

# LCAC Selector Help

---

Ver. 2.4

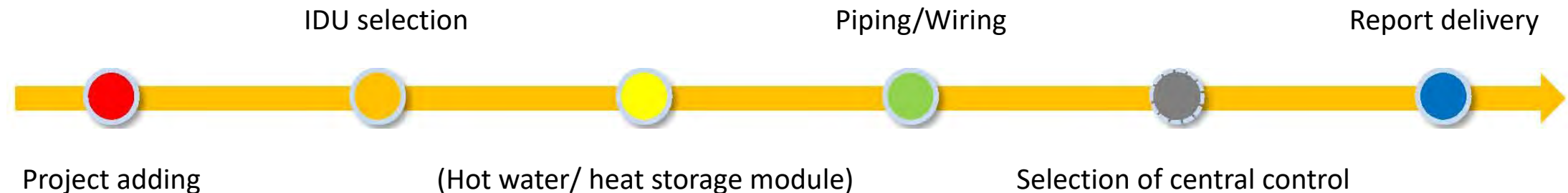
2024/4/15

# Contents

- 1、 [Overview.....3](#)
- 2、 [Model Selection.....4](#)
  - [1.Homepage.....5](#)
  - [2.Project Adding.....12](#)
  - [3.IDU Selection.....13](#)
  - [4.ODU Selection.....22](#)
  - [5.Piping.....34](#)
  - [6.Wiring.....51](#)
  - [7.Selection of Central Control.....59](#)
  - [8.Report .....66](#)

# 1、 Overview

Gree new generation VRF selector is developed based on years of experience in model selection and comprehensive research and analysis on the market. We carefully studied the selection logic of VRF products and optimized the selection process to tackle the pain points of customers, so as to make it suitable to different groups of customers. It is convenient to use, professional and precise. Each selection can be a joyful trip.

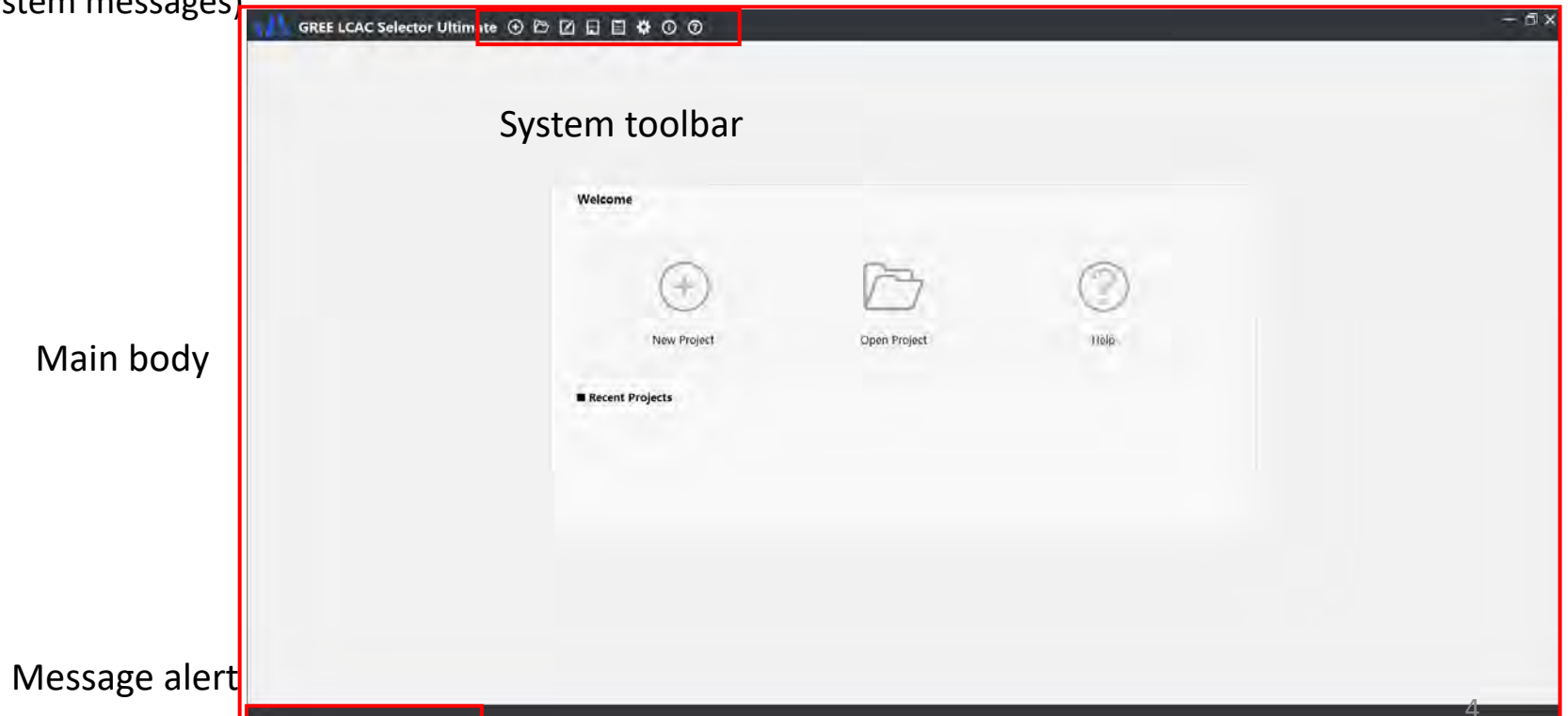


## 2、 Model Selection

### 1.Homepage

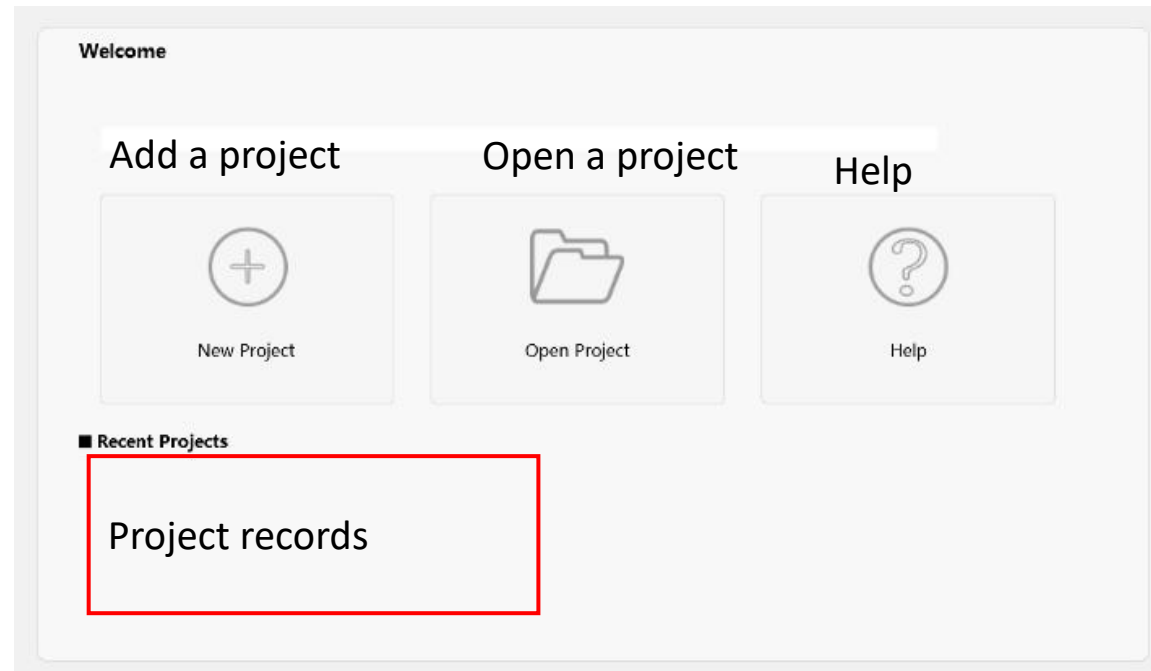
The homepage is divided into three sections.

- 1、 System toolbar(including project adding, save, edit and system setting)
- 2、 Main body (display area of the software)
- 3、 Message alert (display of system messages)



## 1.1 Welcome page

After the software is started, you will see a welcome page at the main body.



## 1.2 System toolbar



Help

About (version information)

Setting (software configuration)

Save project file as

Save project file(ctrl+s)

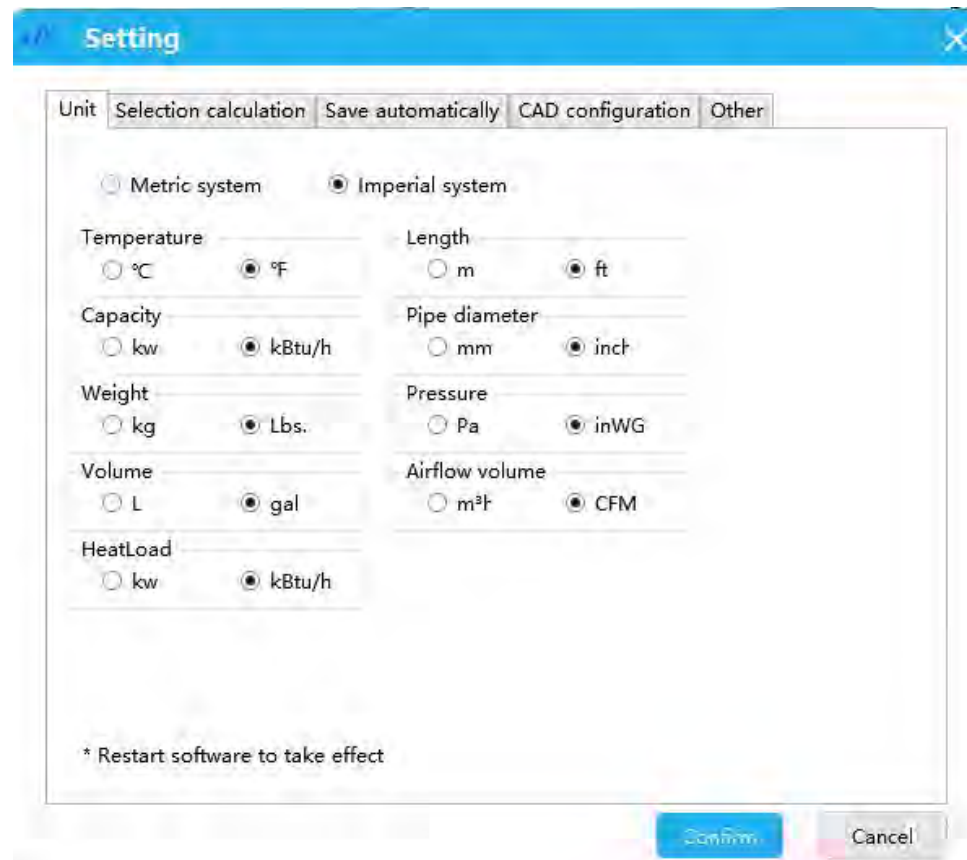
Edit project information(ctrl+e)

Open a project(ctrl+o)

Add a project(ctrl+n)

## 1.3 Setting

1. Unit setting (This is to set units that are used for calculation during model selection)



## 1.3 Setting

### 2. Selection calculation (the way of auto adjustment, R/E pipe selection, tolerance allowed, correction factor)

IDU and ODU are adjusted at the same time by default.

The screenshot shows a 'Setting' dialog box with a blue header and a close button. The 'Selection calculation' tab is active. The settings are as follows:

- Adjust methods**
  - ☒ Adjust IDU and ODU at the same time
  - ☐ Only adjust outdoor unit
- R/E pipe Selection Mode**
  - ☒ Calculate R/E pipe
  - ☐ Don't calculate R/E pipe
  - ☐ Collect information of R/E pipe only
- Indoor unit tolerances allowed**

Mode	Lower	Upper	Default
Cooling	-10%	20%	0%
Heating	-10%	20%	0%
Sensible Cooling	-10%	20%	0%
- Simultaneously maximum usage rate of IDU**

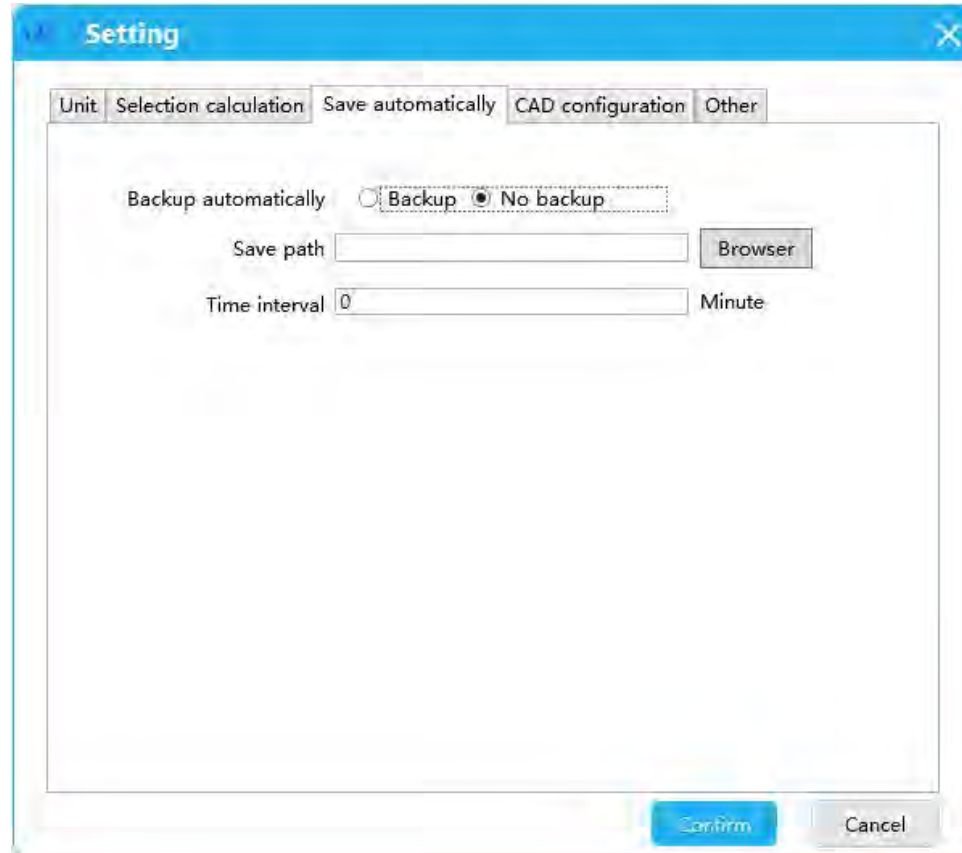
Mode	Lower	Upper	Default
Cooling	80%	100%	100%
Heating	80%	100%	100%
- Select the modification item of the actual capacity of the unit**

Unit Type	Mode	a	b	c
Indoor unit	Cooling	<input checked="" type="checkbox"/> m	<input checked="" type="checkbox"/> b	
	Heating	<input checked="" type="checkbox"/> m	<input checked="" type="checkbox"/> b	<input checked="" type="checkbox"/> c
Outdoor unit	Cooling	<input checked="" type="checkbox"/> a	<input checked="" type="checkbox"/> b	
	Heating	<input checked="" type="checkbox"/> a	<input checked="" type="checkbox"/> b	<input checked="" type="checkbox"/> c

Buttons: Confirm, Cancel

## 1.3 Setting

### 3. Save automatically (Set the path and time interval for auto saving)



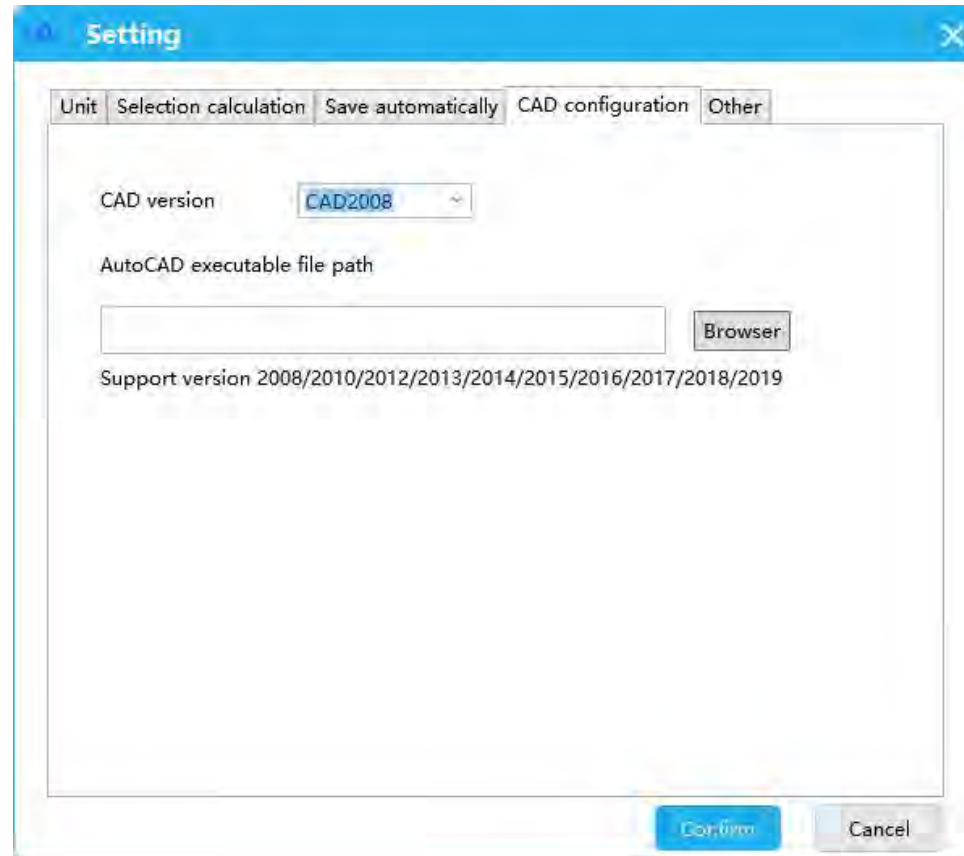
The image shows a software window titled "Setting" with a blue header bar. Inside the window, there are five tabs: "Unit", "Selection calculation", "Save automatically", "CAD configuration", and "Other". The "Save automatically" tab is currently selected. Within this tab, there are three main settings:

- Backup automatically:** This section contains two radio buttons. The "Backup" button is unselected, and the "No backup" button is selected.
- Save path:** This is a text input field. To its right is a "Browser" button.
- Time interval:** This is a text input field containing the number "0". To its right is the label "Minute".

At the bottom right of the dialog box, there are two buttons: "Confirm" (in blue) and "Cancel" (in grey).

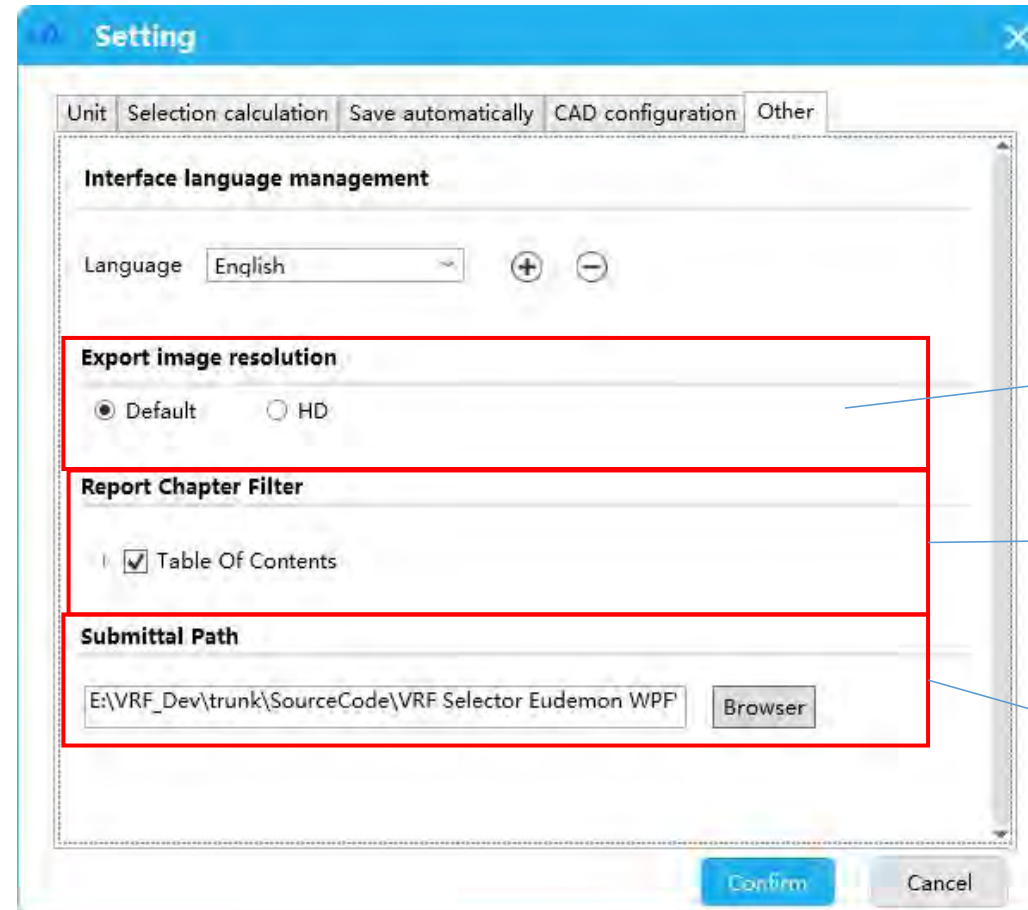
## 1.3 Setting

### 4. AutoCAD configuration (AutoCAD version, executable file path)



## 1.3 Setting

### 5. Others (Add or delete languages, Report Setting, submittal)



HD image export setting

Report Setting

Submittal path setting  
(This function is only for North American market at present)

## 2. Project adding

Click the icon of project adding at the toolbar or the welcome page to open the window of new project.

**Project information**

Area: North America Frequency: 50Hz 60Hz

Project Name: Address:

Date: 2021/9/4 Contract No.:

**Client information**

Name: Position:

Company: Address:

Tel: Fax:

☐ Save client information

**Designer information**

Name: Position:

Company: Address:

Tel: Fax:

☐ Save designer information

Remark:

Confirm Cancel

Enter project information

Choose an area for data customization.  
Choose power specification.

Enter client information.

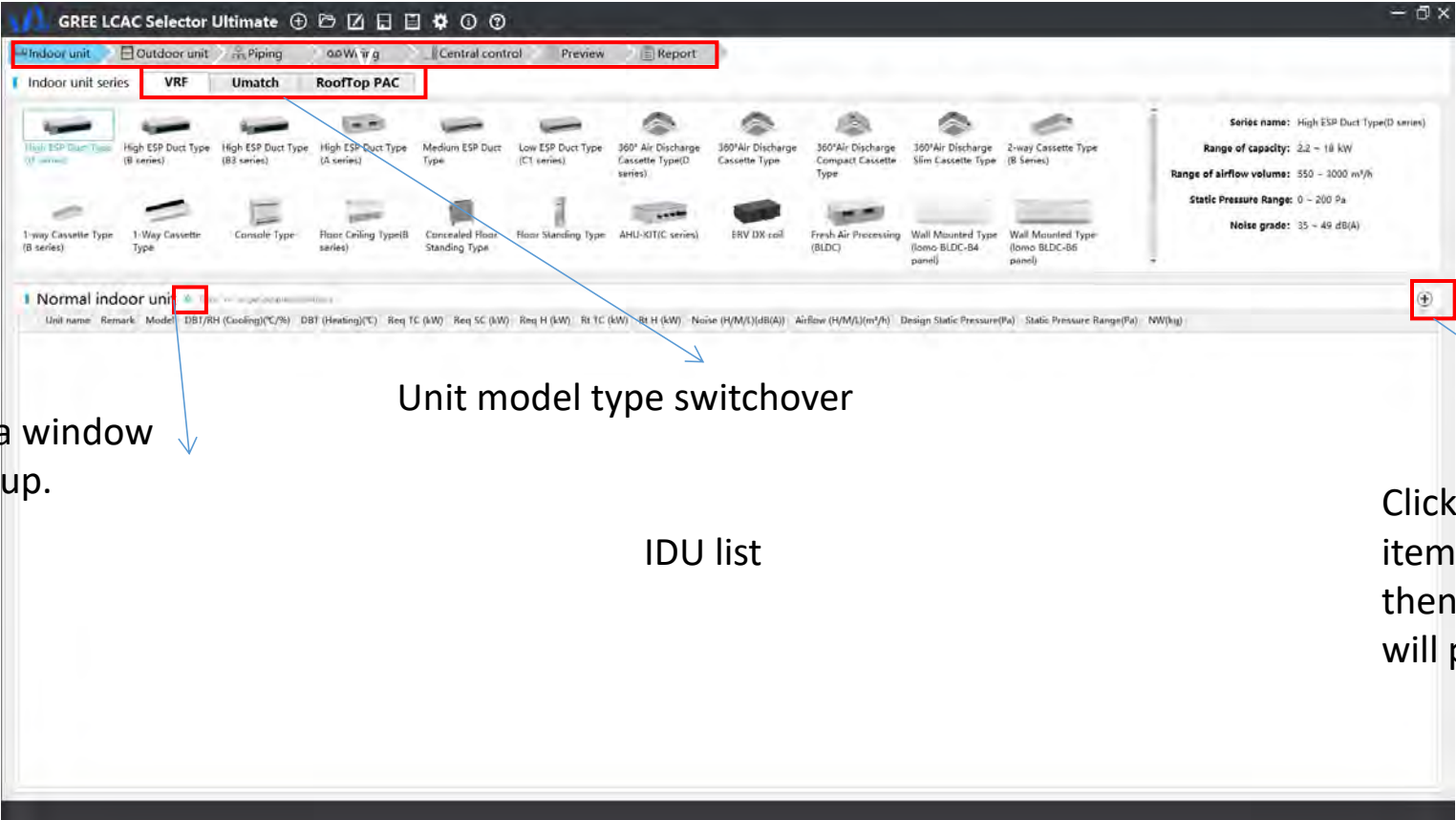
Enter designer information.

After entering all the information, click “Confirm” to enter the interface of IDU selection.

### 3. IDU selection

#### IDU selection Interface

Selection process navigation bar (Note: Other interfaces are shielded until IDUs are added.)



List of IDU series

IDU information

Click the blue arrow and a window of specifications will pop up.

Unit model type switchover

IDU list

Click this icon or double-click an item in the list of IDU series, then a window of IDU adding will pop up.

