



Global VRF Selection Software – User Guide

Global Product Management Division

Nov. 2016

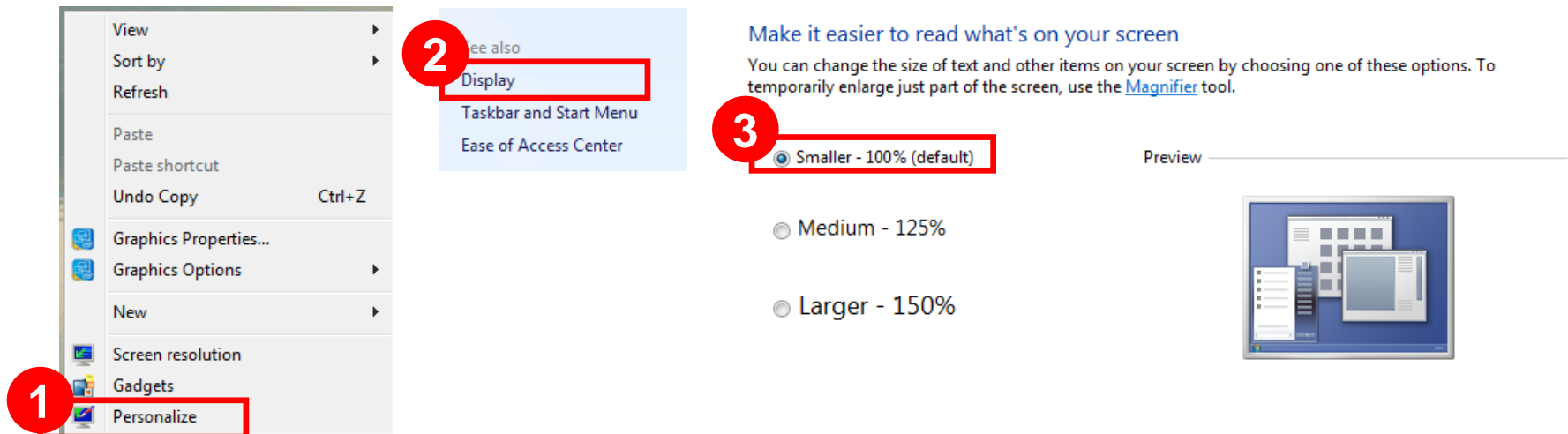


HITACHI
Air conditioning solutions

Requirements of Operation Environment

- Support Windows XP & Windows 7 version operation systems;
- Use Office 2007 & above version to open exported reports
- Need to install operation environment of .Net Framework 4.0
- Set Windows font size as 100%

(Right Click → ①Personalize → ②Display → ③Smaller 100%(default))



Note: If you have any queries about installation, please contact help desk AECworks.help@jci.com

Content

1. Software Installation
2. Login Interface & Region
/Brand/Source Selection
1. Toolbar & Multi-language Introduction
2. Open Saved Project or Create New Project
3. Select Indoor Unit
 - ① Add Indoor Unit without Room Information
 - ② Room Information Management
 - ③ Room Load Index/Calculation
 - ④ Add Indoor Unit With Room Information
 - ⑤ Indoor Option Selection
4. Select Outdoor Unit
 - ① Indoor Unit Connection System
 - ② Fresh Air Unit 1 to 1 Connection System
 - ③ Fresh Air Unit Mixed Type Connection System
 - ④ Piping Length & Height Difference
7. System Piping
 - ① Change Layout
 - ② Drag & Drop Rules (Heat Pump)
 - ③ Drag & Drop Rules (Heat Recovery)
 - ④ Add Header Branch
 - ⑤ Piping Length Input
 - ⑥ System Verification
8. System Wiring
9. System Control
10. Save Project
11. Output Report

1. Software Installation

■ Install installation package file

1. Please download the selection software file from below link:
<https://my.jci.com/sites/BE/AsiaProdDPC/Pages/Software.aspx>
2. Please right click the *.exe file and click “Run Elevated” to install the software
3. Please input the installation password

■ Install patch file

1. Please download the selection software patch file from above link:
2. Please right click the *.exe file and click “Run Elevated” to install the software

Note:

1. *Please install the *.exe file follow the version sequence.*
2. *Please note that the installation password is different from regional activation password.*
3. *When you install the patch file, there is no need to input password again.*

2. Login Interface & Region/Brand/Source Selection

■ Login Interface

1. Please input "Activation Password" when you first login the selection software and click "OK"



Note:

1. Only need to input the password at the first time and the software will record your input automatically.
2. For different regions, PM generate different passwords. Please keep the password confidentially.

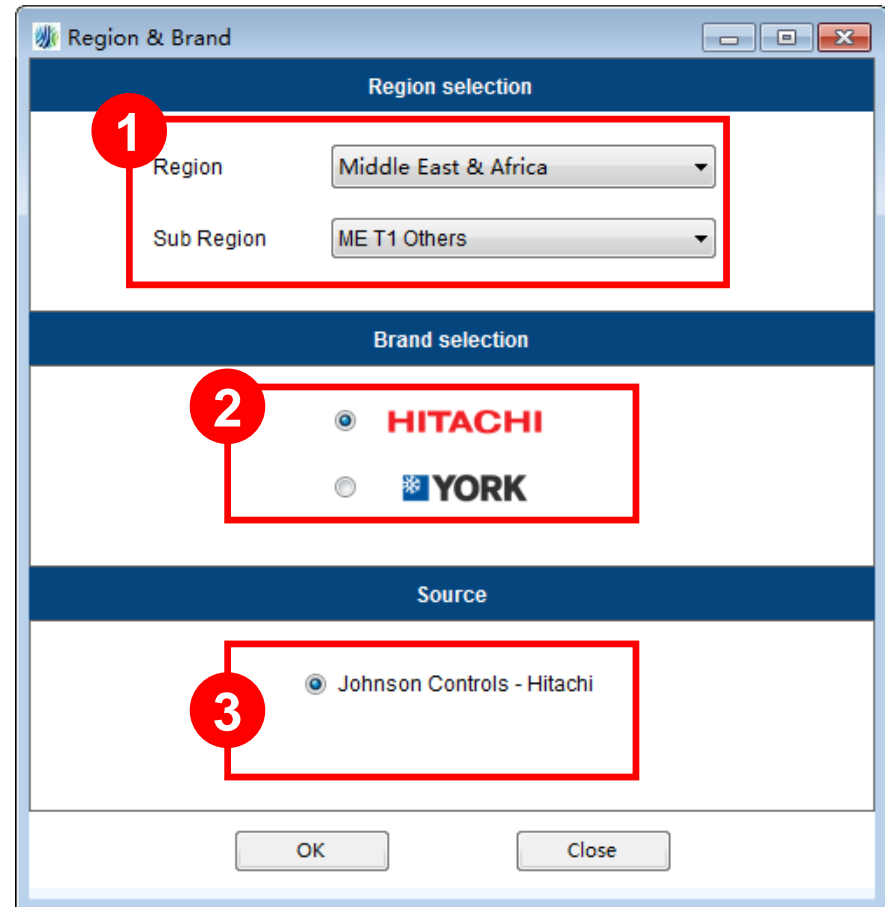
2. Login Interface & Region/Brand/Source Selection

■ Region/Brand/Source Selection

1. Please select the “Sub. Region” by drop box
2. Please select the “Brand”: “Hitachi” or “York”
3. Please select the “Source”:
“Johnson Controls - Hitachi” or “York
Guangzhou Factory”

Note:

1. The region information cannot be changed and it's related to your activation password.
2. The brand & source selection options will be related to the sub region you choose.
3. Please make sure to choose the right sub-region, brand & source information because the product series will be changed according to your selection.



The screenshot shows a software window titled "Region & Brand" with three main sections:

- Region selection:** Contains two dropdown menus. The first, labeled "Region", is set to "Middle East & Africa". The second, labeled "Sub Region", is set to "ME T1 Others". A red box with the number "1" highlights these two dropdowns.
- Brand selection:** Contains two radio button options. The first is "HITACHI" (selected) and the second is "YORK". A red box with the number "2" highlights these options.
- Source:** Contains one radio button option labeled "Johnson Controls - Hitachi" (selected). A red box with the number "3" highlights this option.

At the bottom of the window are two buttons: "OK" and "Close".

3. Toolbar & Multi-language Introduction

■ Toolbar

1. Click “New” icon of Toolbar menu to create a new project.
2. Click “Open” icon of Toolbar menu to open a saved project

*Note: to open a saved project, you **MUST** select the same region and sub-region at login interface*

3. Click “Save” icon of Toolbar menu to save current project
4. Click “Save as” icon of Toolbar menu to save current project as another project name
5. Click “Import” icon of Toolbar menu to import a saved project information



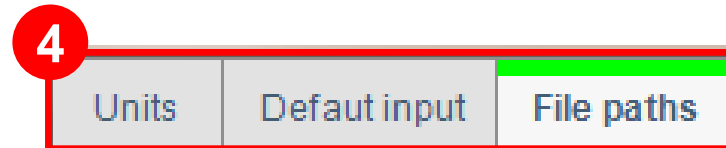
3. Toolbar & Multi-language Introduction

■ Toolbar -- Preference Setting

1. Click “setting” icon of Toolbar menu and enter the “Preference Setting” user interface.



2. Click “Export Setting” button to export and save current setting information (“setting.config.xml” file will be generated).
3. Click “Import Setting” button to select and import the setting information file which generated before.



4. Three types of preference setting can be done in the selection software:
 - ① “Units” Setting
 - ② “Default input” Setting
 - ③ “File paths & Altitude” Setting

3. Toolbar & Multi-language Introduction

■ Preference Setting

1. Can select **Metric** or English unit through “Units” setting sheet.
2. Can input prefix of items, working condition of indoor/outdoor and room input through “Default input” setting sheet.
3. Can choose report & drawing file paths and enable altitude correction through “File paths & Altitude” setting sheet.

3. Toolbar & Multi-language Introduction

■ Multi-language Setting

1. Click “Language” drop box in the left bottom of the selection software.
2. Choose the language you want to use for the selection software.

There are totally 5 languages can be selected:

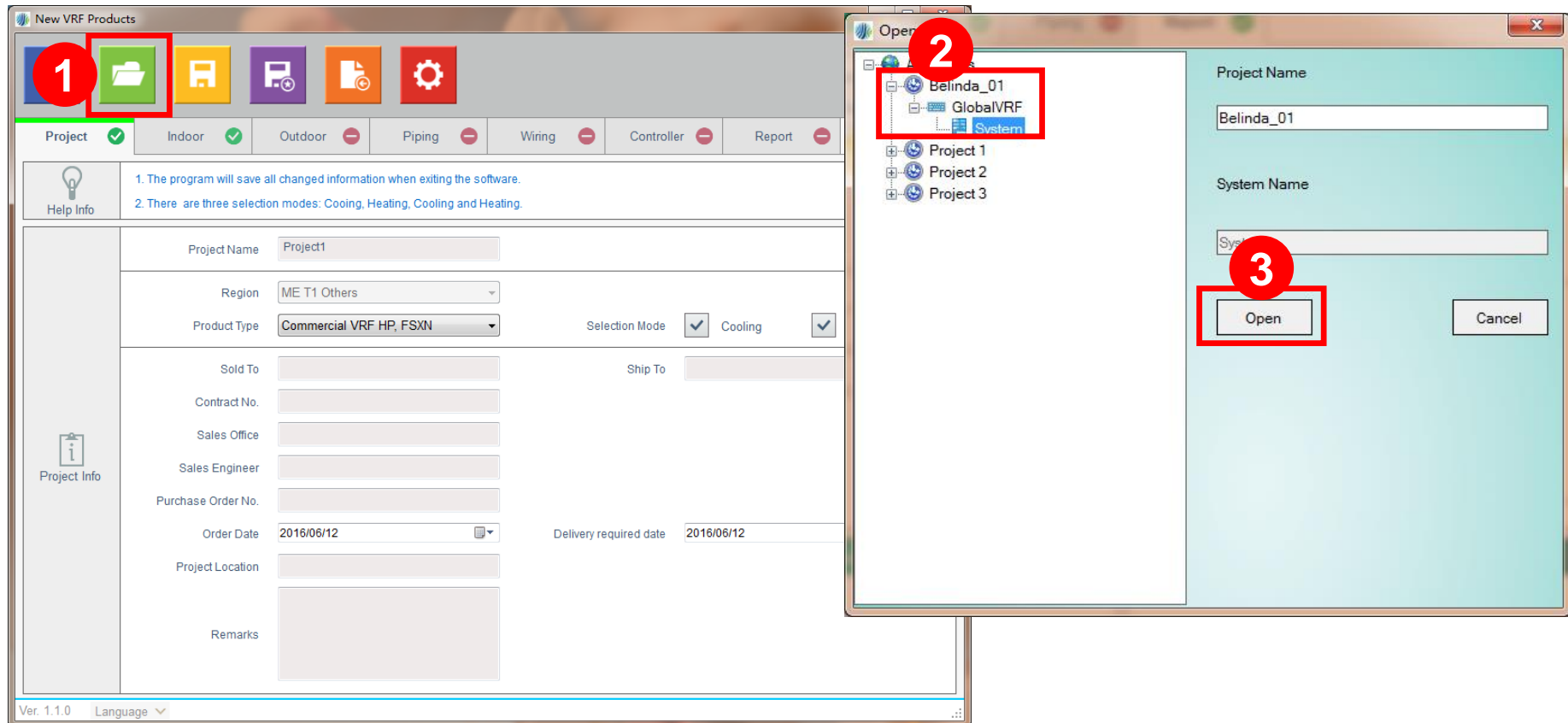
- a) English
- b) Chinese
- c) Spanish
- d) French
- e) Turkish



4. Open Saved Project or Create New Project

■ Open Saved Project

1. Click “Open” icon, “Open” interface will be shown
2. Select the saved project (*Must select the system file below “GlobalVRF” hierarchy, otherwise cannot open the project.*)
3. Click “Open” button to open the saved project



4. Open **Saved** Project or Create New Project

■ Create New Project

1. Click “New” icon
2. Input “Project Name”.
3. Select “Selection” and input Attitude data
4. Input detail information of the project.

