. pipe total length		m	25	25	25	30	30		50	
Maximum height difference		m	10	10	10	20	20		30	
Outer dimensions (H/W/D)		mm	550 / 780 / 290			890 / 900 / 320		890 / 900 / 320		
Weight		kg	33	32		57	57	48	48	57
Sound pressure level		dB(A)	47	52		59	60	59	60	60
Operating range		°C	15~46				15~46			

*1 Rated conditions Cooling : Indoor air temperature 27°C DB / 19°C WB, Outdoor air temperature 35°C DB



High-Wall type

Elegant and slim

Slim-line design

With its attractive, slim-line design, the unit can easily blend in with any room interior. The filtration system further the indoor air quality benefits of this high-wall unit.

Optimum air distribution

45° directional Auto-swing louvre mode allows optimum air distribution throughout the room. Total comfort is granted, thanks also to Automatic air volume control and Automatic cooling/heating.

Self cleaning function*2

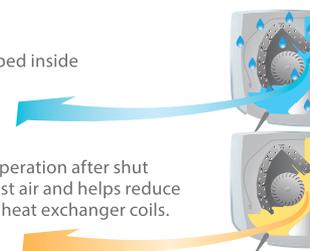
Toshiba's self-cleaning function is designed to reduce the humidity that causes mold to form inside an air-conditioning unit 20 minutes of fan operation after shut down dries the moist air and helps reduce mold formation on heat exchanger coils.



* Included with indoor unit
 ** Available as an option.
 *2 The Self cleaning function must be set by user.

Normal Operation
 Moisture stays trapped inside

Self-cleaning Function
 20 minutes of fan operation after shut down dries the moist air and helps reduce mold formation on heat exchanger coils.