### 3. IDU selection

#### Selection of specifications

Normal indoor unit <a href="#">Click "&gt;&gt;" to get detailed definitions</a>											
Unit name	Remark	Model	DBT/RH (Cooling)(°F/%)	DBT (Heating)(°F)	Req TC (kBtu/h)	Req SC (kBtu/h)	Req H (kBtu/h)	Rt TC (kBtu/h)	Rt H (kBtu/h)	Noise (H/M/L)(dB(A))	Airflow (H/M/L)(CFM)

**Specification**

Select the following options. It will be displayed in detailed list

<input checked="" type="checkbox"/> <b>Unit name</b>	User-defined unit name
<input checked="" type="checkbox"/> <b>Remark</b>	Unit information remarked by tl
<input checked="" type="checkbox"/> <b>Model</b>	Unit model
<input checked="" type="checkbox"/> <b>DBT/RH (Cooling)(°F/%)</b>	Cooling dry bulb temperature/r
<input checked="" type="checkbox"/> <b>DBT (Heating)(°F)</b>	Heating indoor dry bulb tempe
<input checked="" type="checkbox"/> <b>Req TC (kBtu/h)</b>	Total cooling load of user desig
<input checked="" type="checkbox"/> <b>Req SC (kBtu/h)</b>	Sensible cooling load of user d
<input checked="" type="checkbox"/> <b>Req H (kBtu/h)</b>	Heating load of user design de
<input checked="" type="checkbox"/> <b>Rt TC (kBtu/h)</b>	Rated total cooling capacity of
<input checked="" type="checkbox"/> <b>Rt H (kBtu/h)</b>	Rated heating capacity of air cc
<input checked="" type="checkbox"/> <b>Noise (H/M/L)(dB(A))</b>	Unit noise

1.By selecting these parameters, you can adjust data items shown in the IDU list of the IDU selection interface.

2.You can view the explanation of each abbreviated parameter.

### 3. IDU selection

#### VRF Window of IDU adding

Unit name: IDU 1  
Remark:  
IDU Series: AHU-KIT(C series)  
AHU Type  
☐ Circulating Air ☒ Fresh Air  
☐ Manual selection  
Design condition T1 T3 More...  
Cooling  
Dry bulb temp. 27.00 °C  
Wet bulb temp. 19.00 °C  
Relative HUM 45.77 %  
Heating  
Dry bulb temp. 20.00 °C  
Required Capacity ☐ Sensible cooling  
Total cooling 0 kW  
Heating 0 kW  
Height Difference  
0 m  
Add Count: 1 Cancel Add

AHU-KIT

Unit name: IDU 1  
Remark:  
DU Series: High ESP Duct Type(D series)  
☐ Manual selection  
Design condition T1 T3 More...  
Cooling  
Dry bulb temp. 27.00 °C  
Wet bulb temp. 19.00 °C  
Relative HUM 45.77 %  
Heating  
Dry bulb temp. 20.00 °C  
Required Capacity ☐ Sensible cooling  
Total cooling 0 kW  
Heating 0 kW  
Static pressure 0 Pa  
Height Difference  
0 m  
Add Count: 1 Cancel Add

Common IDU

Unit name: IDU 1  
Remark:  
IDU Series: ERV DX coil  
☐ Manual selection  
Design condition T1 T3 More...  
Cooling  
Dry bulb temp. 27.00 °C  
Wet bulb temp. 19.00 °C  
Relative HUM 45.77 %  
Heating  
Dry bulb temp. 20.00 °C  
Required Capacity  
Static pressure 0 Pa  
Fresh air 0 m³/h  
Height Difference  
0 m  
Add Count: 1 Cancel Add

Fresh air unit

Set unit name and remark

Click the blue arrow or select the select box and then a manual selection window will pop up.

(When you add AHU-KIT, select AHU. Once added, it can't be changed.)

Set working condition

Design load  
(Different design load selections are displayed as per IDU series.)

Other settings, height difference to ODU  
(For example, position of the ODU relative to IDUs)

Click "Add" to add one IDU.

### 3. IDU selection

#### U-match\RoofTop Window of IDU adding

U-Match Unit

Unit name: U-Match 1

Remark:

☐ Include the Gateway

ODU Type: Heat pump ODU Power: 220~240V, 1Ph

IDU Type: Duct IDU Series: Inverter A Series

☐ Manual selection

**Design condition**

Design condition

Cooling Indoor DBT: 27.00 °C WBT: 19.00 °C RH: 45.77 % Outdoor DBT: 35.00 °C

Heating Indoor DBT: 20.00 °C Outdoor DBT: 7.00 °C WBT: 6.00 °C RH: 85.36 %

**Required Capacity**

Total cooling: 0 kW Heating: 0 kW Static pressure: 0 Pa

**Height Difference**

0 m

Add Count: 1 Cancel Add

U-match

Set unit name and remark

Click the blue arrow or select the select box and then a manual selection window will pop up.  
(When you add AHU-KIT, select AHU. Once added, it can't be changed.)

Set working condition

Design load  
(Different design load selections are displayed as per IDU series.)

Other settings, height difference to ODU  
(For example, position of the ODU relative to IDUs)

Click "Add" to add one IDU.

RoofTop Unit

Unit name: RoofTop 1

Remark:

Power: 380~415V, 3Ph Function Type: Duct

Series: Rooftop Packaged Unit

☐ Manual selection

**Design condition**

Design condition

Cooling Indoor DBT: 27.00 °C WBT: 19.00 °C RH: 45.77 % Outdoor DBT: 35.00 °C

Heating Indoor DBT: 20.00 °C Outdoor DBT: 7.00 °C WBT: 6.00 °C RH: 85.36 %

**Required Capacity**

Total cooling: 0 kW Heating: 0 kW Static pressure: 0 Pa

Add Count: 1 Cancel Add

RoofTop

### 3. IDU selection

#### Auto recommendation

Indoor unit

Unit name: IDU 1

Remark:

IDU Series: High ESP Duct Type(D series)

☐ Manual selection

**Design condition** T1 T3 More...

Cooling

Dry bulb temp. 27.00 °C

Wet bulb temp. 19.00 °C

Relative HUM 45.77 %

Heating

Dry bulb temp. 20.00 °C

**Required Capacity** ☐ Sensible cooling

Total cooling 0 kW

Heating 0 kW

Static pressure 0 Pa

**Height Difference**

0 m

Add Count: 1 Cancel Add

Normal indoor unit Click ">>" to get detailed definitions

Unit name	Remark	Model	DBT/RH (Cooling)(°C/%)	DBT (Heating)(°C)	Req TC (kW)	Req SC (kW)	Req H (kW)	Rt TC (kW)	Rt H (kW)	Noise (H/M/L)(dB(A))	Airflow (H/M/L)(m³/h)
Ind 1		GMV-ND100PHS/B-T	27 / 45.77	20	10	0	10	10	11.2	40/37/35	1800/1450/1250
Ind 2		GMV-ND100PHS/B-T	27 / 45.77	20	10	0	10	10	11.2	40/37/35	1800/1450/1250
Ind 3		GMV-ND100PHS/B-T	27 / 45.77	20	10	0	10	10	11.2	40/37/35	1800/1450/1250

(Fully automatic)

1. Every time you click "Add", it will automatically select IDUs according to the selected IDU series, input working condition and design load. The selected IDUs will be displayed in the IDU list.
2. IDUs will be adjusted automatically in following selections.
3. If no IDU is satisfied, it will inform you of the cause.

(Semi automatic)

After clicking the blue arrow, a manual selection window will pop up. When the manual select box is not selected:

1. Double-click the specific model and set the rated power of that model as design load; when you click "Add", the unit that satisfies the required capacity will be recommended and added to the IDU list.
2. IDUs will be adjusted automatically in following selections.

### 3.IDU selection

#### Manual selection

Unit name: IDU 1

Remark:

IDU Series: High ESP Duct Type(D series) ☒ Manual selection

**Design condition** T1 T3 More...

Cooling

Dry bulb temp. 27.00 °C

Wet bulb temp. 19.00 °C

Relative HUM 45.77 %

Heating

Dry bulb temp. 20.00 °C

**Required Capacity** ☐ Sensible cooling

Total cooling 0 kW

Heating 0 kW

Static pressure 0 Pa

**Height Difference**

0 m

Add Count: 1 Cancel Add

**IndoorUnitSeries**

High ESP Duct Type (D series) High ESP Duct Type (B series) High ESP Duct Type (A series) Medium ESP Duct Type Low ESP Duct Type (C1 series)

360° Air Discharge Cassette Type(D series) 360° Air Discharge Cassette Type 360° Air Discharge Compact Cassette Type 360° Air Discharge Slim Cassette Type 2-way Cassette Type (B Series)

**Indoor unit list**

Model	Rt TC (kW)	Rt H (kW)	NW(kg)	Noise (H/M/L)(dB(A))	Static Pressure Range(Pa)
GMV-ND22PHS/D-T	2.2	2.5	30.5	35/31/29	0~80
GMV-ND25PHS/D-T	2.5	2.8	30.5	35/31/29	0~80
GMV-ND28PHS/D-T	2.8	3.2	30.5	35/31/29	0~80
GMV-ND32PHS/D-T	3.2	3.6	30.5	36/33/30	0~80
GMV-ND36PHS/D-T	3.6	4	30.5	36/33/30	0~80
GMV-ND40PHS/D-T	4	4.5	31.5	40/36/32	0~80
GMV-ND45PHS/D-T	4.5	5	31.5	40/36/32	0~80
GMV-ND50PHS/D-T	5	5.6	31.5	40/36/32	0~80
GMV-ND56PHS/D-T	5.6	6.3	40.5	40/36/32	0~200
GMV-ND63PHS/D-T	6.3	7.1	40.5	40/36/32	0~200
GMV-ND71PHS/D-T	7.1	8	41	40/36/32	0~200
GMV-ND80PHS/D-T	8	9	41	40/36/32	0~200
GMV-ND90PHS/D-T	9	10	54	42/38/34	0~200
GMV-ND100PHS/D-T	10	11.2	54	42/38/34	0~200

( Completely manual)

After selecting the select box, a manual selection window will pop up.

1.Double-click the specific model. If the current input load is “0”, then set the design load; if the current load is not “0”, then do not change the design load. The column of Model will display the selected IDUs. When you click “Add”, the unit will be added to the IDU list.

2.IDUs will not be adjusted in following selections.

### 3.IDU selection

**Preview Submittal report**(This function is only for North America at present)

**Indoor unit**

Unit name: IDU 1

Remark:

IDU Series: High ESP Duct Type(D series)

☐ Manual selection

**Design condition** T1 T3 More...

Cooling

Dry bulb temp. 80.60 °F

Wet bulb temp. 66.20 °F

Relative HUM 45.77 %

Heating

Dry bulb temp. 68.00 °F

**Required Capacity** ☐ Sensible cooling

Total cooling 0 kBtu/h

Heating 0 kBtu/h

Static pressure 0 inWG

**Height Difference**

0 ft

Add Count: 1 Cancel Add

**IndoorUnitSeries**

High ESP Duct Type (D series) High ESP Duct Type (B series) Slim Duct Type Low ESP Duct Type 360° Air Discharge Cassette Type(D series)

360° Air Discharge Cassette Type 360° Air Discharge Compact Cassette Type 2-way Cassette Type (B Series) 1-Way Cassette Type Console Type

Click to preview Submittal report **Preview**

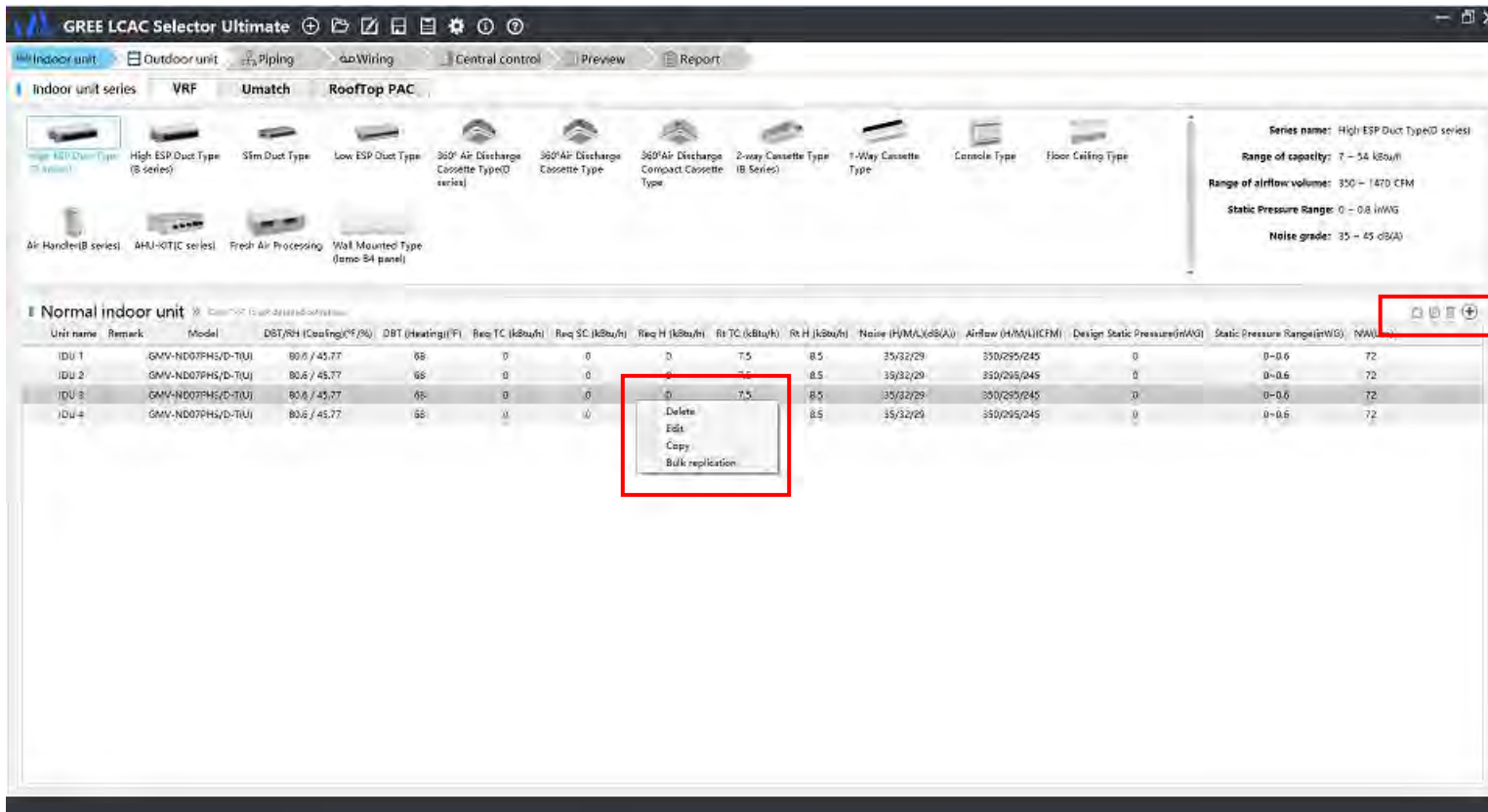
**Indoor unit list**

Model	Rt TC (kBtu/h)	Rt H (kBtu/h)	NW(Lbs)	Noise (H/M/L)(dB(A))	Static Pressure Range(in)
GMV-ND07PHS/D-T(U)	7.5	8.5	72	35/32/29	0~0.6
GMV-ND09PHS/D-T(U)	9.5	10.5	72	35/32/29	0~0.6
GMV-ND12PHS/D-T(U)	12	13.5	95	37/35/33	0~0.8
GMV-ND15PHS/D-T(U)	15	17	95	37/35/33	0~0.8
GMV-ND18PHS/D-T(U)	18	20	95	37/35/33	0~0.8
GMV-ND22PHS/D-T(U)	22	24	95	38/36/34	0~0.8
GMV-ND24PHS/D-T(U)	24	27	95	38/36/34	0~0.8
GMV-ND30PHS/D-T(U)	30	34	128	42/39/36	0~0.8
GMV-ND36PHS/D-T(U)	36	40	128	42/39/36	0~0.8
GMV-ND42PHS/D-T(U)	42	47	128	42/39/36	0~0.8
GMV-ND48PHS/D-T(U)	48	54	130	45/42/39	0~0.8
GMV-ND54PHS/D-T(U)	54	60	130	45/42/39	0~0.8

- 1.Select any series and choose a model;
- 2.Click “Preview” button;
- 3.Submittal report can be previewed when operation and sources are normal ;
- 4.If preview is unavailable, corresponding reasons will be displayed.

### 3. IDU selection

#### Actions of IDU list



Click a certain IDU in the list, then three icons will show up in the header.

Right-click a certain IDU in the list, then an action menu will appear.

The three icons correspond to the three actions in the menu:

Delete: Delete the corresponding IDU;

Edit: Edit the corresponding IDU;

Copy: Copy the corresponding IDU.

Bulk replication: Bulk Copy the corresponding IDU.

### 3. IDU selection

#### Display of different IDU series

GREE LCAC Selector Ultimate

Indoor unit Outdoor unit Piping Wiring Central control Preview Report

Indoor unit series VRF Umatch Rooftop PAC

High ESP Duct Type (D series) High ESP Duct Type (B series) High ESP Duct Type (B3 series) High ESP Duct Type (A series) Medium ESP Duct Type Low ESP Duct Type (C1 series) 360° Air Discharge Cassette Type (D series) 360° Air Discharge Cassette Type 360° Air Discharge Compact Cassette Type 360° Air Discharge Slim Cassette Type 2-way Cassette Type (B Series) 1-way Cassette Type (B series) 1-Way Cassette Type Console Type Floor Ceiling Type (B series) Concealed Floor Standing Type Floor Standing Type AHU-KIT (C series) ERV DX coil Fresh Air Processing (BLDC) Wall Mounted Type (lomo BLDC-B4 panel) Wall Mounted Type (lomo BLDC-B6 panel)

Series name: AHU-KIT (C series)

Range of capacity: 2.8 ~ 252 kW

**Normal indoor unit** Click "aa" to get detailed definitions

Unit name	Remark	Model	DBT/RH (Cooling)(°C/%)	DBT (Heating)(°C)	Req TC (kW)	Req SC (kW)	Req H (kW)	Rt TC (kW)	Rt H (kW)	Noise (H/M/L)(dB(A))	Airflow (H/M/L)(m³/h)	Design Static Pressure(Pa)	Static Pressure Range(Pa)	NW(kg)
IDU 1		GMV-ND90PHS/D-T	27 / 45.77	20	8.79	0	9.96	9	10	42/38/34	1800/1450/1250	0	0~200	54
IDU 2		GMV-ND90PHS/D-T	27 / 45.77	20	8.79	0	9.96	9	10	42/38/34	1800/1450/1250	0	0~200	54
IDU 3		GMV-ND90PHS/D-T	27 / 45.77	20	8.79	0	9.96	9	10	42/38/34	1800/1450/1250	0	0~200	54
IDU 4		GMV-ND90PHS/D-T	27 / 45.77	20	8.79	0	9.96	9	10	42/38/34	1800/1450/1250	0	0~200	54
IDU 5		GMV-ND90PHS/D-T	27 / 45.77	20	8.79	0	9.96	9	10	42/38/34	1800/1450/1250	0	0~200	54
IDU 6		GMV-ND90PHS/D-T	27 / 45.77	20	8.79	0	9.96	9	10	42/38/34	1800/1450/1250	0	0~200	54

**Fresh air unit** Click "aa" to get detailed definitions

Unit name	Remark	Model	DBT/RH (Cooling)(°C/%)	DBT (Heating)(°C)	Design fresh air(m³/h)	Design Static Pressure(Pa)	Airflow (H/M/L)(m³/h)	Static Pressure Range(Pa)	Rt TC (kW)	Rt H (kW)	Noise (H/M/L)(dB(A))	NW(kg)
IDU 11		GMV-VDR8PH/SA-S	27 / 45.77	20	0	0	800/600/400	0~150	12	10.6	46/38/33	158
IDU 12		GMV-VDR8PH/SA-S	27 / 45.77	20	0	0	800/600/400	0~150	12	10.6	46/38/33	158
IDU 13		GMV-VDR8PH/SA-S	27 / 45.77	20	0	0	800/600/400	0~150	12	10.6	46/38/33	158
IDU 14		GMV-VDR8PH/SA-S	27 / 45.77	20	0	0	800/600/400	0~150	12	10.6	46/38/33	158
IDU 15		GMV-VDR8PH/SA-S	27 / 45.77	20	0	0	800/600/400	0~150	12	10.6	46/38/33	158
IDU 16		GMV-VDR8PH/SA-S	27 / 45.77	20	0	0	800/600/400	0~150	12	10.6	46/38/33	158

**AHU-KIT** Click "aa" to get detailed definitions

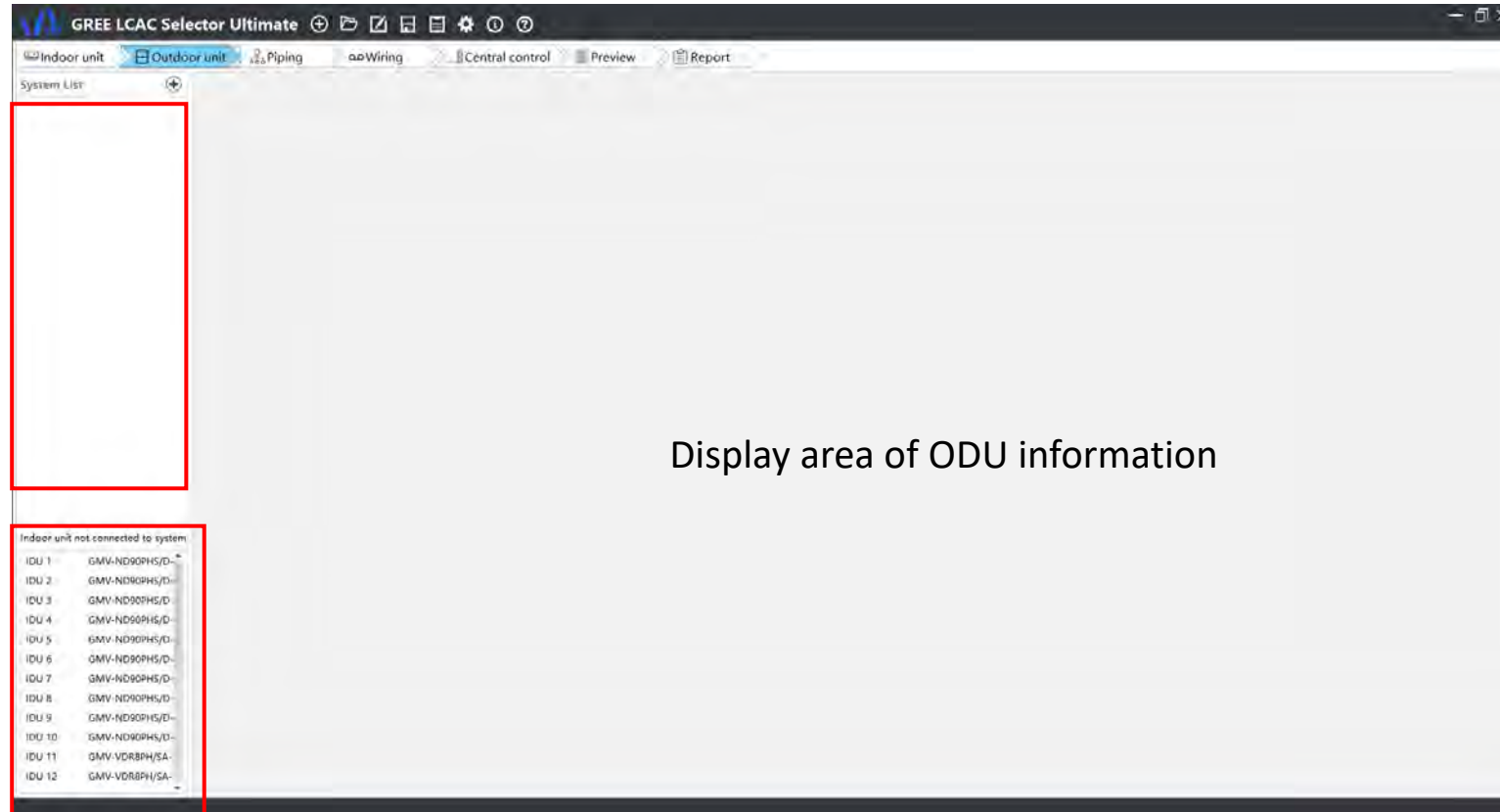
Unit name	Remark	Model	DBT/RH (Cooling)(°C/%)	DBT (Heating)(°C)	Req TC (kW)	Req SC (kW)	Req H (kW)	Rated Capacity(kW)	Range of cooling capacity(kW)	Range of heating capacity(kW)	Suggested Airflow Range(m³/h)	NW(kg)
IDU 21(F)		GMV-N71U/C-T	27 / 45.77	20	8.79	0	9.96	5.6	4.5~5.6	5~6.3	675~1064	10.5
IDU 22(F)		GMV-N71U/C-T	27 / 45.77	20	8.79	0	9.96	5.6	4.5~5.6	5~6.3	675~1064	10.5
IDU 23(F)		GMV-N71U/C-T	27 / 45.77	20	8.79	0	9.96	5.6	4.5~5.6	5~6.3	675~1064	10.5
IDU 24(F)		GMV-N71U/C-T	27 / 45.77	20	8.79	0	9.96	5.6	4.5~5.6	5~6.3	675~1064	10.5
IDU 25(F)		GMV-N71U/C-T	27 / 45.77	20	8.79	0	9.96	5.6	4.5~5.6	5~6.3	675~1064	10.5

Common IDUs, fresh air units and AHU-KIT are displayed separately in three zones because they have different parameter lists.

## 4. ODU selection

### ODU selection Interface

After IDU selection is done, click “Outdoor unit” at the process navigation bar to enter the ODU selection interface.