The screenshot shows the 'New VRF Products' software window. A red box highlights the 'New' icon (a blue square with a white plus sign) in the top toolbar, labeled with a red circle containing the number 1. Below the toolbar, the 'Project' tab is selected, and a red box highlights the 'Project Name' input field, labeled with a red circle containing the number 2. The 'Region' dropdown menu is set to 'ME T1 Others', and the 'Altitude' input field is set to '0' m. The 'Selection Mode' section has checkboxes for 'Cooling' and 'Heating', both of which are checked. A red box highlights the 'Project Info' section, which includes fields for 'Sold To', 'Contract No.', 'Sales Office', 'Sales Engineer', 'Purchase Order No.', 'Order Date' (set to 2016/11/18), 'Delivery required date' (set to 2016/11/18), 'Project Location', and 'Remarks'. This section is labeled with a red circle containing the number 4. A red box highlights the 'Help Info' section, which contains two lines of text: '1. The program will save all changed information when exiting the software.' and '2. There are three selection modes: Cooling, Heating, Cooling and Heating.' This section is labeled with a red circle containing the number 3.

Note:

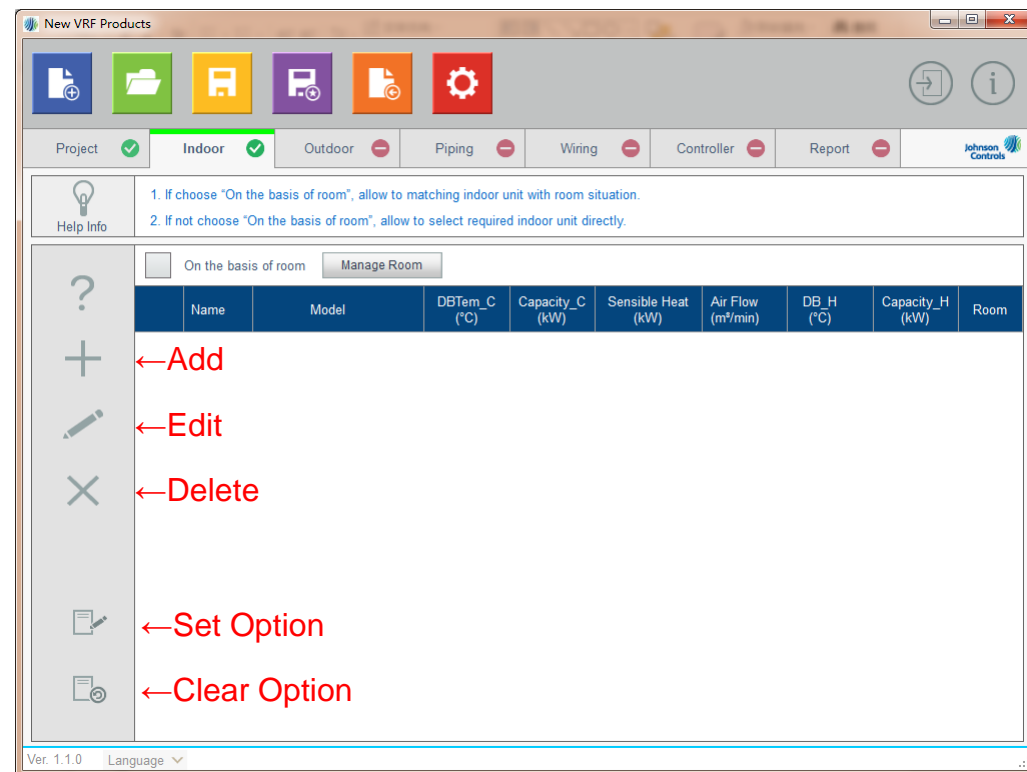
1. “Region” cannot be changed as it’s determined by your input in “Region/Brand/Source Selection”.
2. Please make sure to click the “Enable altitude correction” in the setting sheet. Otherwise, the “Altitude” column will not be shown.

5. Select Indoor Unit

- Indoor Unit can be selected without room information
 - Indoor unit can be selected with room information (Click “On the basis of rooms”)
1. Manage room information (Click “Manage Room” button)
 2. Input/Calculate room load
 3. Select indoor unit by using room load information
- Can Add/Edit/Delete indoor unit
 - Can Select/Reset option for each indoor unit

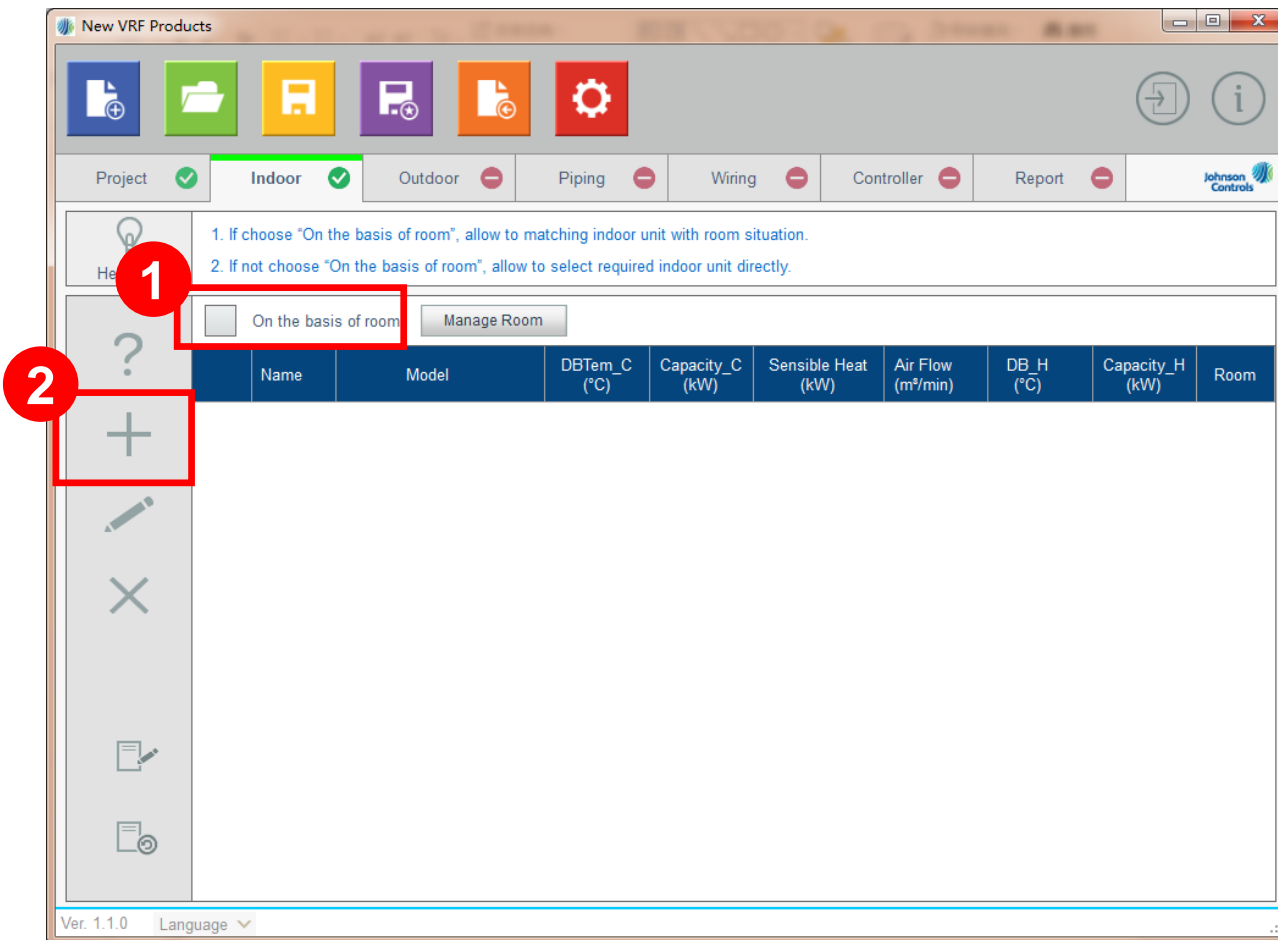
Note:

1. The indoor selection can be done manually or automatically.
2. Fresh air unit selection process in “Indoor” interface is same as other types of indoor unit.



5. Select Indoor Unit (w/o Room Info.)

- ① Add Indoor Unit without Room Information
 1. Make sure to unselect the checkbox of "On the basis of room"
 2. Click "Add" icon and enter the "Indoor Selection" interface



5. Select Indoor Unit (w/o Room Info.)

■ ① Add Indoor Unit without Room Information (Manual Selection)

1. Select “Manual” of the selection method check box
2. Select the outdoor series and an indoor type from the drop box
3. Select an indoor unit from “Model” list
4. Click “OK” button or double click the indoor unit model name to add this highlighted indoor unit to “Indoor” main interface
5. Click “Close” button, go back to “Indoor” main interface

Note:

1. The indoor unit type should be related to the outdoor unit series
2. Sensible heat can be selected and the ratio of indoor will be changed automatically. Suggest to use the default setting as “High”.

Indoor selection - [Add]

Selection Help Info.

Required Info.

