Hisense

Hisense Design Software Introduction

Hisense life reimagined

Contents

Hisense life reimagined

1. Brief Introduction

Developers	YNYC Software Technology Co.,Ltd
Latest version	Oct. 2016 V4.0
Operating system	32bit or 64 bit Windows XP/Win7/Win8
Language	English & Chinese
Software size	Main program 64M & update pack 30M
Type	Free trial

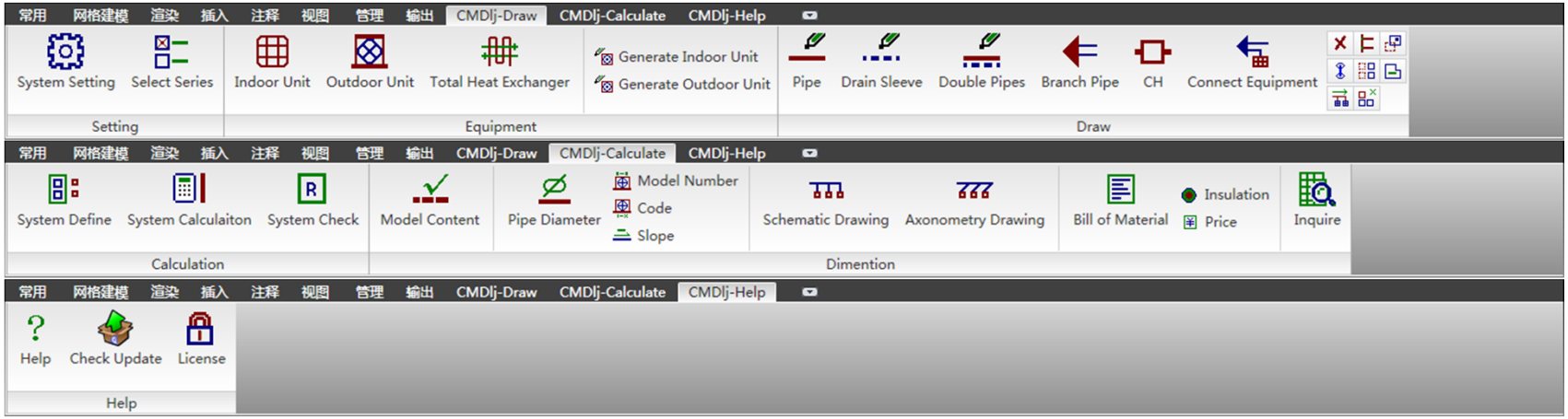
- By using CMDlj, we can complete the drawing of VRF system efficiently , including equipment and pipe design, pipe connecting , system define and calculation, generate the axonometric and stretch-out view drawing .
- We can generate the equipment chart , and refrigerant charge calculation, then export data as an Excel.
- Simple to operate, setting short-cut key for each function
- Check for update online and update automatically

1. Brief Introduction

Function Menu

Support AutoCAD Ribbon menu

3D Model



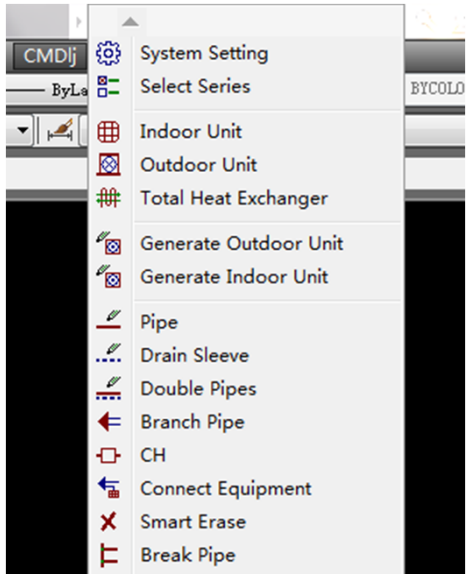
floating toolbars

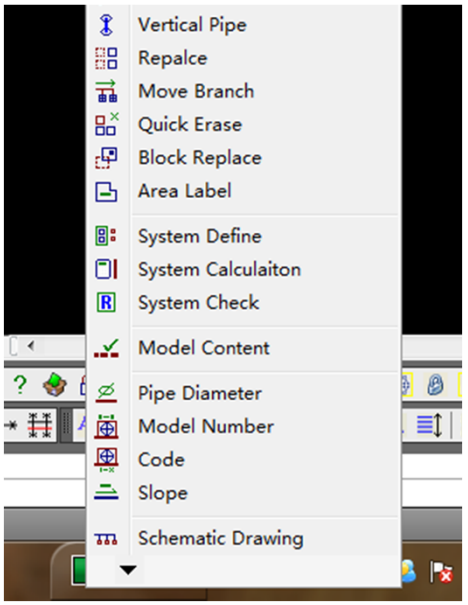
1. Brief Introduction

Function Menu

Support AutoCAD Ribbon menu

2D Model

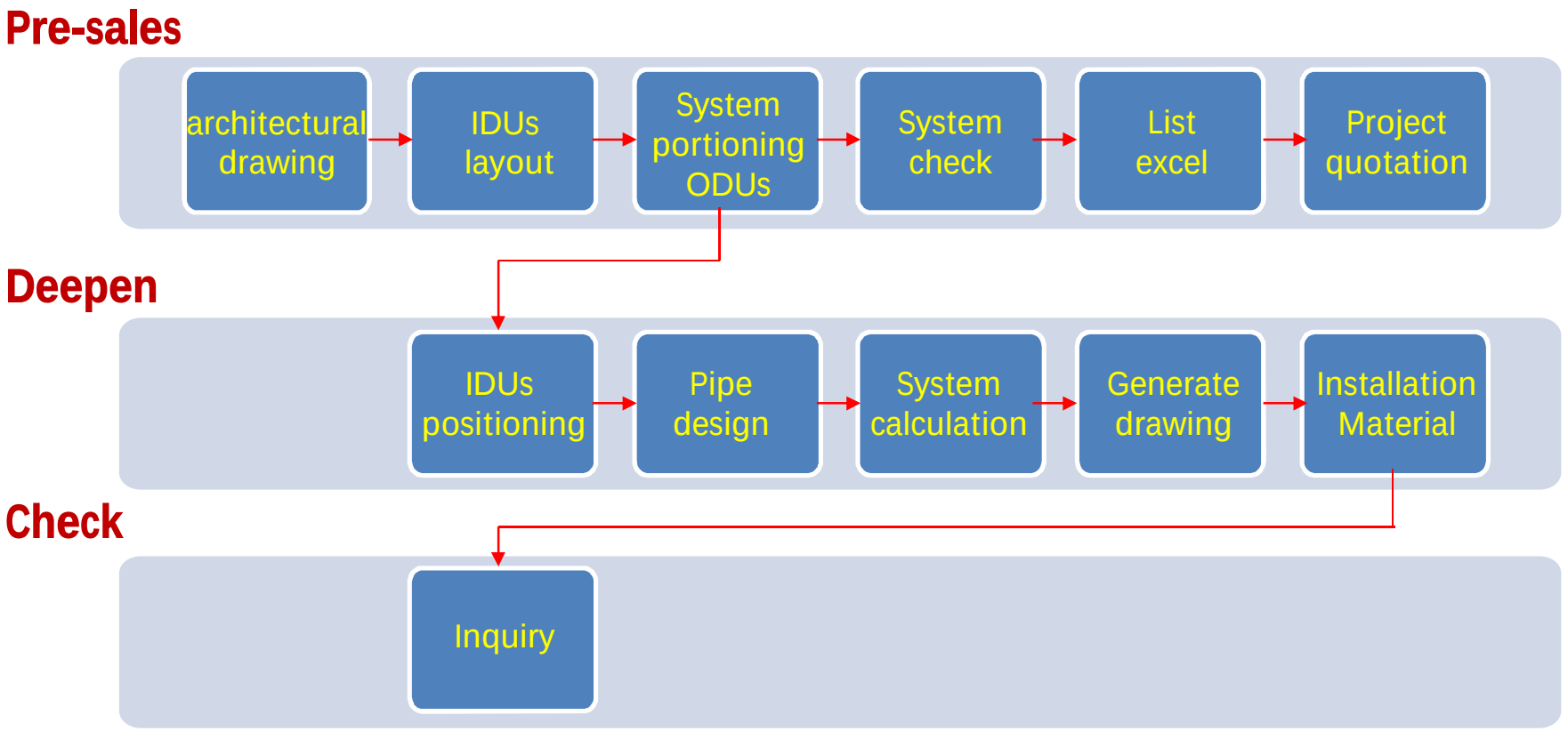




floating toolbars

1. Brief Introduction

Design Process



Contents

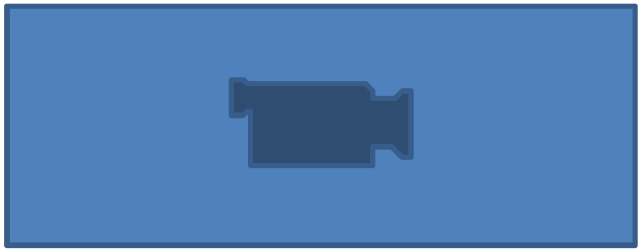
PREPARE:

Installation

- Download address: http://www.hvacapp.com.cn
- Download the edition of AutoCAD and then select oversea edition.
- After finishing software installation, it can be Loaded into the AutoCAD platform automatically.