List of ODUs

Display area of ODU information

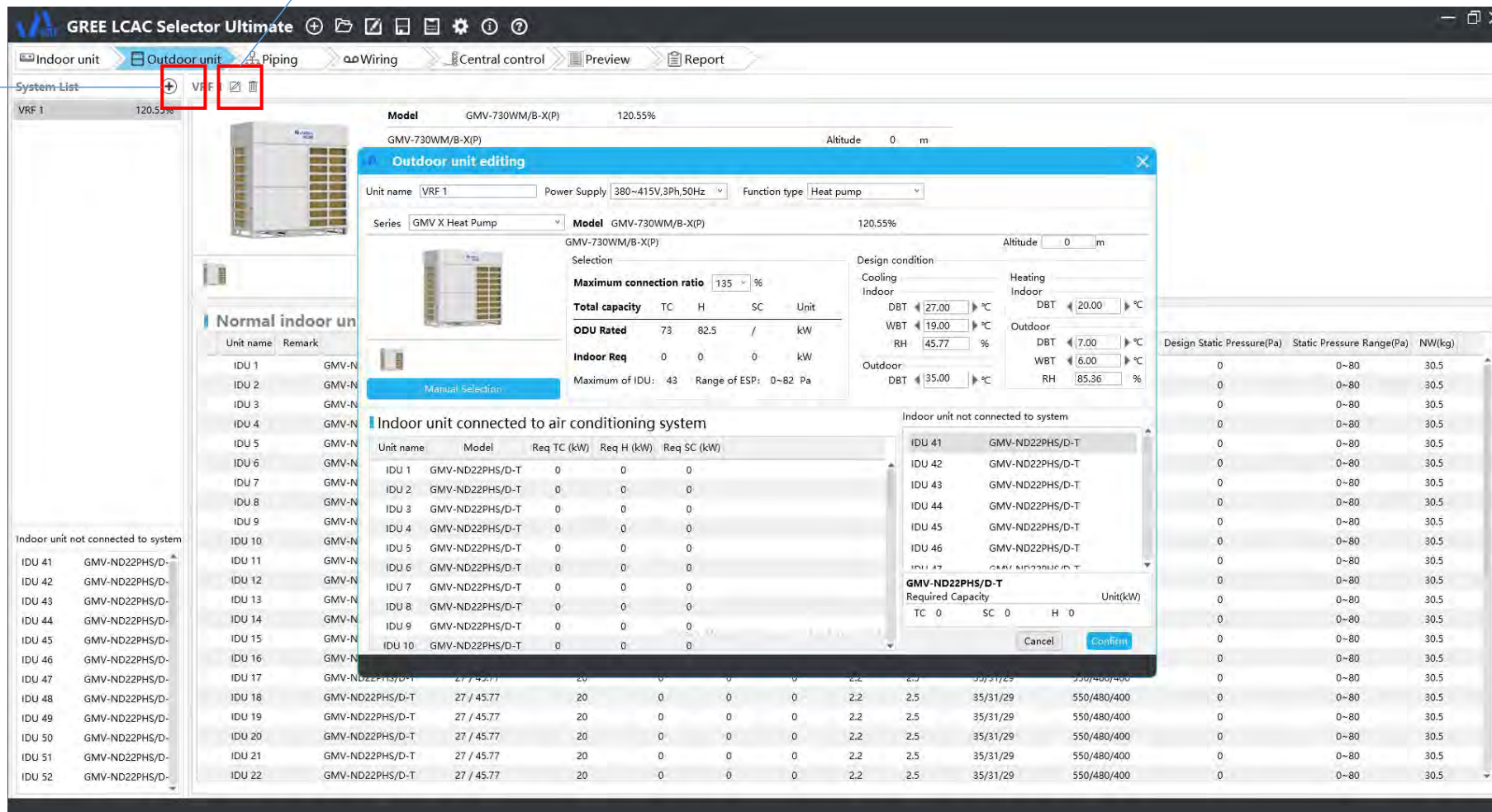
List of IDUs that are not added to the system

## 4. ODU selection

## Add an ODU system

Edit, delete

Add a system 



# 4. ODU selection

## System selection window

Press the icon of system adding and the system selection window will pop up.

Power supply selection

Unit name: VRF 1

Power Supply: 380~415V,3Ph,50Hz

Function type: Heat pump

Series: GMV X Heat Pump

Model: GMV-730WM/B-X(P)

Maximum connection ratio: 135 %

Total capacity: TC 73 H 82.5 SC / Unit kW

ODU Rated: 73 82.5 / kW

Indoor Req: 0 0 0 kW

Maximum of IDU: 43 Range of ESP: 0~82 Pa

Design condition

Cooling Indoor DBT 27.00 °C WBT 19.00 °C RH 45.77 %

Heating Indoor DBT 20.00 °C Outdoor DBT 7.00 °C WBT 6.00 °C RH 85.36 %

Altitude: 0 m

Manual Selection

Indoor unit connected to air conditioning system

Unit name	Model	Req TC (kW)	Req H (kW)	Req SC (kW)
IDU 1	GMV-ND22PHS/D-T	0	0	0
IDU 2	GMV-ND22PHS/D-T	0	0	0
IDU 3	GMV-ND22PHS/D-T	0	0	0
IDU 4	GMV-ND22PHS/D-T	0	0	0
IDU 5	GMV-ND22PHS/D-T	0	0	0
IDU 6	GMV-ND22PHS/D-T	0	0	0
IDU 7	GMV-ND22PHS/D-T	0	0	0
IDU 8	GMV-ND22PHS/D-T	0	0	0
IDU 9	GMV-ND22PHS/D-T	0	0	0
IDU 10	GMV-ND22PHS/D-T	0	0	0

List of system IDUs

Indoor unit not connected to system

IDU 41	GMV-ND22PHS/D-T
IDU 42	GMV-ND22PHS/D-T
IDU 43	GMV-ND22PHS/D-T
IDU 44	GMV-ND22PHS/D-T
IDU 45	GMV-ND22PHS/D-T
IDU 46	GMV-ND22PHS/D-T
IDU 47	GMV-ND22PHS/D-T

GMV-ND22PHS/D-T

Required Capacity Unit(kW)

TC	0	SC	0	H	0
----	---	----	---	---	---

Display of IDU parameters

Edit system name

ODU series select box

ODU system information

Manual selection

Functions to be selected: heat pump, heat recovery, hot water VRF, cooling only,GMV Water Heat Pump,GMV Water Heat Recovery

Design condition

List of IDUs to be added to the system  
Select one IDU or press "Shift" and left-click to select multiple IDUs. Then drag the IDU(s) to the list of system IDUs. In this way, IDUs are successfully added. After IDUs are added, it will automatically recommend the ODU.

# 4. ODU selection

GMV Water ODU selection

GMV Water ODU selection

Outdoor unit editing

Unit nameVRF 2Power Supply380~415V,3Ph,50HzFunction typeWater pump(GMV Water)

SeriesGMV WATER III Heat pumpModelGMV-W252WM/C-X69.84 %

Selection

Maximum connection ratio135 %

Total capacity

	TC	H	SC	Unit
ODU Rated	25.2	28.5	/	kW
Indoor Req	0	0	0	kW

Indoor Req000kWMaximum of IDU: 14Range of ESP: 0 Pa

Altitude0 m

Design condition

Cooling

Indoor

DBT27.00 °C

WBT19.00 °C

RH45.77 %

Outdoor

IWT35.00 °C

Heating

Indoor

DBT20.00 °C

Outdoor

IWT10 °C

WaterFlow

Water Flow6.00 m³/h

Manual Selection

Indoor unit connected to air conditioning system

Unit name	Model	Req TC (kW)	Req H (kW)	Req SC (kW)
IDU 41	GMV-ND22PHS/D-T	0	0	0
IDU 42	GMV-ND22PHS/D-T	0	0	0
IDU 43	GMV-ND22PHS/D-T	0	0	0
IDU 44	GMV-ND22PHS/D-T	0	0	0
IDU 45	GMV-ND22PHS/D-T	0	0	0
IDU 46	GMV-ND22PHS/D-T	0	0	0
IDU 47	GMV-ND22PHS/D-T	0	0	0
IDU 48	GMV-ND22PHS/D-T	0	0	0

List of system IDUs

Indoor unit not connected to system

IDU 49GMV-ND22PHS/D-T

IDU 50GMV-ND22PHS/D-T

IDU 51GMV-ND22PHS/D-T

IDU 52GMV-ND22PHS/D-T

IDU 53GMV-ND22PHS/D-T

IDU 54GMV-ND22PHS/D-T

IDU 55GMV-ND22PHS/D-T

GMV-ND22PHS/D-T

Required Capacity

	TC	SC	H	Unit(kW)
	0	0	0	

CancelConfirm

GMV Water condition  
IWT——Inlet Water Temperature

25

## 4. ODU selection

### Manual selection, free combination of ODUs

After IDUs are dragged in place, click “Manual Selection” or ODU module combination, then the window of module combination will appear.

Set the range of connection ratio of the ODU system

Recommended ODU systems that satisfy the range of connection ratio

You can choose modules that make up the ODU system (four modules at most) according to the actual condition.

The screenshot shows the 'Manual Selection' window with the following components:

- Manual Selection** (tab)
- Maximum of IDU: 50    Range of ESP: 0~110 Pa    DBT: 35.00 °C    RH: 85.36 %
- Free combination modules of the same series    Free combination modules across different series
- Range of connection ratio(%)** Lower limit: 50    Upper limit: 135
- Screen unit mode: [dropdown]
- Table of recommended ODU systems:

	Ratio(%)	Rt TC (kW)	Rt H (kW)	Model	Unit module	Unit module	Unit module	Unit module
<input type="radio"/>	129.41	85	95	GMV-Y850WM/D-X(S)	GMV-Y400WM/D-X(	GMV-Y450WM/D-X(		
<input type="radio"/>	122.22	90	100	GMV-Y900WM/D-X(S)	GMV-Y450WM/D-X(	GMV-Y450WM/D-X(		
<input type="radio"/>	114.58	95.8	108	GMV-Y960WM/D-X(S)	GMV-Y280WM/D-X(	GMV-Y280WM/D-X(	GMV-Y400WM/D-X(	
<input type="radio"/>	108.91	100.8	113	GMV-Y1010WM/D-X(S)	GMV-Y280WM/D-X(	GMV-Y280WM/D-X(	GMV-Y450WM/D-X(	
<input type="radio"/>	103.29	106.2	119	GMV-Y1065WM/D-X(S)	GMV-Y280WM/D-X(	GMV-Y335WM/D-X(	GMV-Y450WM/D-X(	
<input type="radio"/>	97.35	112.9	126.5	GMV-Y1130WM/D-X(S)	GMV-Y280WM/D-X(	GMV-Y400WM/D-X(	GMV-Y450WM/D-X(	

Buttons: Cancel    **Confirm**

Click “Confirm” to complete the selection of ODUs.

## 4. ODU selection

### Manual selection, free combination of multiple series

After IDUs are dragged in place, click “Manual Selection” or ODU module combination, then the window of module combination will appear.

Only specific systems are allowed to enter this function

Allocation rate and rated capacity of current combination

The screenshot shows a software interface for selecting outdoor units (ODUs). At the top, there's a 'Manual Selection' button and status information: 'Maximum of IDU: 50', 'Range of ESP: 0~110 Pa', 'DBT: 35.00 °C', and 'RH: 85.36 %'. Below this, there are two tabs: 'Free combination modules of the same series' and 'Free combination modules across different series'. The 'Free combination modules across different series' tab is active. It contains a table with columns: 'Ratio', 'Rt TC', 'Rt H', and 'Model'. The first row has values 0, 0, 0, and a radio button. To the right of the table, there are four dropdown menus, each labeled 'GMV6 Solar Heat Pt' and 'Unit module'. A 'Confirm' button is at the bottom right.

Ratio	Rt TC	Rt H	Model
0	0	0	<input type="radio"/>

Outdoor unit system type and modules (4 modules at the most) can be freely selected according to actual circumstances

Click “Confirm” to complete the selection of ODUs.

## 4. ODU selection

### Selection of special modules

If you select GMV6 heat pump series, heat storage module selection button will appear.

Unit name: VRF 1 Power Supply: 380~415V,3Ph,50Hz Function type: Heat pump

Series: 6 Heat Pump (Universal series) Model: GMV-735WM/G-X 119.73 % **Storage heat module selection**

GMV-335WM/G-X+GMV-400WM/G-X

Altitude: 0 m

Selection

Maximum connection ratio: 135 %

Total capacity TC H SC Unit

ODU Rated 73.5 82.5 / kW

Indoor Req 0 0 0 kW

Maximum of IDU: 46 Range of ESP: 0~110 Pa

Design condition

Cooling Indoor DBT 27.00 °C WBT 19.00 °C RH 45.77 % Outdoor DBT 35.00 °C

Heating Indoor DBT 20.00 °C Outdoor DBT 7.00 °C WBT 6.00 °C RH 85.36 %

Indoor unit connected to air conditioning system

Unit name	Model	Req TC (kW)	Req H (kW)	Req SC (kW)
IDU 1	GMV-ND22PHS/D-T	0	0	0
IDU 2	GMV-ND22PHS/D-T	0	0	0
IDU 3	GMV-ND22PHS/D-T	0	0	0
IDU 4	GMV-ND22PHS/D-T	0	0	0
IDU 5	GMV-ND22PHS/D-T	0	0	0
IDU 6	GMV-ND22PHS/D-T	0	0	0
IDU 7	GMV-ND22PHS/D-T	0	0	0
IDU 8	GMV-ND22PHS/D-T	0	0	0
IDU 9	GMV-ND22PHS/D-T	0	0	0
IDU 10	GMV-ND22PHS/D-T	0	0	0

Indoor unit not connected to system

IDU 41 GMV-ND22PHS/D-T

IDU 42 GMV-ND22PHS/D-T

IDU 43 GMV-ND22PHS/D-T

IDU 44 GMV-ND22PHS/D-T

IDU 45 GMV-ND22PHS/D-T

IDU 46 GMV-ND22PHS/D-T

IDU 47 GMV-ND22PHS/D-T

GMV-ND22PHS/D-T Required Capacity Unit(kW)

TC 0 SC 0 H 0

Cancel Confirm

If you select EU GMV6 HR or hot water VRF ODU, hot water module selection button will appear.

Unit name: VRF 1 Power Supply: 380~415V,3Ph,50Hz Function type: Heat recovery

Series: GMV6 Heat Recovery(EU) Model: GMV-VQ280WM/C-X+GMV-VQ400WM/C-X 129.41 % **Model selection for hot water system**

Altitude: 0 m

Selection

Maximum connection ratio: 135 %

Total capacity TC H SC Unit

ODU Rated 68 76.5 / kW

Indoor Req 0 0 0 kW

Maximum of IDU: 39 Range of ESP: 0~110 Pa

Design condition

Cooling Indoor DBT 27.00 °C WBT 19.00 °C RH 45.77 % Outdoor DBT 35.00 °C

Heating Indoor DBT 20.00 °C Outdoor DBT 7.00 °C WBT 6.00 °C RH 85.36 %

Indoor unit connected to air conditioning system

Unit name	Model	Req TC (kW)	Req H (kW)	Req SC (kW)
IDU 1	GMV-ND22PHS/D-T	0	0	0
IDU 2	GMV-ND22PHS/D-T	0	0	0
IDU 3	GMV-ND22PHS/D-T	0	0	0
IDU 4	GMV-ND22PHS/D-T	0	0	0
IDU 5	GMV-ND22PHS/D-T	0	0	0
IDU 6	GMV-ND22PHS/D-T	0	0	0
IDU 7	GMV-ND22PHS/D-T	0	0	0
IDU 8	GMV-ND22PHS/D-T	0	0	0
IDU 9	GMV-ND22PHS/D-T	0	0	0
IDU 10	GMV-ND22PHS/D-T	0	0	0

Indoor unit not connected to system

IDU 41 GMV-ND22PHS/D-T

IDU 42 GMV-ND22PHS/D-T

IDU 43 GMV-ND22PHS/D-T

IDU 44 GMV-ND22PHS/D-T

IDU 45 GMV-ND22PHS/D-T

IDU 46 GMV-ND22PHS/D-T

IDU 47 GMV-ND22PHS/D-T

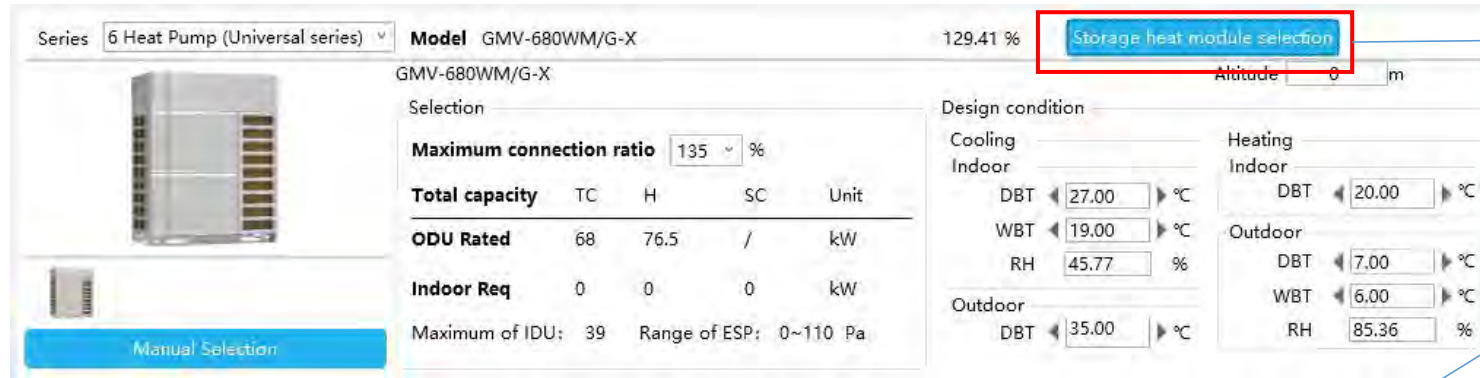
GMV-ND22PHS/D-T Required Capacity Unit(kW)

TC 0 SC 0 H 0

Cancel Confirm

## 4. ODU selection

### Special module selection – heat storage module



Series: 6 Heat Pump (Universal series) Model: GMV-680WM/G-X 129.41 %

Altitude: 0 m

Selection

Maximum connection ratio: 135 %

Total capacity	TC	H	SC	Unit
ODU Rated	68	76.5	/	kW
Indoor Req	0	0	0	kW

Maximum of IDU: 39 Range of ESP: 0~110 Pa

Design condition

Cooling Indoor DBT: 27.00 °C WBT: 19.00 °C RH: 45.77 % Outdoor DBT: 35.00 °C

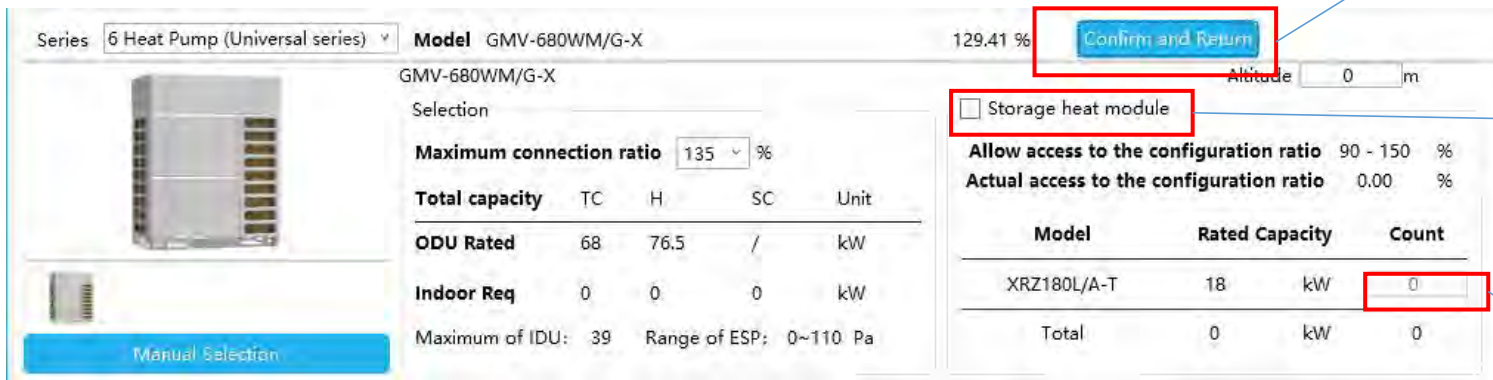
Heating Indoor DBT: 20.00 °C Outdoor DBT: 7.00 °C WBT: 6.00 °C RH: 85.36 %

Manual Selection

Storage heat module selection

Click the heat storage module selection button to enter the heat storage module selection panel.

Click the button of return to go back to the panel of ODU design condition.



Series: 6 Heat Pump (Universal series) Model: GMV-680WM/G-X 129.41 %

Altitude: 0 m

Selection

Maximum connection ratio: 135 %

Total capacity	TC	H	SC	Unit
ODU Rated	68	76.5	/	kW
Indoor Req	0	0	0	kW

Maximum of IDU: 39 Range of ESP: 0~110 Pa

Confirm and Return

☐ Storage heat module

Allow access to the configuration ratio: 90 - 150 %  
Actual access to the configuration ratio: 0.00 %

Model	Rated Capacity	Count
XRZ180L/A-T	18 kW	0
Total	0 kW	0

Manual Selection

Select heat storage module and it will recommend you the number of heat storage modules according to the current capacity of ODUs.

After selecting heat storage module, enter the number of heat storage modules in the input box.

# 4. ODU selection

## Special module selection – hot water module (hot water VRF)

Series GMV5 Home

Model GMV-S140WL/A-S

110.00 %

Model selection for hot water system

Altitude 0 m

Selection

Maximum connection ratio

110 %

Total capacity

	TC	H	SC	Unit
ODU Rated	14	16.5	/	kW
Indoor Req	0	0	0	kW

Maximum of IDU: 8    Range of ESP: 0 Pa

Design condition

Cooling

Indoor

DBT

27.00 °C

WBT

19.00 °C

RH

45.77 %

Outdoor

DBT

35.00 °C

Heating

Indoor

DBT

20.00 °C

Outdoor

DBT

7.00 °C

WBT

6.00 °C

RH

85.36 %

Click the hot water module selection button to enter the hot water module selection panel.

Select hot water/floor heating/solar energy

☒ Hot water

☒ Floor heating

☐ Connected to solar energy?

Hot water

Demand:

Total demand of hot water

0 L

Number of people

0

Daily water consumption per capita

0 L

Hot Water Generator

Hot Water Generator 1

Fall with outdoor unit

0 m

Water tank

Total volume of water tank

L

Water tank 1

Fall with outdoor unit

0 m

Water tank 2

Fall with outdoor unit

0 m

Floor heating

Total load of floor heat

0 kW

+

Room type

Living room

Heat load index

140 w/m²

Room area

0 m²

-

Return to model selection for outdoor unit

Click the button of return to go back to the panel of ODU design condition.

Hot water panel

Floor heating panel

30

## 4. ODU selection


### Special module selection – hot water module (GMV6 HR)

Series
GMV6 Heat Recovery(EU)

Model
GMV-VQ224WM/C-X

68.75 %

Model selection for hot water system



Altitude
0
m

GMV-VQ224WM/C-X

Selection

Maximum connection ratio
110 ~ %

Total capacity	TC	H	SC	Unit
ODU Rated	22.4	25	/	kW
Indoor Req	0	0	0	kW

Maximum of IDU: 13      Range of ESP: 0~110 Pa

Design condition

Cooling

Indoor

DBT
27.00 °C

WBT
19.00 °C

RH
45.77 %

Outdoor

DBT
35.00 °C

Heating

Indoor

DBT
20.00 °C

Outdoor

DBT
7.00 °C

WBT
6.00 °C

RH
85.36 %

Manual Selection

Click the hot water module selection button to enter the hot water module selection panel.

Select hot water/floor heating/solar energy

☐ Hot water
 ☐ Floor heating
 ☐ Connected to solar energy?
 [Return to model selection for outdoor unit](#)

Hot water  
**Demand:**
 Total demand of hot water  L
 Total demand of floor heating  kW

**Hot Water Generator**
 Total load of floor heat  kW

Hot Water Generator 1 
 Floor Heating 1  kW
 Fall with outdoor unit  m

Hot Water Generator 2 
 Floor Heating 2  kW
 Fall with outdoor unit  m

**Water tank**
 Total volume of water tank  L

Water tank 1 
 volume of water 1  L
 Fall with Generator  m

Water tank 2 
 volume of water 2  L
 Fall with Generator  m

Click the button of return to go back to the panel of ODU design condition.

➤ Enter total demand

Hot water generator and floor heating

➤ Water tank

## 4. ODU selection

ODU Submission preview(This function is only for North America at present)

**Outdoor unit editing**

Unit name: VRF 1 Power Supply: 208~230V,3Ph,60Hz Function type: Heat pump Click to preview Submittal report Preview

Series: Ultra Heat GMV6 HR(AHRI) Model: GMV-VQ72WM/C-F(U) 97.22 %

Altitude: 0 ft

**Selection**

Maximum connection ratio: 135 %

**Total capacity**

	TC	H	SC	Unit
ODU Rated	72	81	/	kBtu/h
Indoor Req	0	0	0	kBtu/h

Maximum of IDU: 13 Range of ESP: 0~0.44 inWG

**Design condition**

**Cooling**

Indoor DBT: 80.60 °F WBT: 66.20 °F RH: 45.77 %

Outdoor DBT: 95.00 °F

**Heating**

Indoor DBT: 68.00 °F

Outdoor DBT: 44.60 °F WBT: 42.80 °F RH: 85.36 %

**Indoor unit connected to air conditioning system**

Unit name	Model	Req TC (kBtu/h)	Req H (kBtu/h)	Req SC (kBtu/h)
IDU 1	GMV-ND07PHS/D-T(U)	0	0	0
IDU 2	GMV-ND07PHS/D-T(U)	0	0	0
IDU 3	GMV-ND07PHS/D-T(U)	0	0	0
IDU 4	GMV-ND07PHS/D-T(U)	0	0	0
IDU 5	GMV-ND07PHS/D-T(U)	0	0	0
IDU 6	GMV-ND07PHS/D-T(U)	0	0	0
IDU 7	GMV-ND07PHS/D-T(U)	0	0	0
IDU 8	GMV-ND07PHS/D-T(U)	0	0	0
IDU 9	GMV-ND07PHS/D-T(U)	0	0	0
IDU 10	GMV-ND07PHS/D-T(U)	0	0	0

**Indoor unit not connected to system**

**GMV-ND07PHS/D-T(U)**

Required Capacity Unit(kBtu/h)

	TC	SC	H
0	0	0	0

Cancel Confirm

1.After connecting to an IDO, a ODU model will be recommended automatically or selected manually;


2.Click “Preview” button;

3.Submittal report can be previewed when operation and sources are normal ;

4.If preview is unavaible, corresponding reasons will be displayed.

# 4. ODU selection

Click “Confirm” to complete the selection of ODUs. The detailed information of selected ODUs is displayed at the ODU system structure display area of the ODU selection interface.



**Model**GMV-730WM/B-X(P)120.55%

GMV-730WM/B-X(P)

Altitude0m

Selection

Total capacity	TC	H	SC	Unit
ODU Rated	73	82.5	/	kW
Indoor Req	0	0	0	kW

Design condition

Cooling

Indoor

DBT	27	°C
WBT	19	°C
RH	45.77	%

Outdoor

DBT	35	°C
-----	----	----

Heating

Indoor

DBT	20	°C
-----	----	----

Outdoor

DBT	7	°C
WBT	6	°C
RH	85.36	%

Maximum of IDU: 43Range of ESP: 0~82 Pa

ODU system information

Normal indoor unit

Click ">>" to get detailed definitions

Unit name	Remark	Model	DBT/RH (Cooling)(°C/%)	DBT (Heating)(°C)	Req TC (kW)	Req SC (kW)	Req H (kW)	Rt TC (kW)	Rt H (kW)	No
IDU 1		GMV-ND22PHS/D-T	27 / 45.77	20	0	0	0	2.2	2.5	
IDU 2		GMV-ND22PHS/D-T	27 / 45.77	20	0	0	0	2.2	2.5	

Detailed information of IDUs contained in the system

## 5. Piping

Piping interface (Take heat pump system as an example)

Piping toolbar

Legend

List of ODUs

List of IDUs not connected to pipes

List of hot water generators not connected to pipes

Main interface of piping

System message alert

System List

VRF 1 120.55%

Branch-Y Branch-T4 Branch-T8

GMV-730WM/B-X(P)

GMV-730WM/B-X(P)  
73.0 / 75.7 kW  
82.5 / 87.4 kW  
~ / 66.0 kW

31.8(19.05)IDU

Drag in

VRF 1: Unconnected indoor unit

IDU 1 IDU 2  
IDU 3 IDU 4  
IDU 5 IDU 6

VRF 1: Unconnected Generator

100%

System message alert

There is indoor unit not being connected!