Cooling

Capacity kW

Sensible kW

Air Flow m³/min

DB °C

WB °C

RH %

Heating

Capacity kW

DB °C

Fresh Air

Fresh Air m³/min

Indoor Units Selection

Ind1

Series

Type

Model

RPC-1.5FSN3

RPC-2.0FSN3

RPC-2.5FSN3

RPC-3.0FSN3

RPC-4.0FSN3

RPC-5.0FSN3

RPC-6.0FSN3

☐ Auto ☒ Manual

Sensible Heat

5. Select Indoor Unit (w/o Room Info.)

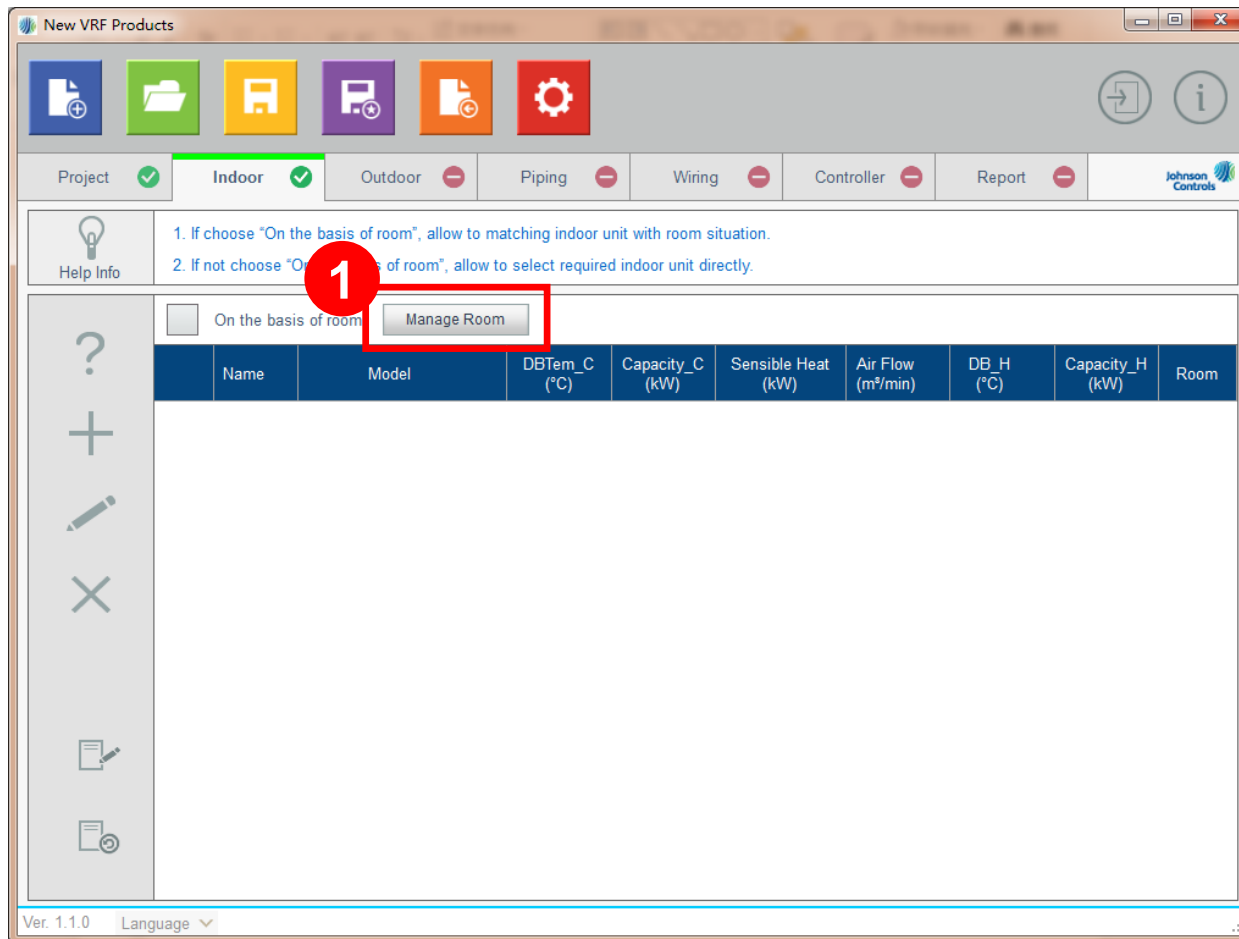
■ ① Add Indoor Unit without Room Information (Auto Selection)

1. Select “Auto” of the selection method check box
2. Input “Required info.” data including cooling capacity/sensible/airflow & heating capacity
3. Select the outdoor series and an indoor type from the drop box, it will automatically select the best suitable indoor unit
4. Click “OK” button to add this indoor unit to “Indoor” main interface
5. Click “Close” button, go back to “Indoor” main interface

5. Select Indoor Unit (w/ Room Info.)

■ ② Room Information Management

1. Click “Manage Room” button and go to Room Management interface



5. Select Indoor Unit (w/ Room Info.)

■ ② Room Information Management

1. Click "Add Floor" button and add a Floor
2. Select a Floor and change "Floor Info."
3. Click "Confirm" button to save the floor information
4. Select a Floor, Click "Add Room" and add a Room
5. Select a Room, change "Room Info."
6. *Click "Confirm" button to save the room information*
7. Copy Room/Floor: Select a room/floor and click "Copy" icon
8. Delete Room/Floor: Select a room/floor and click "Delete" icon
9. Click "Close" button, go back to "Indoor" main interface

Note:

1. *Room copy can only be done in the same floor, cannot copy room to other floor.*

The screenshot shows the 'Room/Fresh Air Area management' window. It is divided into three main sections: 'Room', 'Fresh Air Area', and 'Room Info.'. The 'Room' section on the left contains a tree view with 'Floor1' (containing Room1, Room2, Room3) and 'Floor2' (containing Room1, Room2, Room3). The 'Fresh Air Area' section below it contains 'FreshAirArea1' and 'FreshAirArea2'. The right side of the window contains form fields for 'Floor Info.', 'Fresh Air Area Info.', and 'Room Info.'. Red boxes and numbers 1 through 9 highlight specific UI elements corresponding to the steps in the list:

- 1: 'Add Floor' button in the 'Floor Info.' section.
- 2: 'Name' field in the 'Floor Info.' section.
- 3: 'Confirm' button in the 'Floor Info.' section.
- 4: 'Add Room' button in the 'Room Info.' section.
- 5: 'Name' field in the 'Room Info.' section.
- 6: 'Confirm' button in the 'Room Info.' section.
- 7: 'Copy' icon in the 'Room' tree view.
- 8: 'Delete' icon in the 'Room' tree view.
- 9: 'Close' button at the bottom right.

5. Select Indoor Unit (w/ Room Info.)

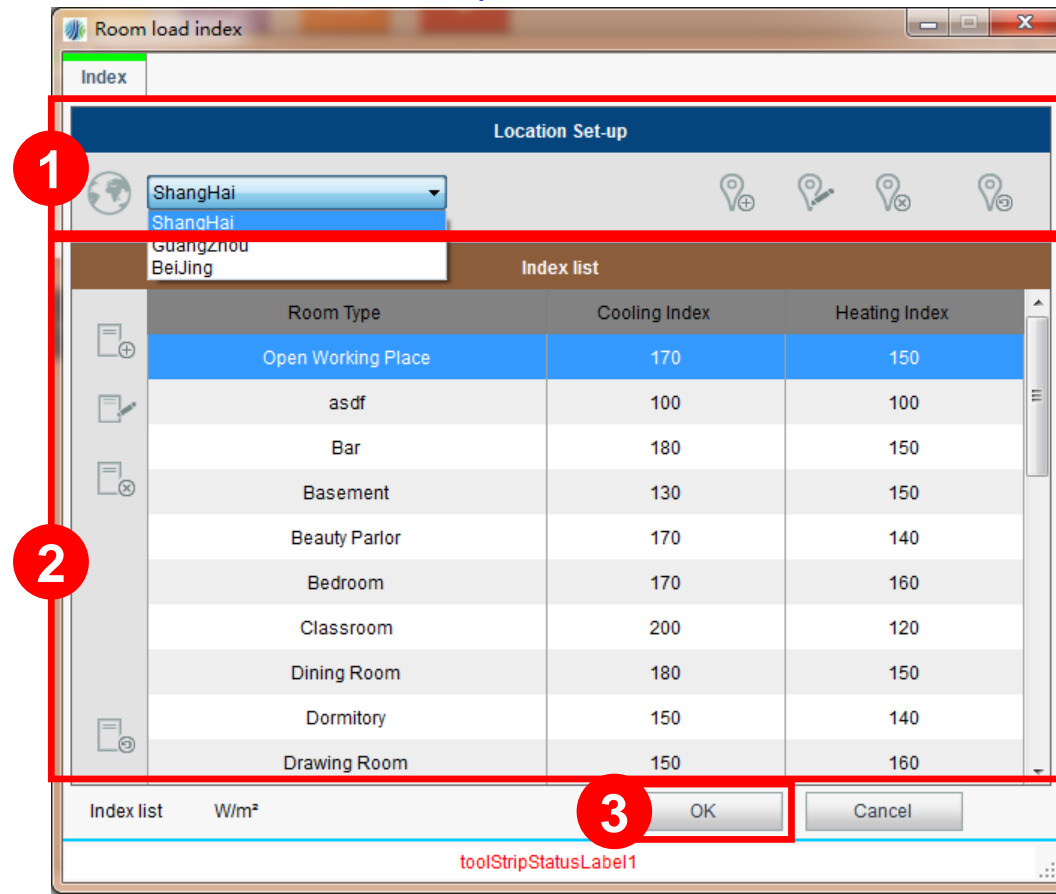
■ ③ Room Load Index/Calculation (Load Index)

1. Setting city name by using “Add/Edit/Delete/Set Default” button in the “Location Set-up” area
2. Setting different room load index by using “Add/Edit/Delete/Set Default” button in the “Index List” area.

Note: before you use room type and room area to calculate the load, please create this load index of your city and set it as default

3. Click “OK” button to go back to “Room Management” interface.

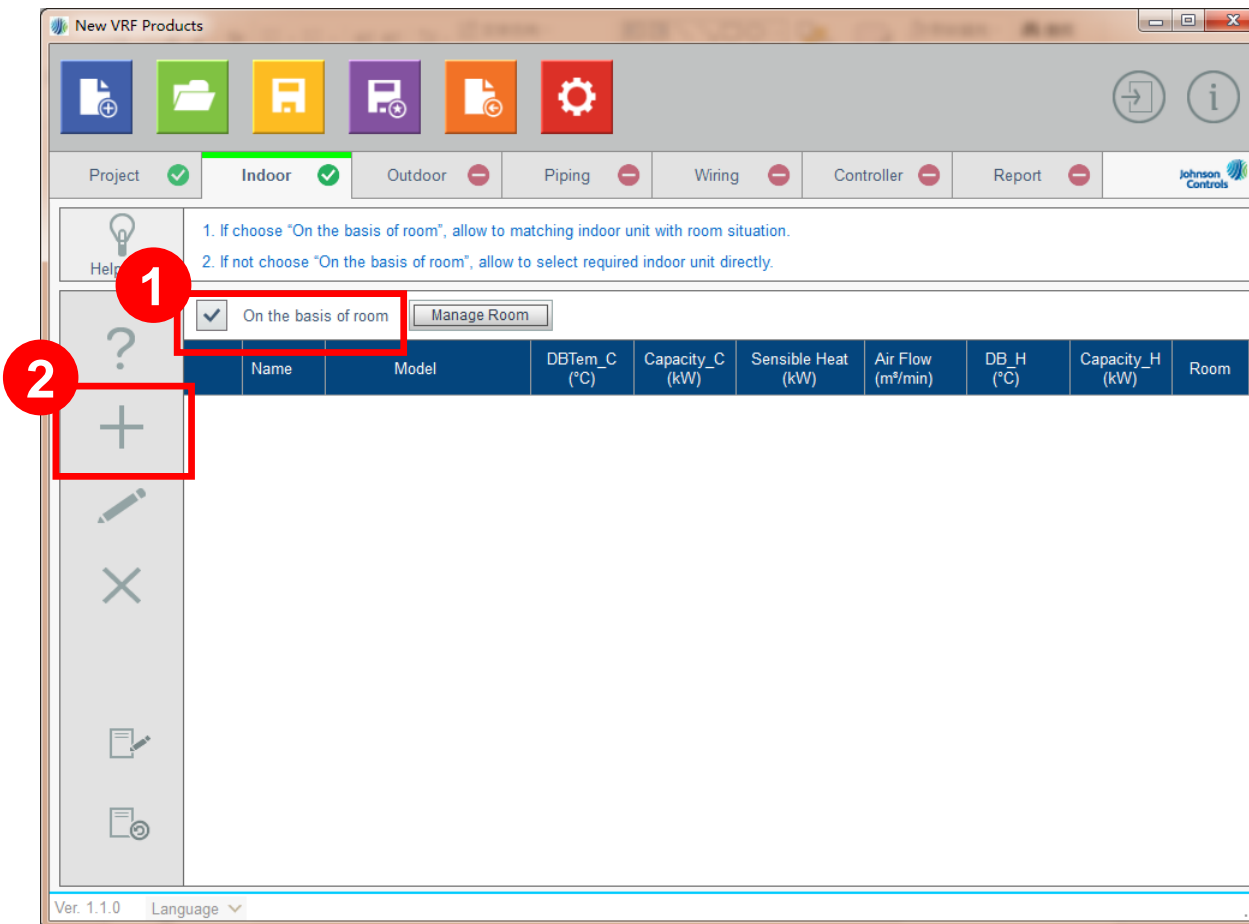
Add Edit Delete Set Default



5. Select Indoor Unit (w/ Room Info.)

■ ④ Add Indoor Unit With Room Information

1. Make sure to select the checkbox of "On the basis of room"
2. Click "Add" icon and enter the "Indoor Selection" interface



5. Select Indoor Unit (w/ Room Info.)

■ ④ Add Indoor Unit With Room Information (Manual Selection)

1. Select a Room and "Required info." is shown below
2. Select the checkbox of "Manual"
3. Select the outdoor series and an indoor type from the drop box
4. Select an indoor unit from "Model" list
5. Click "right arrow" bar and add indoor unit into "Selected Indoor unit info." list.
6. Change the "Number" of selected indoor unit
7. Click "OK" button to confirm the selection.
8. Click "Close" button and go back to "Indoor" main interface

Note:

1. Multiple indoor units can be selected in one room.
2. The room name shown in the "select room" will be turned blue when the indoor unit has been selected.