Register

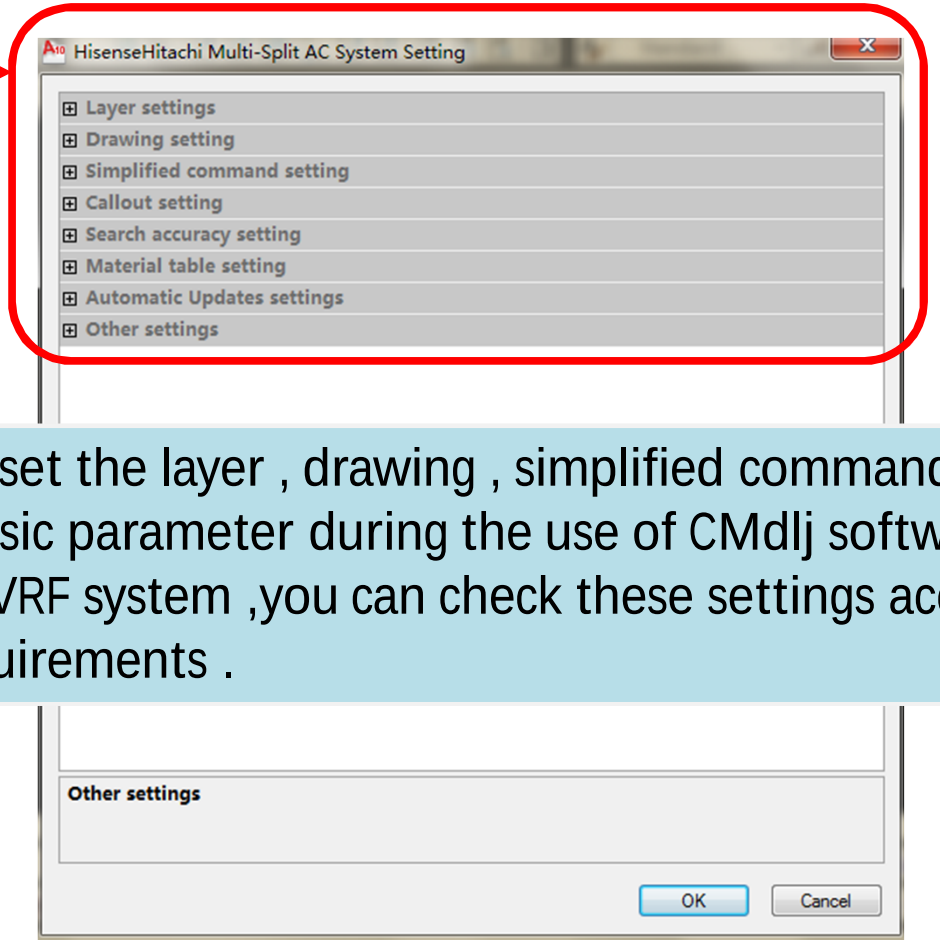
License



2. Main Function

Function 1 System Setting

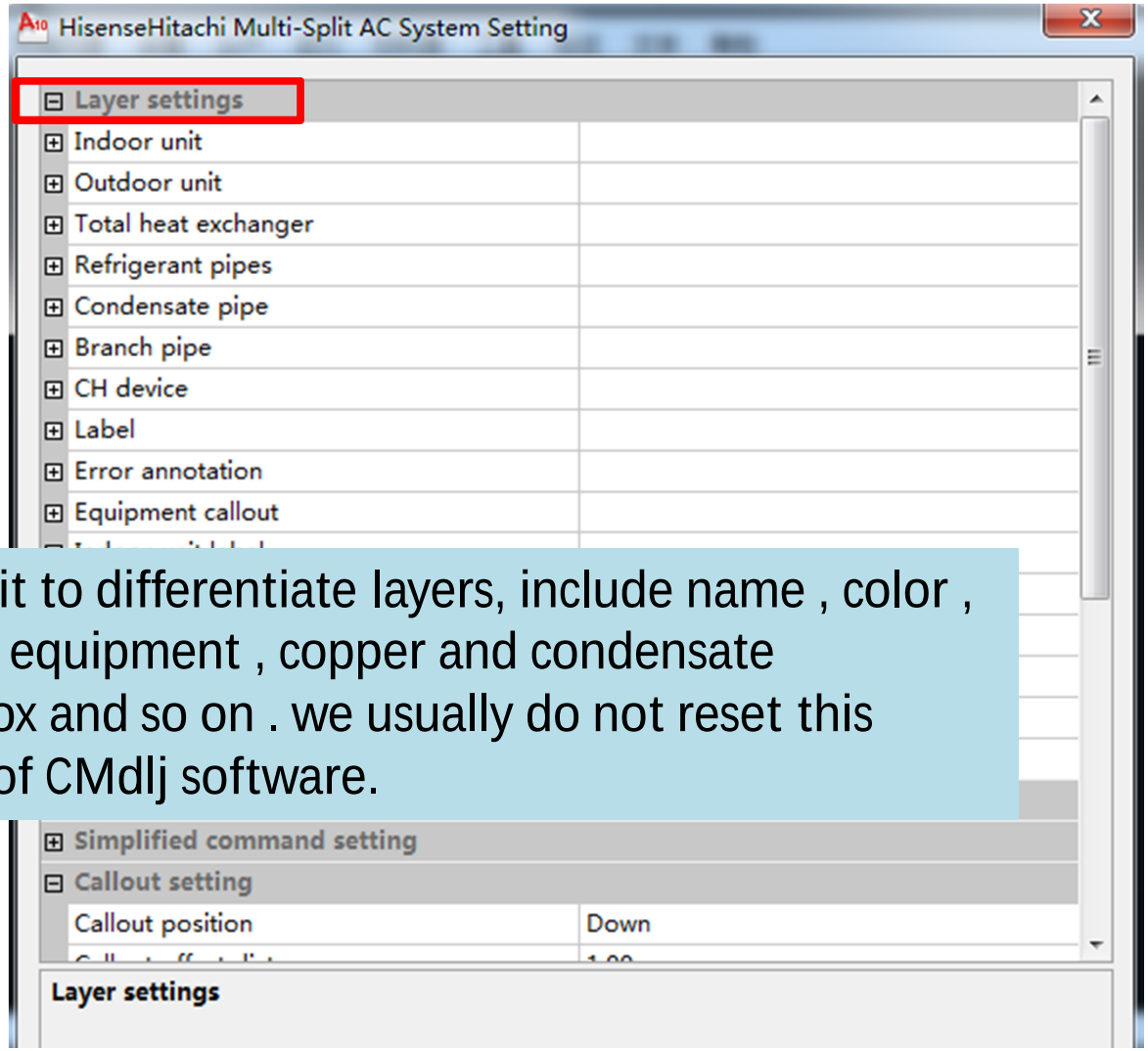
System setting



- System settings can set the layer , drawing , simplified command callout and other basic parameter during the use of CMdlj software . before drawing the VRF system ,you can check these settings according to your drawing requirements .

Function 1 System Setting

Layer setting



- Layer settings： we use it to differentiate layers, include name , color , linear and line width of equipment , copper and condensate pipe ,branch pipe, CH box and so on . we usually do not reset this settings during the use of CMdlj software.

2. Main Function

Function 1 System Setting

Drawing setting

⊞ Layer settings	
⊟ Drawing setting	
Drawing scale	100.00
Text height	2.50
⊟ Branch pipe setting	
Branch pipe filling	Yes
Branch pipe size	2.00
Pipe connector tube length	1.00
⊟ CH device settings	
CH device fills	Yes
CH length	3.01
CH width	1.91
CH extension pipe length	0.20
⊟ Vertical pipe setting	
Refrigerant vertical pipe diameter in drawing	1.00
Condensate vertical pipe diameter in drawing	1.00
⊟ Auto-connecting	
Indoor piping extended length (mm)	400.00
Indoor condensate pipe extended length (mm)	250.00
Min.length of straight line at branch pipe outlet (mm)	0.00
⊞ Simplified command setting	

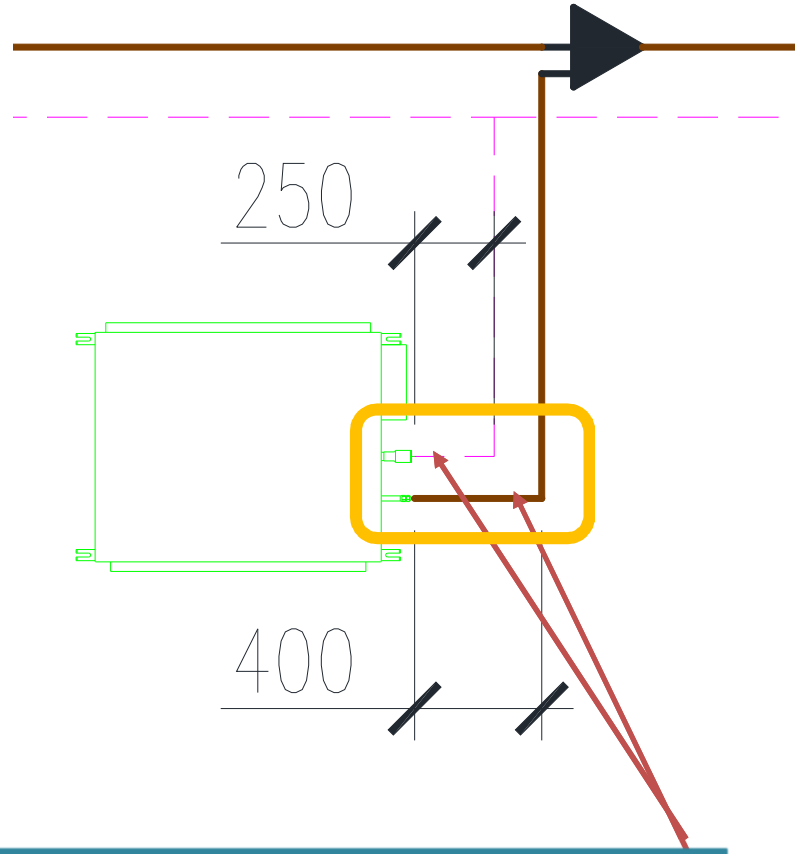
- Drawing settings can reset basic settings such as fills ,scale , length of the branch pipe , CH device , vertical pipe diameter and auto-connecting , according to your drawing requirements.

2. Main Function

Function 1 System Setting

Drawing setting： Auto-connecting

Auto-connecting	
Indoor piping extended length (mm)	400.00
Indoor condensate pipe extended length (mm)	250.00
Min.length of straight line at branch pipe outlet (mm)	0.00



Indoor pipe extending

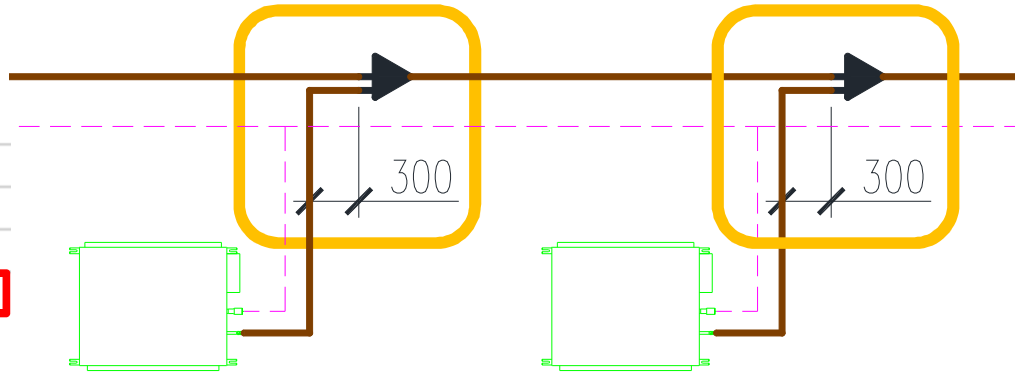
2. Main Function

Function 1 System Setting

Drawing setting： Auto-connecting

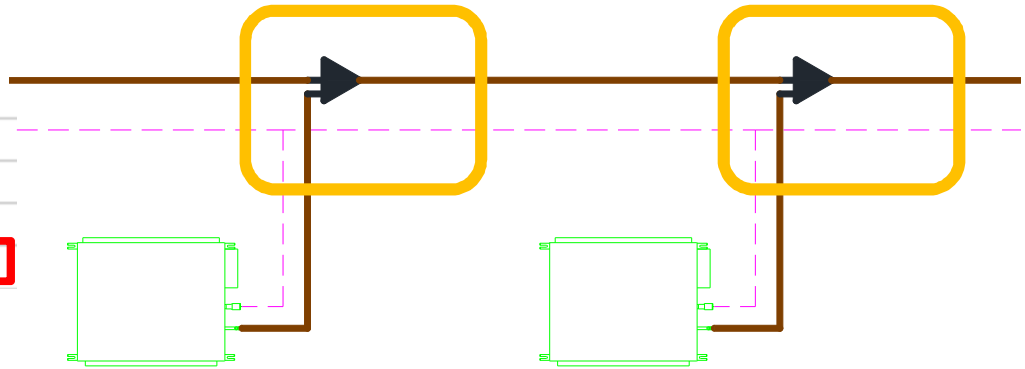
Default

Auto-connecting	
Indoor piping extended length (mm)	400.00
Indoor condensate pipe extended length (mm)	250.00
Min.length of straight line at branch pipe outlet (mm)	300.00



We suggest change the value to “0”

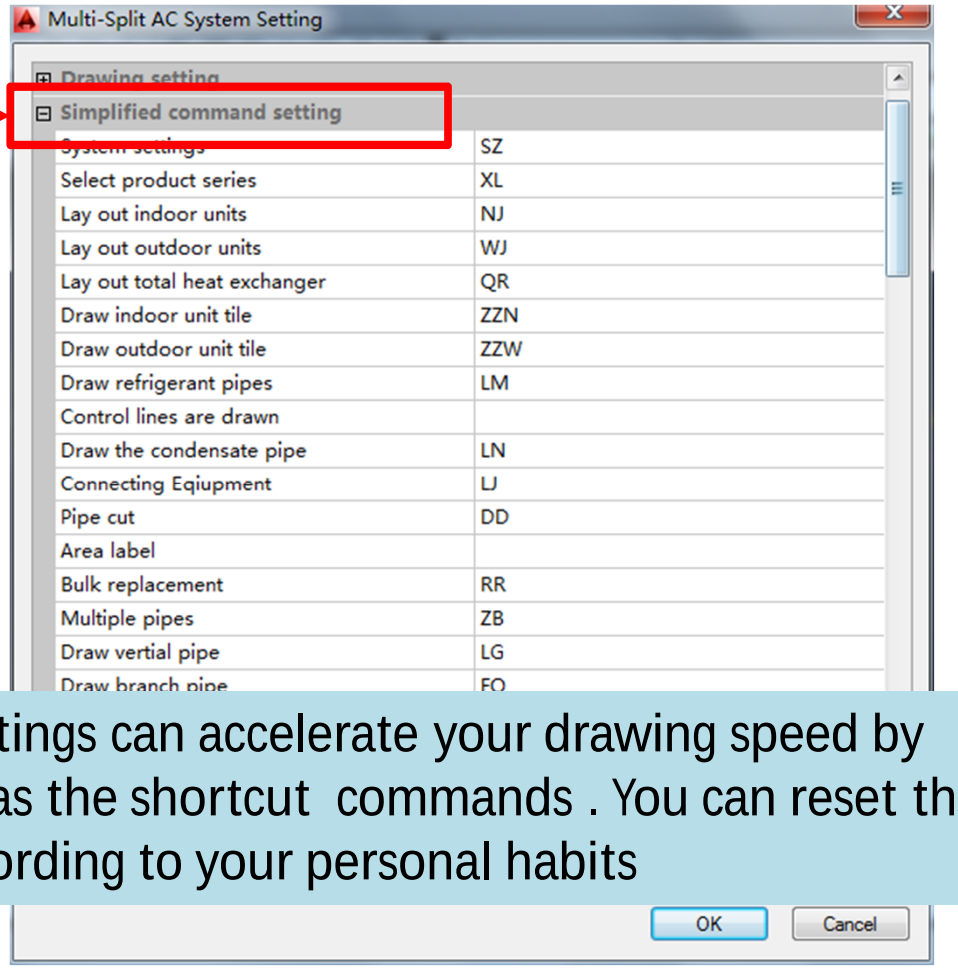
Auto-connecting	
Indoor piping extended length (mm)	400.00
Indoor condensate pipe extended length (mm)	250.00
Min.length of straight line at branch pipe outlet (mm)	0.00