## 5. Piping

Piping legend



Legend

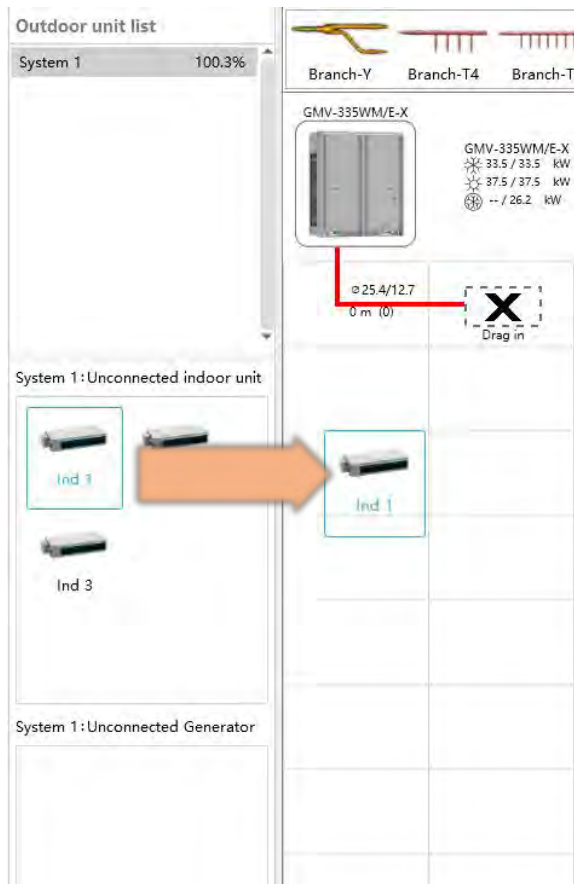
Item	Explain
1	Branch Name : Branch Mode
2	Gas pipe /The pipe diameter of Liquid
3	The length of pipe(Elbow quantity)
4	H:Drop from ODU
5	Unit name
6	Unit model
7	Cooling Rated Capacity /Actual Capacity
8	Heating Rated Capacity /Actual Capacity
9	Sensible Cooling -- /Actual Capacity(l
10	Branch
11	Indoor unit
12	Connecting pipe
13	An unconnected branch

Click the icon of legend,  
and the legend window  
will appear.

## 5. Piping

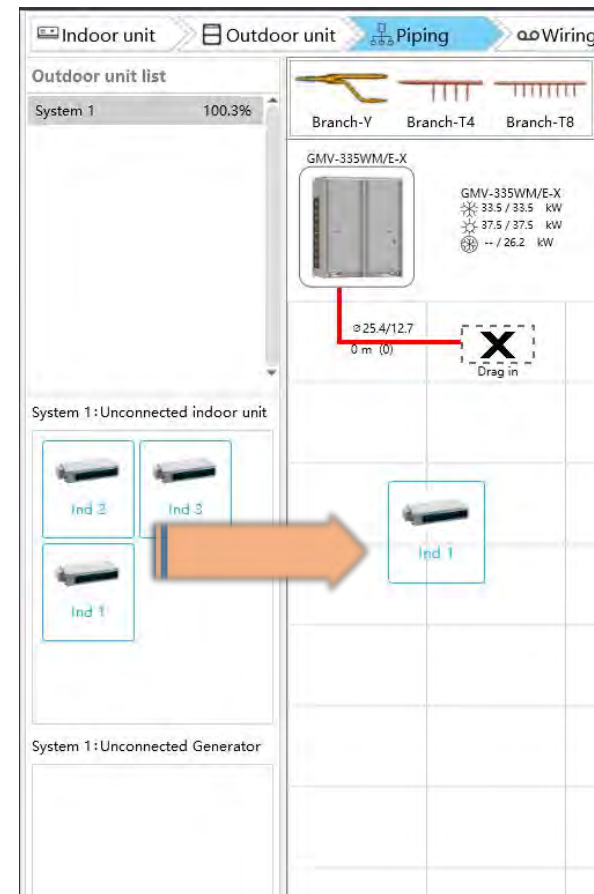
### Piping process – Drag IDUs

Drag one IDU



Left-click the IDU and drag it to the main interface of piping.

Drag multiple ODU

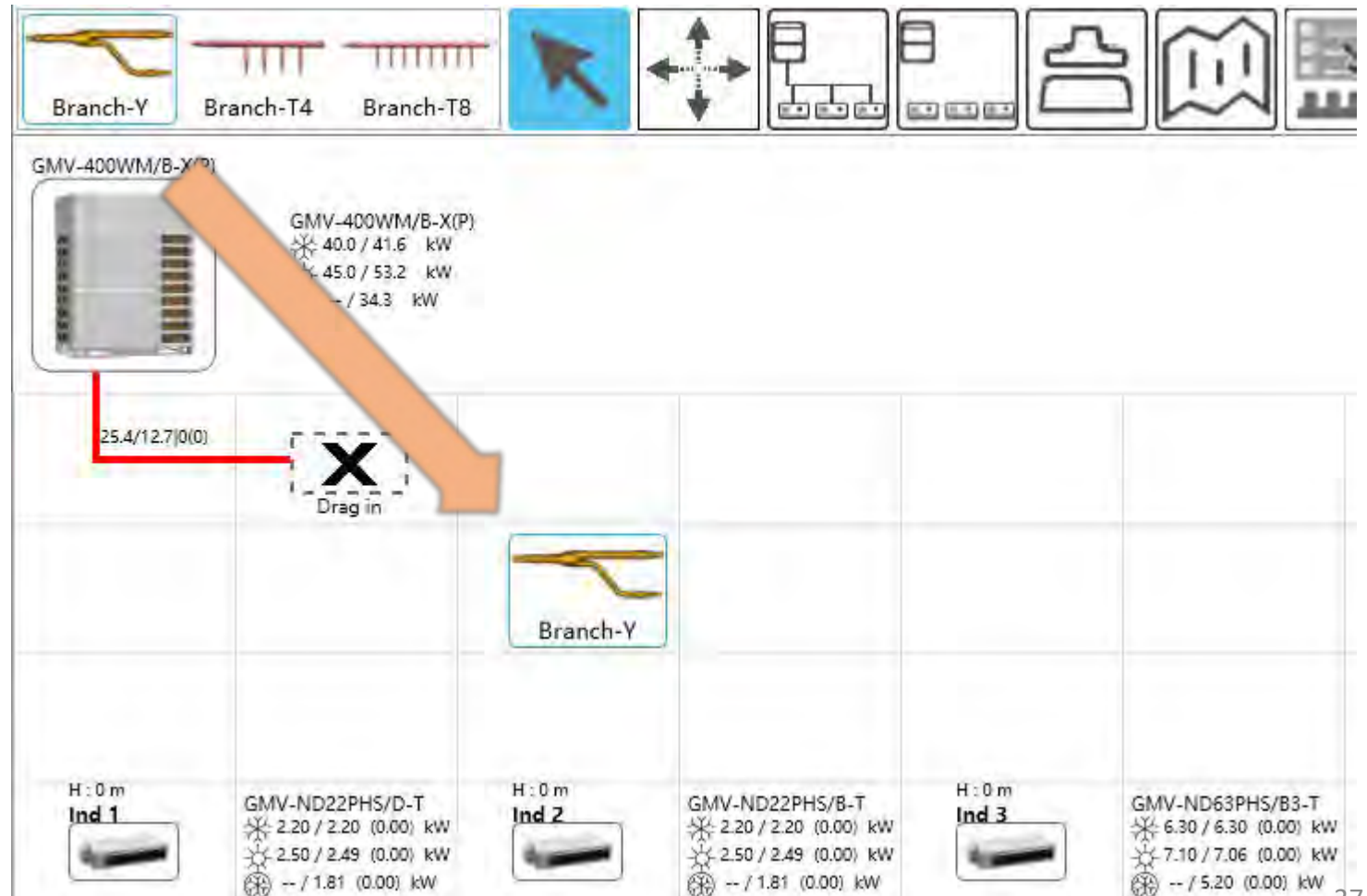


Press and hold “Shift” to select multiple IDUs. Don’t release “Shift” when dragging the IDU(s). Add multiple IDUs to the piping interface.

## 5. Piping

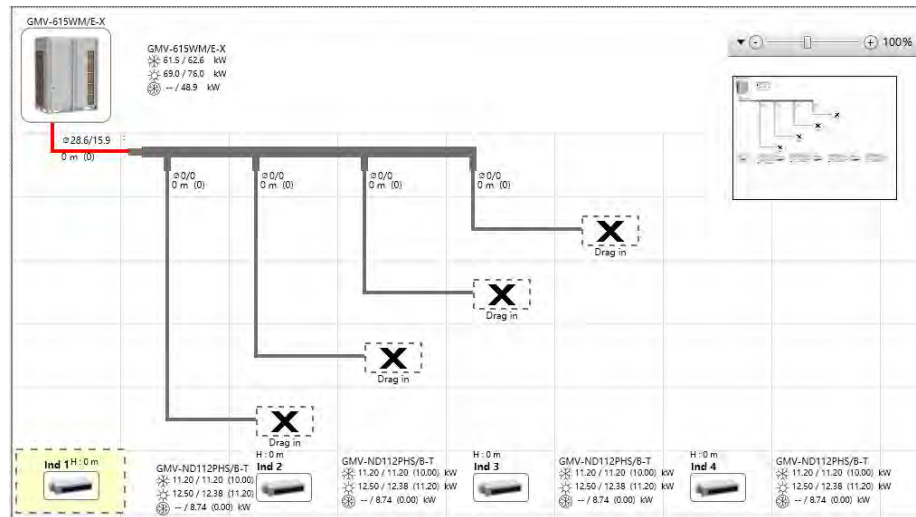
### Piping process – Drag branches

Select proper branches based on needs. Left-click and drag it to the piping interface.

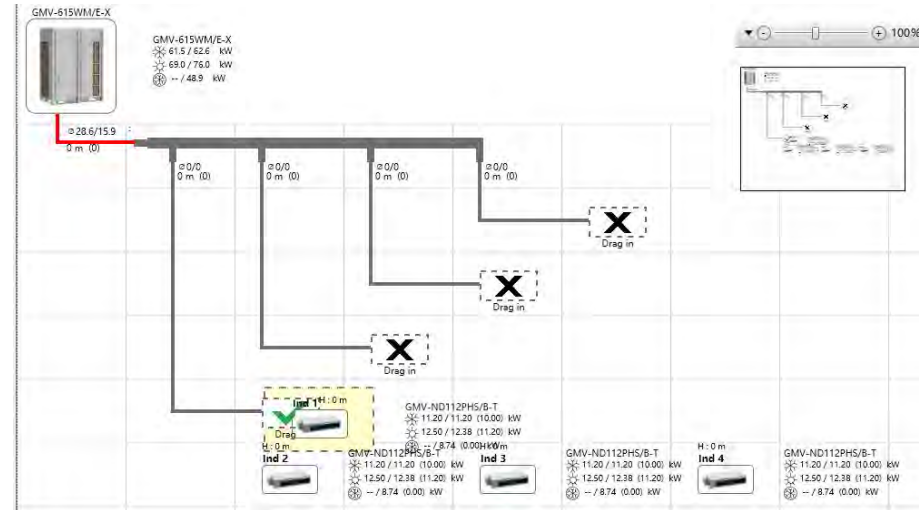


## 5. Piping

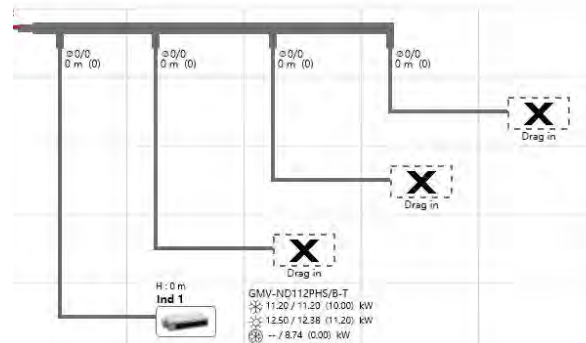
### Piping process – Connection between branches and IDs



Left-click the surrounding area of an IDU and drag it to the branch terminal marked with “X”.



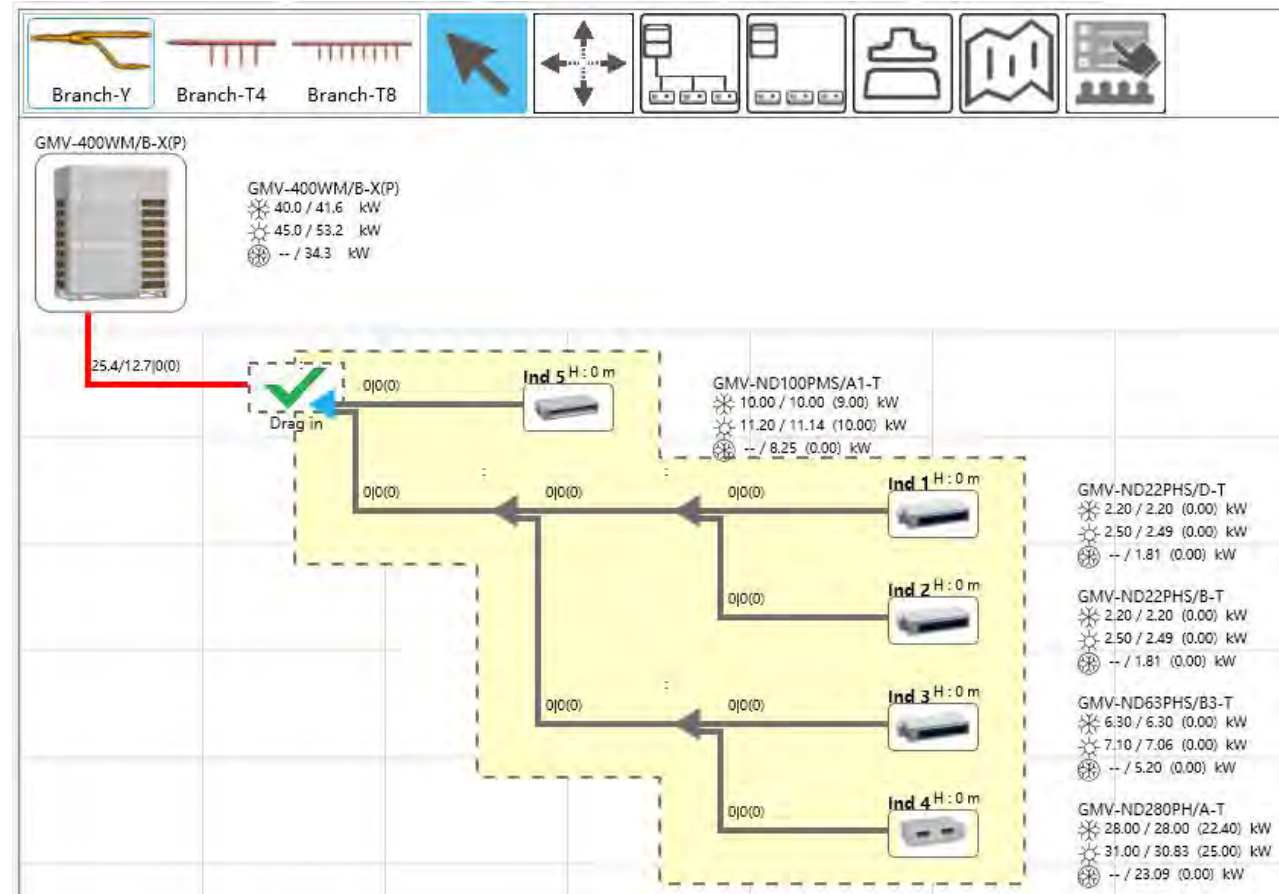
When the branch terminal shows “V”, release the left mouse button. In this way, the branch is connected to the IDU.



## 5. Piping

### Piping process – Connection between indoor and outdoor sides

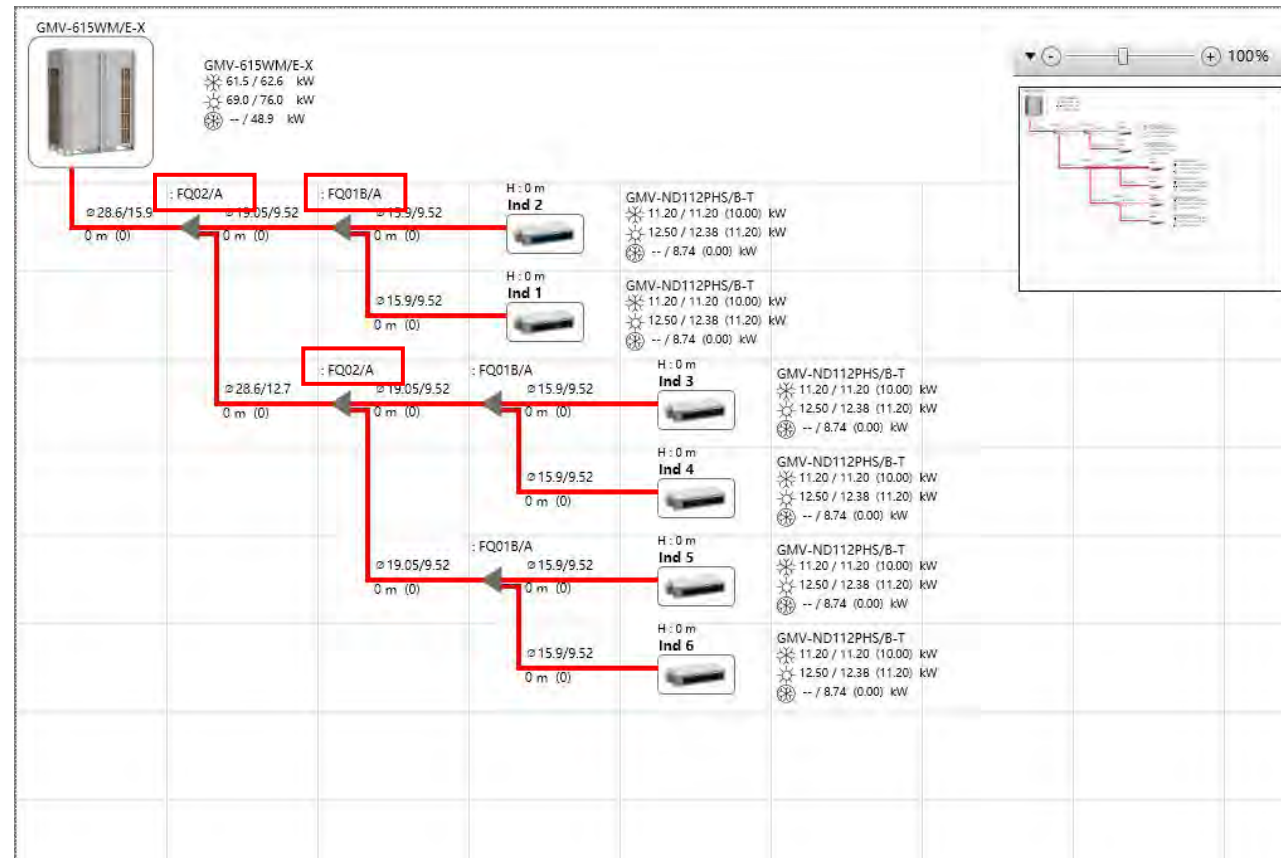
After all the IDUs and branches are connected, drag the surrounding area of the first branch in the whole piping network to the outdoor side, just like connecting the IDU to a branch. In this way, the outdoor and indoor sides are connected.



## 5. Piping

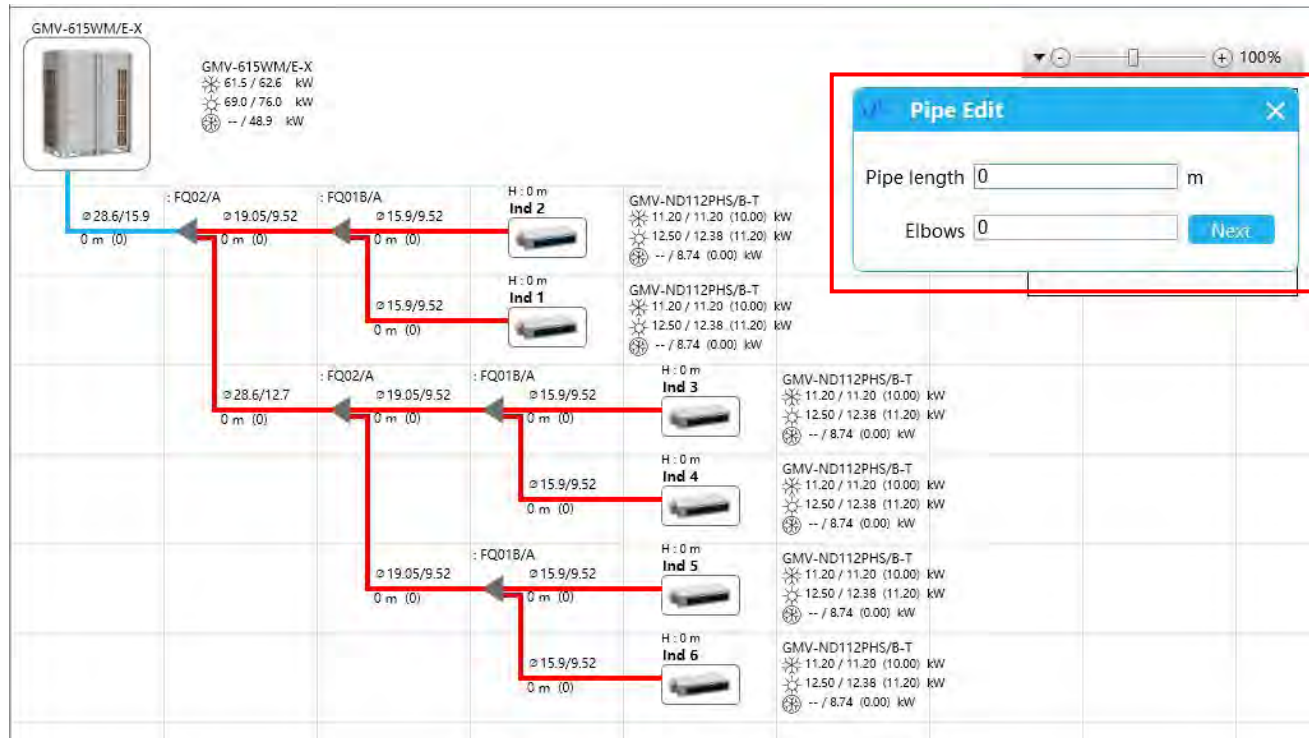
### Piping process – Branch selection

After the indoor and outdoor sides are connected, the whole piping network will automatically conduct branch selection.



## 5. Piping

### Piping process – Input pipe length and the number of elbows

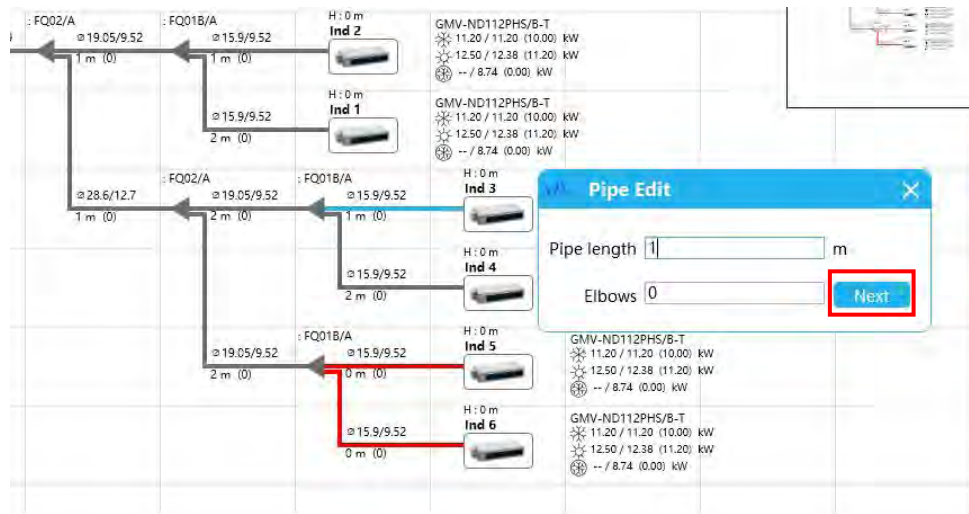


Move the cursor to any one pipeline. When the pipeline color is changed, double-click the mouse and then an edit window will pop up. Input pipe length and the number of elbows.

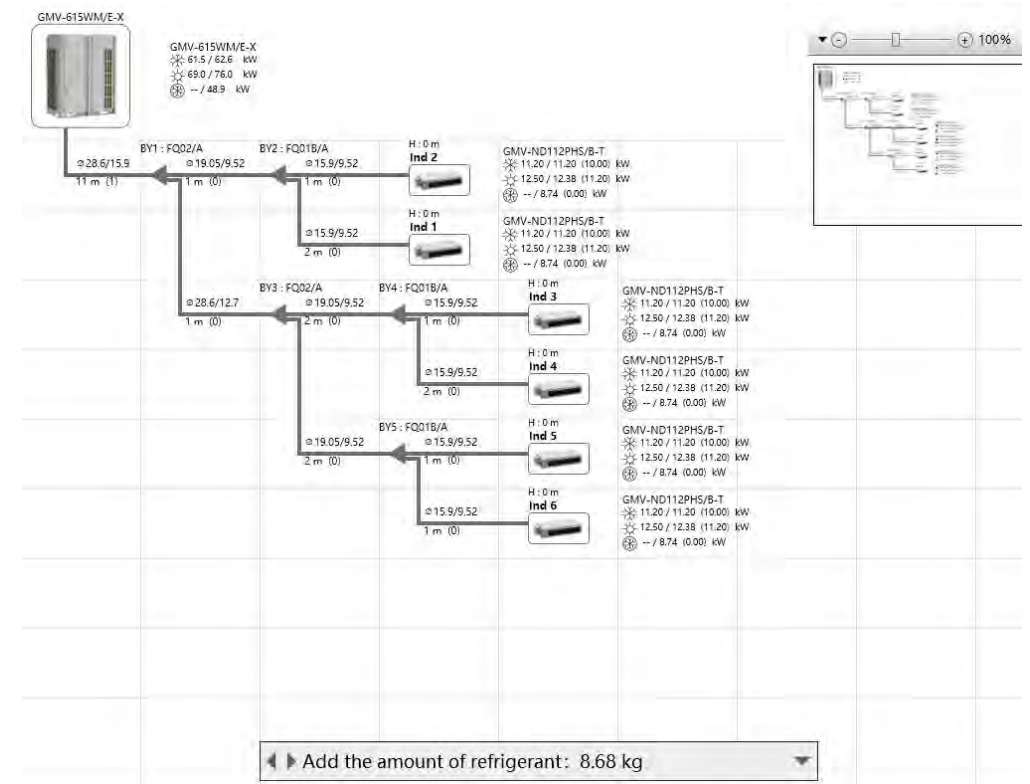
Press “↑”, “↓” on the keyboard to switch the input box.