The screenshot shows the 'Indoor selection - [Add]' dialog box. It is divided into several sections:

- Select room (1):** A tree view showing 'Floor1' with sub-items 'Room1', 'Room2', and 'Room3'. 'Room1' is highlighted in blue.
- Required info. (2):** A section with 'Cooling' and 'Heating' tabs. Under 'Cooling', 'Capacity' is 5.1 kW, 'Sensible' is 0 kW, and 'Air Flow' is 0 m³/min. Under 'Heating', 'Capacity' is 4.5 kW. There is also a 'Fresh Air' section with 'Fresh Air' set to 3 m³/min.
- Indoor units selection (3, 4):** A section with 'Series' (Commercial VRF HP, FSXN) and 'Type' (Ceiling Suspended) dropdowns. Below is a list of indoor unit models: RPC-1.5FSN3, RPC-2.0FSN3, RPC-2.5FSN3, RPC-3.0FSN3, RPC-4.0FSN3, RPC-5.0FSN3, and RPC-6.0FSN3. A red box highlights the 'Manual' checkbox (2) and the model list (4).
- Selected indoor units info. (5, 6):** A table with columns 'Name', 'Model', and 'Count'. It contains two entries: 'Ind1' with model 'RPC-1.5FSN3' and count '1', and 'Ind2' with model 'RPC-1.5FSN3' and count '1'. A red box highlights the table (6) and the right arrow button (5).
- Buttons (7, 8):** At the bottom right, there are 'OK' (7) and 'Close' (8) buttons.

5. Select Indoor Unit (w/ Room Info.)

■ ④ Add Indoor Unit With Room Information (Auto Selection)

1. Select a Room and “Required info.” is shown below
2. Select the checkbox of “Auto”
3. Select the outdoor series and an indoor type from the drop box, and indoor unit will be automatically selected into “Selected indoor unit info.” list
4. Click **”OK”** button
5. Click “Close” button and go back to “Indoor” main interface

Note:

1. Only one indoor unit can be selected in one room.
2. The room name shown in the “select room” will be turned blue when the indoor unit has been selected.

The screenshot shows the 'Indoor selection - [Add]' window. It is divided into several sections:

- Select room:** A tree view showing 'Floor1' with 'Room1' selected (highlighted in blue). A red box with a '1' is around this section.
- Required info.:** A section with tabs for 'Cooling' and 'Heating'. Under 'Cooling', Capacity is 5.1 kW, Sensible is 0 kW, and Air Flow is 0 m³/min. Under 'Heating', Capacity is 4.5 kW. A 'Fresh Air' section shows 3 m³/min. A red box with a '2' is around the 'Auto' checkbox in the 'Heating' section.
- Indoor units selection:** A list of indoor unit models (RPC-1.5FSN3 to RPC-6.0FSN3) with a 'Type' dropdown set to 'Ceiling Suspended'. A red box with a '3' is around this list.
- Selected indoor units info:** A table showing the selected unit: RPC-2.0FSN3 with a count of 1. A red box with a '4' is around the 'OK' button at the bottom right.
- Buttons:** 'OK' and 'Close' buttons are at the bottom right. A red box with a '5' is around the 'Close' button.

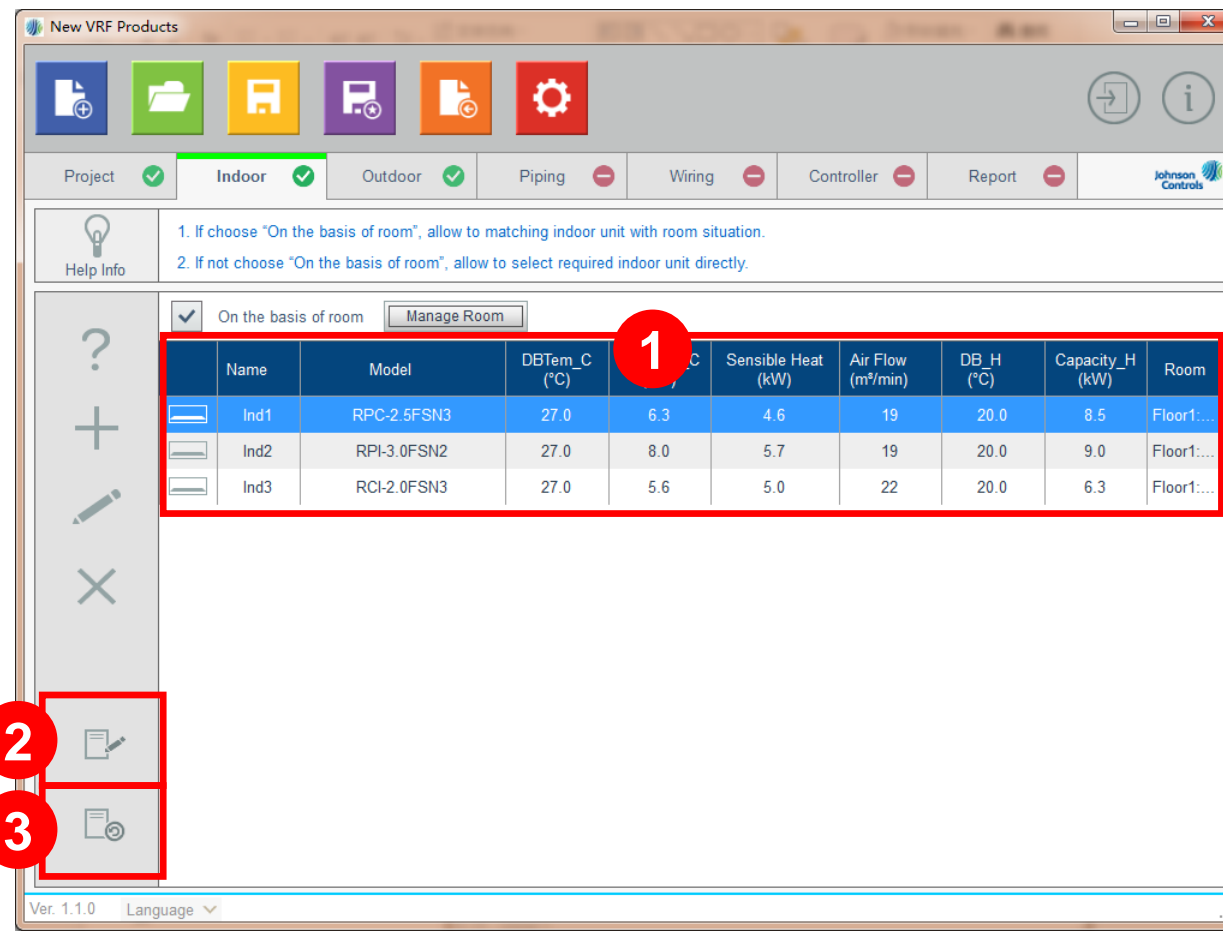
5. Select Indoor Unit (w/ Room Info.)

■ ⑤ Indoor Option Selection

1. Select an indoor unit or multiple indoor units
2. Click “Set Option” icon, go to “Add Option” interface
3. Click “Clear Option” icon and reset indoor option

Note:

1. Press “ctrl” and click multiple indoor units and select the option at the same time
2. Make sure that selected multiple indoor units are the same type and same capacity.



5. Select Indoor Unit

■ ⑤ Indoor Option Selection (Add Option)

1. Select an option type from “Available Accessories” list
2. Click “right arrow” bar and add the option into “Selected Accessories” list.
3. Click “Delete” to delete a selected accessory
4. Click “Reset” to reset the indoor unit option
5. Click “OK” to go back to “Indoor” main interface

Note:

1. Some accessories are the standard ones which must be selected.
2. Some accessories should be selected in pair and when you choose one of them, the other one will also be selected at the same time.
3. All accessories have the limitation number shown in the list and please do not exceed this number.

Indoor Model Name RCIM-2.5FSN4

Available Accessories			Selected Accessories	
Type	Model	MaxNumber	Type	Model
Air Panel	P-AP56NAM	1	Air Panel	P-AP56NAM
Duct Adapter	PC-75C	1		
Remote Control Cable	PRC-5K	2		
Remote Control Cable	PRC-10K	2		
Remote Control Cable	PRC-15K	2		
3P Connector Cable	PCC-1A	1		
Remote Sensor	THM-R2A	1		
Liquid Crystal Remote Control Switch	PC-ARF	2		
Wireless Remote Control Switch	PC-LH3B	1		
Wireless Receiver Kit	PC-ALHC1	1		

Buttons: 3 Delete, 4 Reset, 5 OK

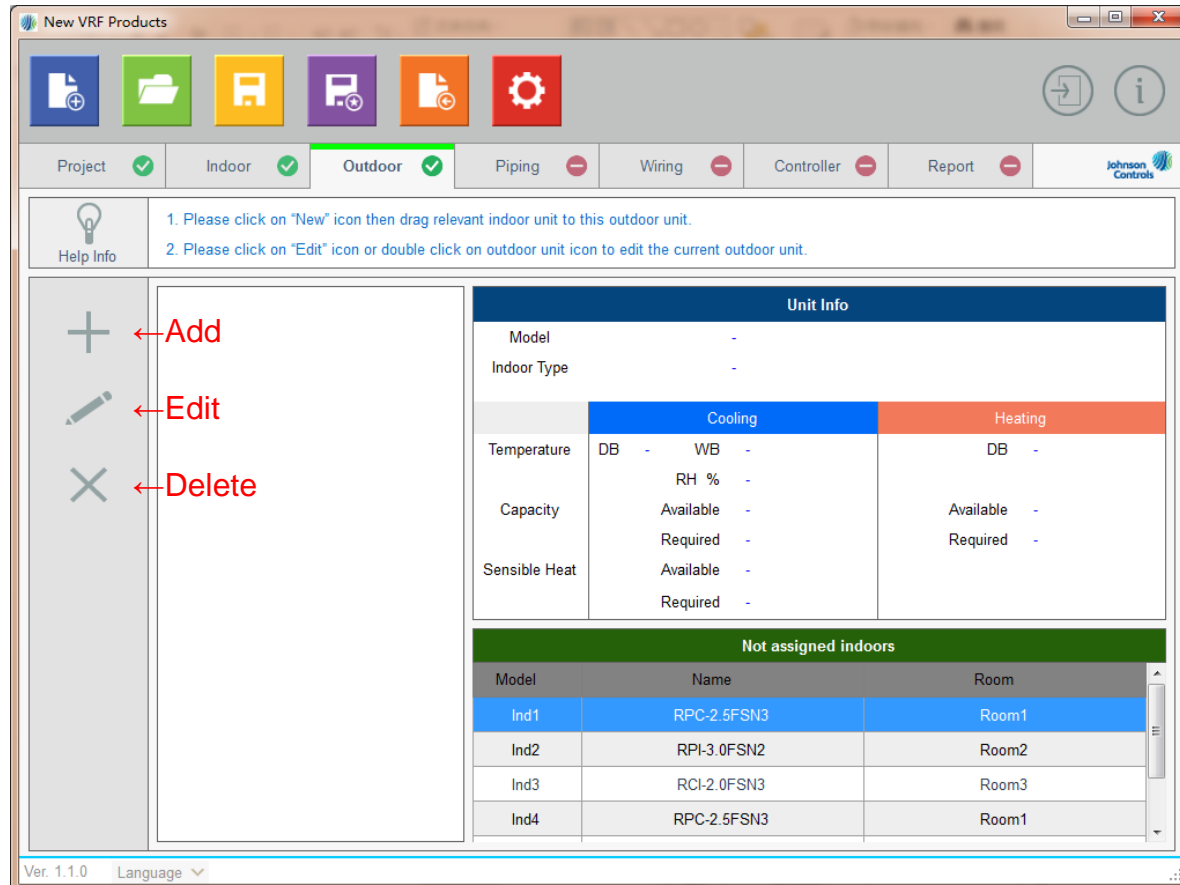
6. Select Outdoor Unit

■ Select Outdoor Unit

1. After indoor units selection, click “Outdoor” **tab** to go to “Outdoor” main interface
2. Click “Add” icon and go to “Outdoor Selection” interface
3. Click “Edit” icon to edit the selected outdoor unit
4. Click “Delete” icon to delete selected outdoor unit

Note:

1. The outdoor selection can only be done automatically.
2. Multiple outdoor systems can be added by click “Add” icon in the main interface.