Specifications

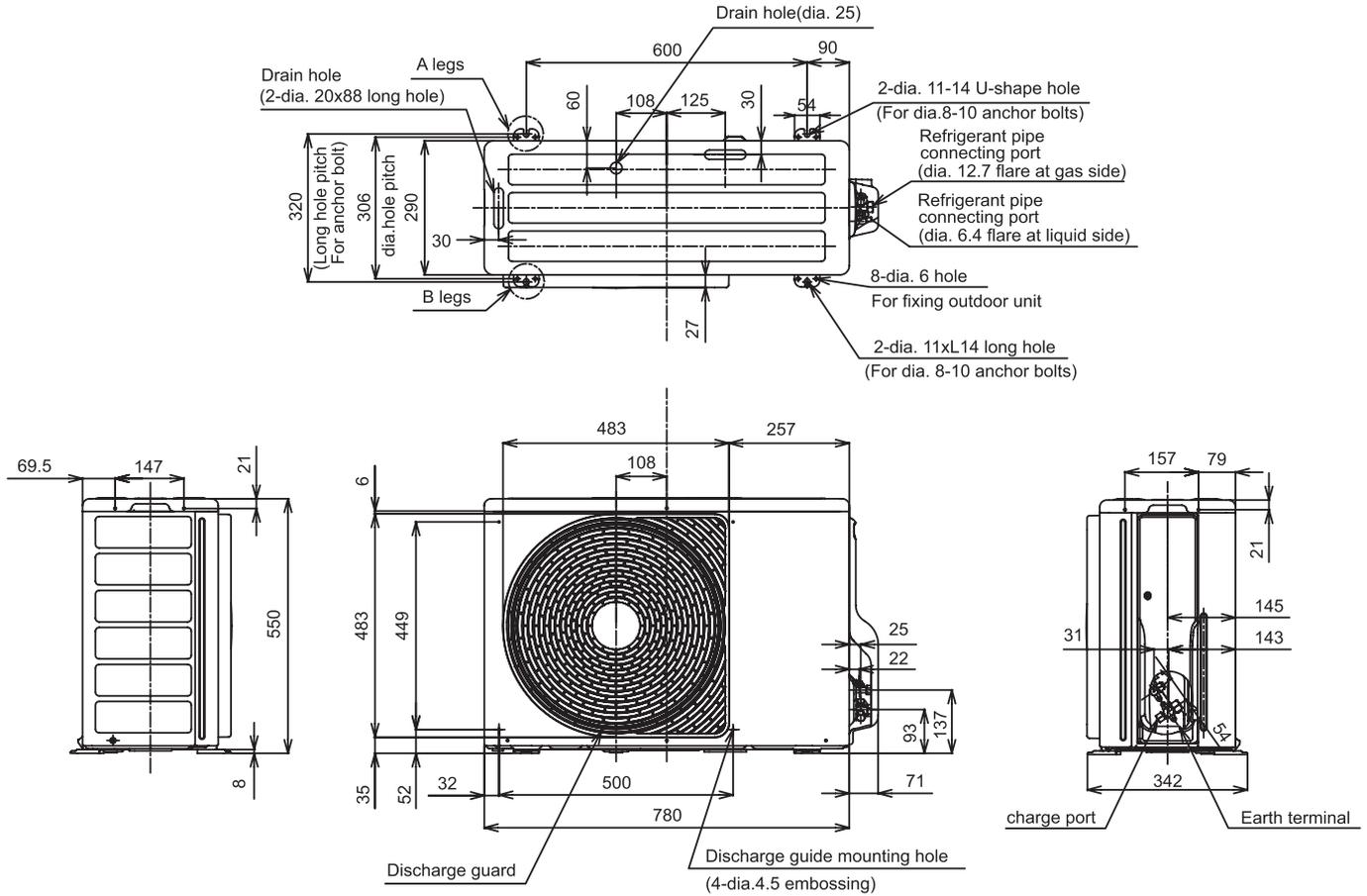
Indoor unit		RAV-SE561KRP	RAV-SE801KRP	
Outdoor unit		RAV-TE561AP	RAV-TE801AP	
Cooling*1	Capacity	kW	5.3	5.8
	Range, min-max	kW	1.2 - 5.6	1.2 - 6.4
	Power consumption	kW	1.60	1.93
	EER (Energy Efficiency Ratio)	Capacity 100%	3.31	3.01
Capacity 80%		4.14	3.75	
Capacity 50%		5.41	4.91	
Standard air flow (H/M/L)	m ³ /h	840 / 750 / 660	1020 / 750 / 660	
Sound pressure level (H/M/L)	dB(A)	42 / 39 / 36	47 / 41 / 36	
Main unit dimensions (H/W/D)	mm	320 / 1050 / 229	320 / 1050 / 229	
Weight	kg	13	13	
Power supply	1-phase 50Hz 220 - 240V / 1-phase 60Hz 220 - 230V			
Compressor type	DC twin rotary			
Connecting pipe dia., Gas/Liquid side	mm	ø12.7 / ø6.4	ø15.9 / ø9.5	
Standard / Min. pipe length	m	7.5 / 2	7.5 / 2	
Max. pipe total length	m	25	25	
Maximum height difference	m	10	10	
Outer dimensions (H/W/D)	mm	550 / 780 / 290	550 / 780 / 290	
Weight	kg	32	32	
Sound pressure level	dB(A)	52	52	
Operating range	°C	15~46		



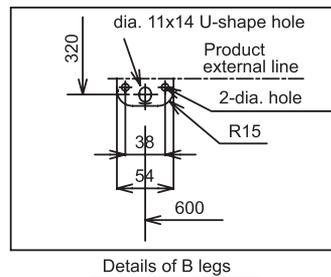
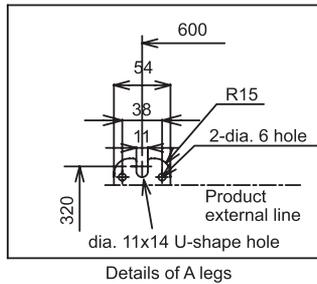
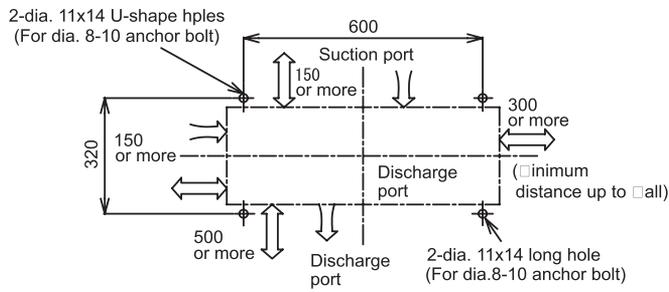
*1 Rated conditions Cooling : Indoor air temperature 27°C DB / 19°C WB, Outdoor air temperature 35°C DB