## 5. Piping

### Piping process – Input pipe length and the number of elbows



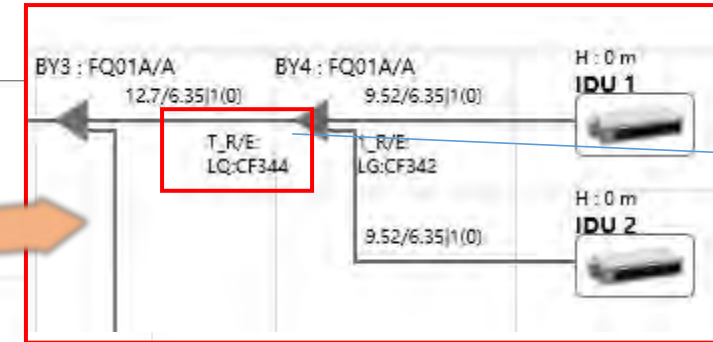
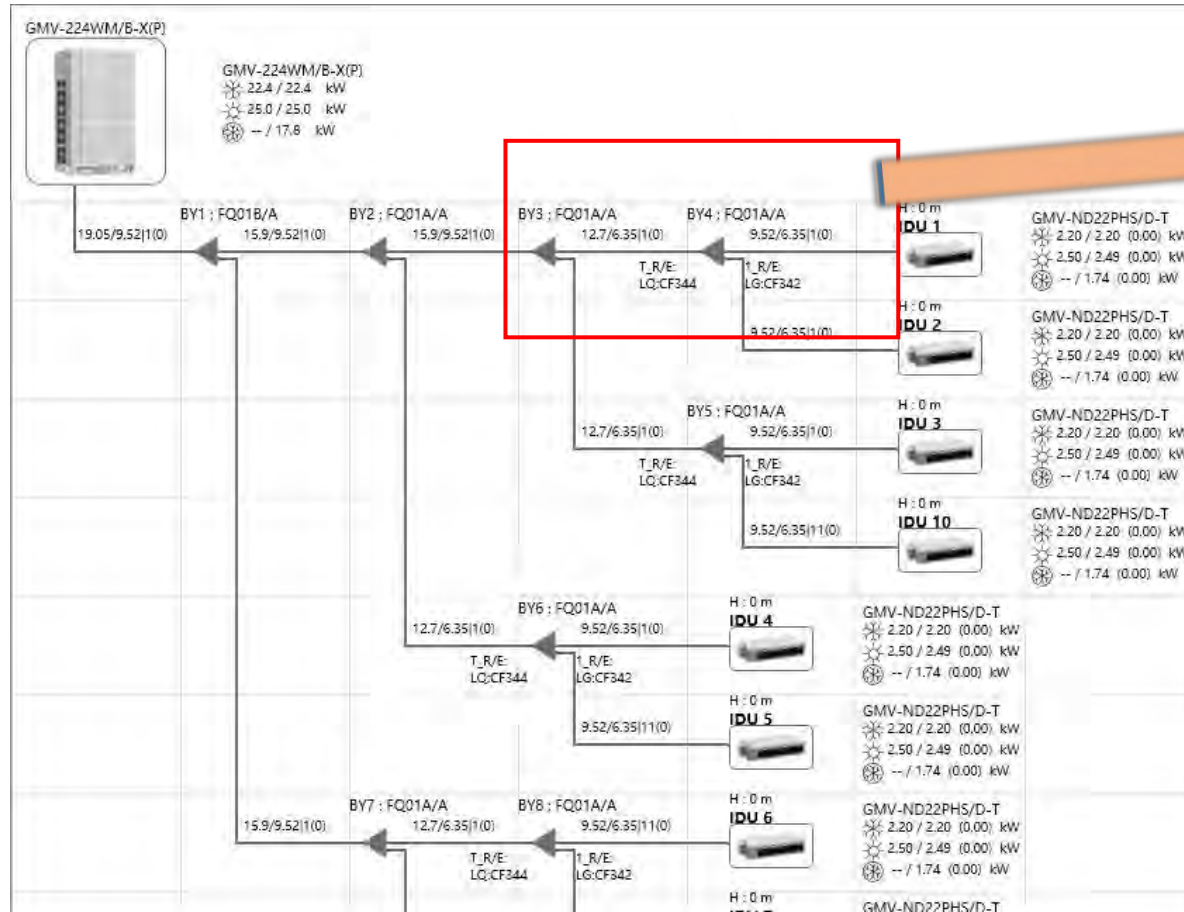
After entering the pipe length and the number of elbows, click “Next” or press the key “Enter” and it will automatically switch to the next pipeline whose length is 0.



This is the entire piping network after all the data is input.

## 5.Piping

Pipe connection process → select R/E pipe



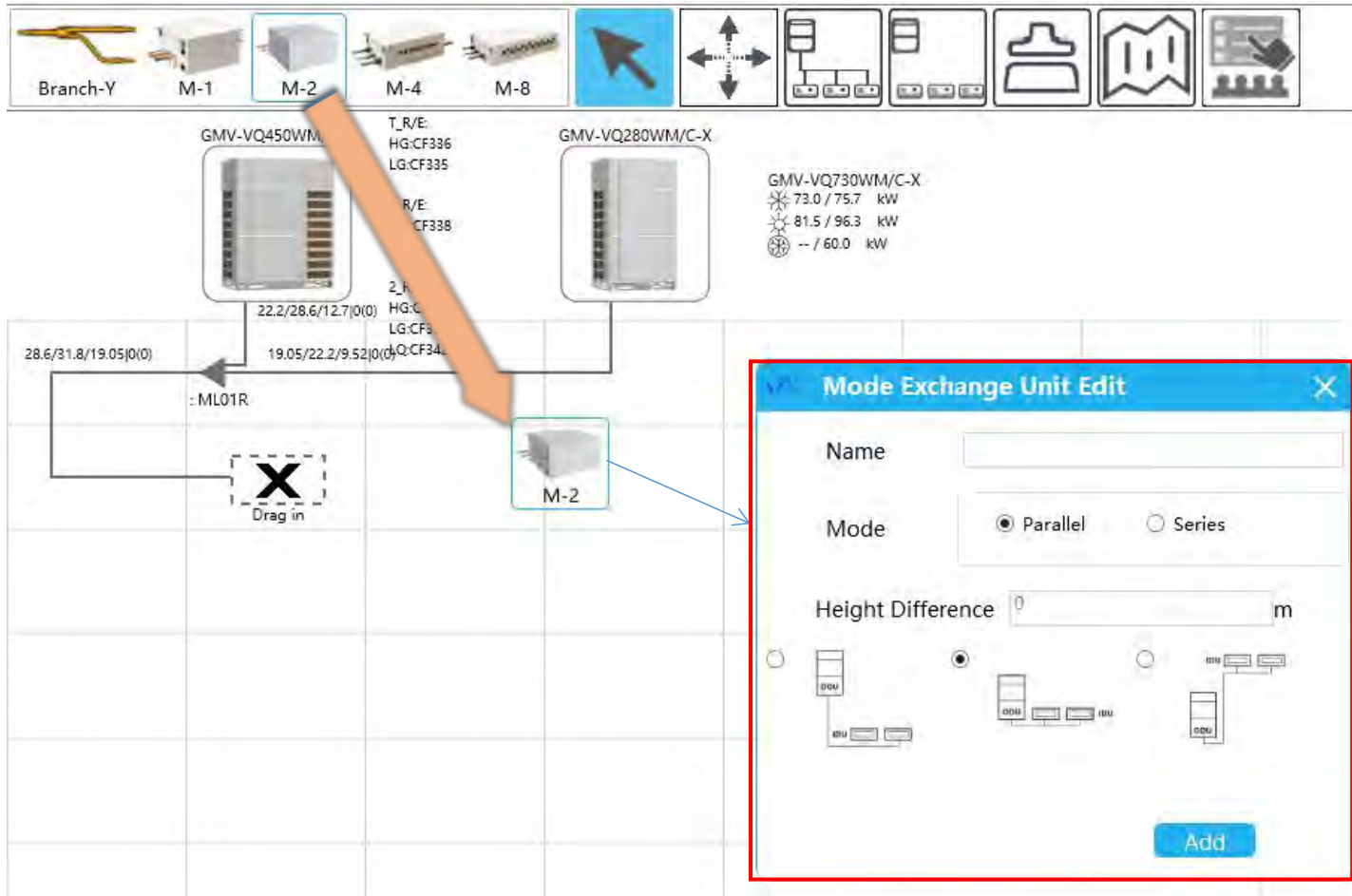
R/E pipe model

When branch pipe model and pipe diameter of pipes are selected, the pipe diameters for the pipe and its branch pipe will be matched:

1. When they can be matched directly, select the branch pipe whose diameter is same as that of the pipe.
2. When they can't be matched, the proper R/E pipe will be recommended automatically for connection.
3. If there is no proper R/E pipe, the corresponding pipe diameter range will be collected.

## 5.Piping

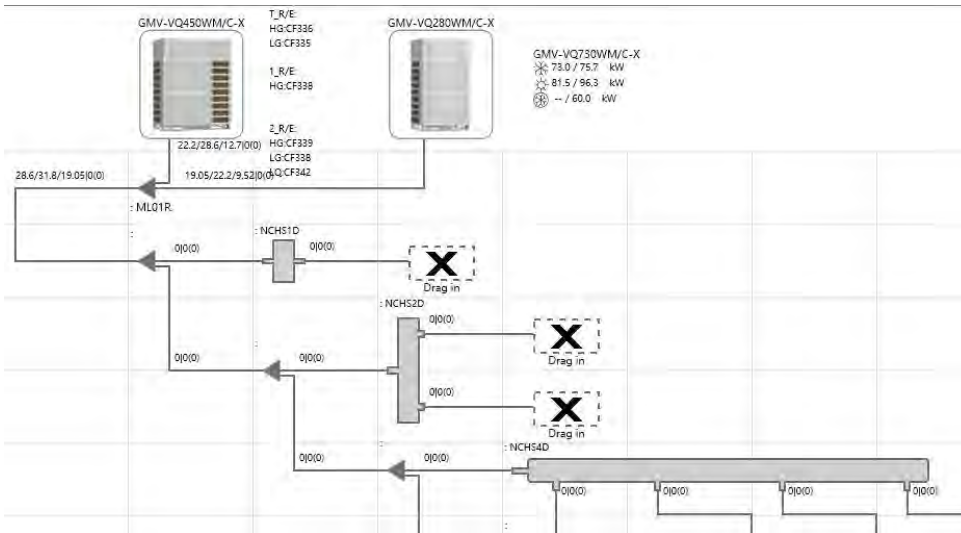
Pipe connection process → select mode exchanger



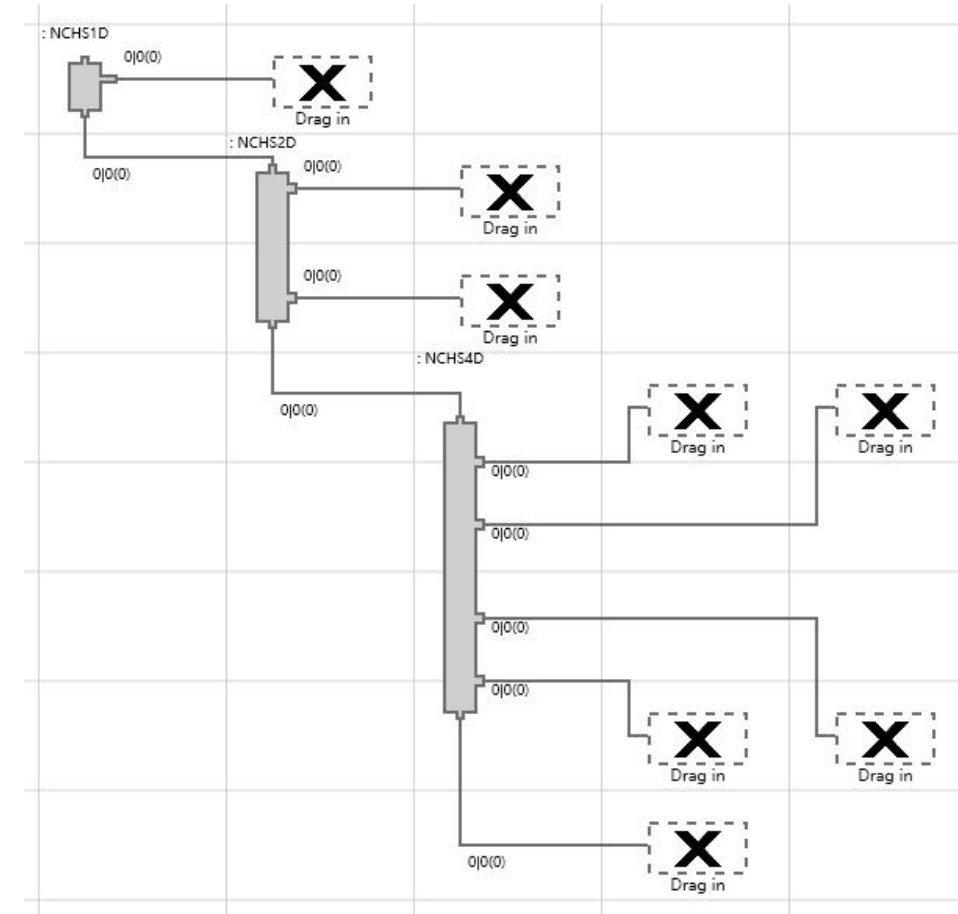
1. Use the shortcut button or drag the mode exchanger to the working area from the tool bar.
2. Edit the mode of the mode exchanger at the window area or double-click the mode exchanger at the working area to open this window.
3. When setting is completed, parallel or series connection can be selected

## 5.Piping

Pipe connection process → select mode exchanger



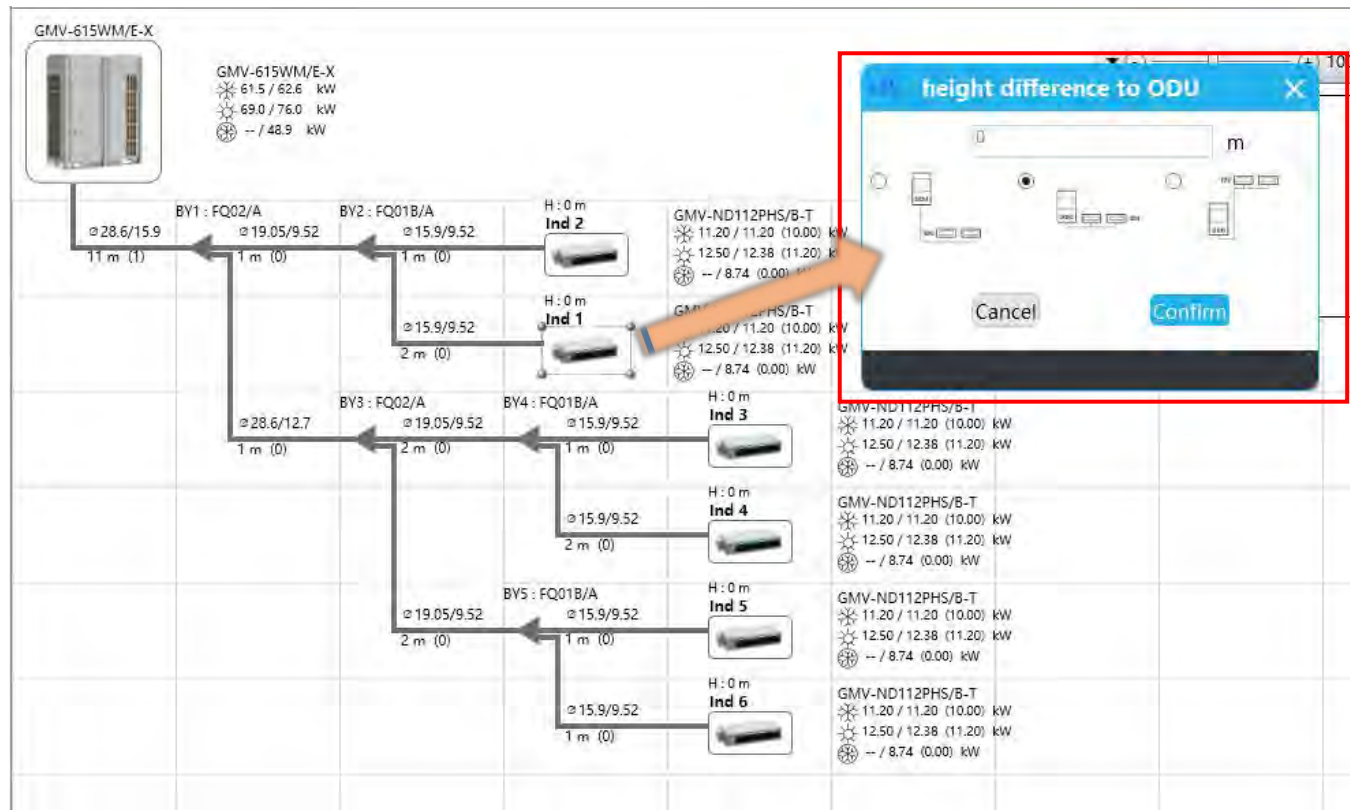
Model selection method for series connection



Model selection method for parallel connection

## 5. Piping

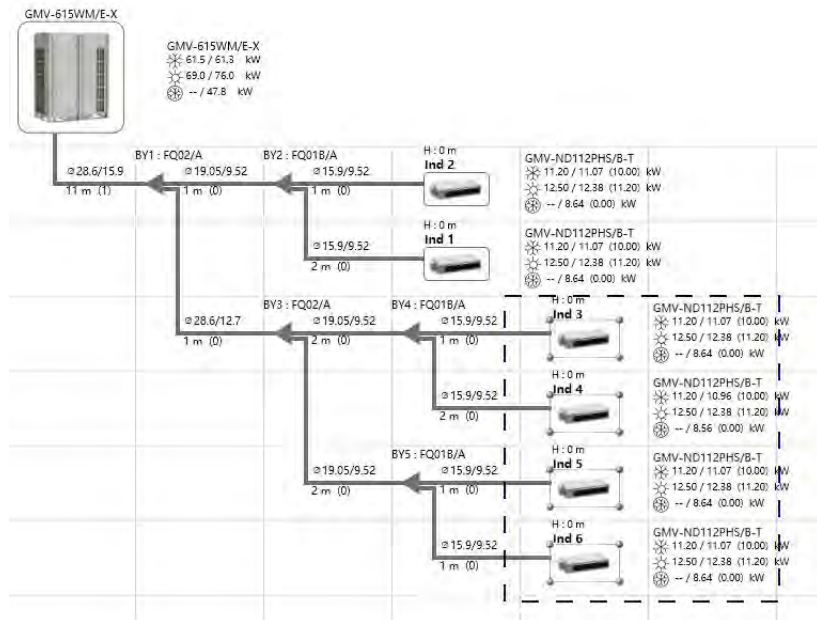
### Height difference setting



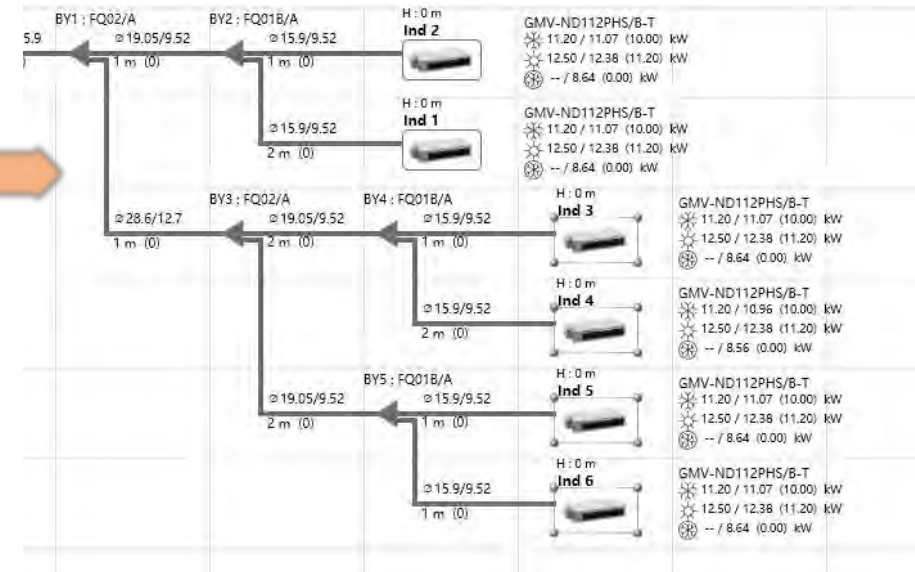
At the piping interface, double-click the picture of an IDU/heat storage module, a window of height difference setting will pop up.

## 5. Piping

### Piping edit—Frame selection



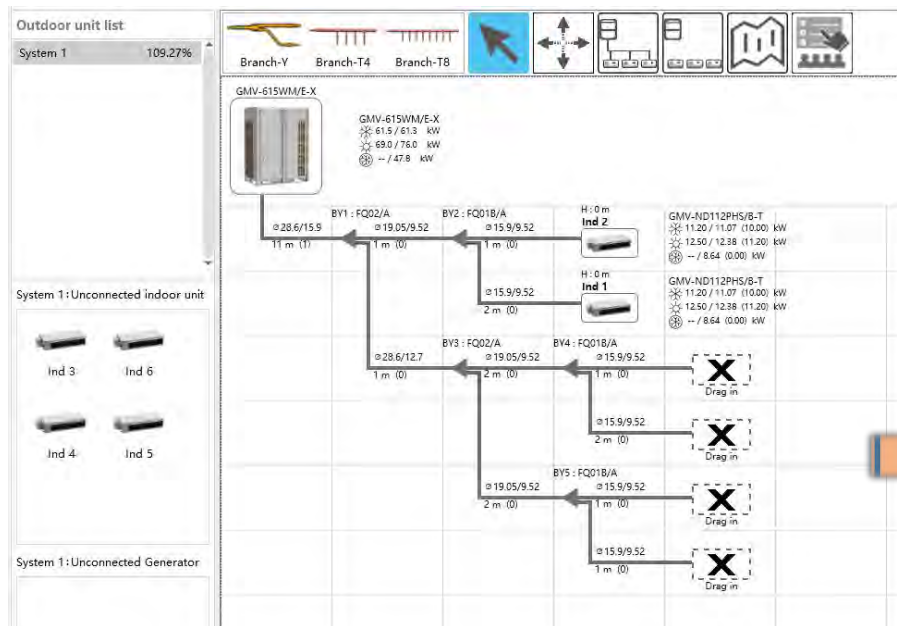
Selected devices will have four dots around.



Move the cursor to the blank space of the piping network, then click and hold the left mouse button to drag the cursor, which will create a dotted frame. Make sure the devices that require operation are within the frame. Then release the left mouse button.

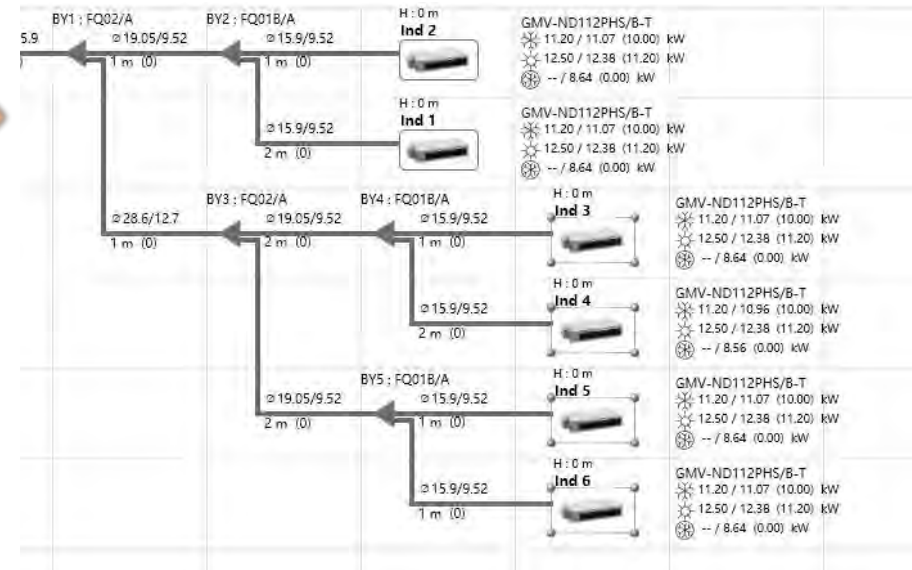
## 5. Piping

### Piping edit—Delete



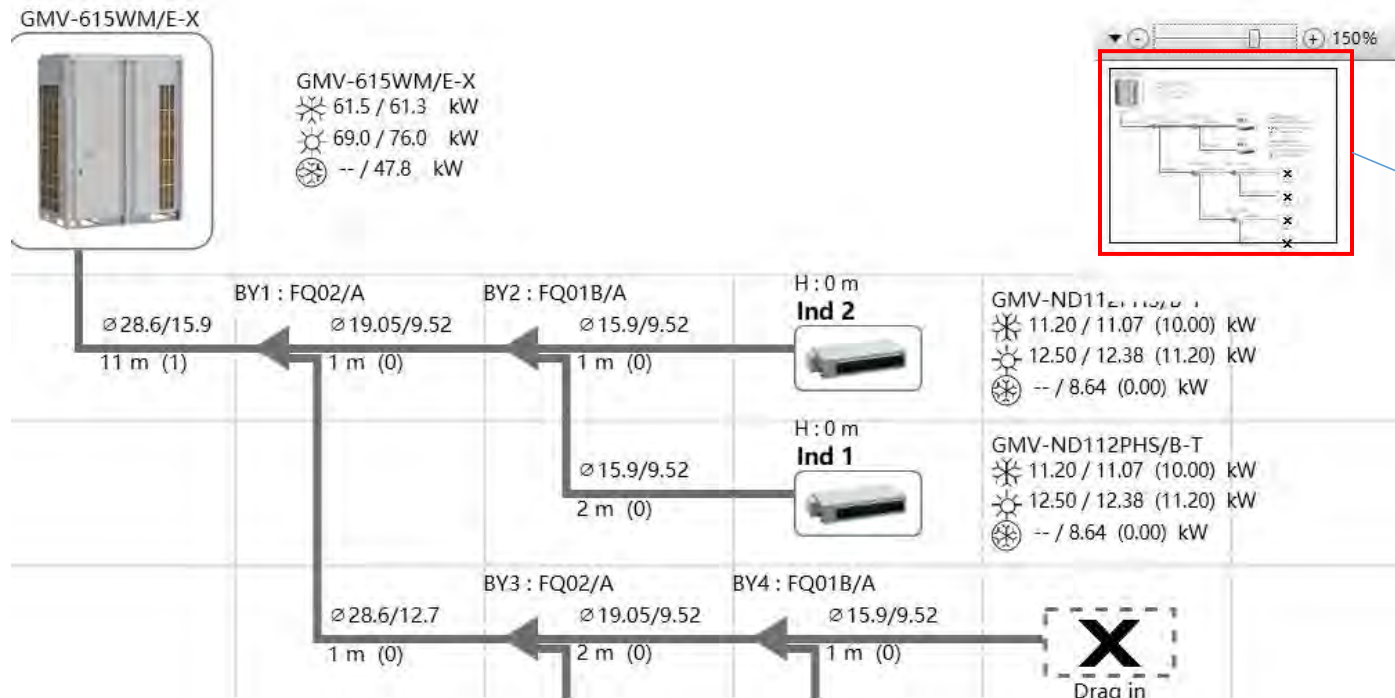
When devices are selected, whether through frame selection or a single click, press “Delete” on the keyboard.