Help Info

1. Please click on "New" icon then drag relevant indoor unit to this outdoor unit.
2. Please click on "Edit" icon or double click on outdoor unit icon to edit the current outdoor unit.

←Add

←Edit

←Delete

Unit Info			
Model	-		
Indoor Type	-		
	Cooling		Heating
Temperature	DB	WB	DB
	RH %		-
Capacity	Available	-	Available
	Required	-	Required
Sensible Heat	Available	-	-
	Required	-	-

Not assigned indoors		
Model	Name	Room
Ind1	RPC-2.5FSN3	Room1
Ind2	RPI-3.0FSN2	Room2
Ind3	RCI-2.0FSN3	Room3
Ind4	RPC-2.5FSN3	Room1

Ver. 1.1.0 Language

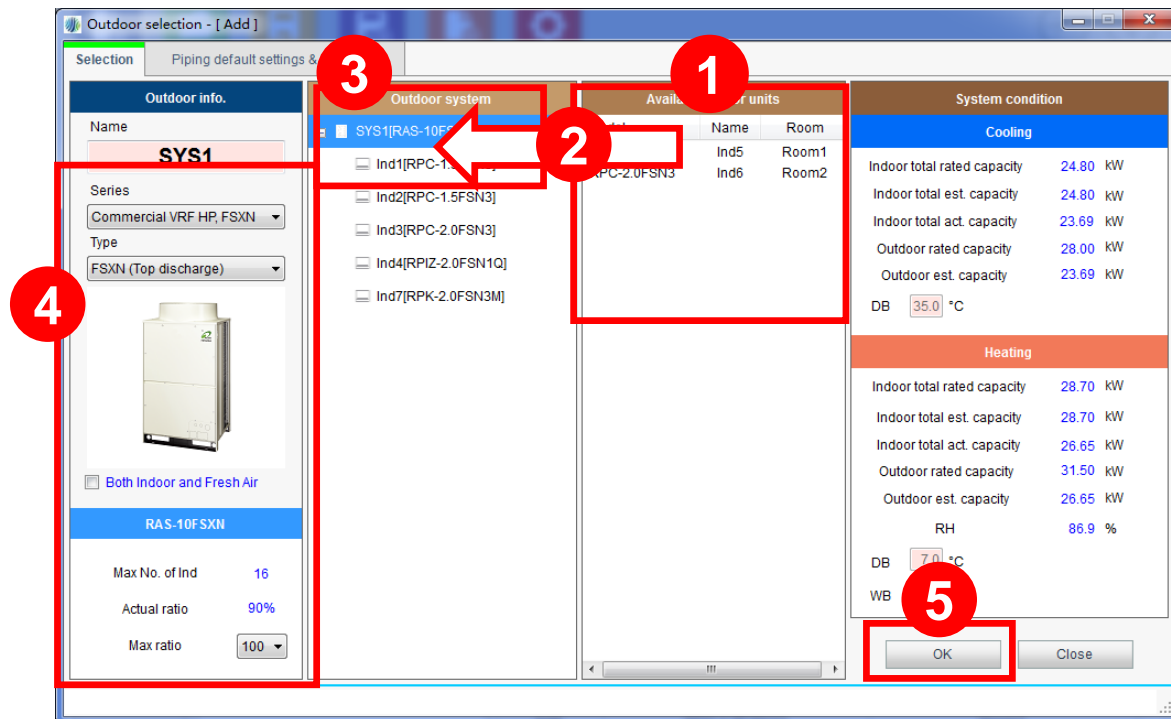
6. Select Outdoor Unit

■ ① Indoor Unit Connection System

1. Select indoor units from “Available indoor Units” List.
2. Drag & Drop the selected Indoor units to **outdoor model** shown in the “Outdoor System” List.
3. It will automatically select the most suitable Outdoor unit
4. Change “Series”, “Type”, “Max Ratio” through drop box in the “Outdoor Info.” and it will automatically re-select outdoor unit
5. Click “OK” to go back to “Outdoor” main interface

Note:

1. Use “ctrl” or “shift” to select multiple indoor units
2. Drag and drop the indoor units to the listed model name (example: “Sys1”)
3. If multiple outdoor systems are needed, go back to “Outdoor” main interface and do the same process to add another outdoor system



6. Select Outdoor Unit

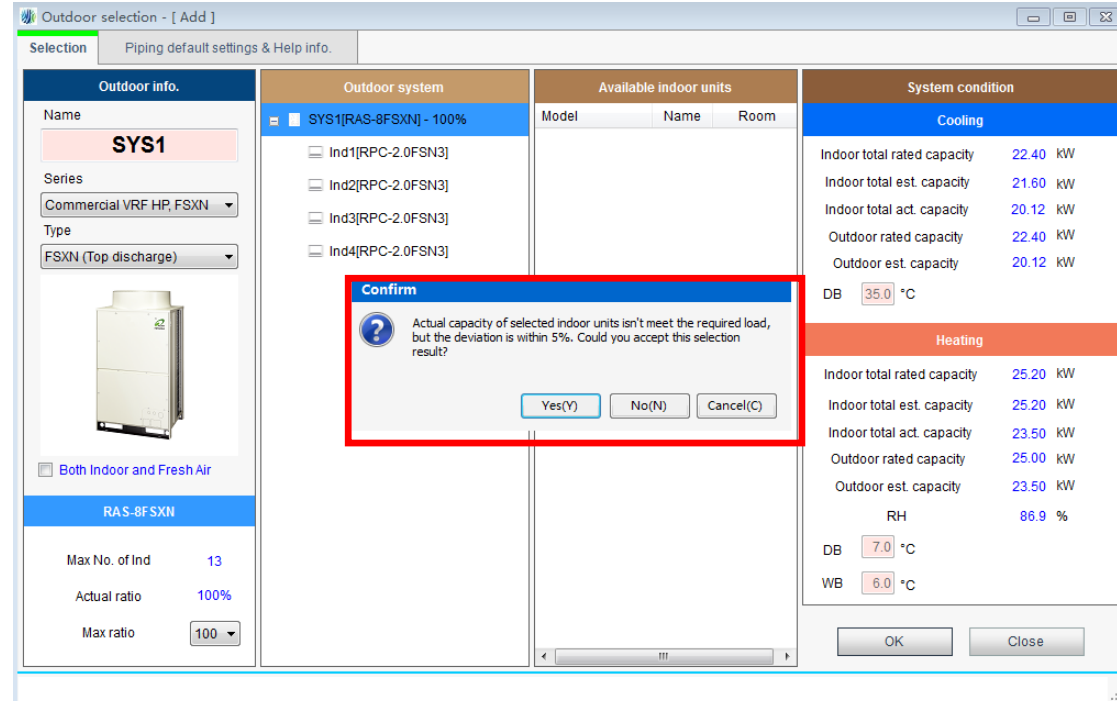
■ ① Indoor Unit Connection System – 5% tolerance

1. If select Indoor Unit with room information, after Outdoor unit selection, need to check whether actual capacity exceeds the room required load or not.
2. If the actual capacity is below the required load because of the correction factor, the further process will be as below.
 - a) Actual capacity < Required load **more than 5%** : Selection procedure will be stopped.
 - b) Actual capacity < Required load **less than 5%** : Software will ask you whether to proceed or not.

Note:

1. *Whether to proceed the selection even actual capacity is below the required load depends on the user's decision.*

Please kindly be responsible to the judgement of the process at user side.



Cooling	
Indoor total rated capacity	22.40 kW
Indoor total est. capacity	21.60 kW
Indoor total act. capacity	20.12 kW
Outdoor rated capacity	22.40 kW
Outdoor est. capacity	20.12 kW
DB	35.0 °C

Heating	
Indoor total rated capacity	25.20 kW
Indoor total est. capacity	25.20 kW
Indoor total act. capacity	23.50 kW
Outdoor rated capacity	25.00 kW
Outdoor est. capacity	23.50 kW
RH	86.9 %
DB	7.0 °C
WB	6.0 °C

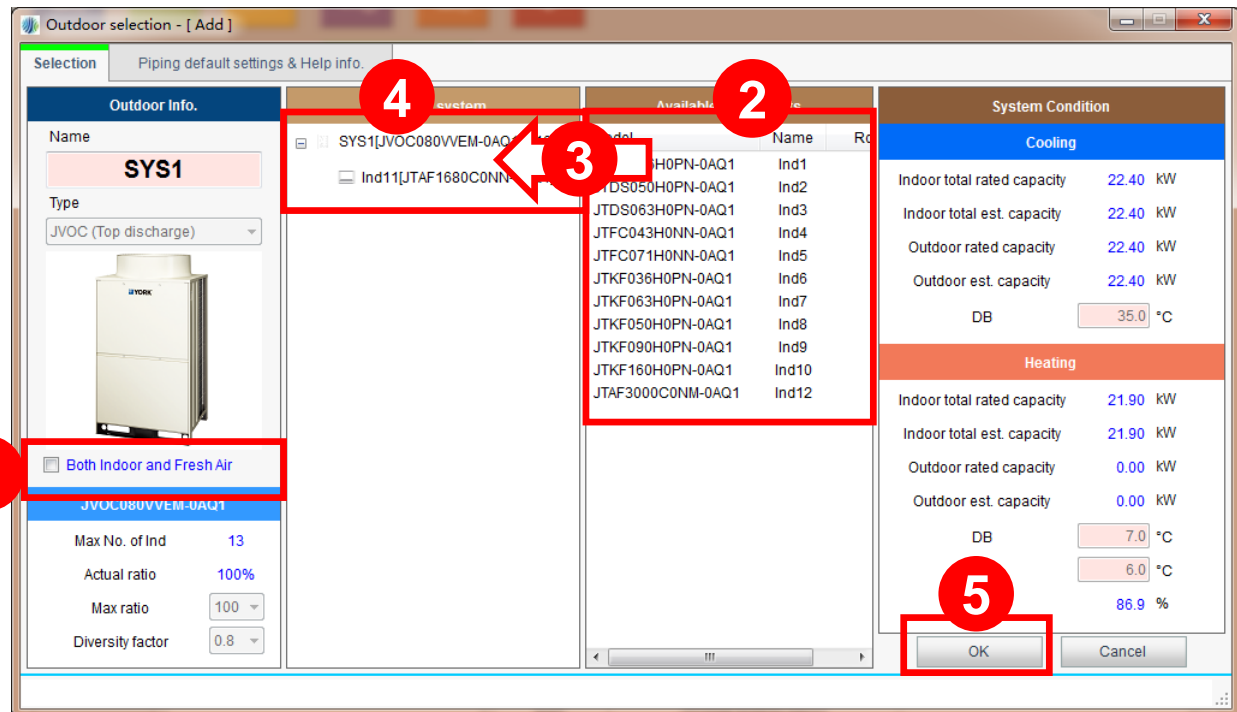
6. Select Outdoor Unit

■ ② Fresh Air Unit 1 to 1 Connection System

1. Make sure to unselect the checkbox of "Both Indoor And Fresh Air"
2. Select fresh air unit from "Available indoor Units" List.
3. Drag & Drop the selected fresh air unit to **outdoor model** shown in the "Outdoor System" List.
4. It will automatically select the related outdoor unit
5. Click "OK" to go back to "Outdoor" main interface

Note:

1. Drag and drop the fresh air unit to the listed model name (example: "Sys1")
2. The outdoor unit of fresh air unit for 1 to 1 connection is fixed and the "Max ratio" and "Diversity factor" cannot be changed manually
3. If multiple outdoor systems are needed, go back to "Outdoor" main interface and do the same process to add another outdoor system