2. Main Function

Function 1 System Setting

Short-cut



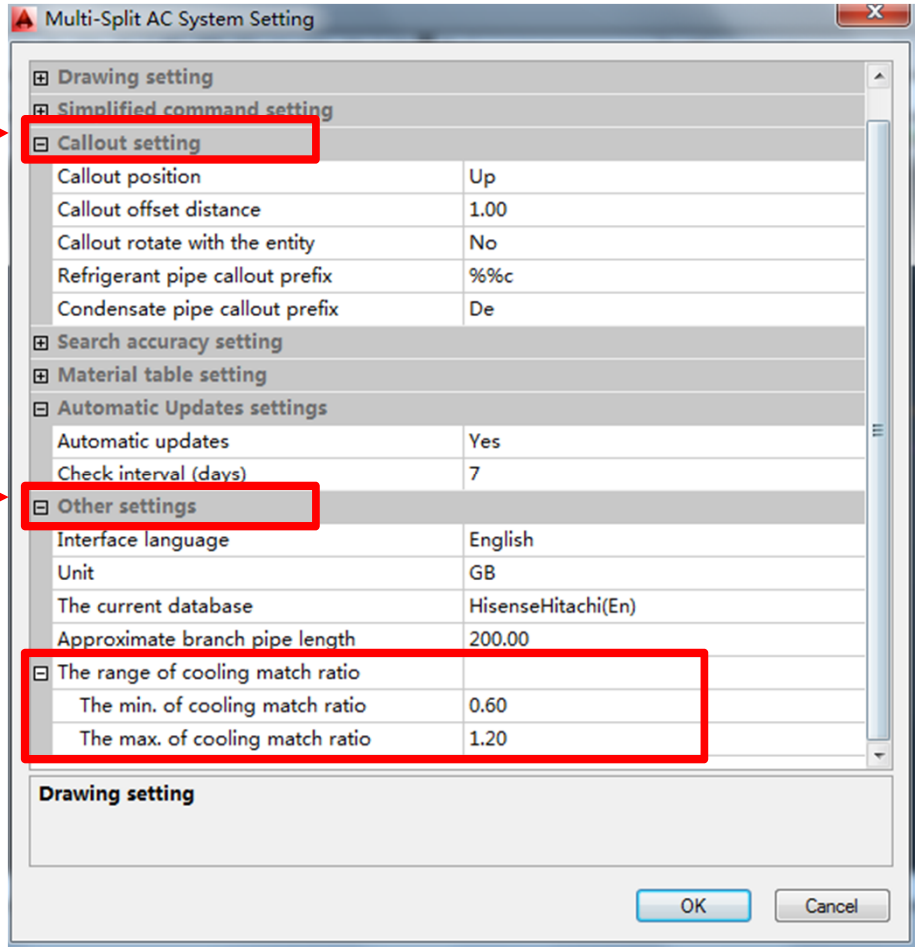
- Simplified command settings can accelerate your drawing speed by inputting simple letters as the shortcut commands . You can reset the shortcut commands according to your personal habits

2. Main Function

Function 1 System Setting

Mark setting

Other settings

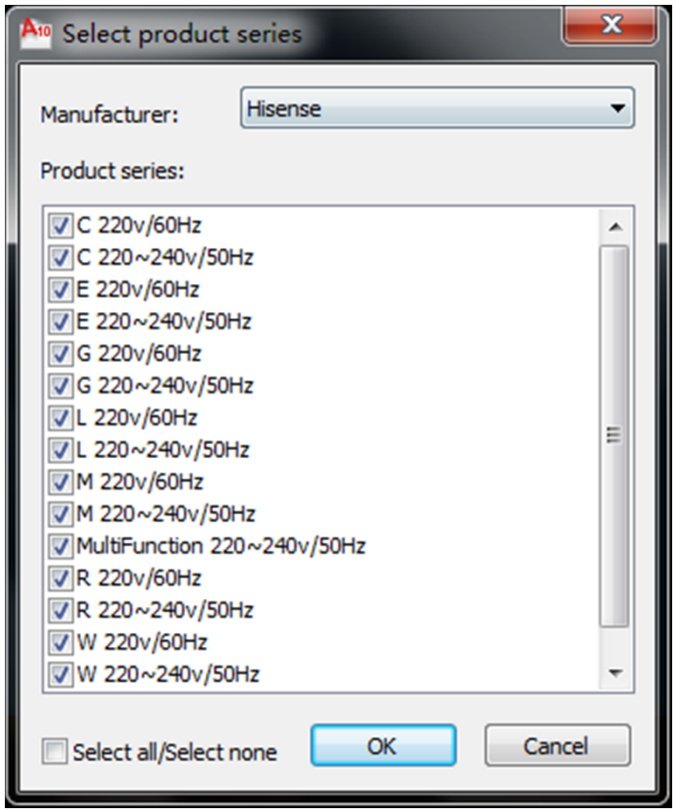


- Prefix
- Language
  Chinese
  English
- Unit
  meter(GB)
  feet(Imperial)

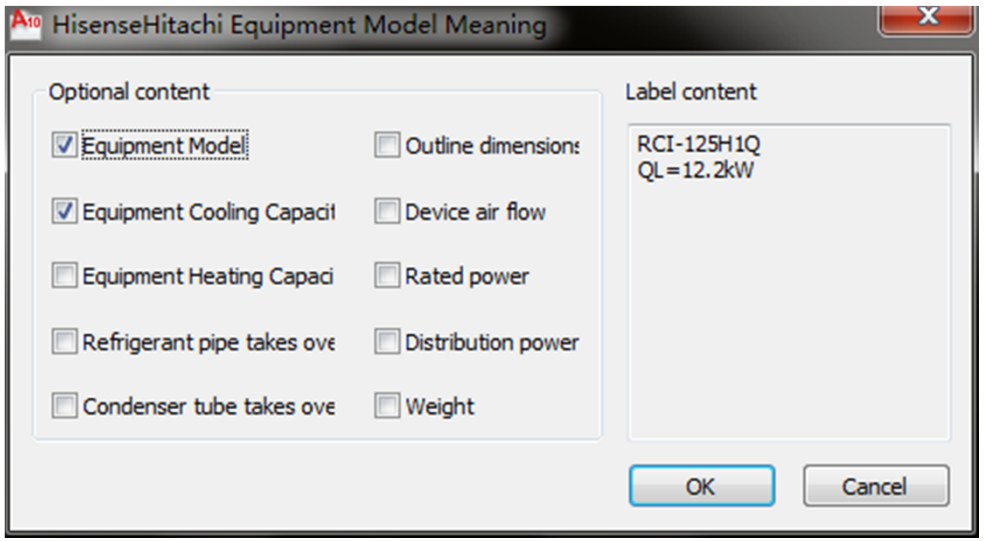
2. Main Function

Function 2 Series and Content Setting

Select Series



Model content



TICK WHAT YOU NEED !

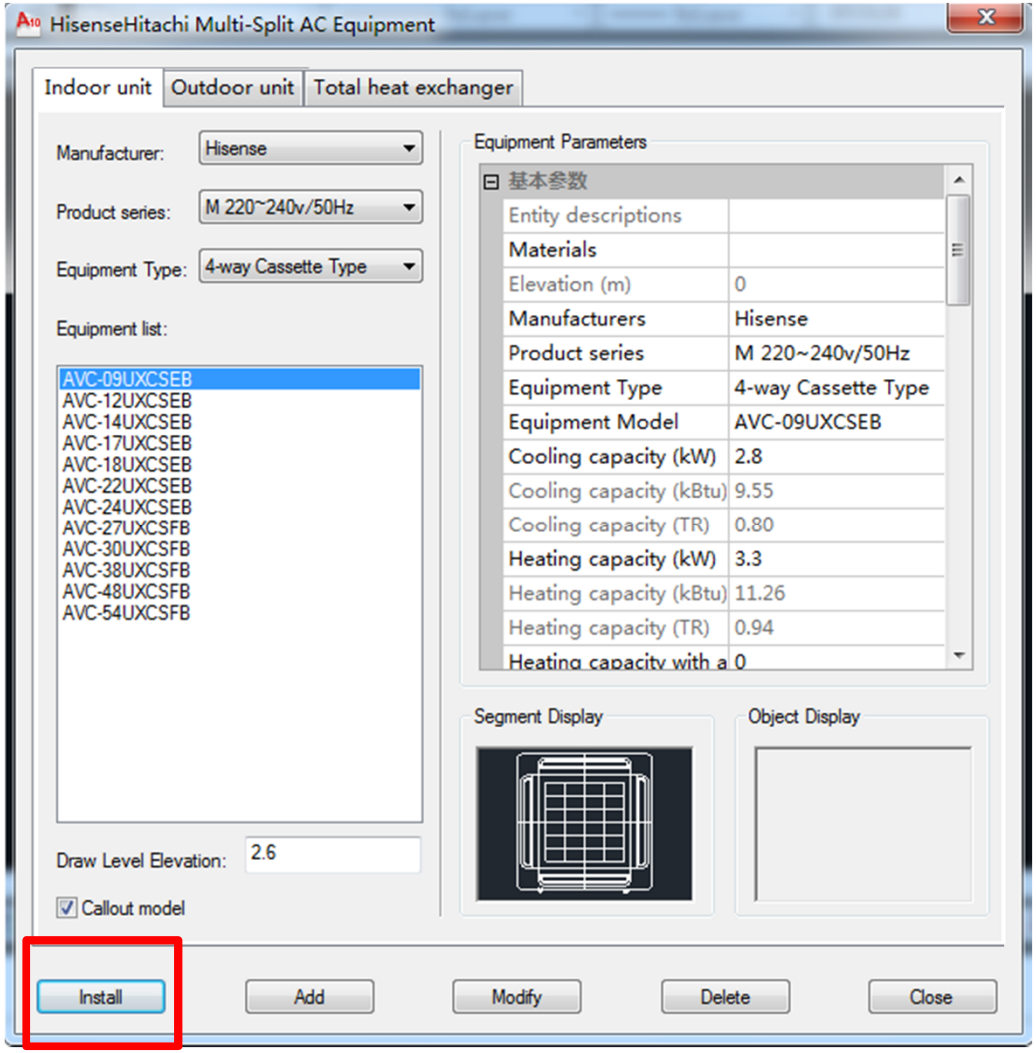
2. Main Function

Function 3 Equipment layout

Indoor unit/outdoor unit →

Equipment Parameters

Manufacturers	Hisense
Product series	M 220~240v/50Hz
Equipment Type	4-way Cassette Type
Equipment Model	AVC-09UXCSEB
Cooling capacity (kW)	2.8
Cooling capacity (kBtu)	9.55
Cooling capacity (TR)	0.80
Heating capacity (kW)	3.3
Heating capacity (kBtu)	11.26
Heating capacity (TR)	0.94
Heating capacity with au	0
Rated power (kW)	.04
Distribution of power (k	.048
Power with auxiliary hea	0



- click “indoor unit”, choose product series and equipment type.

2. Main Function

Function 4 Pipelines design

Pipelines system

Copper tube

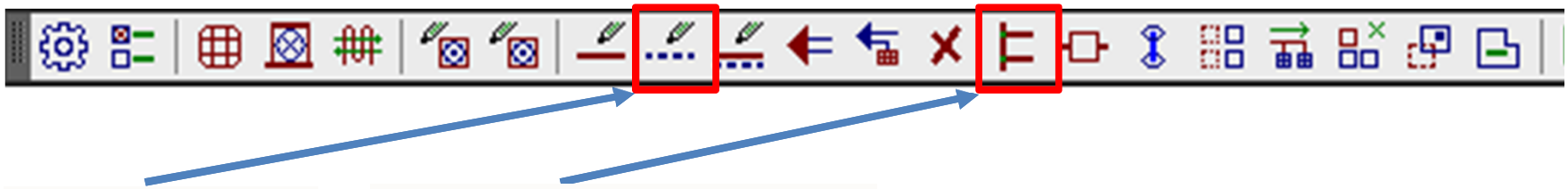
Drain pipe

Double pipe

Double pipe

2. Main Function

Function 4 Pipelines design

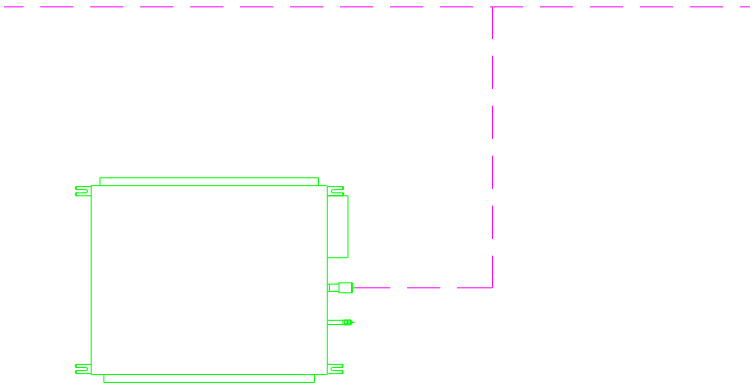


Drain pipe

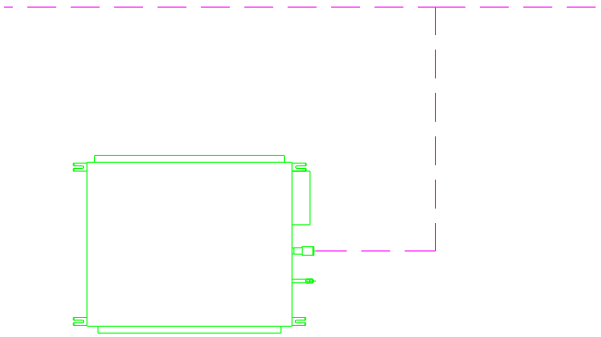
Break drain pipe

Connect equipment

- 1.draw main drain pipe
- 2.draw branch drain pipe
- 3.break drain pipe



- 1.select copper tube (if only connect drain pipe, just click “space”)
- 2.select drain pipe
- 3.select Indoor units
- 4.click “space” or “enter”
- done