This will delete devices that are selected in a frame. If indoor units are selected, they will be placed in the list of unconnected indoor units.



## 5. Piping

### Piping edit—Zoom



If the whole piping network cannot be displayed, use the mouse to slide the box and view local area.

There is a reduced-size version of the piping network at the right corner of the piping interface. Move the slide to zoom in and out.

## 5. Piping

### Piping edit—shortcut button

VRF 1: Unconnected indoor unit



Alt-A: Add indoor unit at the position of mouse

VRF 1: Unconnected Generator



Alt-D: Add hot water generator at the position of the mouse



Add connection parts (as for different system, the optional connection parts may be different) of piping at the work area indicated by the mouse with these five shortcut buttons (Alt-1-5)

The work area can be zoomed or moved by Ctrl and the mouse wheel or by dragging the left button of the mouse

## 6. Wiring

### Wiring interface

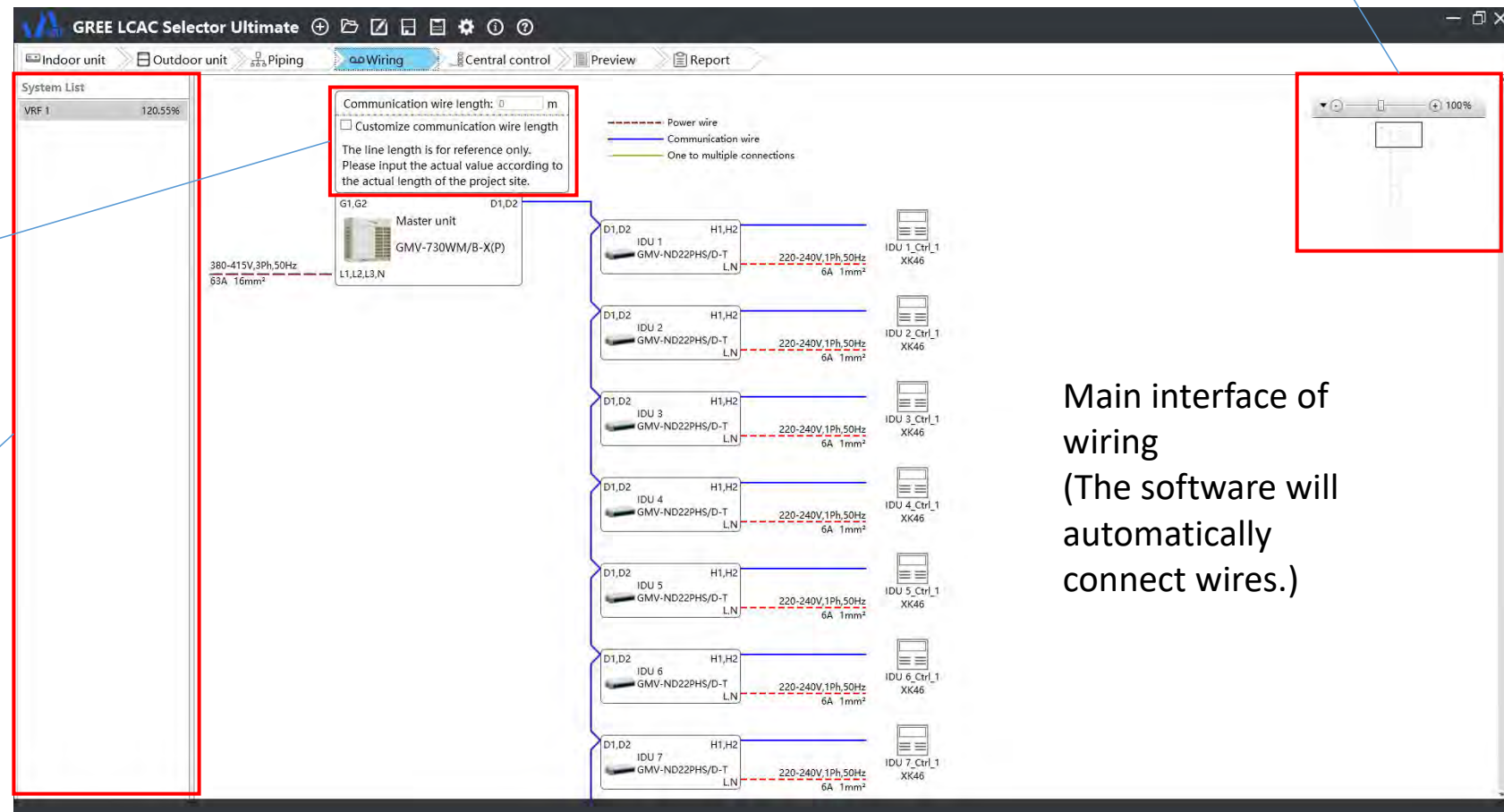
After pipe connection is done, click the navigation bar to enter the wiring interface.

Customize communication wire length:

1. When it's not ticked, the suggested wire length is calculated automatically.
2. When it's ticked, please input the actual length of communication wire

System list

General view

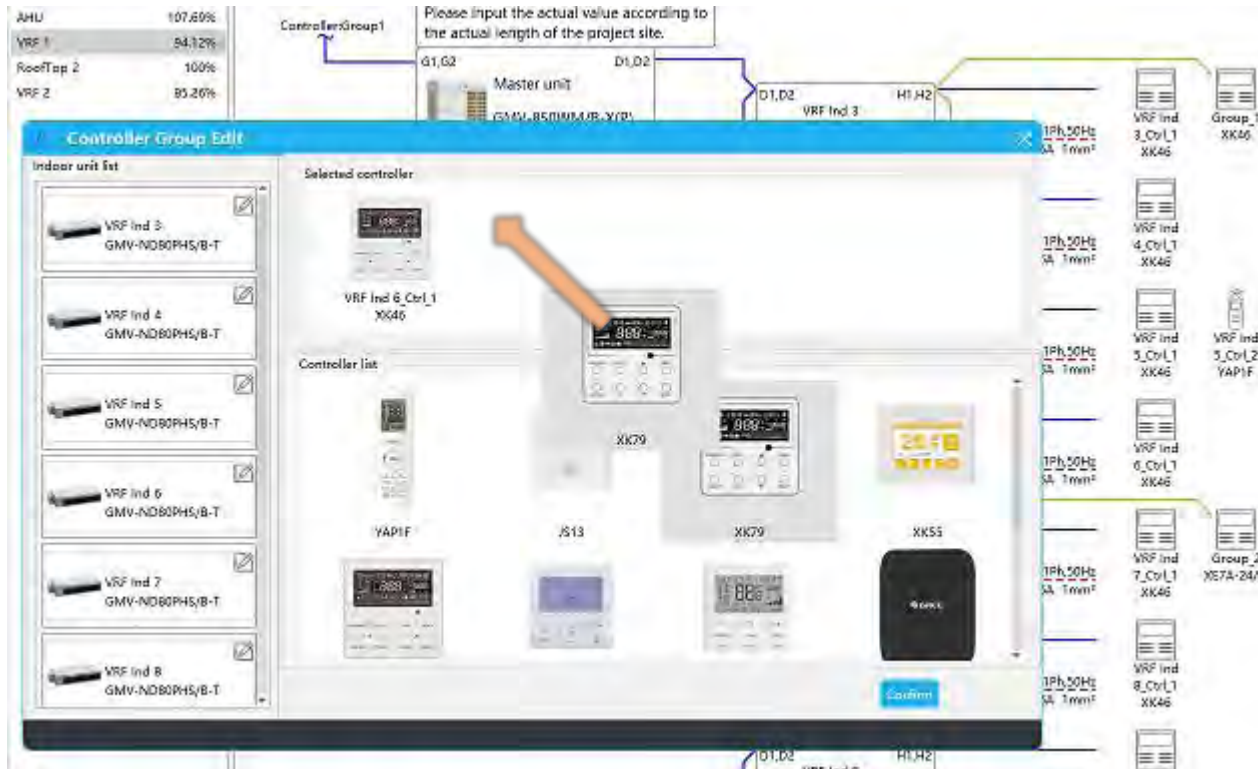


Main interface of wiring  
(The software will automatically connect wires.)

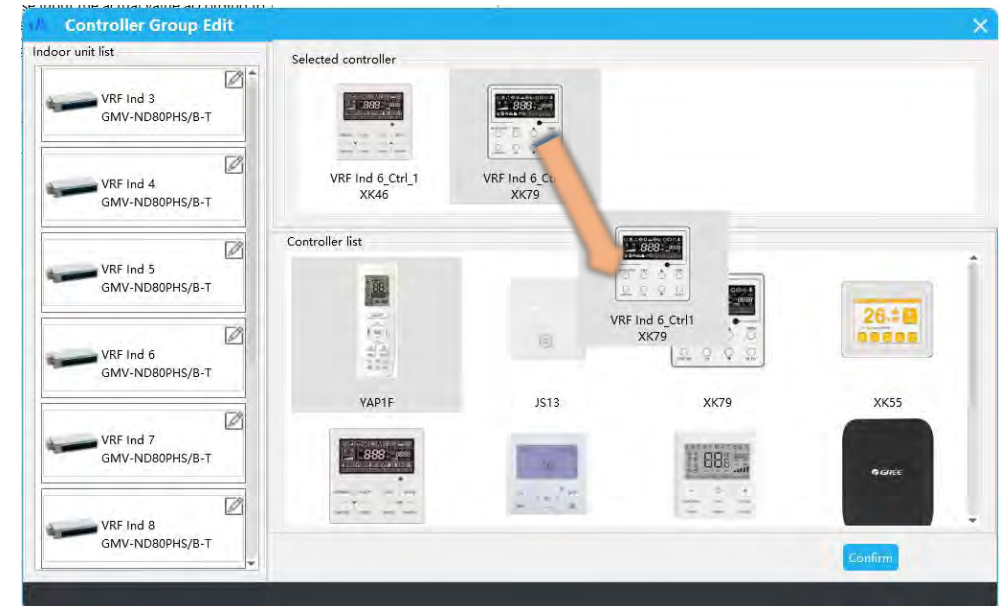
## 6. Wiring

### Controller selection

Double-click the picture of IDU and a controller edit window will pop up.



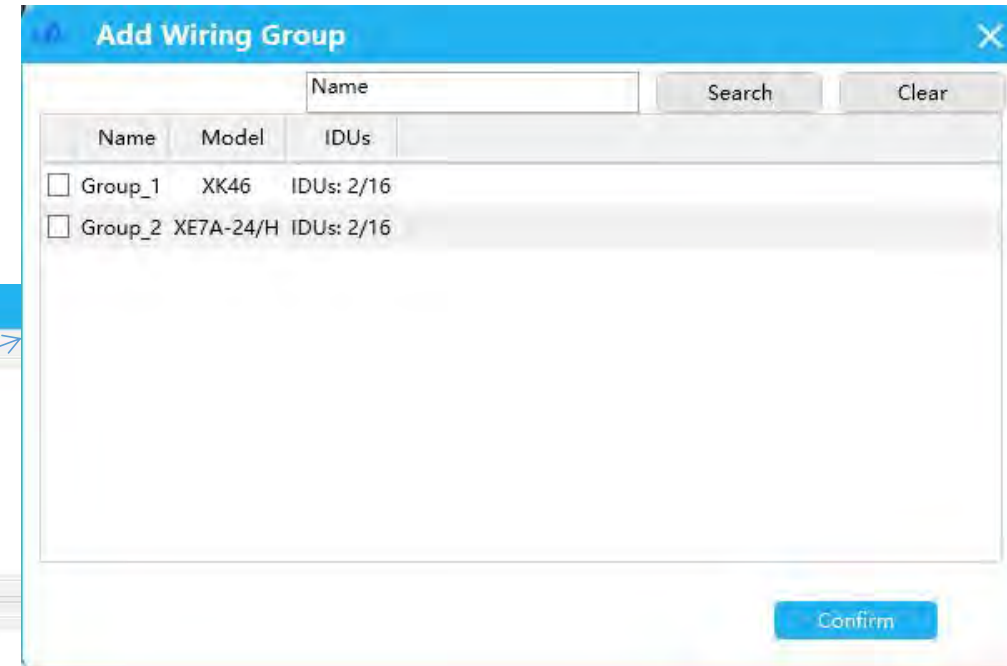
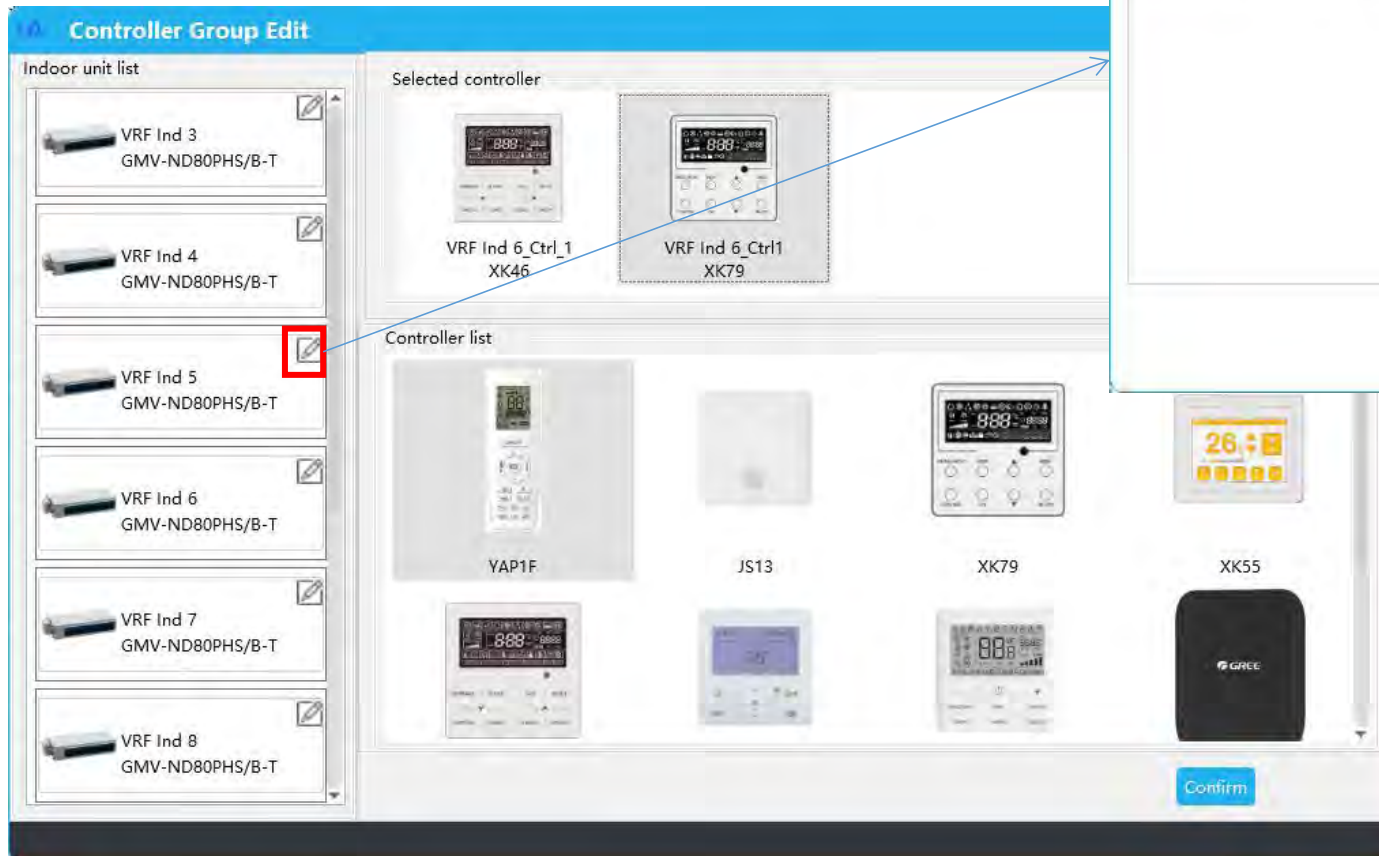
Select the controller to be added and drag it to the box of selected controllers.



Click and drag a selected controller to the lower part and the controller is deleted.

## 6. Wiring

Select the controller

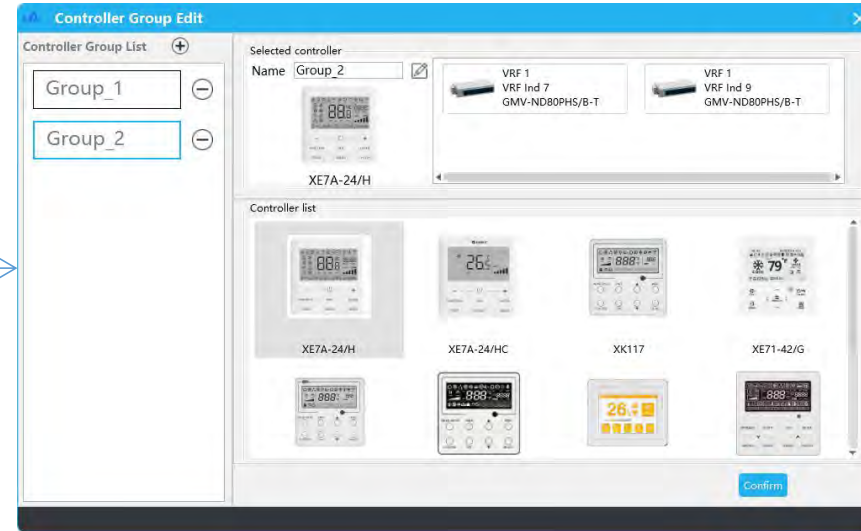


- 1、 Click the edit button to pop up the window of “add wiring group”.
- 2、 Select the controller group and click the confirm the complete group edit.

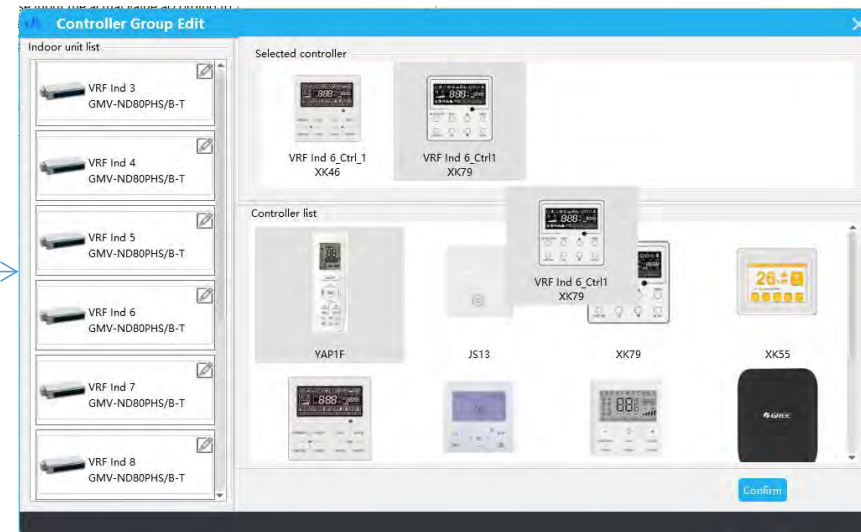
## 6.Wiring

### Select controller

- 1、 Double-click the general controller photo to pop up the controller edit window
- 2、 Double-click the controller group photo to pop up the controller edit window



Controller group edit window

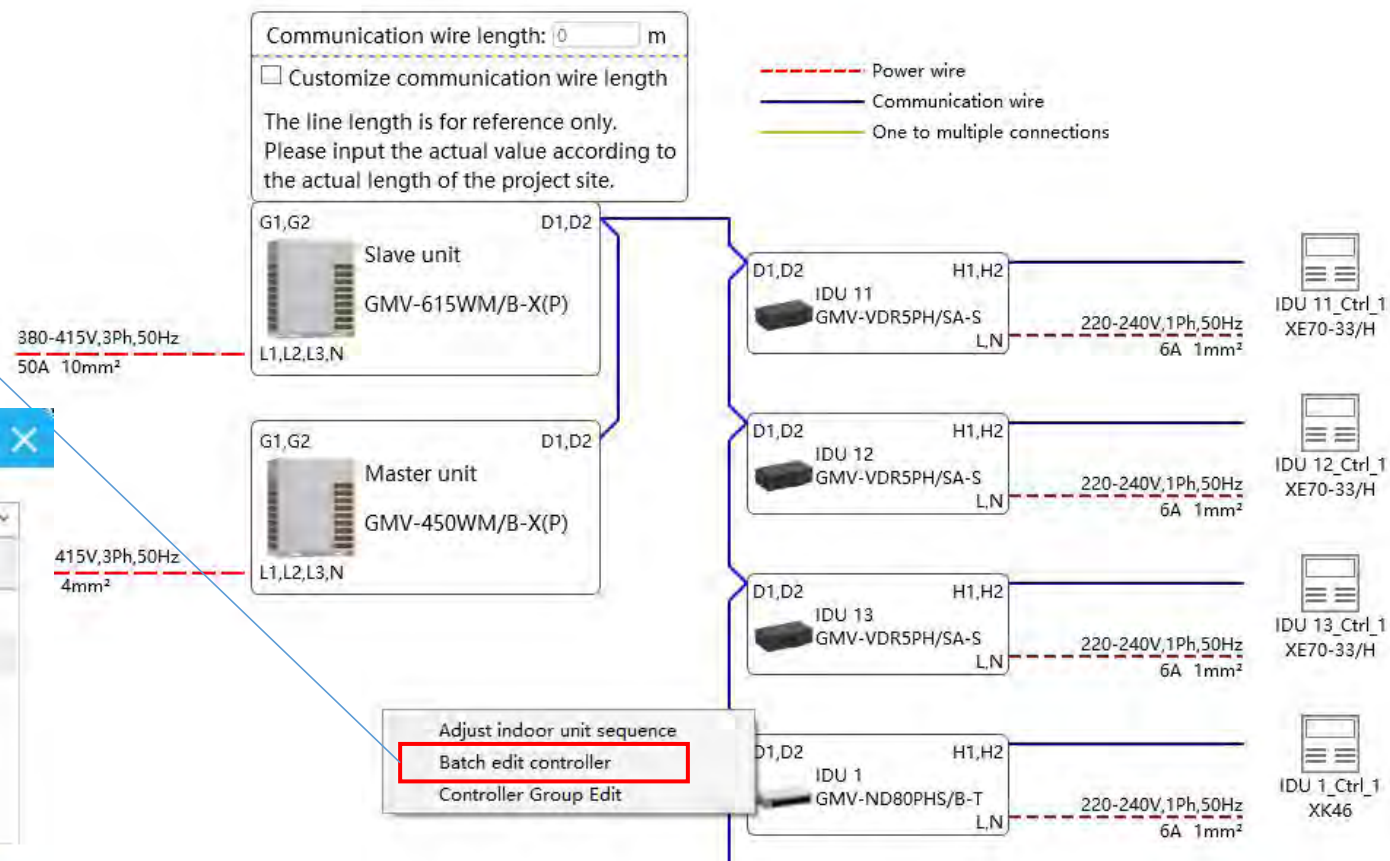
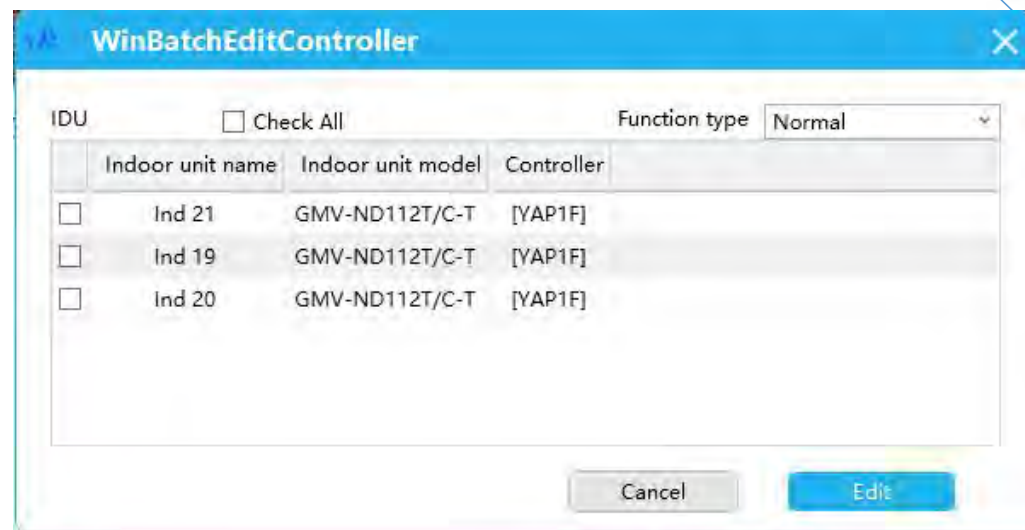


Controller edit window

## 6.Wiring

Batch edit controller→ Open the window

Right-click the page of wiring, click the second menu and open the window of batch edit controller