Outdoor unit drawings - 1.5HP, 2HP, 3HP

RAV-TE401AP-V
RAV-TE561AP-V
RAV-TE801AP-V



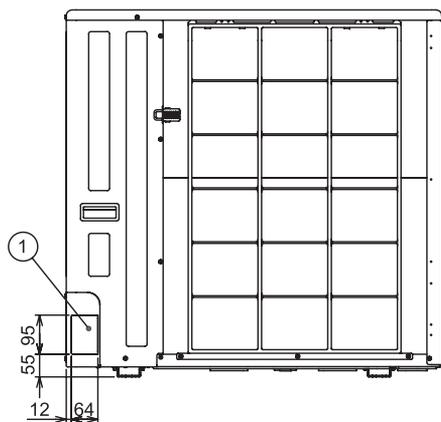
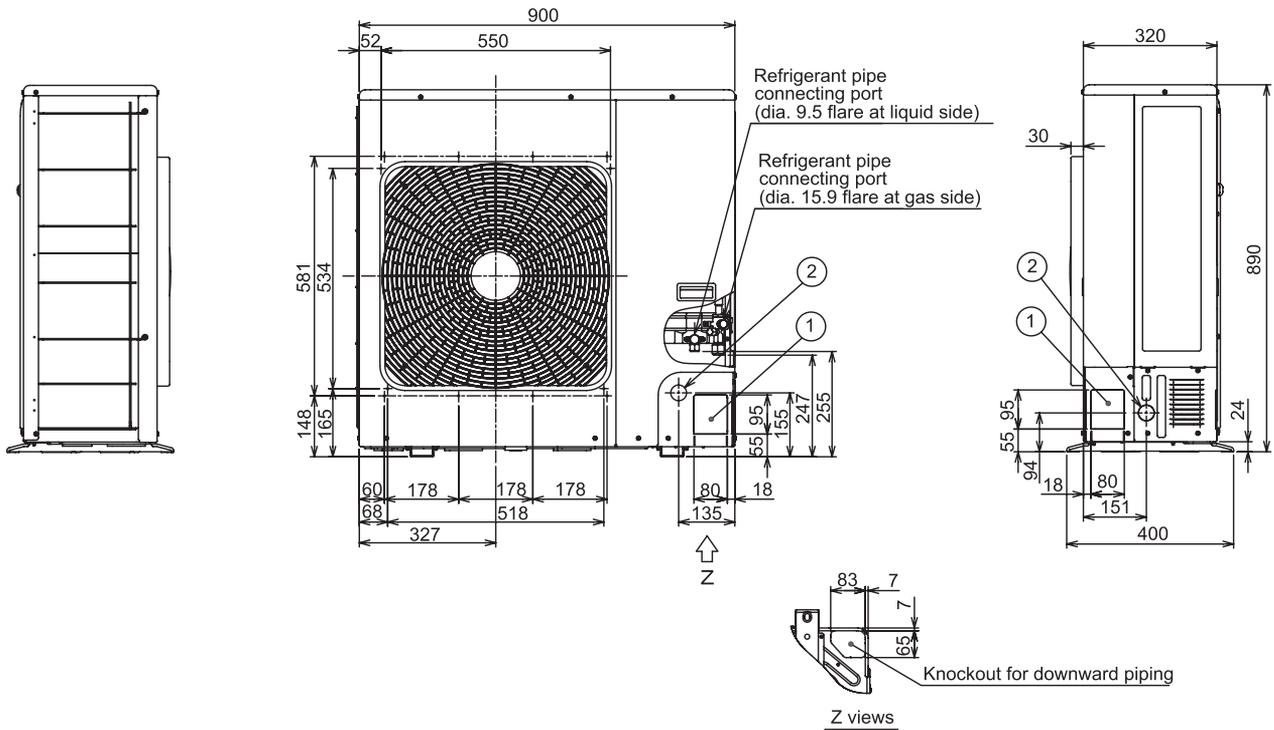
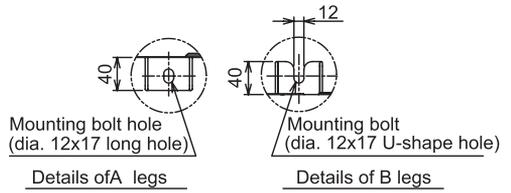
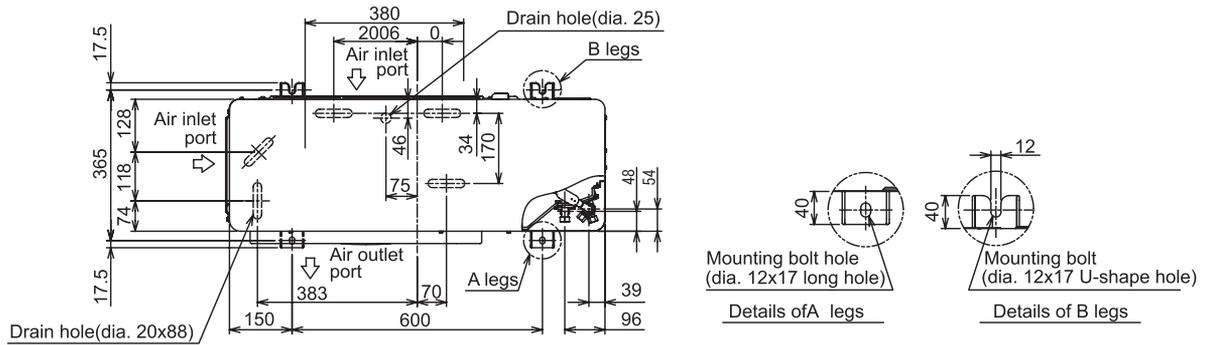
● Space required for installation and servicing