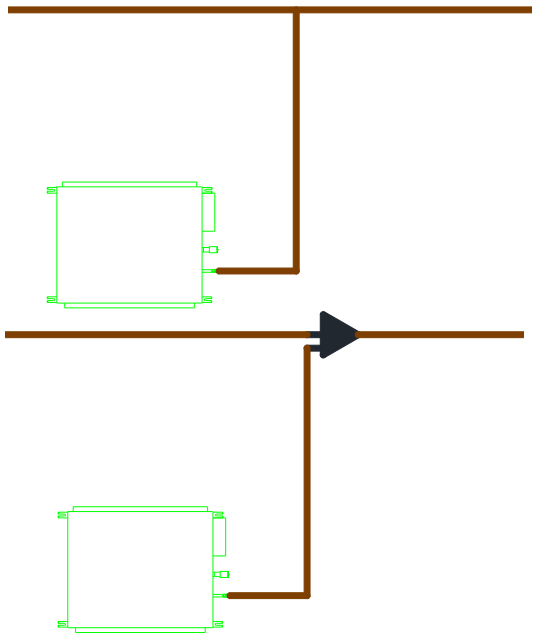


2. Main Function

Function 4 Pipelines design

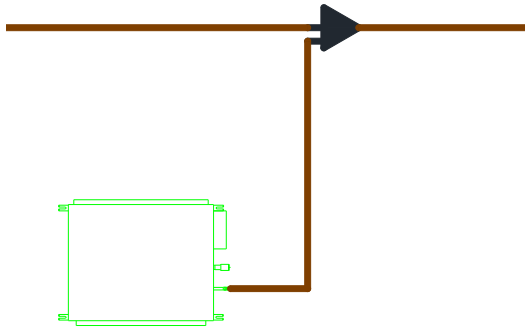
Branch pipe

- 1.select main pipe
- 2.select branch pipe



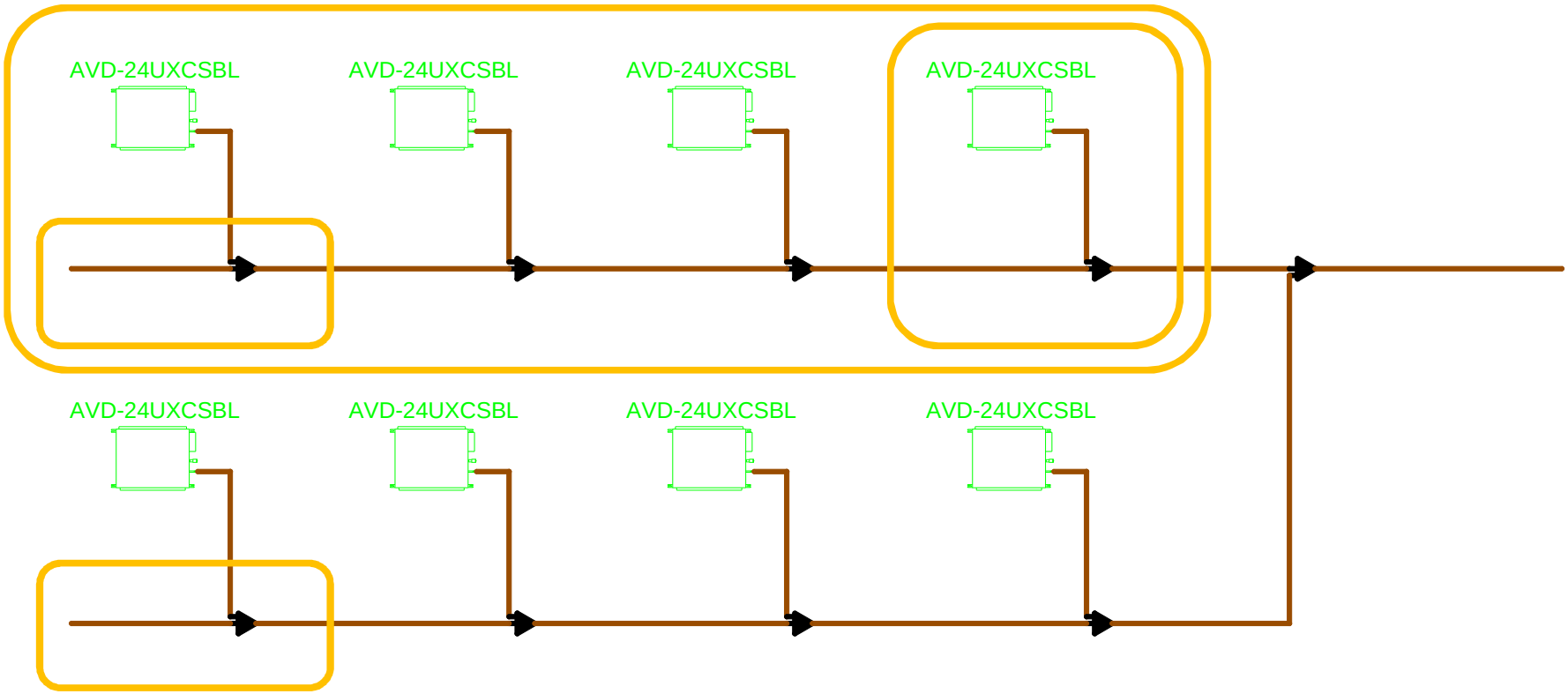
Connect equipment

- 1.select copper tube
- 2.select drain pipe(if only connect copper tube, just click “space”)
- 3.select Indoor units
- 4.click “space” or “enter”
- done



2. Main Function

Function 5 Smart Erase

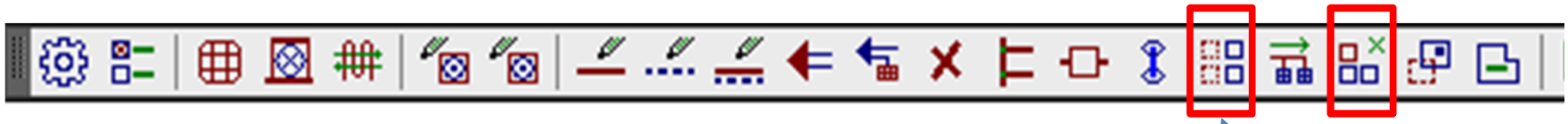


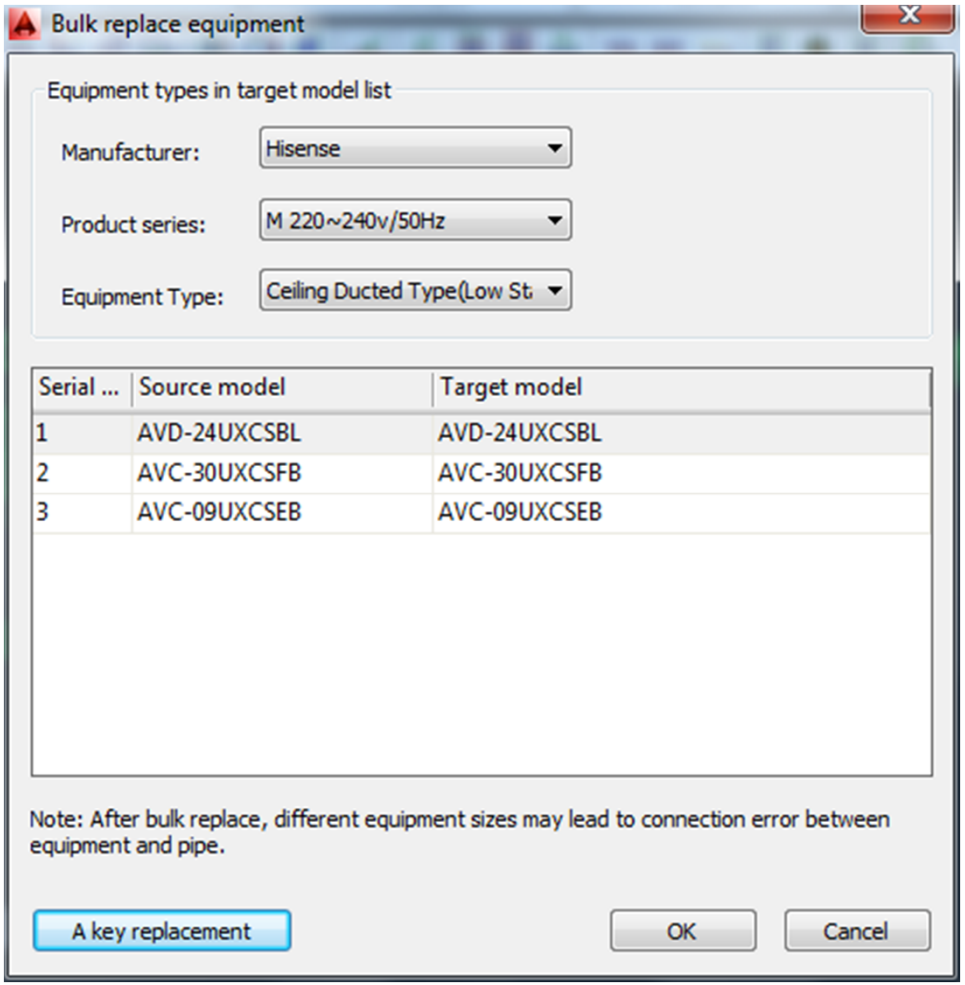
➢ Smart erase:

use this key to erase indoor unit, branch pipe, or CH box, it can also clear up pipe system in the meanwhile.

2. Main Function

Function 6 Smart Label and IDUs replace





- Equipment replace

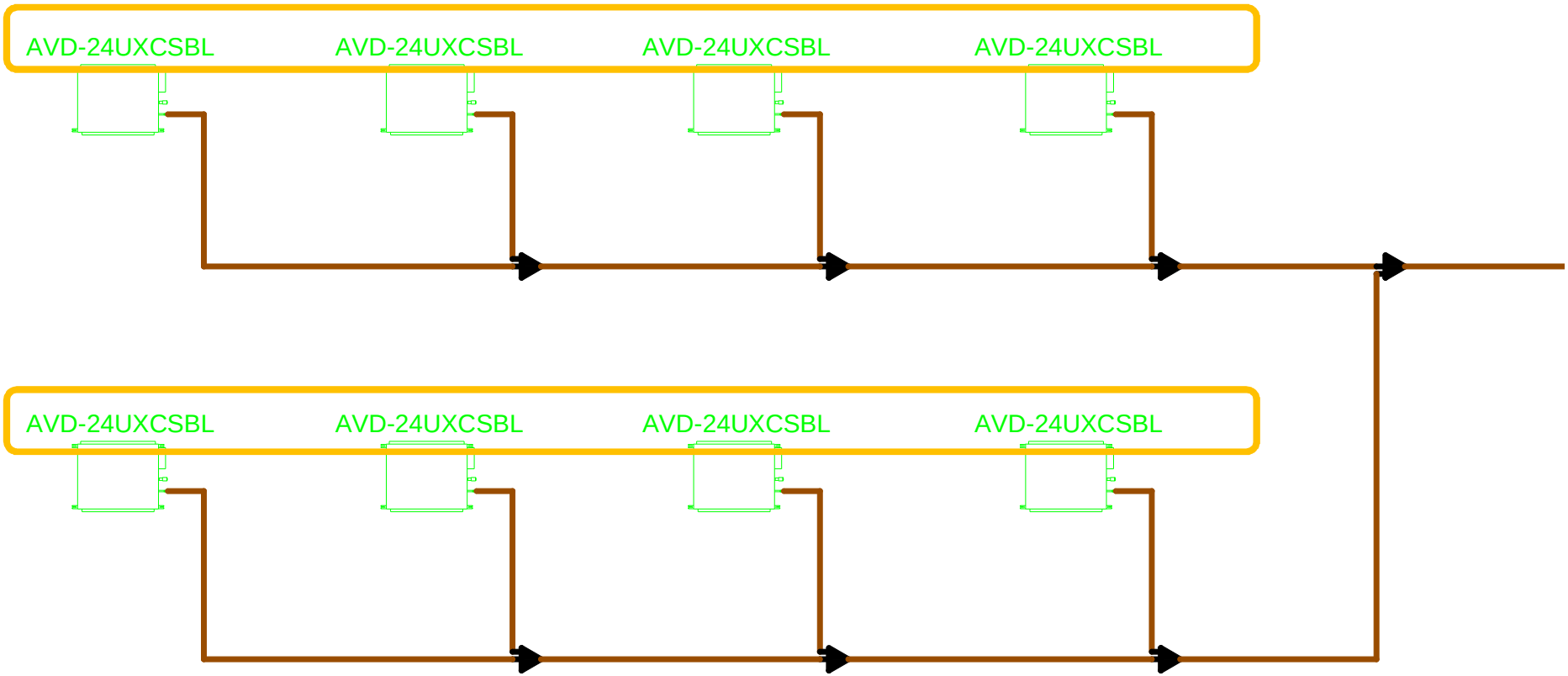
Select the equipment you want to replace , choose the product series and type.

- Quick erase: use it to delete, copy or move things which are in the same layer or type.