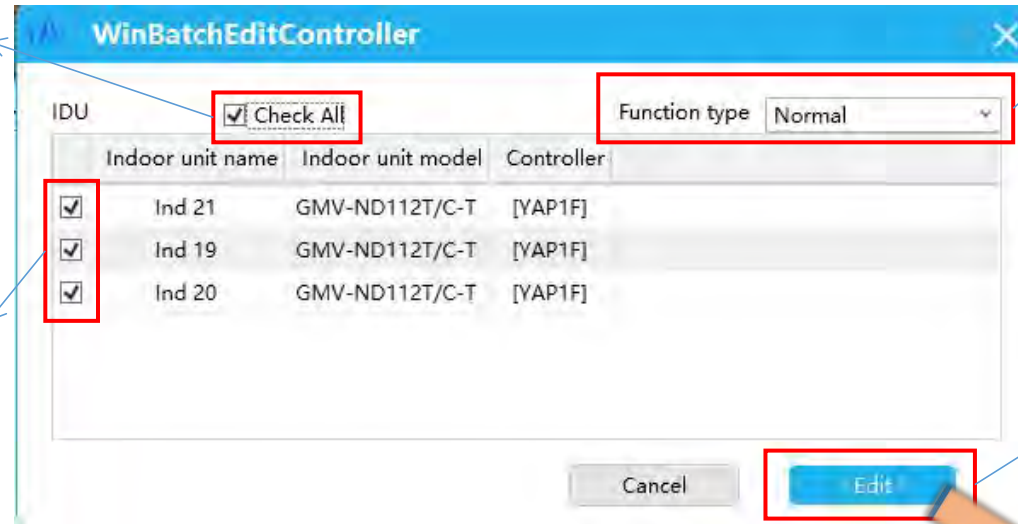


## 6.Wiring

### Batch edit controller→ interface introduction

Select all indoor units

Select all indoor units  
whose controllers  
should be changed



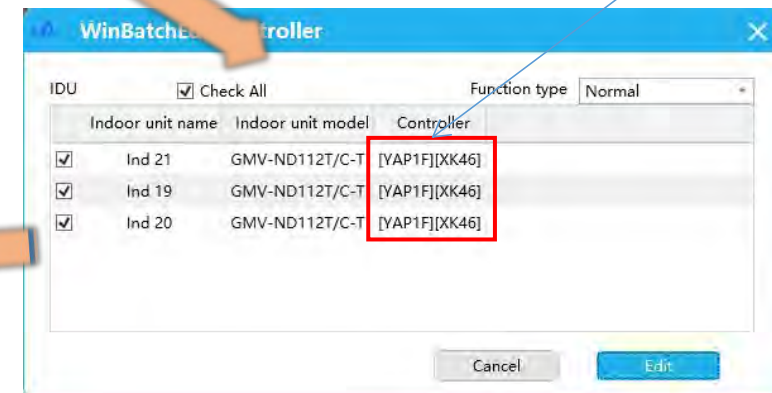
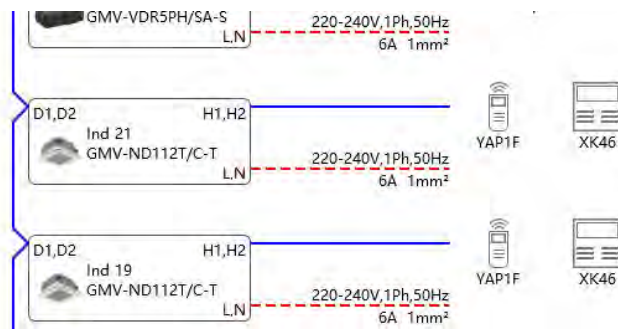
The drop-down box is for  
the controller type:

- 1.Normal
- 2.Duct
- 3.ERV
- 4.LSP\_C1

Click “Edit” and then the controller  
selection window will pop up by  
taking the first selected indoor unit  
as the template

When the controller is changed, the  
proposal for the controller will be  
updated to all selected indoor units

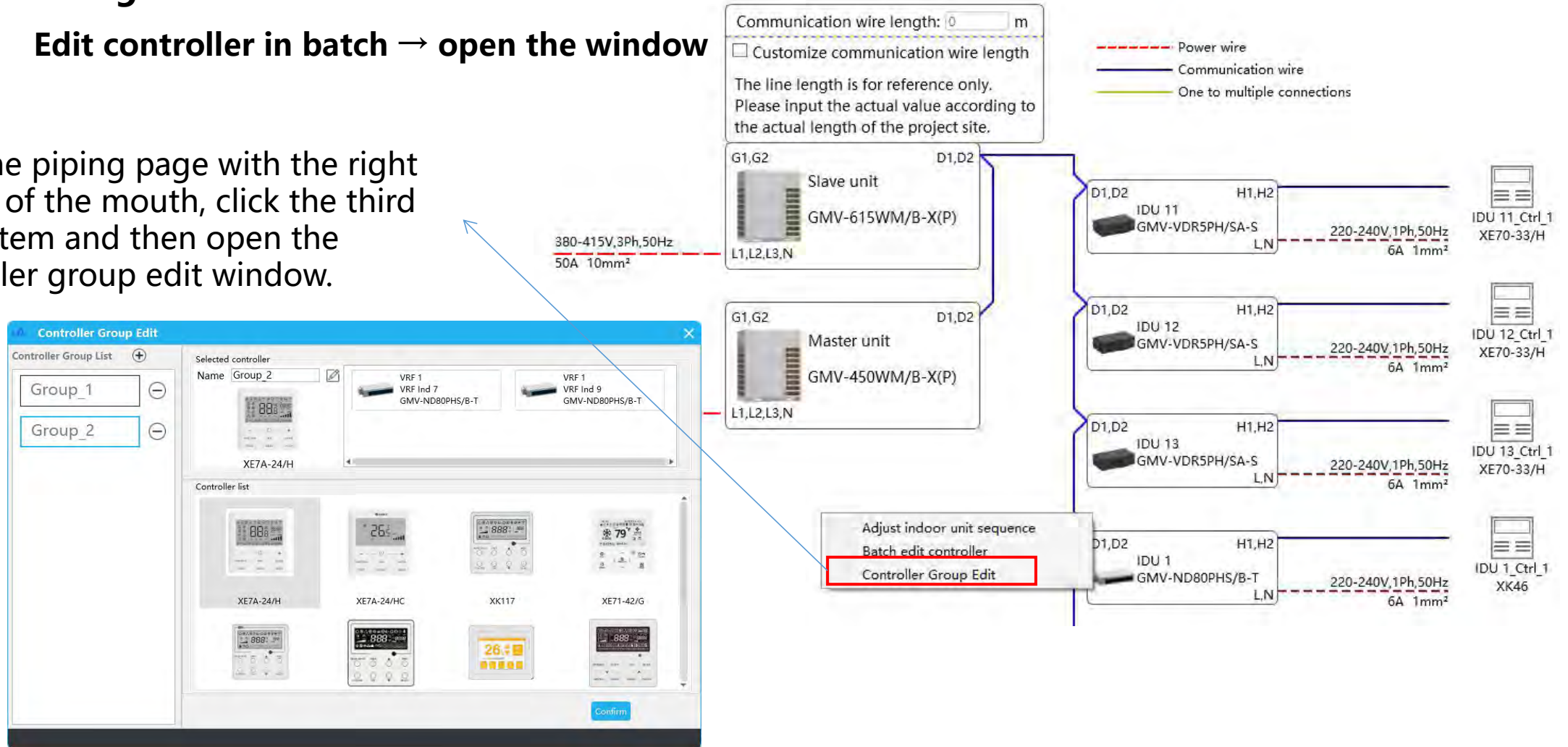
When clicking cancel or closing the window, the batch edited  
proposal will be refreshed to the wiring page.



## 6. Wiring

**Edit controller in batch → open the window**

Click the piping page with the right button of the mouse, click the third menu item and then open the controller group edit window.

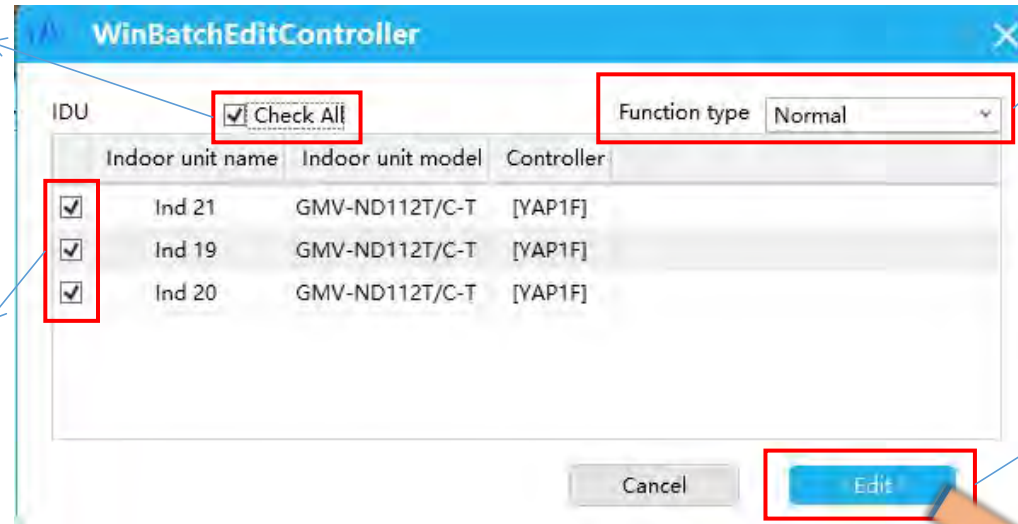


## 6.Wiring

### Batch edit controller→ interface introduction

Select all indoor units

Select all indoor units  
whose controllers  
should be changed



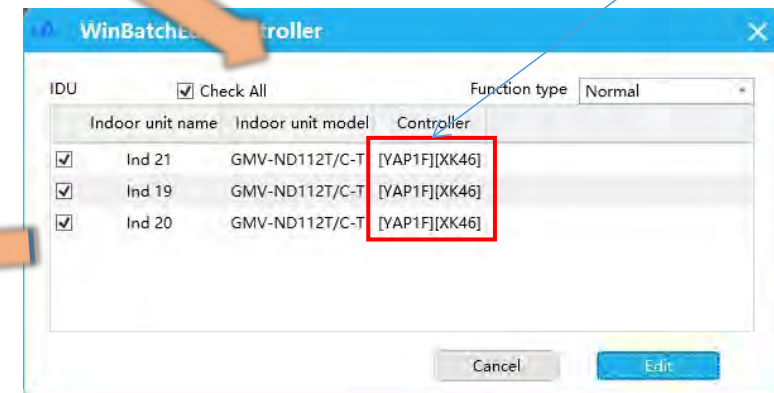
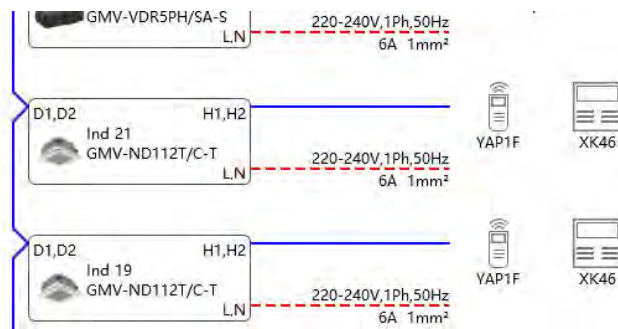
The drop-down box is for  
the controller type:

- 1.Normal
- 2.Duct
- 3.ERV
- 4.LSP\_C1

Click "Edit" and then the controller  
selection window will pop up by  
taking the first selected indoor unit  
as the template

When the controller is changed, the  
proposal for the controller will be  
updated to all selected indoor units

When clicking cancel or closing the window, the batch edited  
proposal will be refreshed to the wiring page.



## 7. Selection of central control

### Interface of central controller selection

Global control wiring

Outdoor unit list

Add a group

Central controller list

Display area of central controllers in groups

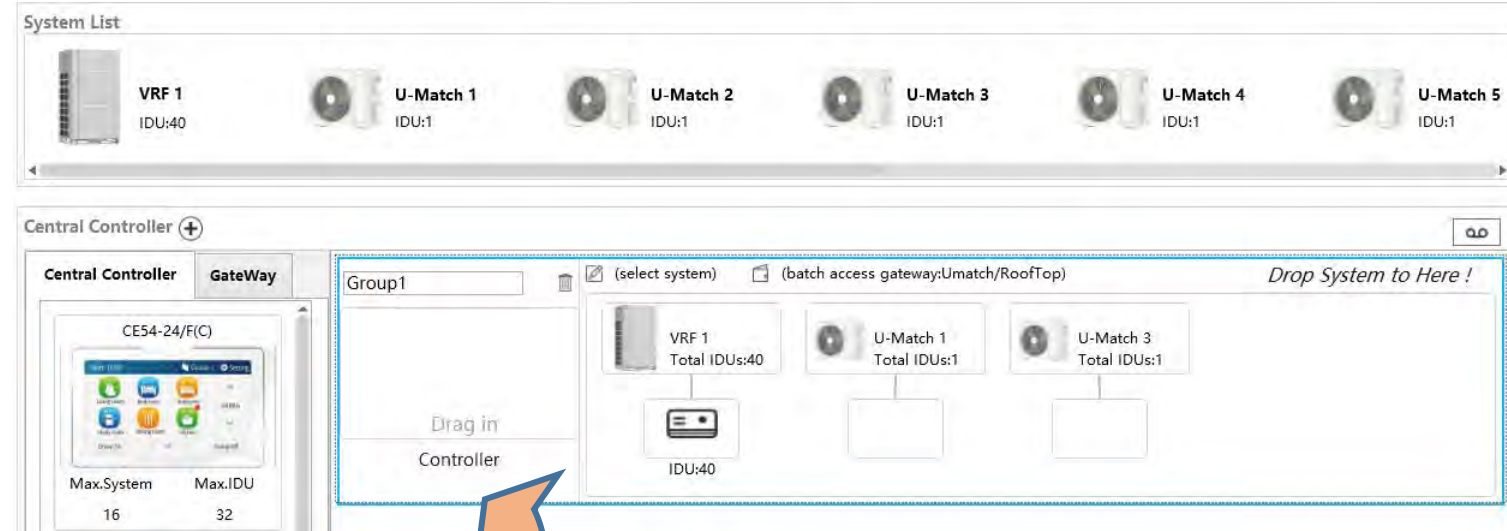
The screenshot displays the GREE LCAC Selector Ultimate software interface. At the top, there is a menu bar with tabs for Indoor unit, Outdoor unit, Piping, Wiring, Central control (selected), Preview, and Report. Below the menu bar is a System List showing various VRF and U-Match units. The main interface is divided into two main sections. On the left, there is a Central Controller list, which is highlighted by a red box and labeled 'Central controller list'. This list contains several controller models with their respective specifications. On the right, there is a large display area for groups, which is also highlighted by a red box and labeled 'Display area of central controllers in groups'. This area includes a 'Group1' section with a 'Drop System to Here!' prompt. A blue arrow labeled 'Add a group' points to a plus icon in the Central Controller list. Another blue arrow labeled 'Global control wiring' points to a button in the top right corner of the interface.

## 7. Selection of central control

Add a group



Click the button of group adding, and then a new group will appear at the group display area.



Drag the ODU system to the box of ODU connection.

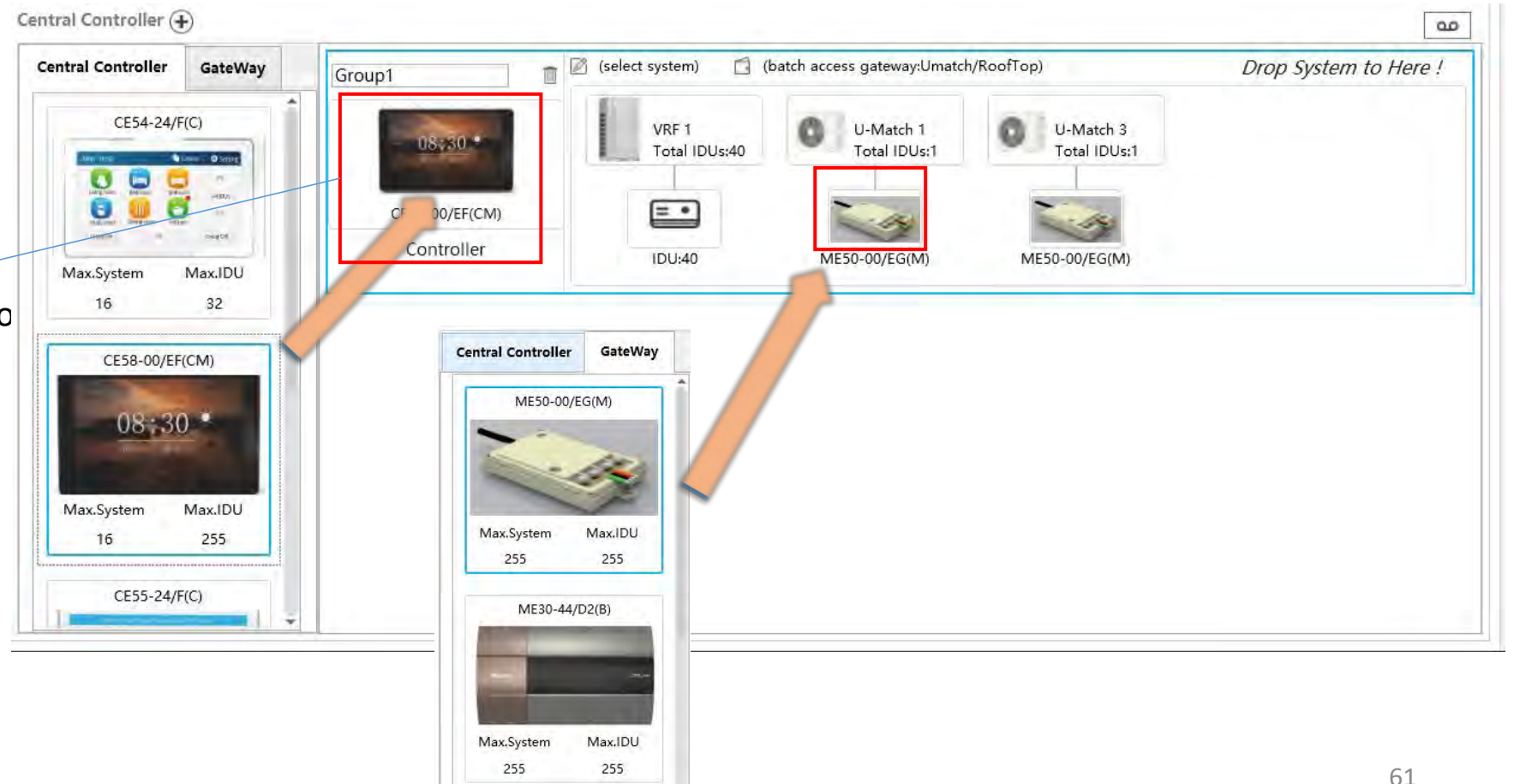


## 7. Selection of central control

### Add central controllers

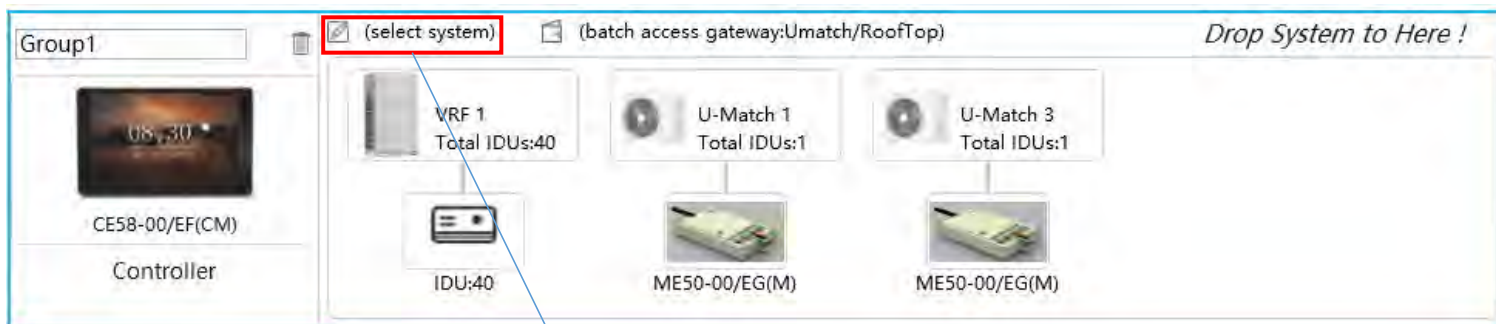
Central controllers can be dragged to two positions.

Global controller  
(Control all the systems within the group)

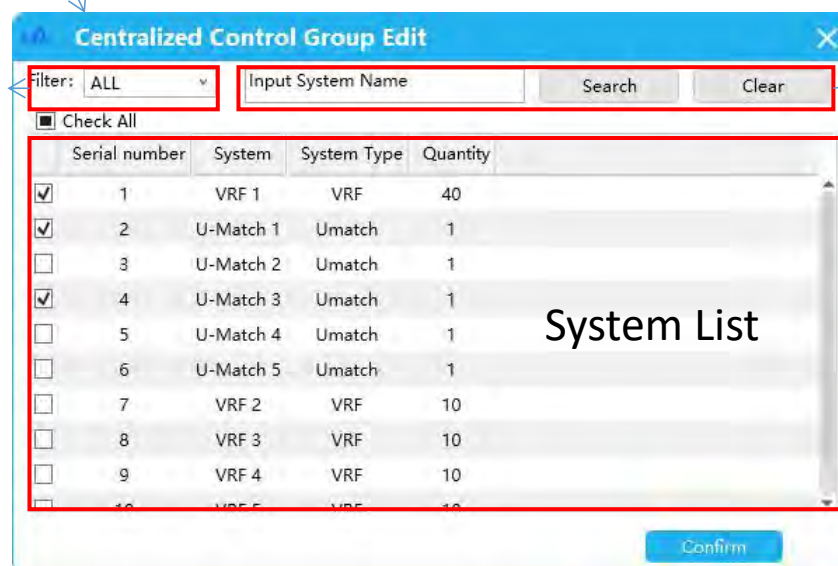


## 7. Selection of central control

### Edite Group



System type switchover

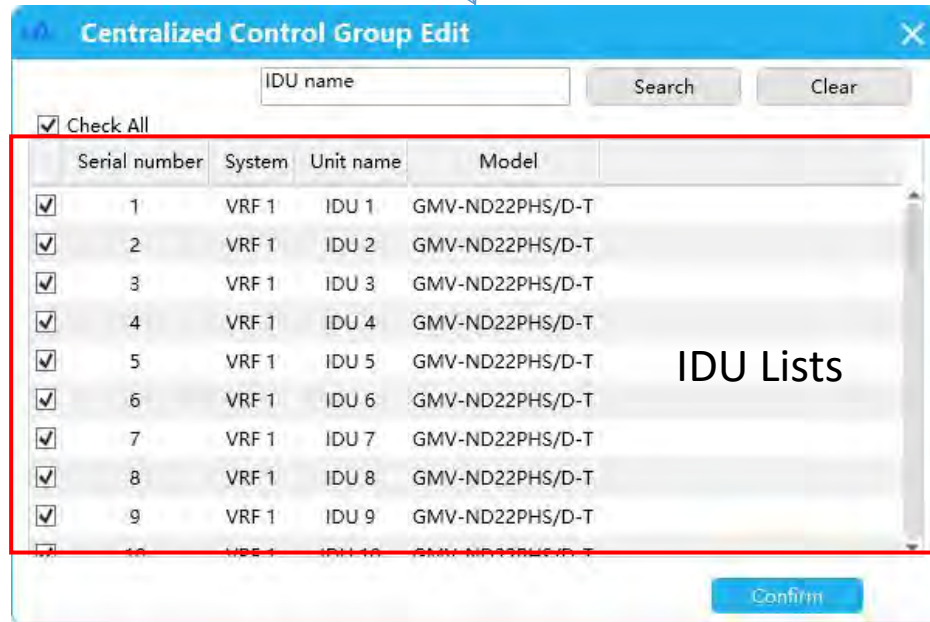
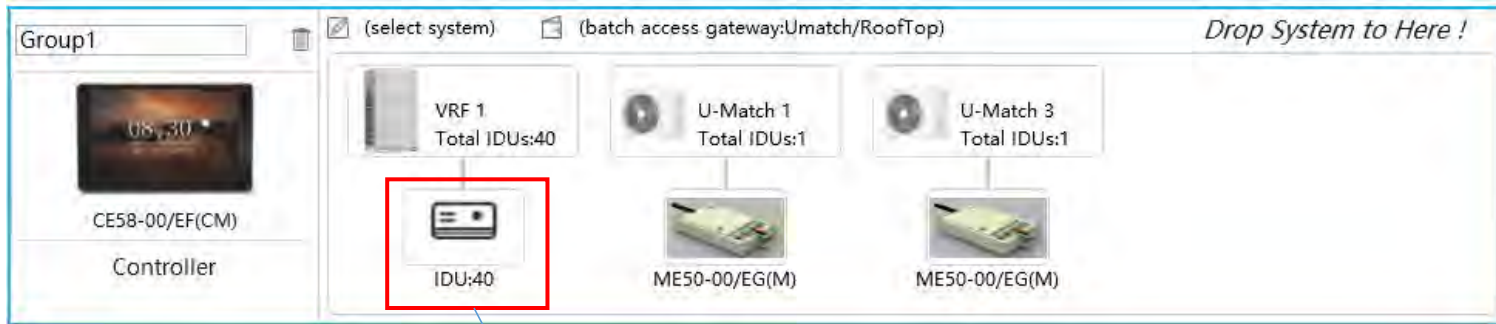