Outdoor unit drawings - 4HP, 5HP, 6HP

RAV-TE1001AP-V, RAV-TE1001A8-V

RAV-TE1251AP-V, RAV-TE1251A8-V, RAV-TE1401A8-V



	Name	Note
①	Refrigerant piping hole Indoor/Outdoor unit connecting wire inlet hole	—
②	Power supply inlet holed	ia. 38 Knockout hole

(Unit: mm)

Appendix

Wired remote controller



RBC-AMT32E

Standard Remote controller

Standard wired remote controller can be connected to a single indoor unit or a group of up to 8 indoor units. Power save operation limits the greatest current value. The remote controller allows error to be displayed while the protective device works or a error occurs.



TCB-EXS21TLE

Schedule timer

Schedule timer mode
 - 6 programmings per day
 - Enabling 8 groups to be programmed
 - A maximum of 64 indoor units can be controlled
 - A maximum of 100 hours back-up power supply
 Weekly timer mode
 - 7 types of weekly schedule and 3 programmings per day



RBC-AMS41E

Remote controller with weekly timer (7-day timer function)

Wired remote controller with clock display and a built in 7-day timer function, possible to program 8 functions for each day of the week. The following items can be set in program: operation time, operation start/stop, operation mode, temperature setting, restriction on button operation



RBC-AS41E

Simple wired remote controller

Simple wired remote controller can be connected to a single indoor unit or a group of up to 8 indoor units.

- Start/Stop
- Temperature setting
- Air flow changing
- Check code display

Wireless remote controller kits

- Changing mode
- Temperature setting
- Air flow changing
- Timer function Either "ON" time or "OFF" time or "CYCLIC" can be set how many 30 min. later ON or OFF is operated.
- Control by 2 remote controllers is available.

Two wireless remote controllers can operate one indoor unit. The indoor unit can then be operated separately from the two different locations.

- Check code display

RBC-ACX33CE

Integral receiver
(For ceiling)



TCB-ACX32E2

Sensor unit; Stand alone receiver
(For Concealed Duct type)



Installation and the use of refrigerants not specified by Toshiba Carrier Corporation

Toshiba refrigeration and air-conditioning units are designed and manufactured on the assumption that the product is used with a specific refrigerant suitable for each unit.

We have recently seen some cases where the type of refrigerant used is different from the one originally installed in the product. Such actions may cause mechanical defects, malfunctions, failures and in some cases result in a serious safety issue. Therefore do not install any refrigerant other than the one specified by Toshiba Carrier Corporation for its respective products.

The type of the refrigerant used for each of our products is shown in the accompanying owners manual, or on the product label attached on the product itself.

Toshiba Carrier Corporation shall not assume any liability for failures, malfunctions or safety in its products if the refrigerant used is different from the one specified.



SAFETY PRECAUTIONS

For operation:

- Before use, read through the operating instructions to ensure proper use.