2. Main Function

Function 6

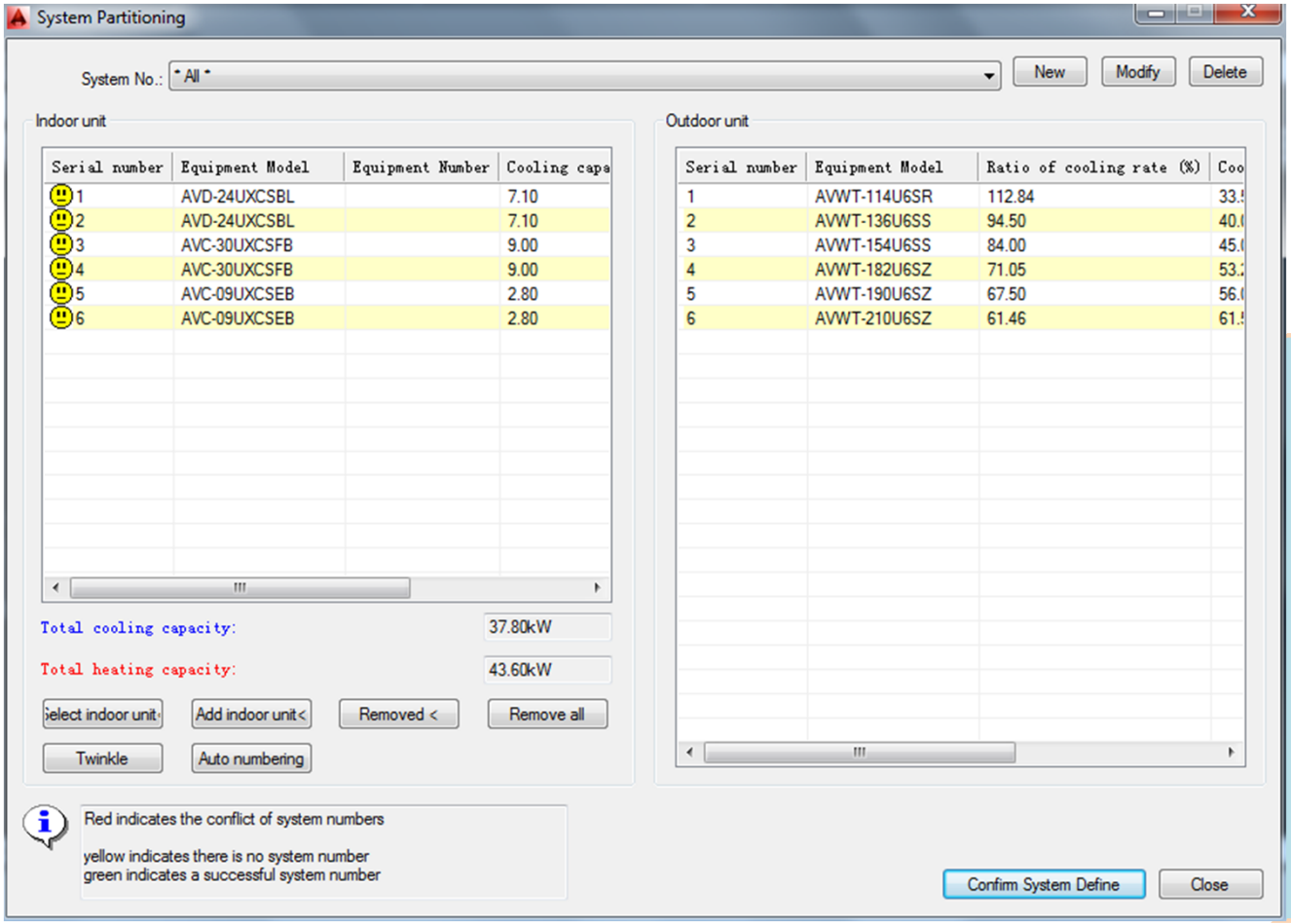
Smart Label and IDUs replace



2. Main Function

Function 7 Refrigerant system partition

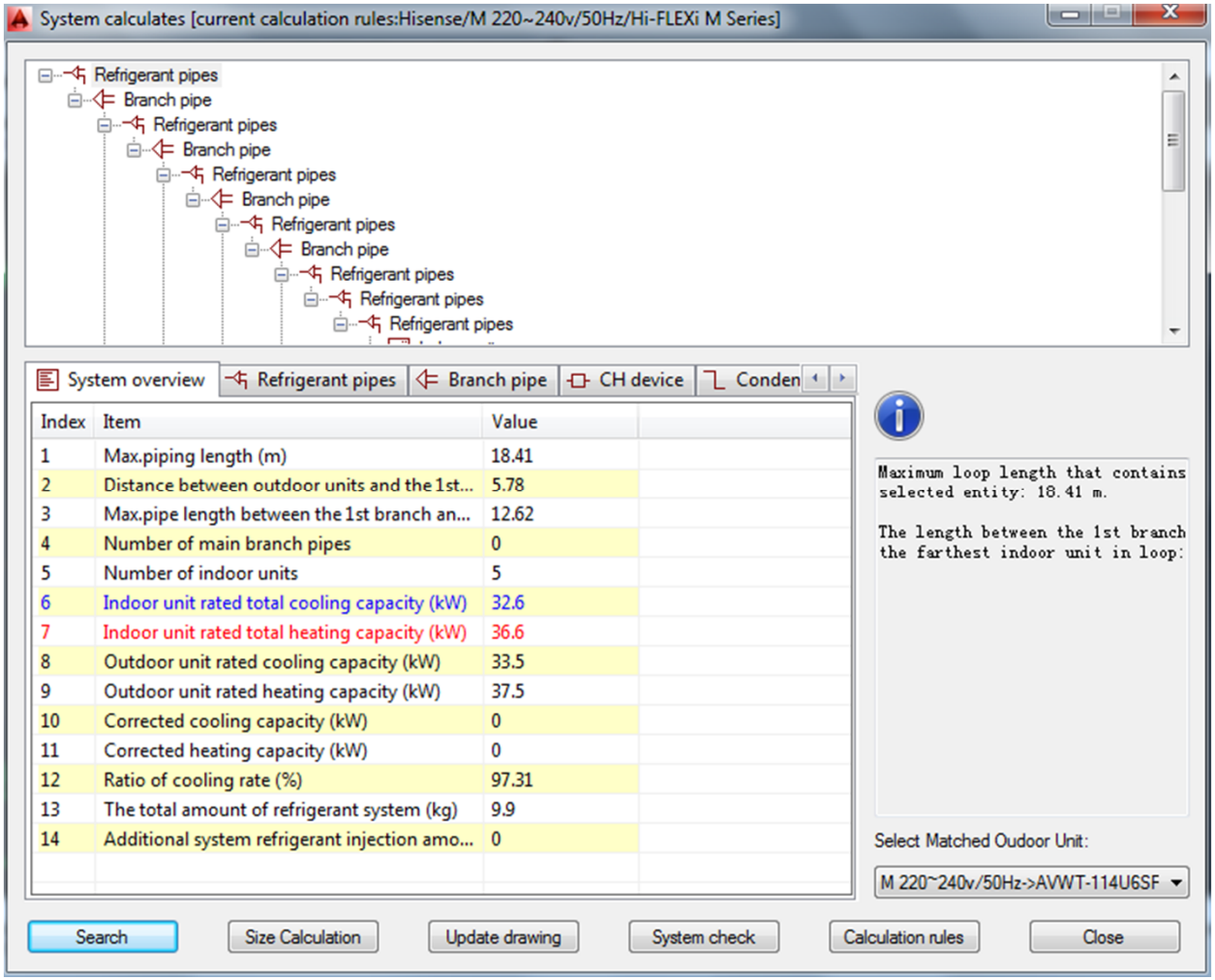
System define



Defining system name and equipment series No. , managing many different systems at the same time. Supporting dynamic twinkle and calculating the match ratio between IDU and ODU.