6. Select Outdoor Unit

■ ③ Fresh Air Unit Mixed Type Connection System

1. Make sure to select the checkbox of "Both Indoor And Fresh Air"
2. Select indoor units & fresh air unit from "Available indoor Units" List.
3. Drag & Drop the selected units to **outdoor unit** shown in the "Outdoor System" List.
4. It will automatically select the most suitable Outdoor unit
5. Change "Type", "Max Ratio", "Diversity Factor" through drop box in the "Outdoor Info." and it will automatically re-select outdoor unit
6. Click "OK" to go back to "Outdoor" main interface

Note:

1. Drag and drop the units to the listed model name (example: "Sys1")
2. The system ratio for mixed type of fresh air connection is 80%~100% and the fresh air capacity should be below 30% of the total system capacity
3. If multiple outdoor systems are needed, go back to "Outdoor" main interface and do the same process to add another outdoor system

The screenshot shows the 'Outdoor selection - [Add]' window. It is divided into several sections:

- Outdoor Info. (Left):** Contains a 'Type' dropdown set to 'JVOC (Top discharge)', an image of an outdoor unit, and a checked checkbox labeled 'Both Indoor and Fresh Air' (annotated with a red circle and number 1). Below this are fields for 'Max No. of Ind', 'Actual ratio' (0%), 'Max ratio' (100), and 'Diversity factor' (0.8).
- Selection (Top):** A tabbed interface with 'Selection' and 'Piping default settings & Help info.' tabs. A red circle and number 4 points to the 'Selection' tab.
- Available indoor Units (Middle):** A list of indoor units with columns for Name, Model, and Room. A red circle and number 2 points to the list header. A red circle and number 3 points to a unit being dragged from this list to the 'SYS2' system in the 'Outdoor System' list.
- Outdoor System (Middle):** A list of outdoor systems. 'SYS2' is highlighted with a red circle and number 4.
- System Condition (Right):** A section with 'Cooling' and 'Heating' tabs. The 'Cooling' tab is active, showing capacity values (0.00 kW) and a DB value of 35.0 °C. The 'Heating' tab shows capacity values (0.00 kW) and DB values of 7.0 °C and 6.0 °C, with a humidity of 86.9 %. A red circle and number 5 points to the 'OK' button at the bottom right.

6. Select Outdoor Unit

■ ④Piping Length & Height Difference

1. Select “Piping default settings & Help info.” sheet.
2. Equivalent piping length & first branch to indoor units length will be calculated automatically refer to the piping length input in the “Piping” main interface.
3. Can choose outdoor unit “Higher”, “Same Level” or “Lower” than indoor unit and input the height difference data.
4. Click “OK” and click “Selection” sheet of “Outdoor” main interface.

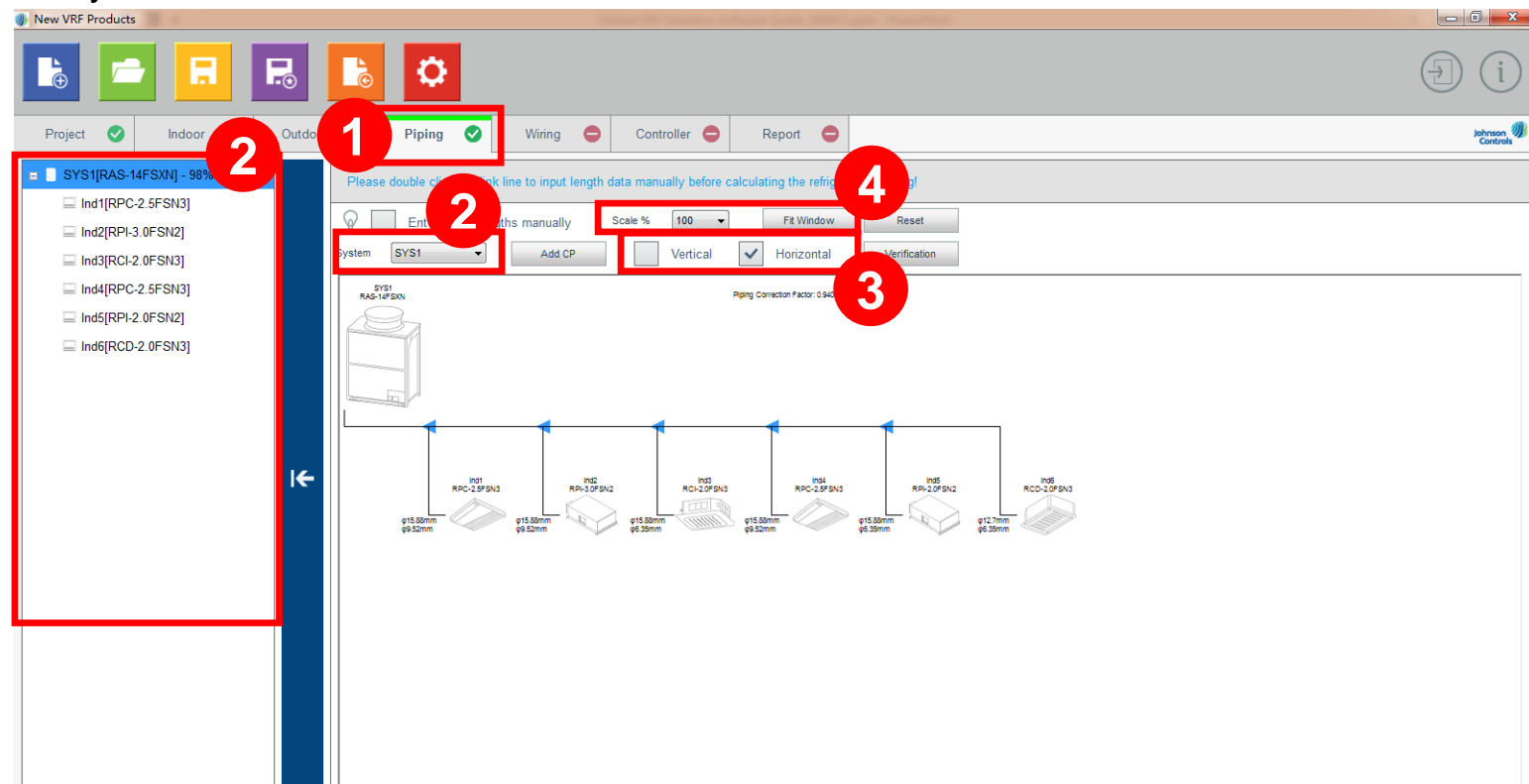
Note:

1. Default data for “Equivalent piping length” is 40m and “First branch to indoor unit” is 20m. These data will be changed if you enter the piping length manually in the “Piping” main interface.
2. Piping correction factor will be automatically calculated by input piping length & height difference data and outdoor unit selection will probably be changed automatically.

7. System Piping

■ System Piping

1. After outdoor units selection, click “Piping” sheet to go to “Piping” main interface and the standard horizontal piping diagram will be automatically shown
2. Select different system by “System” drop box or the left tree structure
3. Click “Vertical” or “Horizontal” to adjust piping layout
4. Change “Scale” value to zoom the piping layout and click “Fit window” to show whole piping system in the window.

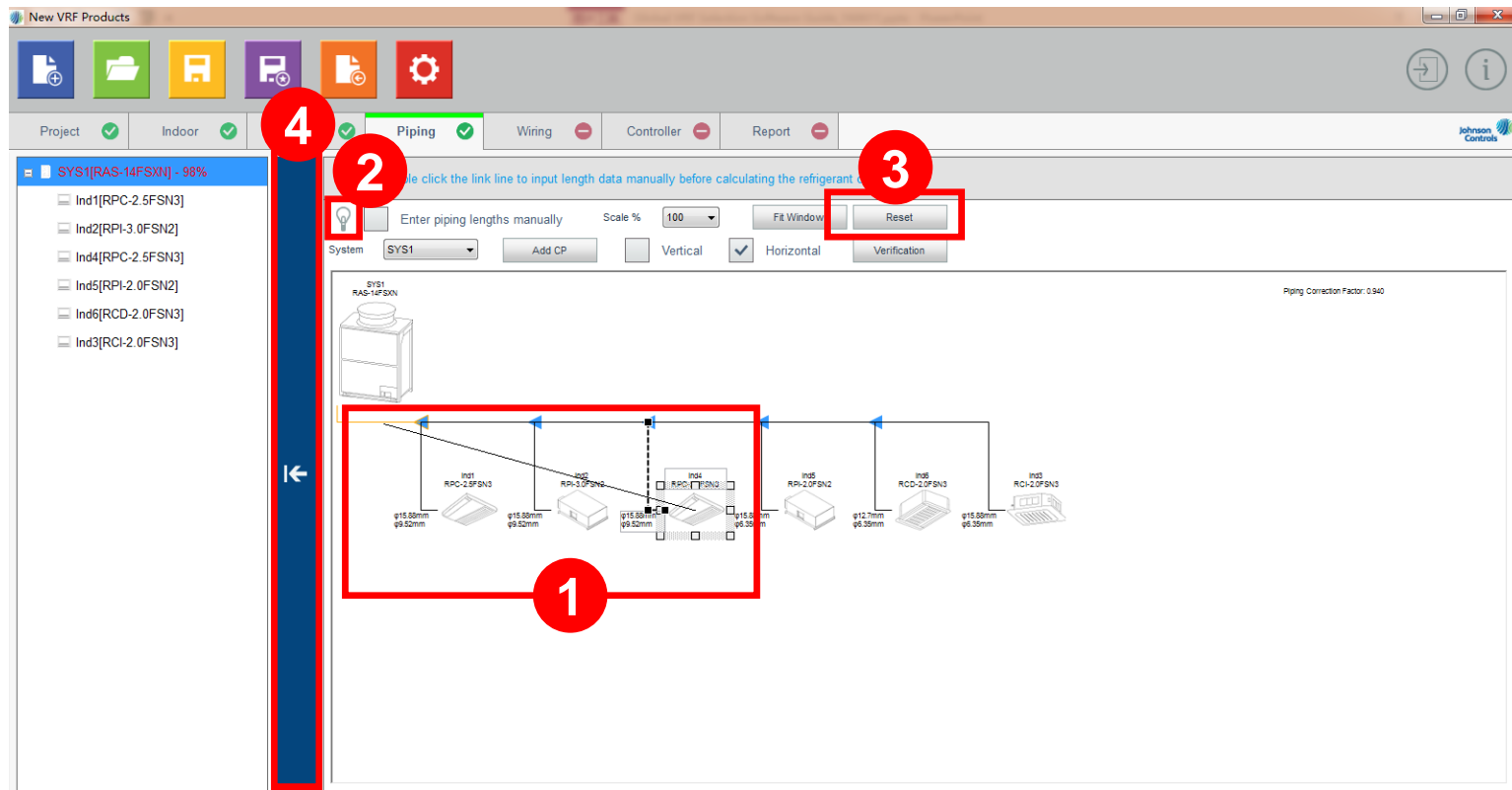


7. System Piping

■ ① Change Layout

1. Drag and drop “indoor unit” or “branch kit” as object to change piping layout
2. Click the button to see detail “Drag and Drop Rules” which is shown in the next slide
3. Click “Reset “ to go to the default piping system (Vertical or Horizontal)
4. Click “Arrow Bar” to hide/show system detail model list