Concerning the purpose for which the air conditioners are to be used

- The air conditioners presented in this catalogue are air conditioning/heating units to be used solely by general consumers.
 - Do not use these air conditioners for special applications such as for the storage of food items, animals, plants, precision machines or works of art. Doing so may degrade the quality of the items.
 - Do not use these air conditioners for air-conditioning applications in vehicles or ships. Doing so may cause water and/or power leakages.

Precautions for using air conditioners

Concerning the automatic defrosting unit

When the outdoor air temperature drops, frost may form on the heat exchanger of the outdoor unit. In such cases, the automatic defrosting unit will be activated, and it will take 5 to 8 minutes for the heating operation to be restored.

Concerning the air conditioner's operating conditions and their selection

(1) Avoid using the air conditioner in the following locations.

- Locations with acidic or alkaline atmospheres (locations at which highly acidic or alkaline air is directly drawn in, such as in hot springs areas from which sulfur gases are given off, or where chemicals, vinegar, exhaust air from burners, etc., are given off) The heat exchangers and other parts may become corroded.
- Locations with atmospheres filled with coolant or other machine oil or steam exhaust (such as at food preparation factories or machine plants). The heat exchangers may corrode; frost may form as a result of heat exchanger malfunction; air conditioner operating performance may be compromised or condensation may form as a result of clogged filters; plastic parts may incur damage; heat-insulation materials may become separated, etc.

(2) Before using an air conditioner in any of the following locations, consult with your dealer or a qualified contractor.

- Locations where vapors from edible oils are given off (such as in bakeries or kitchens and restaurants that use edible oils) ...The air conditioner's operating performance may be compromised or condensation may form as a result of clogged filters, and the plastic parts may incur damage. In line with the prevailing conditions, take countermeasures such as tailoring the installation conditions in accordance with the conditions, using air conditioners designed for kitchens or oil guard filters, etc.
- Locations with disinfectant-induced chlorine atmospheres (water tanks, etc.) The metal parts in the heat exchangers, motors, etc., may become corroded.
- Locations with high salinity (coastal areas, etc.) Corrosion may occur so use outdoor units specifically designed to withstand exposure to salt.

- Locations where power is supplied from independent power generators. The power line frequency and/or voltage may fluctuate, possibly causing the air conditioner to malfunction.
- Locations where high frequencies or electrical noise is generated (from high-frequency welders used for vinyl welding and processing, high-frequency therapeutic devices used for thermotherapy, etc.) The electronic components may be adversely affected, possibly causing the air conditioner to malfunction.
- Locations where electronic equipment is installed. Electrical noise may adversely affect the operation of the electronic equipment.

(3) Concerning use in locations with high ceilings

- In locations with high ceilings, use of circulators for improving the temperature distribution during heating is recommended.

(4) Concerning use in high-humidity environments

- When the ceiling-recessed type of indoor unit is installed in a location, such as those described below, and it is very hot and humid inside the ceiling, condensation may form on the external surfaces of the indoor unit and drip down. In such cases, add external heat-insulating materials.
 - Locations such as food preparation sites in which the areas above the ceilings are hot and humid
 - Locations in which outside air is drawn in and routed above the ceiling
 - Above ceilings with a slate roof or tiled roof overhead

(5) Even when an air conditioner is shut down, it will still consume a small amount of power to protect the unit. If the air conditioner will not be used for a prolonged period, turn OFF the main switch (ground fault circuit breaker). However, before the unit is to be used again, turn ON the main switch (ground fault circuit breaker) for at least 12 hours in order to prevent trouble.

TOSHIBA

Leading Innovation >>>

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QUALITY MANAGEMENT SYSTEM

Certificate Number: 0017 0025100
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ENVIRONMENTAL MANAGEMENT SYSTEM

Certificate Number: 0020205101
TIS 18001
TOTAL INTEGRATED MANAGEMENT SYSTEM

Certificate Number: 0100001101
OHSAS
OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM



Notice: - Products listed in this leaflet use HFC refrigerant R410A with a GWP of 2,088*.

- Toshiba is committed to continuously improving its products to ensure the highest quality and reliability standards, and to meet local regulations and market requirements. All features and specifications are subject to change without prior notice.

*The GWP value is calculated based on information provided in the EU F-gas Regulation and IPCC Fourth Assessment Report.