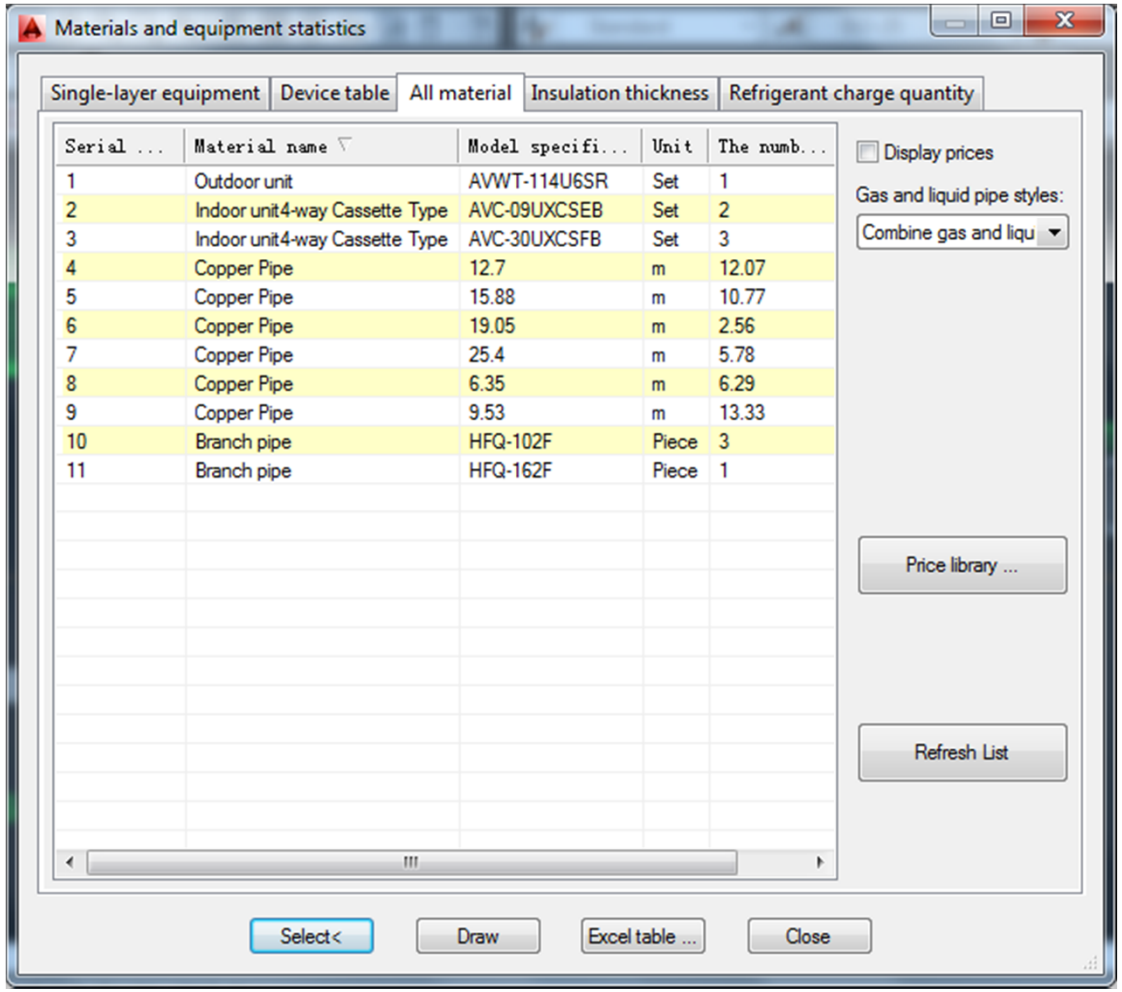
2. Main Function

Function 8 System calculation



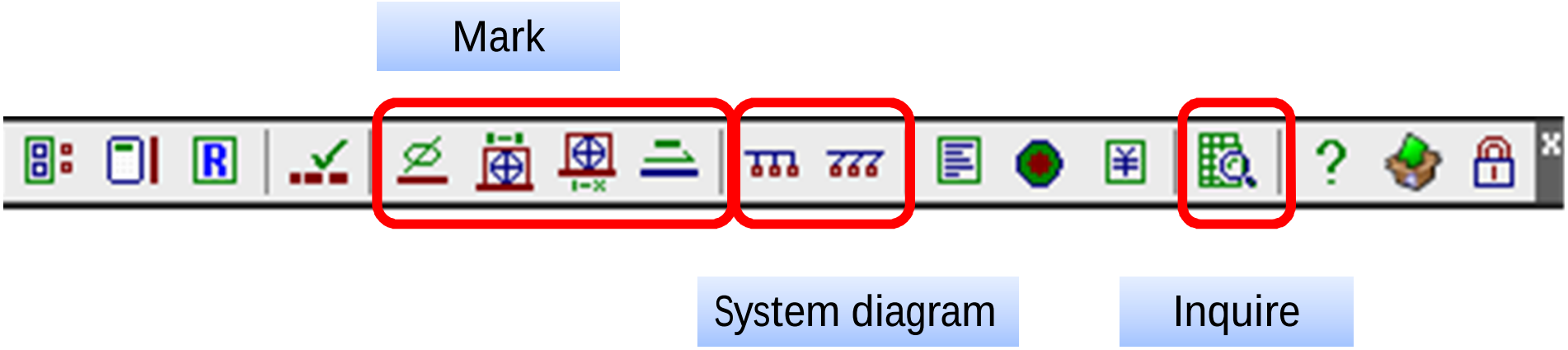
2. Main Function

Function 8 Bill of material



2. Main Function

Other Functions

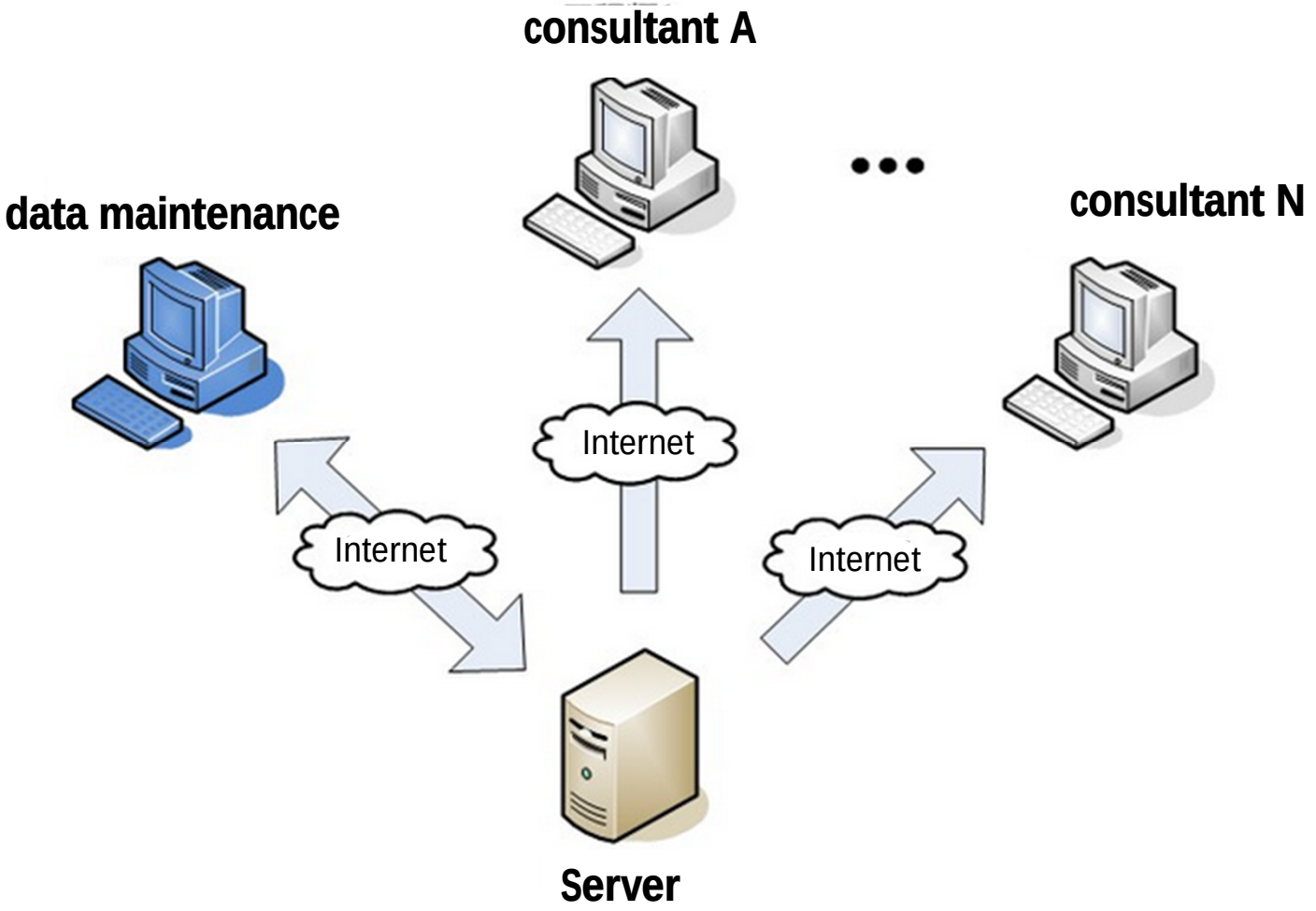


- Mark : Indoor unit , outdoor unit, branch pipe, and drain pipe slope
- System diagram: schematic and axonometric drawing
- Inquire : all information of indoor ,outdoor unit, pipe, branch pipe, and so on

2. Main Function

➢ Update Online and Automatically

Update check



Contents

3. Project Case

Design Steps

1 Area measure , IDUs layout

2 Refrigerant system define, select matched ODU. Confirm shaft position.

3 Draw refrigerant pipe, condensate pipe, branch pipe and connect with IDUs.

4 Calculate the pipe diameter and branch pipe size.

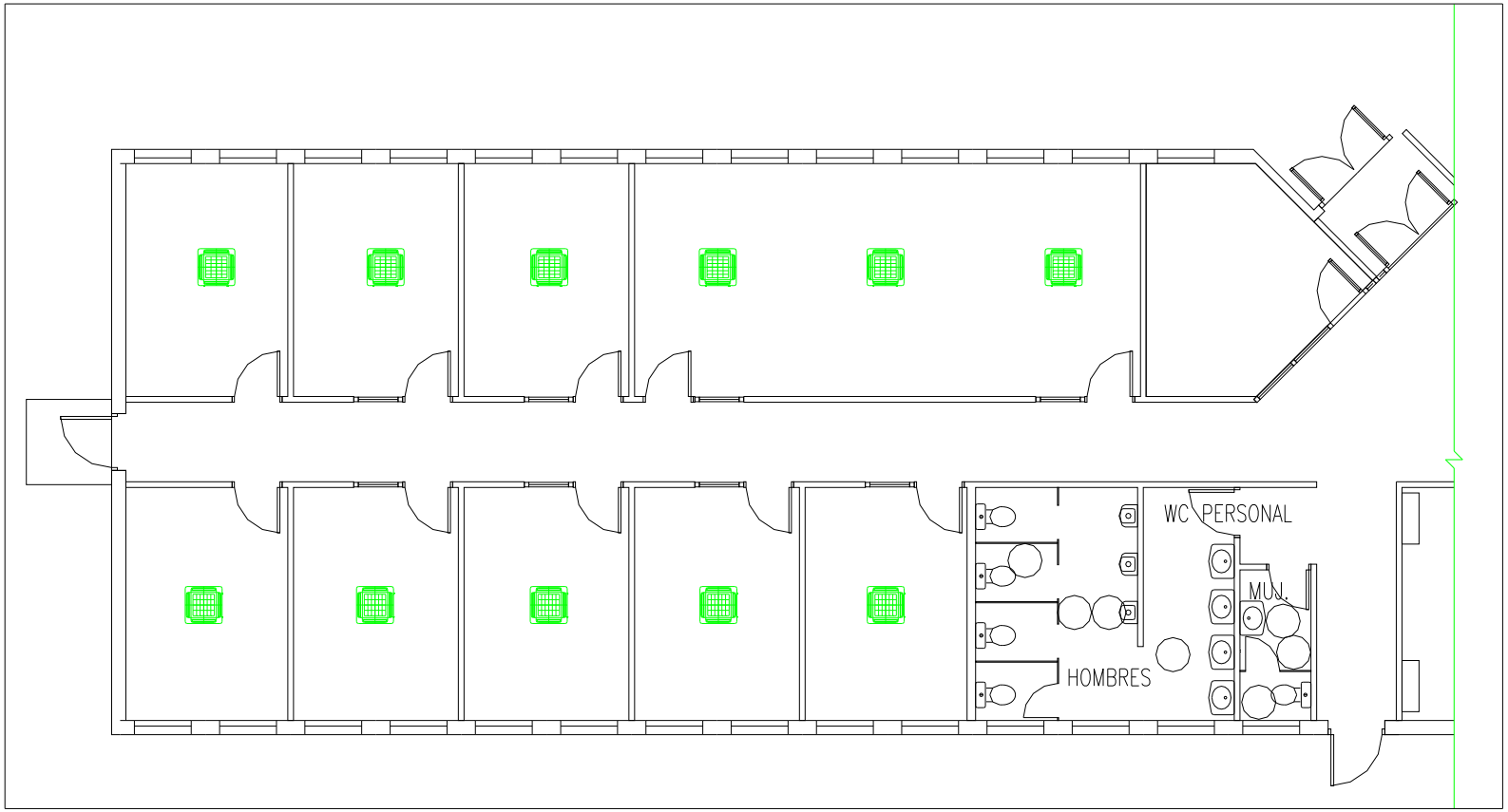
5 Label the pipes' dimension and branch pipe (both diameter and type).

6 Count the material ,draw the chart in drawing or export to Excel.

7 Inquiry the equipment or pipe in the drawing.

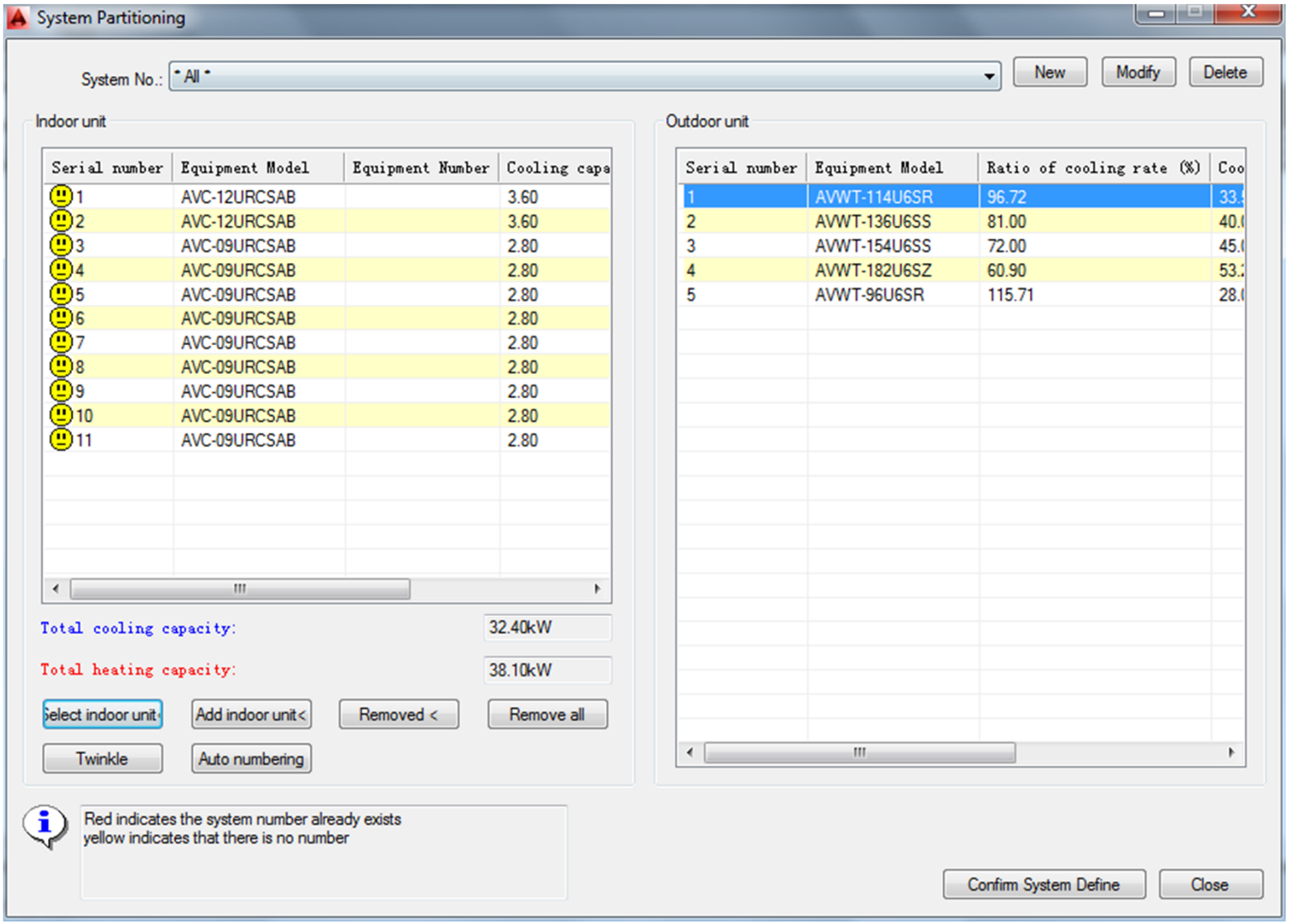
3. Project Case

1.IDUs layout , like Duct type , 4-way cassette



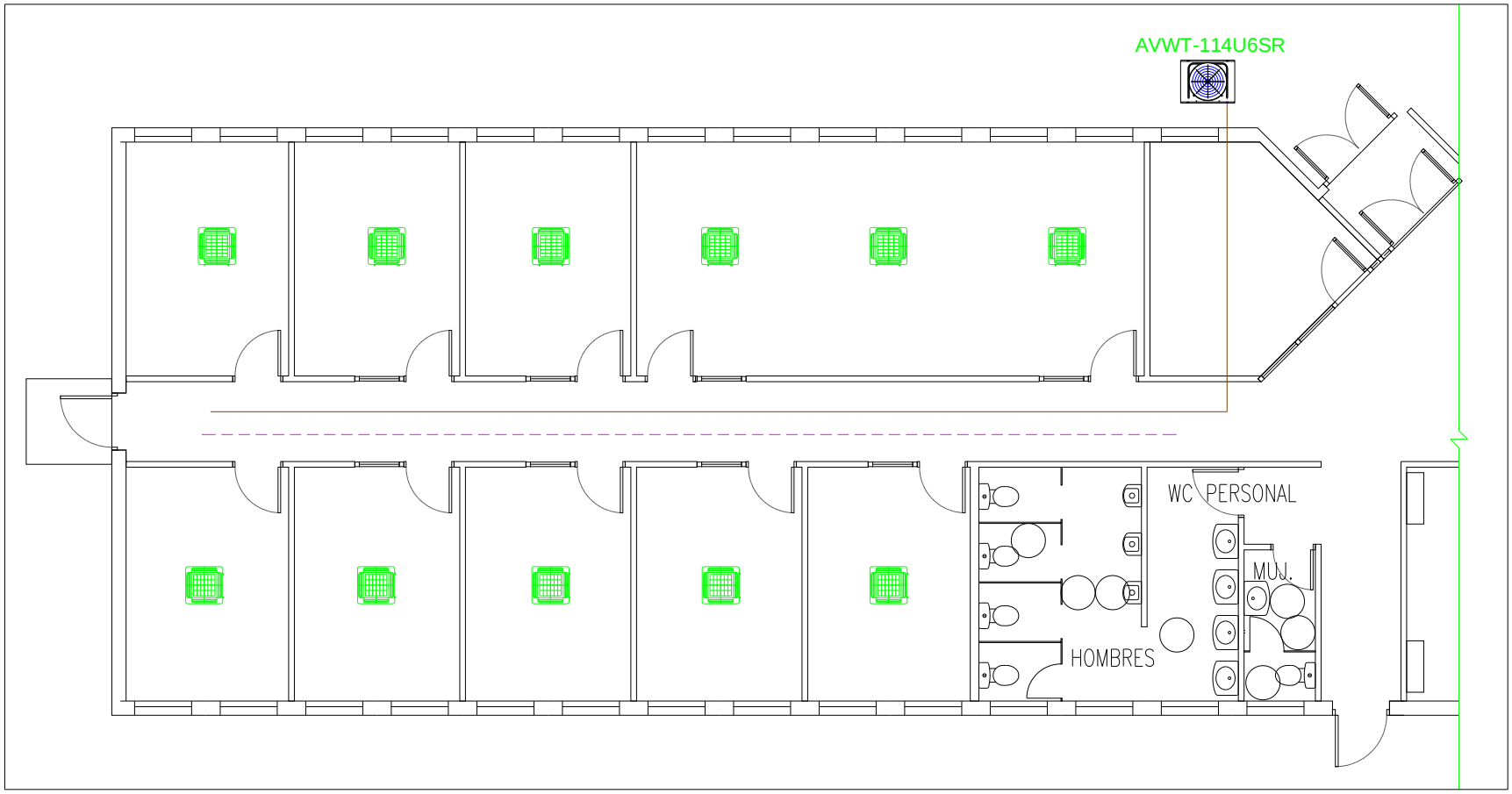
3. Project Case

2.Refrigerant system partition , select matched ODU.