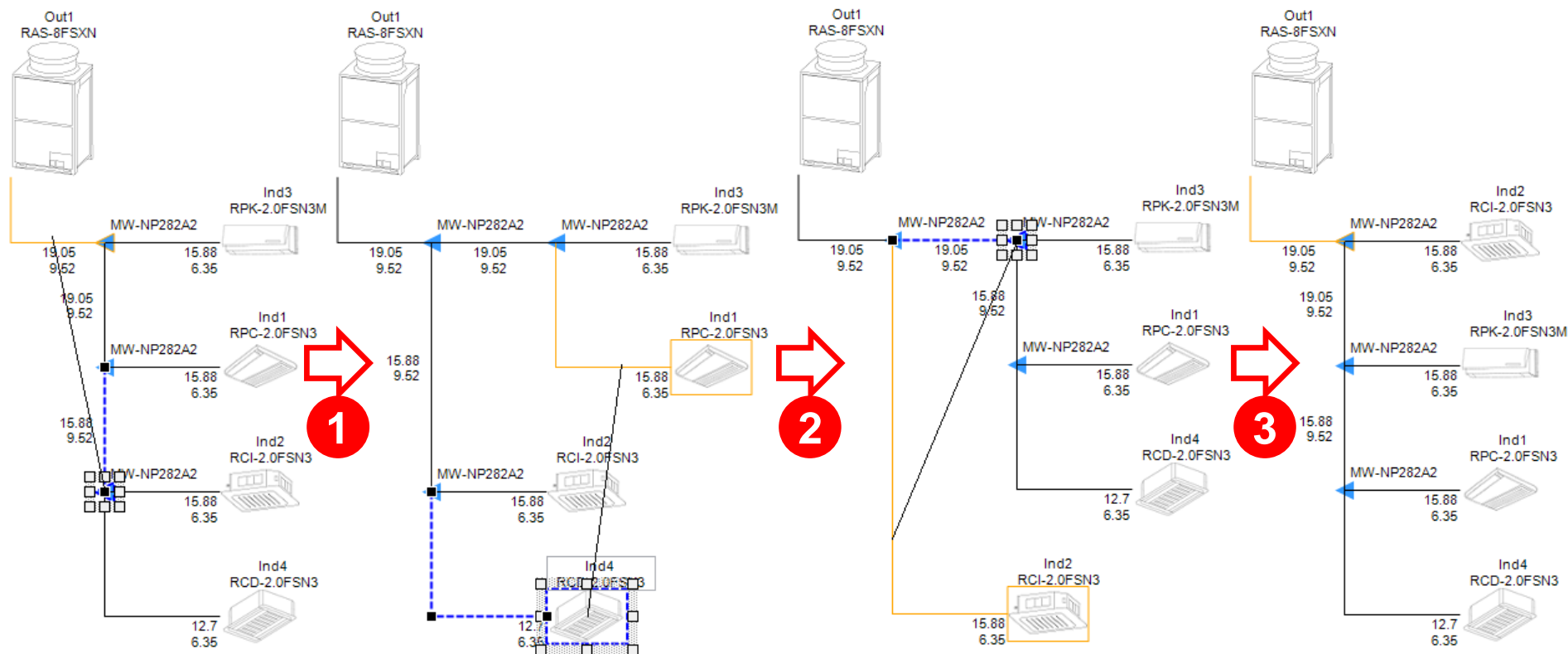
Note: For heat recovery VRF, current software can only support standard horizontal or vertical piping and cannot be changed.



7. System Piping

■ ② Drag & Drop Rules (Heat Pump)

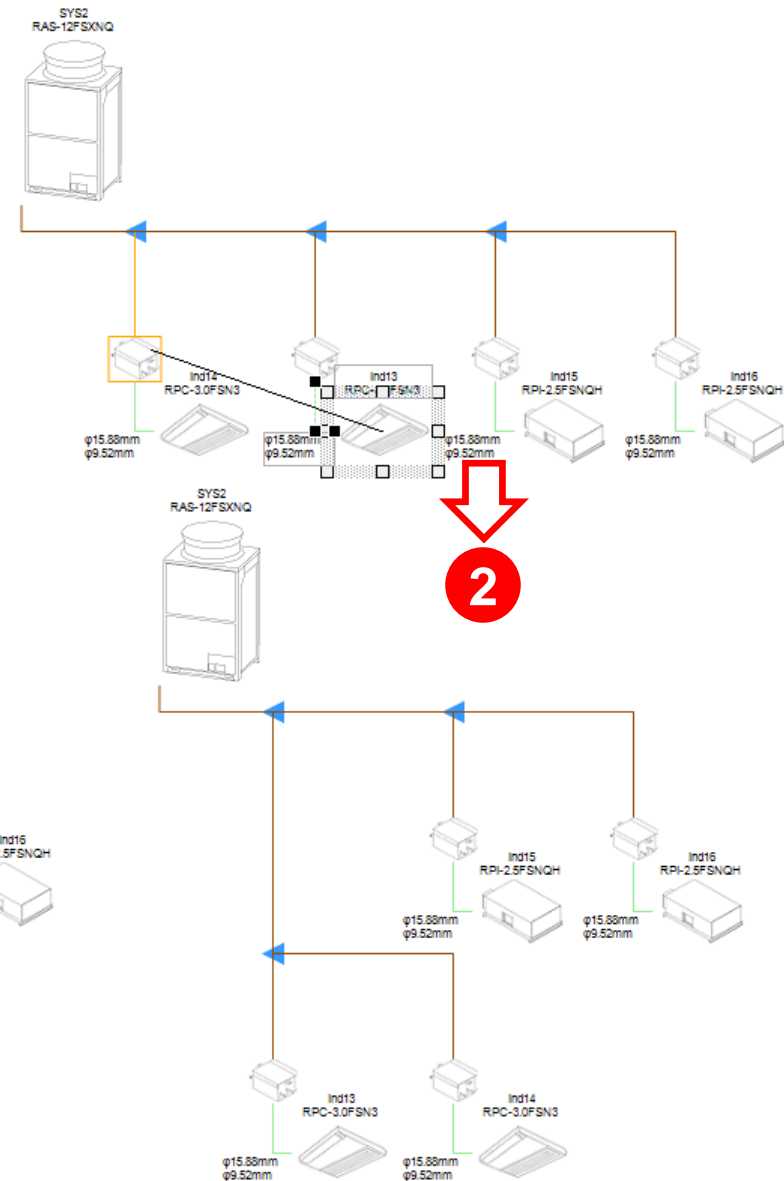
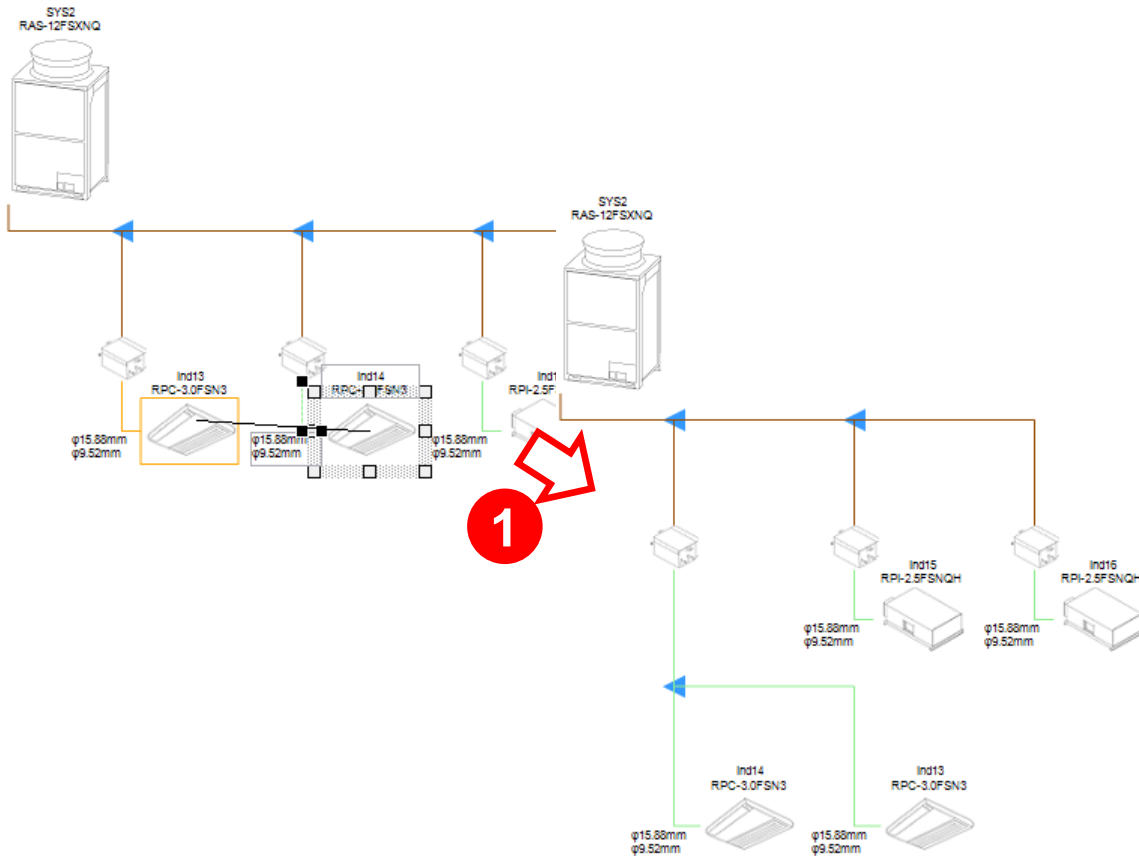
1. Drag “branch kit” and drop on piping which has branch kit
2. Drag “indoor unit” and drop on indoor unit
3. Drag “branch kit” and drop on piping without branch kit or indoor unit



7. System Piping

■ ③ Drag & Drop Rules (Heat Recovery)

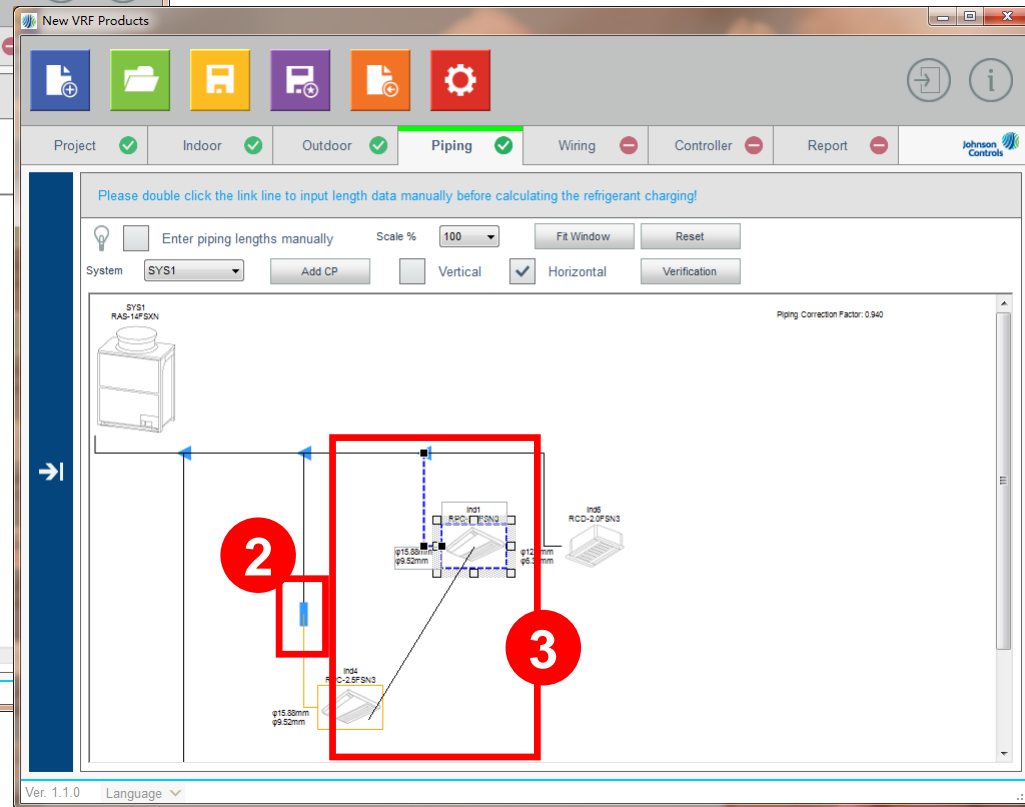
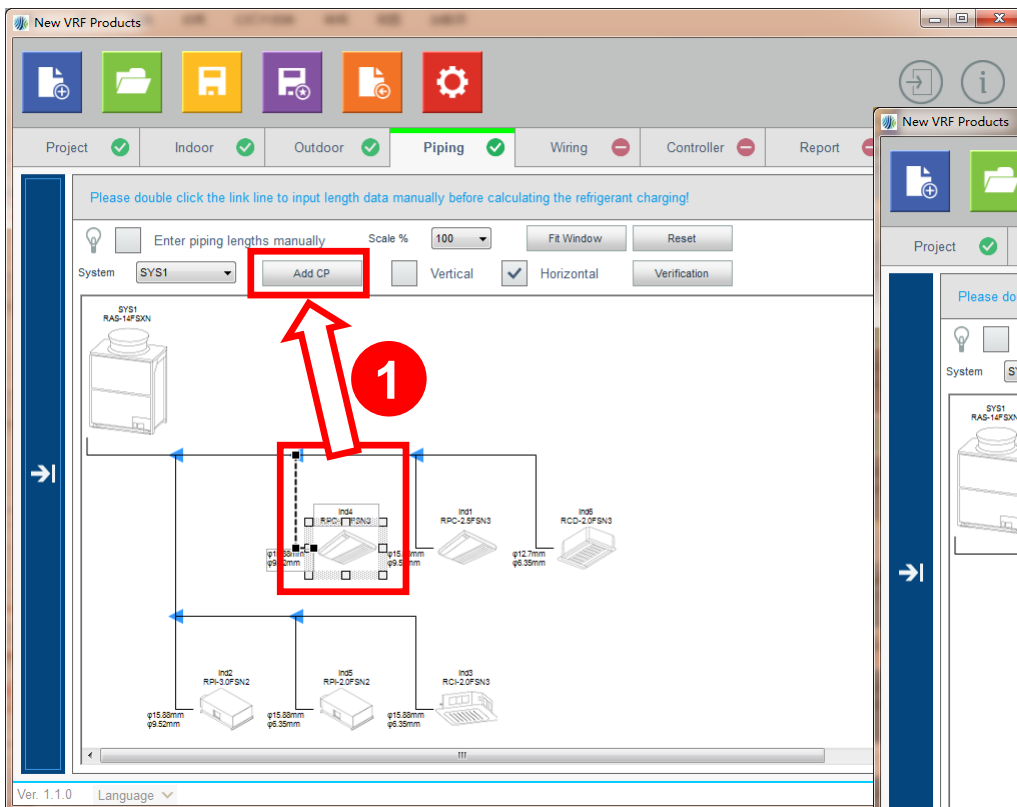
1. Drag “indoor unit” and drop on indoor unit
2. Drag “indoor unit” and drop on CH-Box