Search function

The group system can be added at this area

## 7. Selection of central control

### Edite Group



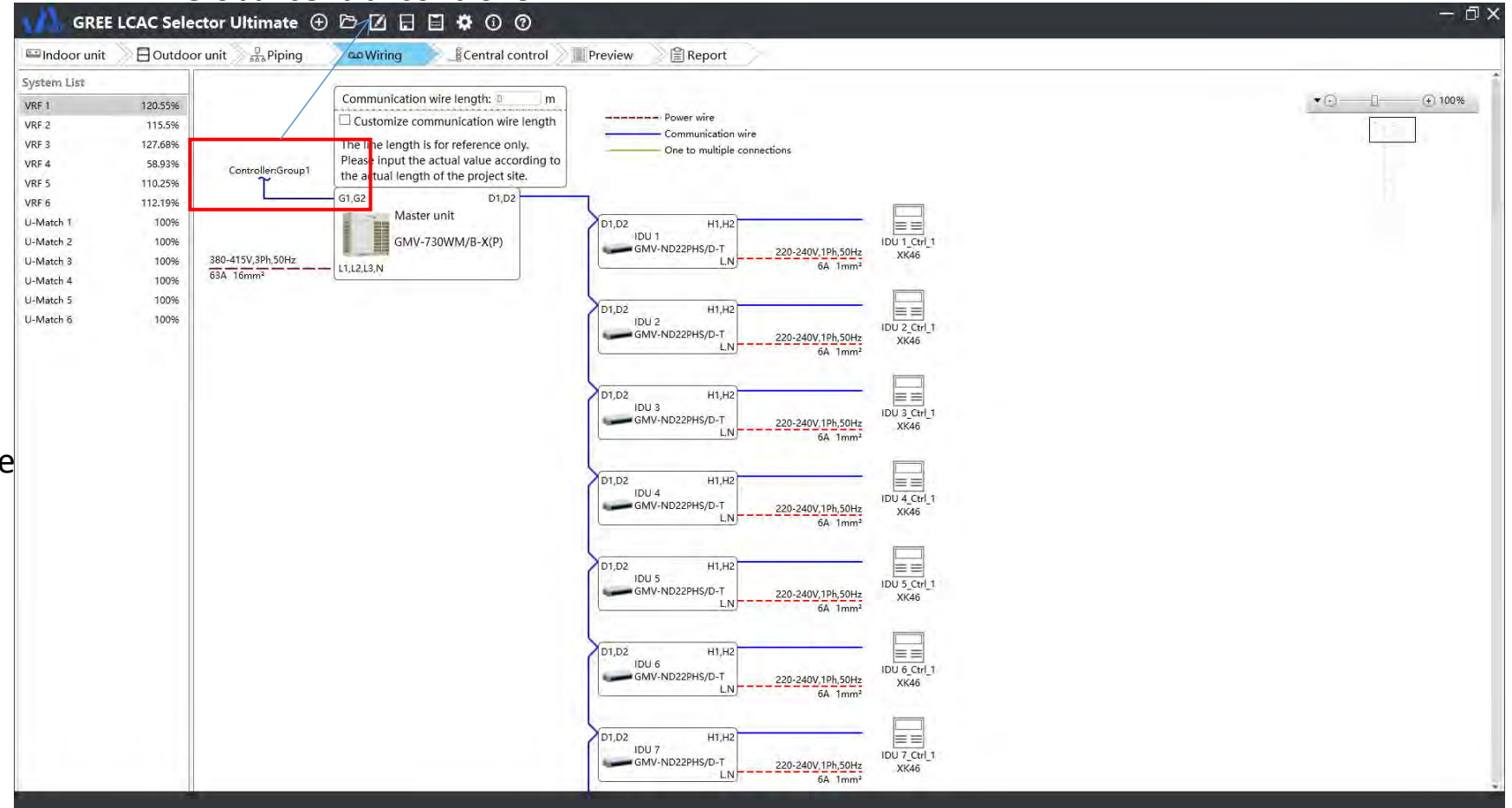
Group indoor units can be selected to be added at this area

## 7. Selection of central control

### Wiring change

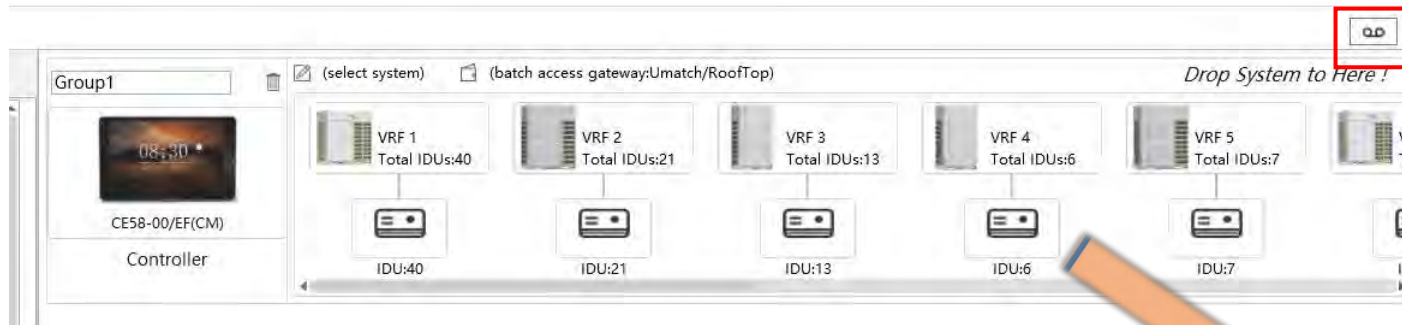
#### Global central controller

After selecting the central controllers, switch to the wiring interface at the navigation bar. The software will automatically connect the wires of central controllers in the systems.



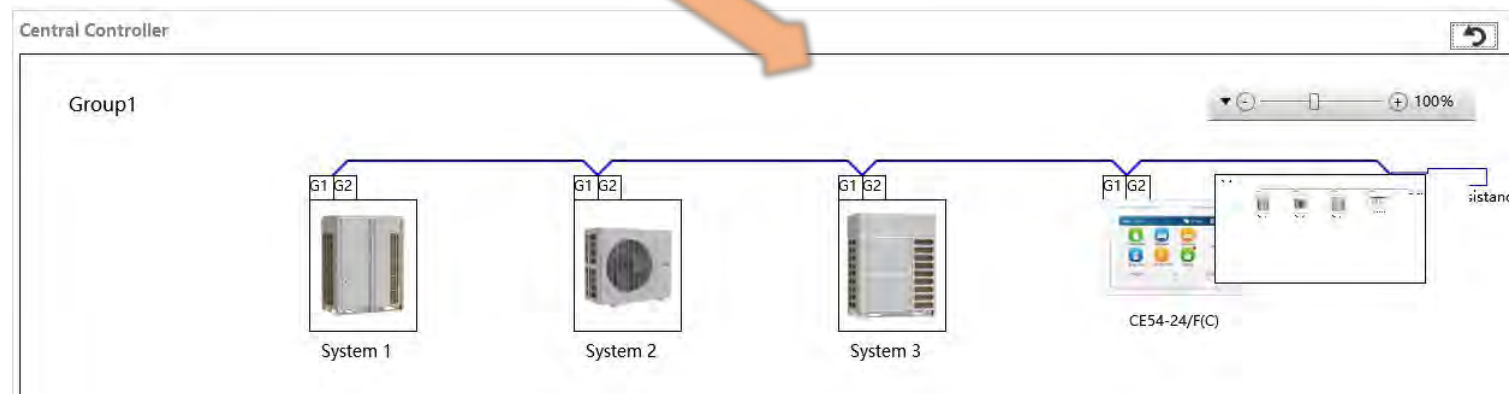
## 7. Selection of central control

### Wiring of global central control



At the interface of central control selection, click this wiring button.

The wiring of global central control is displayed.



## 8.Report

### Report preview

System list

(Select the system whose report preview is needed)

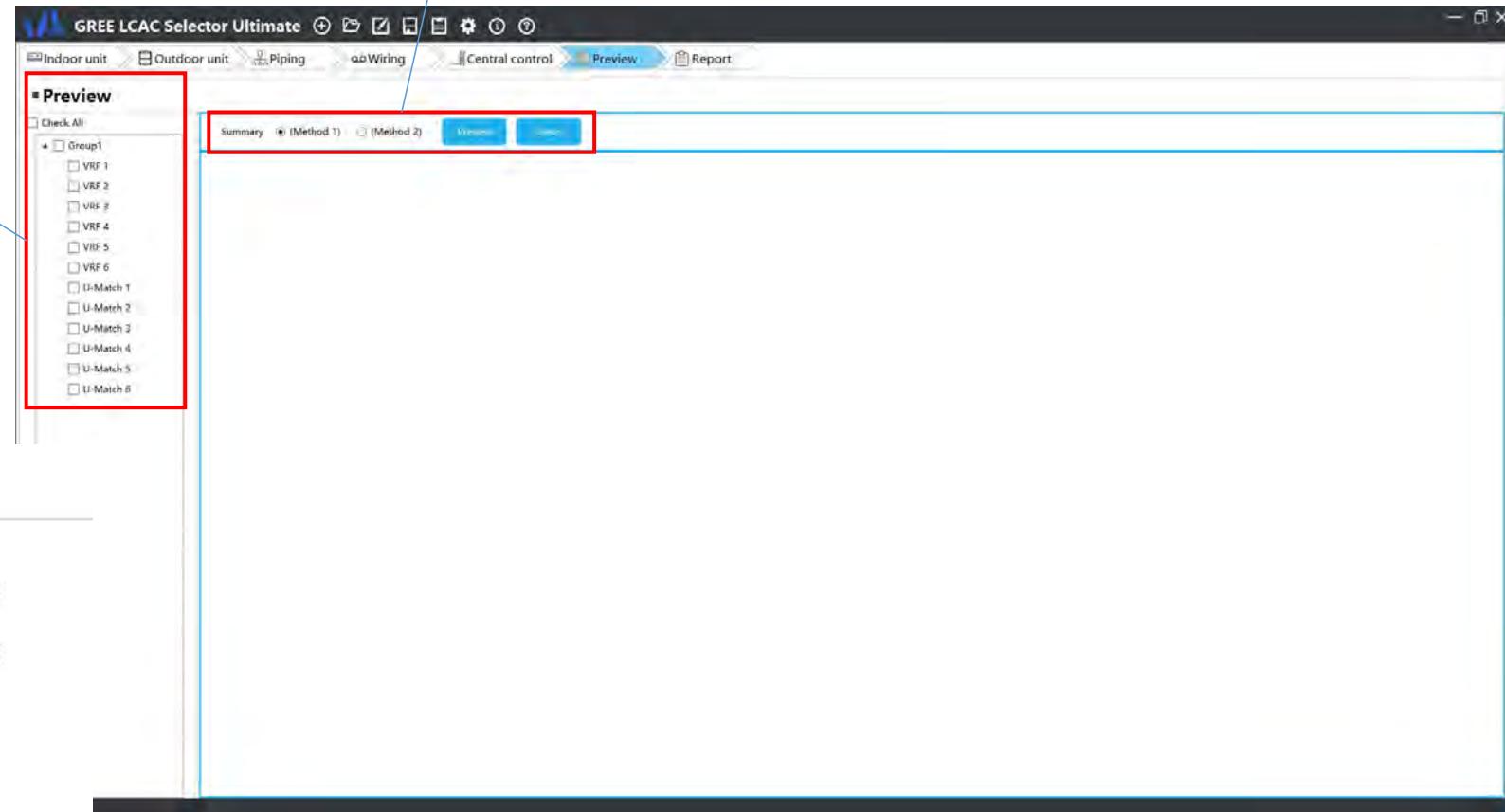
The centralized control selection has not been carried out, and the system list will be as shown in the figure

Click "Preview" to display the report  
Click "Clear" to eliminate the report preview

### Preview

☐ Check All

- ☐ U-Match 1
- ☐ RoofTop 1
- ☐ ERV
- ☐ AHU
- ☐ VRF 1
- ☐ RoofTop 2
- ☐ VRF 2



## 8. Report

### Interface of report

System list  
(Select the system that needs report export.)

The centralized control selection has not been carried out, and the system list will be as shown in the figure

#### ■ Preview

- ☐ Check All
- ☐ U-Match 1
- ☐ RoofTop 1
- ☐ ERV
- ☐ AHU
- ☐ VRF 1
- ☐ RoofTop 2
- ☐ VRF 2

Select piping and wiring diagrams.

Select the export path.

Enter the name of export document.

Select documents:  
1.Summary  
2.Table of parameters  
3.CAD engineering diagrams

Export Submittal  
(This function is only for North American market at present)

# 8. Report

## System report, table of parameters

LCAC Selection Report

Project Name

Date

Project Address

Client Name

Company

Address

1. Abbreviations

No.	Abbreviation	Acronym
1	CC	Cooling Capacity
2	HC	Heating Capacity
3	Total CC-DH	Total Cooling Capacity of DH
4	Total CC-DH	Total Cooling Capacity of DH
5	ESP	External Static Pressure
6	Extra Ref.	Additional Refrigerant to the System
7	DB	Dry Bulb Temperature
8	WB	Wet Bulb Temperature
9	ERT	Indoor Return Temperature
10	RH	Relative Humidity
11	Req. CC-DH	Required Total Cooling Capacity of DH
12	Req. HC-DH	Required Total Heating Capacity of DH
13	Req. HC-DH	Required Total Heating Capacity of DH
14	Req. CC	Required Cooling Capacity
15	Act. CC	Actual Cooling Capacity
16	Req. HC	Required Heating Capacity
17	Act. HC	Actual Heating Capacity
18	Wd. P-C	Rated Input Power for Cooling
19	Act. P-C	Actual Input Power for Cooling
20	Wd. P-H	Rated Input Power for Heating
21	Act. P-H	Actual Input Power for Heating
22	EXCEND	Width/Height/Depth
23	FLA	Maximum Current (Full Load Amps)
24	MCA	Maximum Fusing Current (Minimum Circuit Ampere)
25	MOP	Maximum Overcurrent Protection
26	Breaker	Breaker Capacity
27	Cable Size	Wire Gauge (AWG) > Number of Wires
28	Temp. C	Indoor Conditions in Cooling (Dry Bulb Temperature)
29	Temp. H	Indoor Temperature of Indoor Unit's Cold (Dry Bulb Temperature)
30	Req. CC	Required Cooling Capacity

2. Project Proposal

2.1 Units

No.	Model	Description	Quantity
1	GMV-ND112PHS/B-T	GMV-ND112PHS/B-T	1
2	GMV-ND112PHS/B-T	High PHS (High PHS) model	10

2.2 Branch

Model	Description	Quantity
GMV-ND112PHS/B-T	Branch-1	1
GMV-ND112PHS/B-T	Branch-2	1
GMV-ND112PHS/B-T	Branch-3	10

2.3 Reducer/Expander Pipe

Model	Description	Quantity
GMV-ND112PHS/B-T	Reducer/Expander Pipe	1

2.4 Controller

Model	Description	Quantity
GMV-ND112PHS/B-T	Wireless Controller	10
GMV-ND112PHS/B-T	Wireless Controller	1
GMV-ND112PHS/B-T	Remote Controller	1
GMV-ND112PHS/B-T	Wireless Controller	1
GMV-ND112PHS/B-T	Controller	1

2.5 Mode Converter

Model	Description	Quantity
GMV-ND112PHS/B-T	Mode Converter	1

2.6 Piping Length

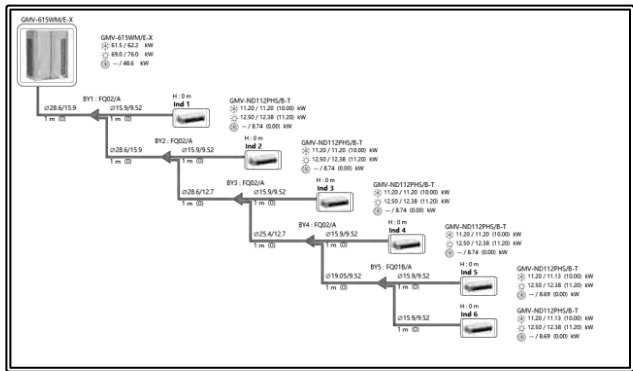
Pipe diameter (mm)	Total Length (m)	Number of Elbows	Wall Thickness (mm)	Type
12.7	0	0	0.75	1
15.9	0	0	0.75	1
15.9	0	0	0.75	1

System report

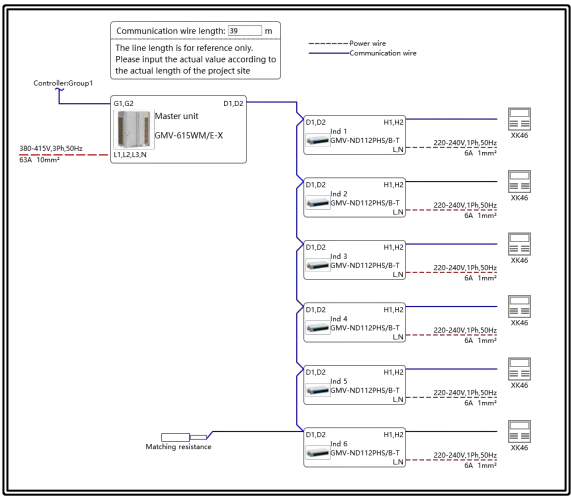
report of parameters

# 8. Report

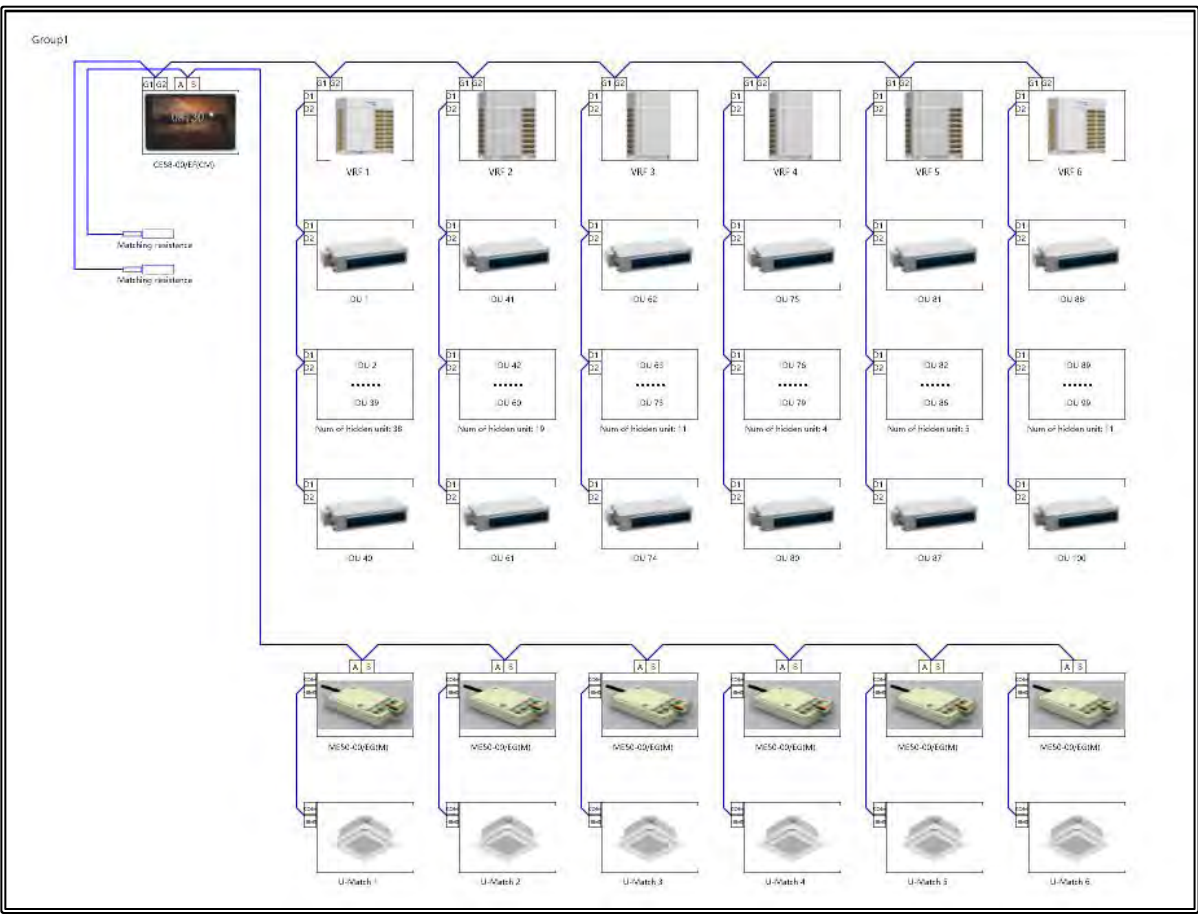
## Piping diagram、Wiring diagram、 centralized control topology



Piping diagram



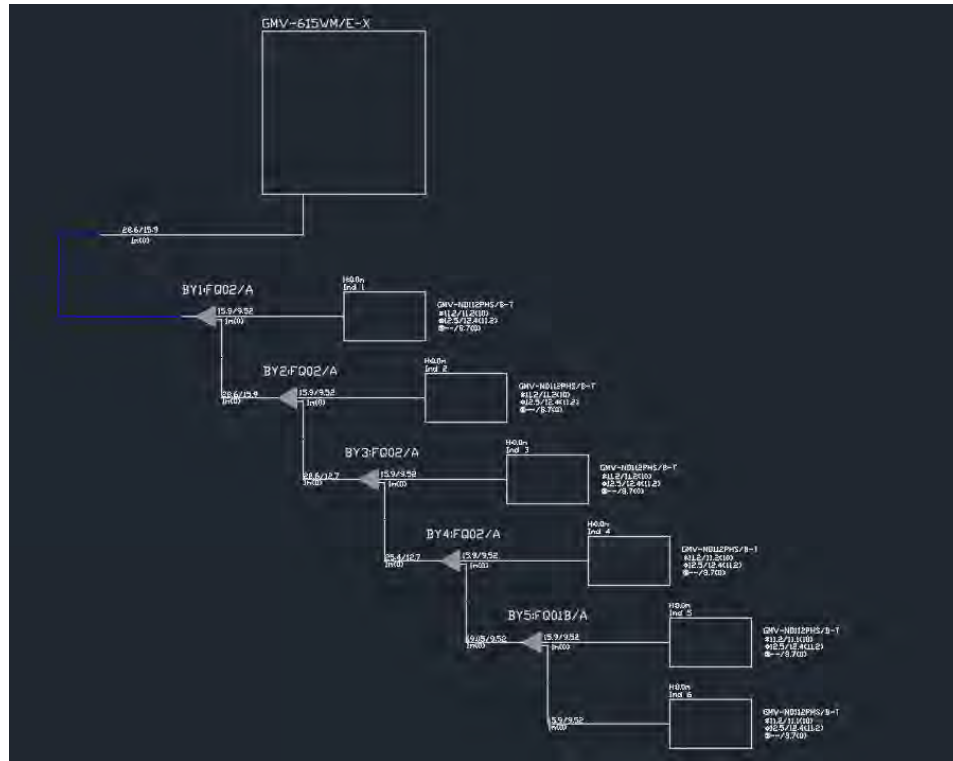
Wiring diagram



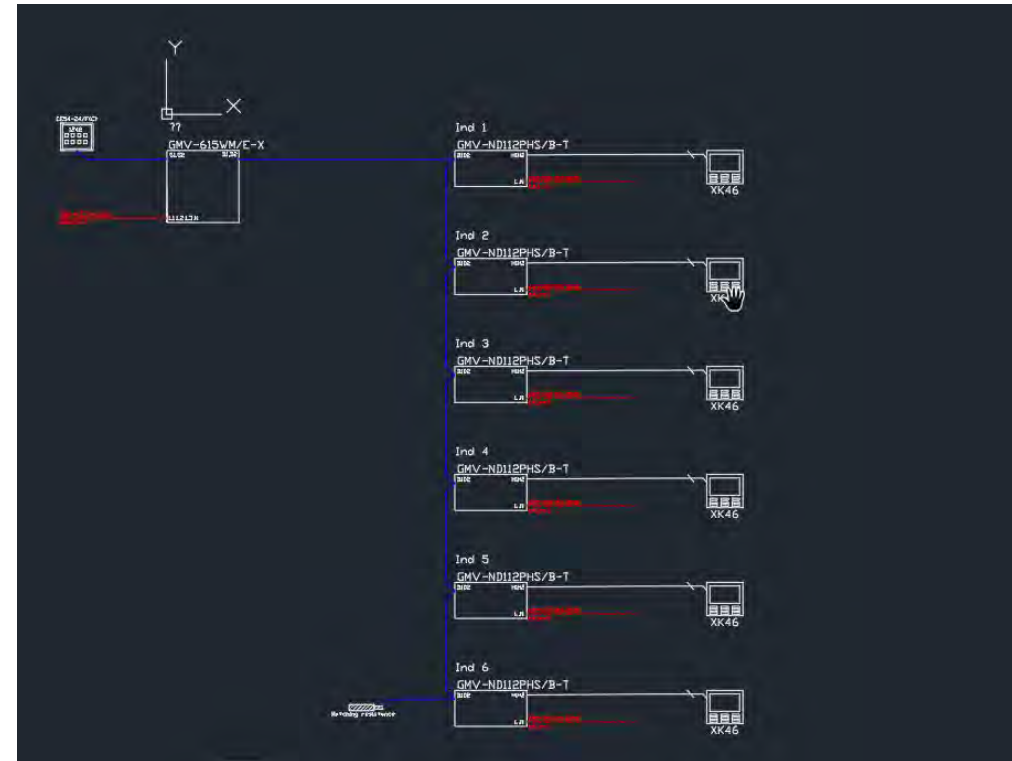
centralized control topology

## 8. Report

### CAD engineering diagrams



Piping engineering  
diagram



Wiring engineering  
drawing

8. Report

Submittal report

(This function is only for North American market at present)



Expot format

GMV SUBMITTAL

GREE COMMERCIAL

208~230V Wall-Mounted-A3

Model:GMV-N12G/A3A-D(U)

Specifications	Unit	Parameter
Model	—	GMV-N12G/A3A-D(U)
<b>Performance</b>		
Rated Cooling Capacity	kBtu/h	12
Rated Heating Capacity	kBtu/h	13.5
Sound Pressure Level	dB(A)	38/41/44
<b>Electrical Data</b>		
Power Supply	Voltage, Phase, Hertz	208/230, 1, 60
Maximum Overcurrent Protection (MOP)	A	15
Minimum Circuit Amps (MCA)	A	1
<b>Fan</b>		
Type x Quantity	—	Cross-flow x1
Air Flow Volume	CFM	282/324/370
Fan Motor Running Current	A	0.21
Fan Motor Power Output	W	20
<b>Refrigerant Piping</b>		
Connection Pipe	Gas (mm/inch)	Φ12.7/1/2
	Liquid (mm/inch)	Φ6.35/Φ 1/4
Connection method	—	Flare Connection
Refrigerant	—	R410A
<b>Dimension/Weight</b>		
Dimensions (H×W×D)	mm/inch	298×940×209 (11-3/4×37×7-7/8)
Net Weight	kg/lbs	12.5/27.6
<b>Other</b>		
Safety Certification	—	ETL

Job Name: \_\_\_\_\_ Date: \_\_\_\_\_

System Reference No.: \_\_\_\_\_

Engineer Signature: \_\_\_\_\_

Specifications subject to change without prior notice. © Gree Electric Appliances, Inc. of Zhuhai

GMV SUBMITTAL

GREE COMMERCIAL

Outline and Physical Dimensions of GMV-N12G/A3A-D(U).

Item	W	H	D
Model	940(37)	298(11-3/4)	209(7-7/8)

The Installation of the Rear Panel

Unit:mm(in.)

R410A

INVERTER

ETL

AHRI CERTIFIED

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI  
Add: No. 4 Jijia Rd., Qianwan, Zhuhai, Guangdong, China, 519070  
Tel: (+86-755) 8022718 Fax: (+86-755) 8058425 E-mail: gree@gree.com.cn www.gree.com

GREE COMMERCIAL

Submittal