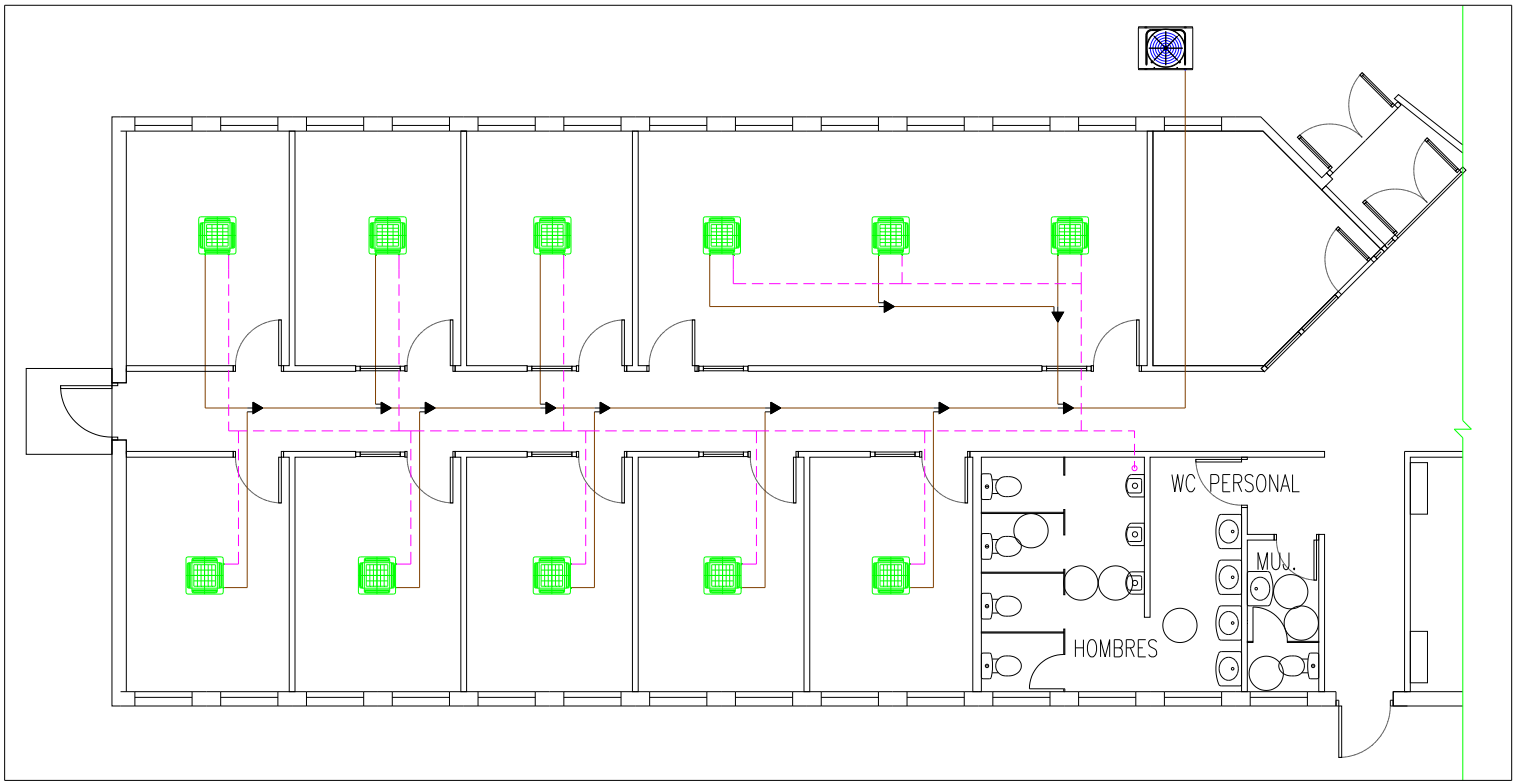
3. Project Case

3.1 Drawing the refrigerant pipe and condensate pipe



3. Project Case

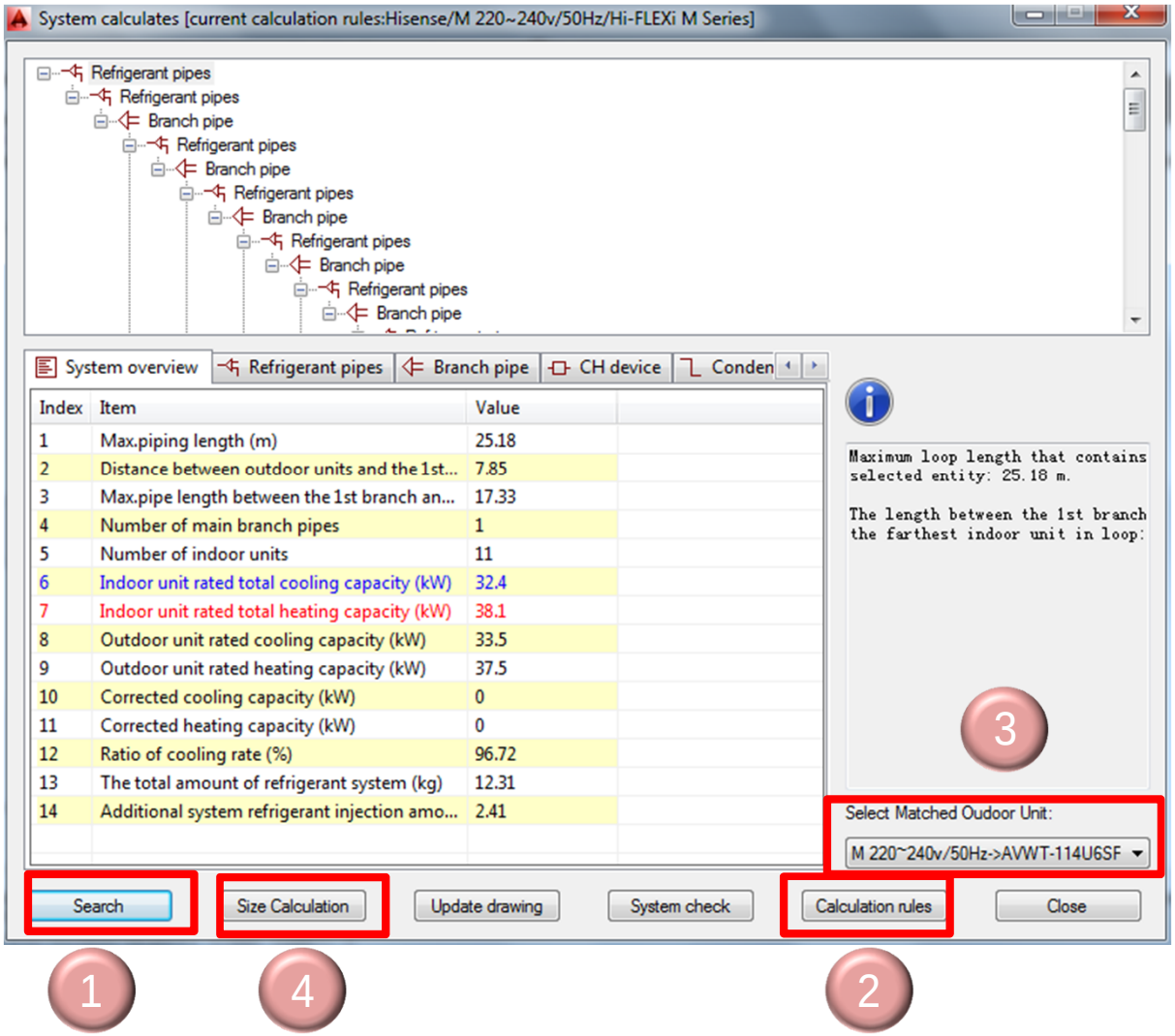
3.2 Drawing the branch pipe and connecting equipment.



- Auto-connecting all the equipment with pipes and branch pipes:
  Select terminal refrigerant pipe—condensate pipe—all the equipment.
- Auto-connecting a single equipment with the pipe:
  Inputting “mm” + ”space ” + ”s ”+”space ”.

3. Project Case

4. System calculation , calculate the pipe diameter and branch pipe .



Calculation steps:

1.Click “search” to select the terminal refrigerant pipe or condensate pipe, check that all the equipment twinkling in the system.

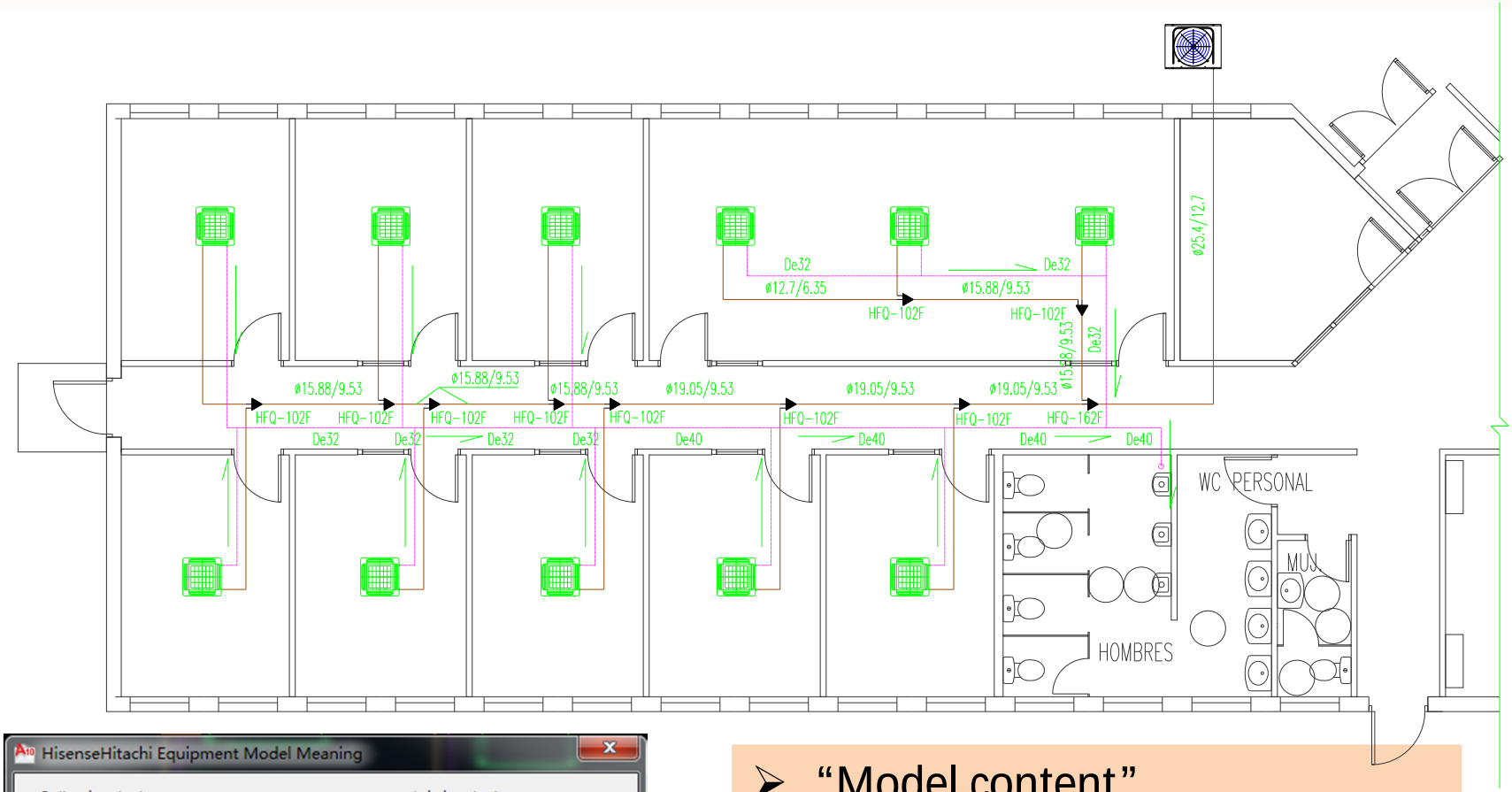
2.Click “calculation rules” and check product series and current rule template.

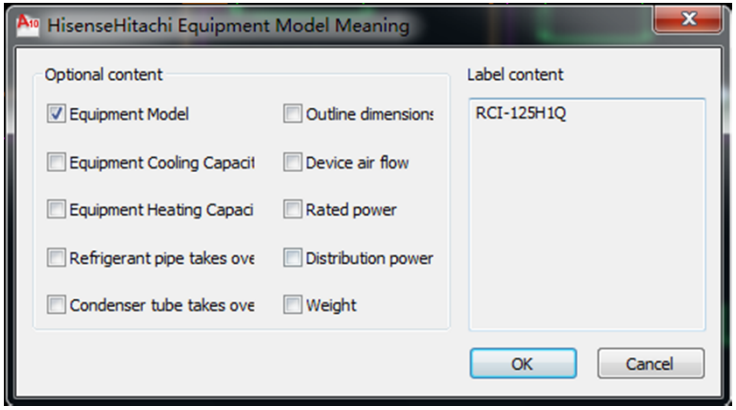
3.Select matched outdoor unit.

4.Click “size calculation” and “close”, calculation complete.

3. Project Case

5.1 Label Equipment , including IDU ,ODU , heat exchanger, branch pipe ,CH device.



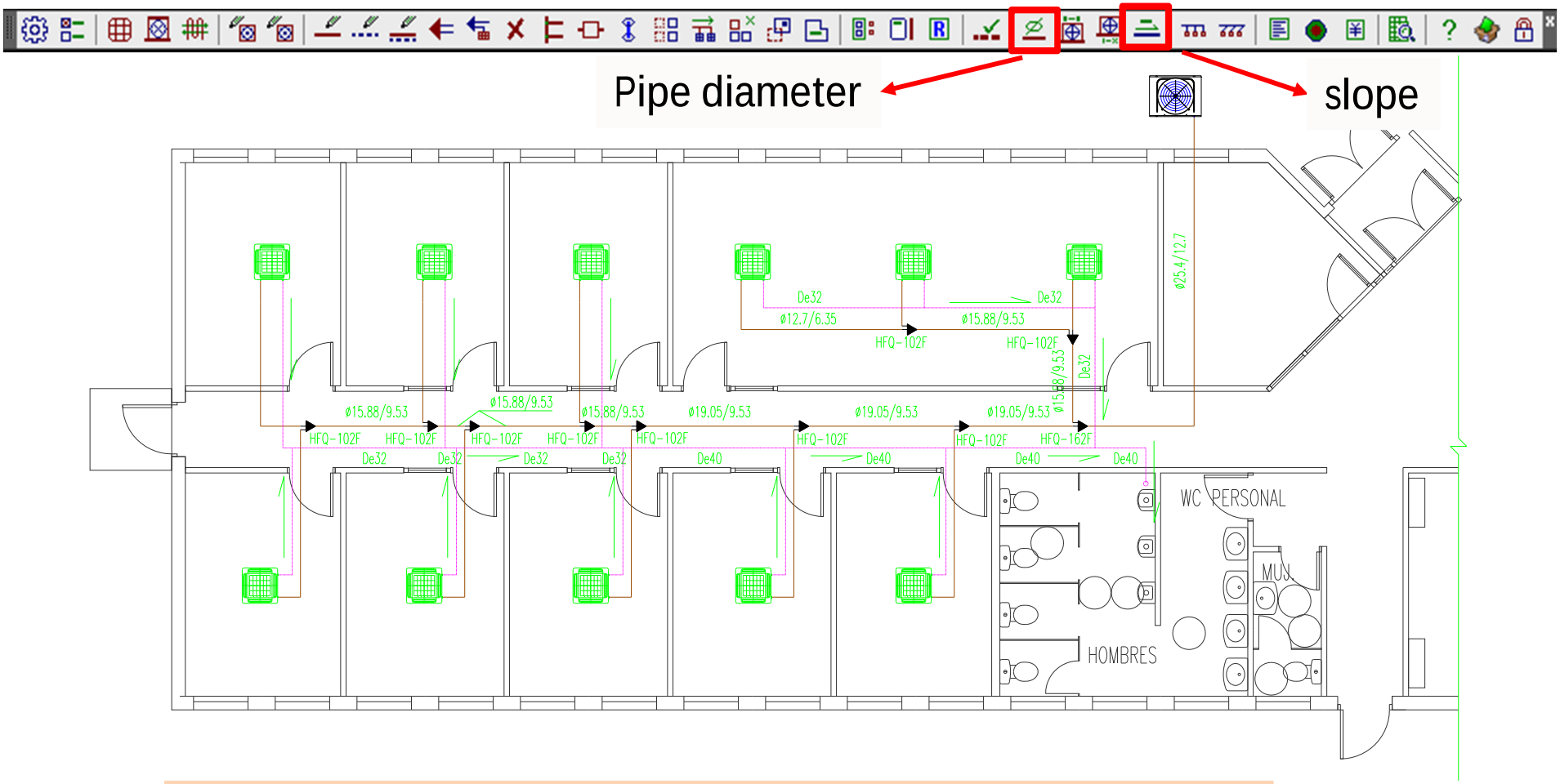


- "Model content"

Before labelling the model of equipment or generating material list in CAD or EXCELL form . The equipment parameters in the optional content can be checked to add in the list.

3. Project Case

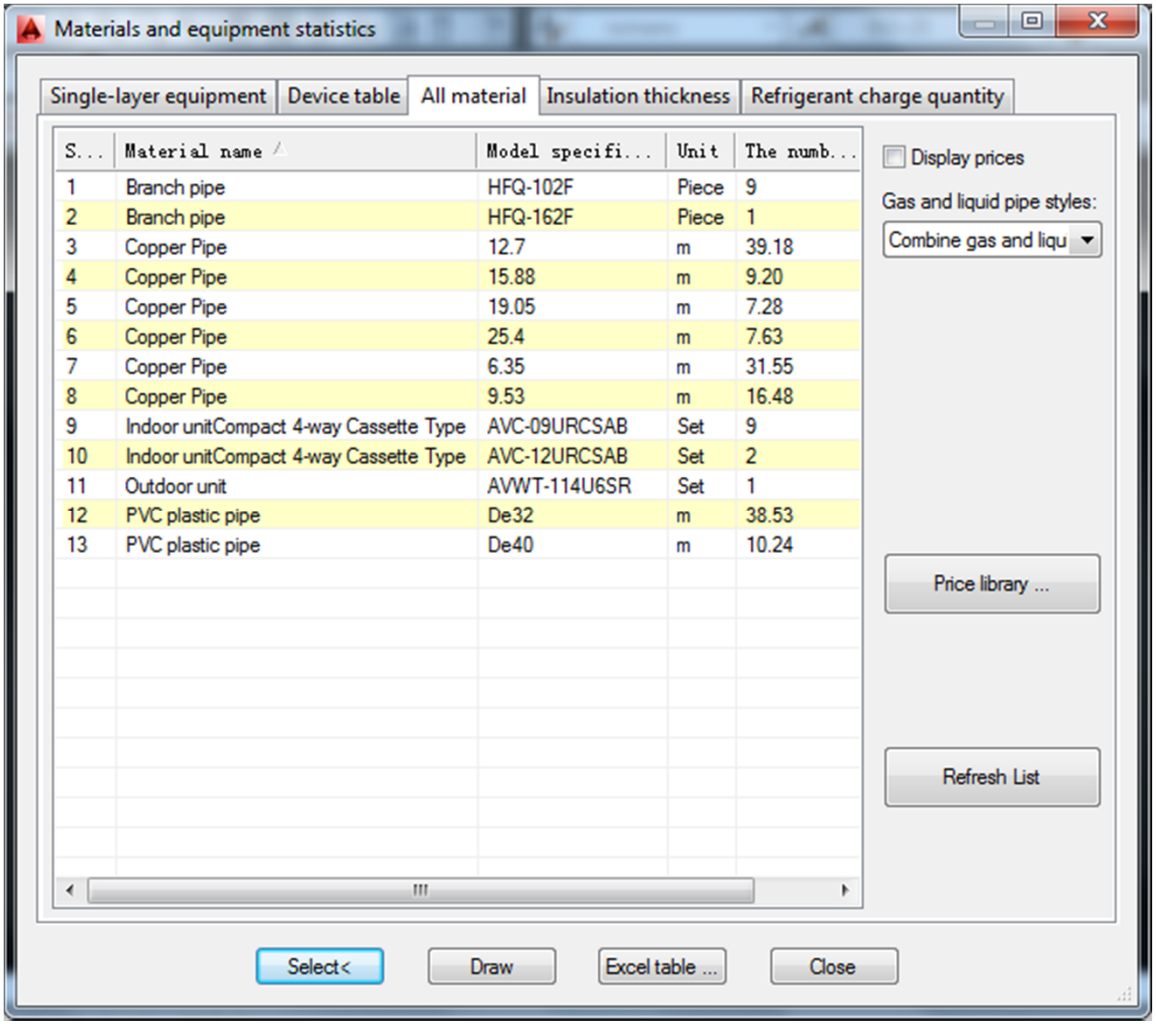
5.2 Labelling refrigerant pipe and condensate pipe diameter , and slope.



- Input “a”+”space” labelling all the pipes at the same time
- Click “ inquire” button can check and reset the elevation, pipe size , and pipe type.

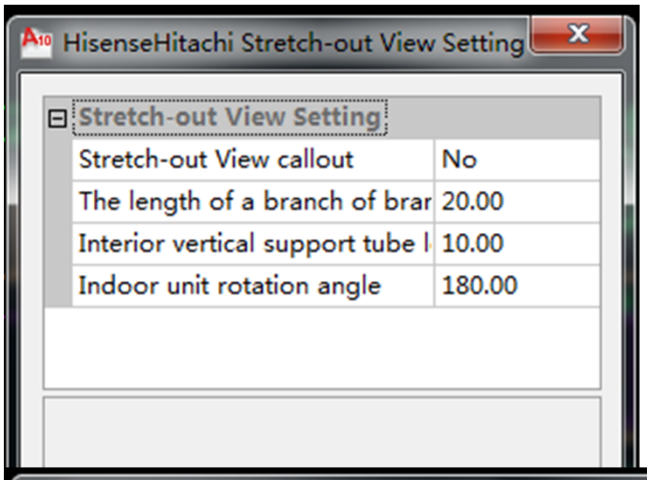
3. Project Case

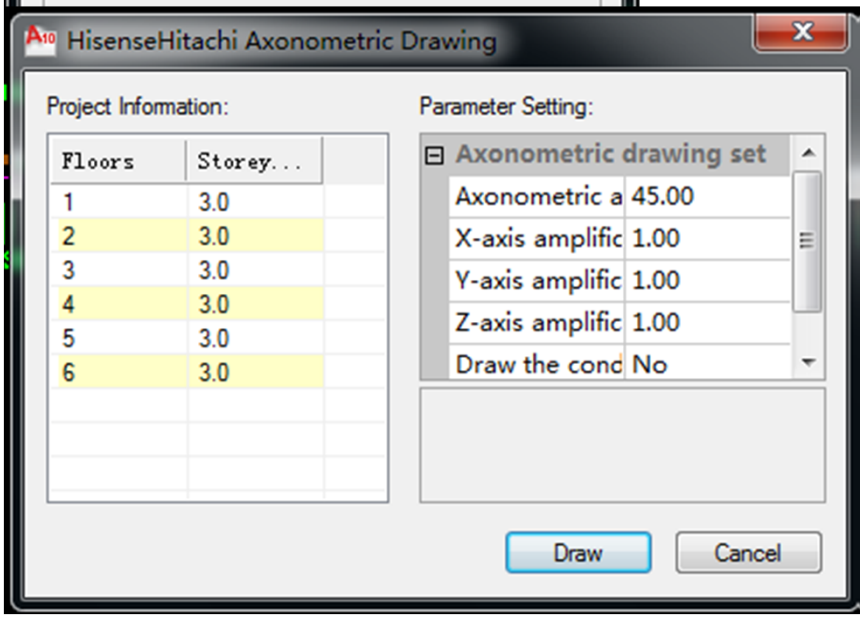
6.Generate the bill of material, Classified as the size of the copper and condensate pipe, generate material list in CAD or EXCELL form.

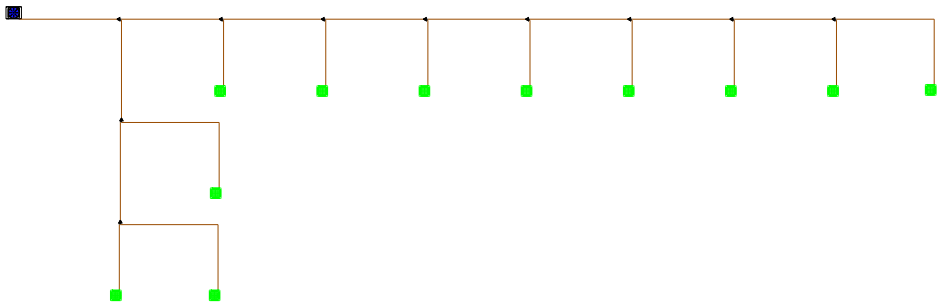


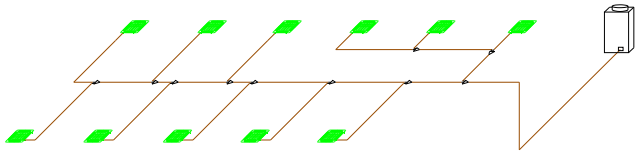
3. Project Case

7.Generate the axonometric drawing, stretch-out view drawing.









- Generate the refrigerant system axonometric drawing, expanded view drawing from the floor plans, clearly shows the connection between ODU and IDUs, label the equipment model and pipe diameter.


Thank
You!

Hisense

life reimagined