7. System Piping

■ ④Add Header Branch

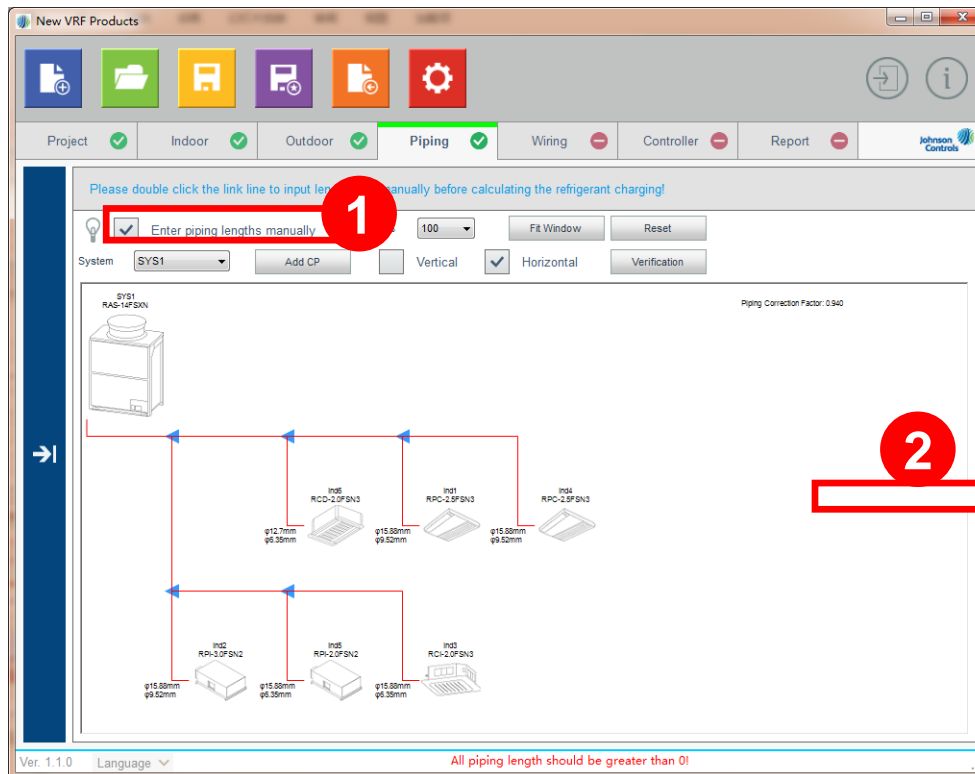
1. Click an indoor unit and click “Add CP” button to add header branch
2. Branch graph changed from line branch type to header branch type
3. Drag and drop other indoor units to the indoor unit below the header branch



7. System Piping

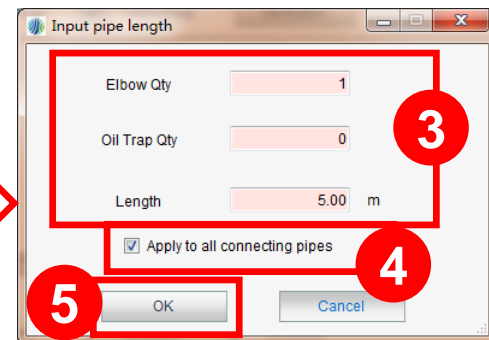
■ ⑤ Piping Length Input

1. Select "Enter piping length manually" Checkbox
2. Double click one pipe, pipe length dialog will be shown
3. Input "Elbow Qty/Oil Trap Qty/Length" value
4. Do the same for other pipes, or click "Apply to all connecting tube", each of pipe length will adopt the same data
5. Click "OK" to go back to the "Piping" main interface



Note:

1. The pipe without length information will be shown in red.



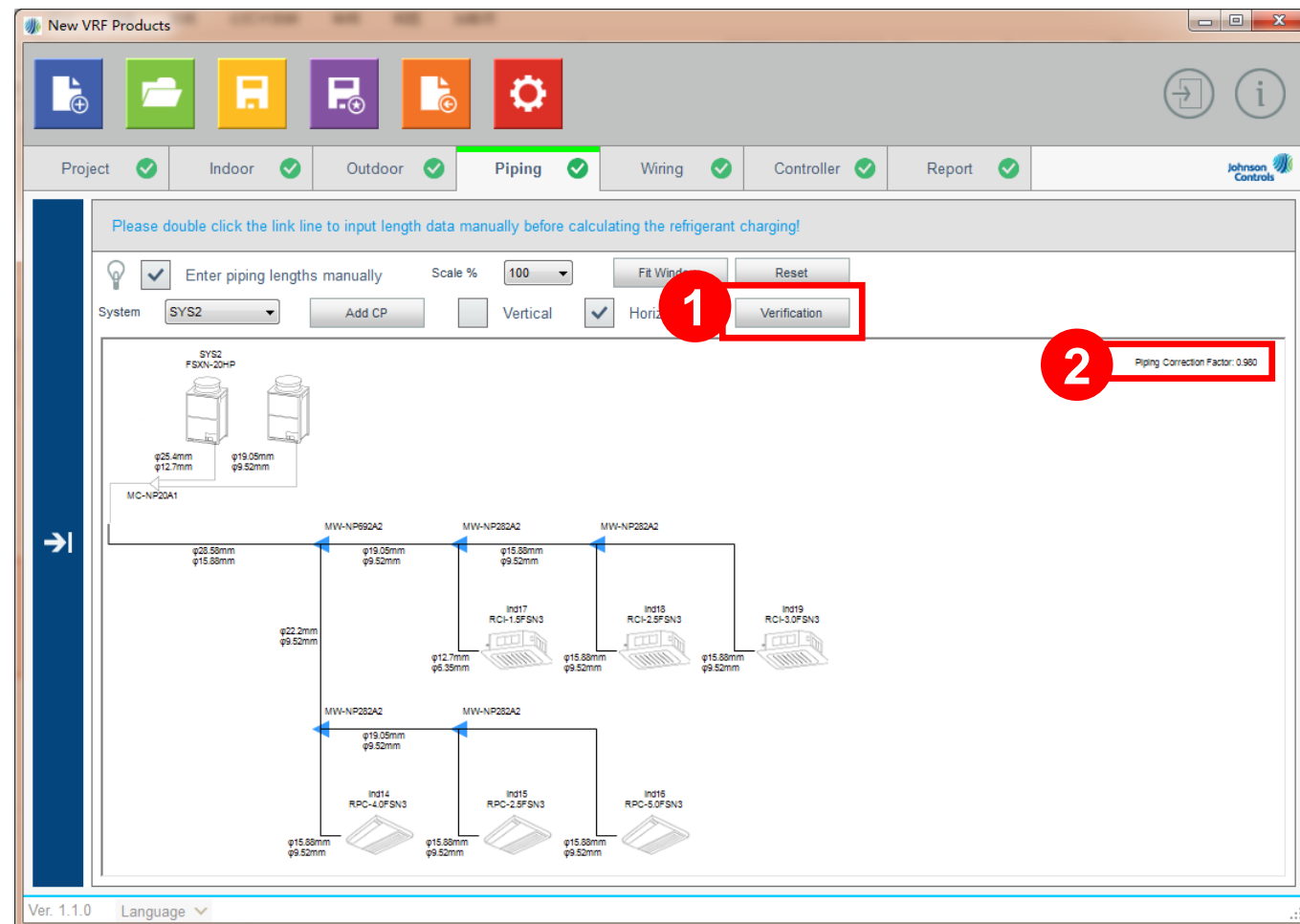
7. System Piping

■ ⑥ System Verification

1. Click “Verification” and system will do indoor/outdoor/piping length verification automatically
2. After complete the system verification, the “Piping Correction Factor” of current system will be shown in the piping drawing

Note:

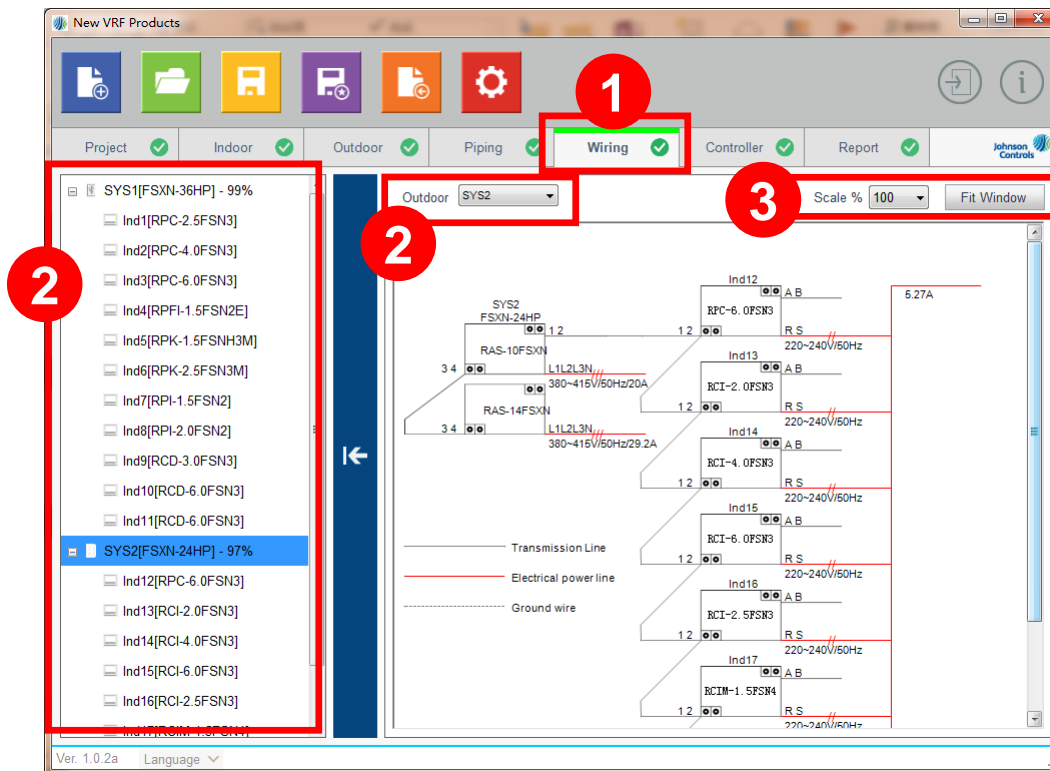
1. The pipe will turn to red if the piping total/single length is out of limitation.
2. Make sure to do system verification finally. Otherwise, piping size & branch kit model name will not be shown and cannot continue the selection.



8. System Wiring

■ System Wiring

1. After system piping, click “Wiring” sheet to go to “Wiring” main interface and the wiring diagram will be automatically shown
2. Select different system by “Outdoor” drop box or the left tree structure
3. Change “Scale” value to zoom the wiring layout and click “Fit window” to show whole wiring system in the window.



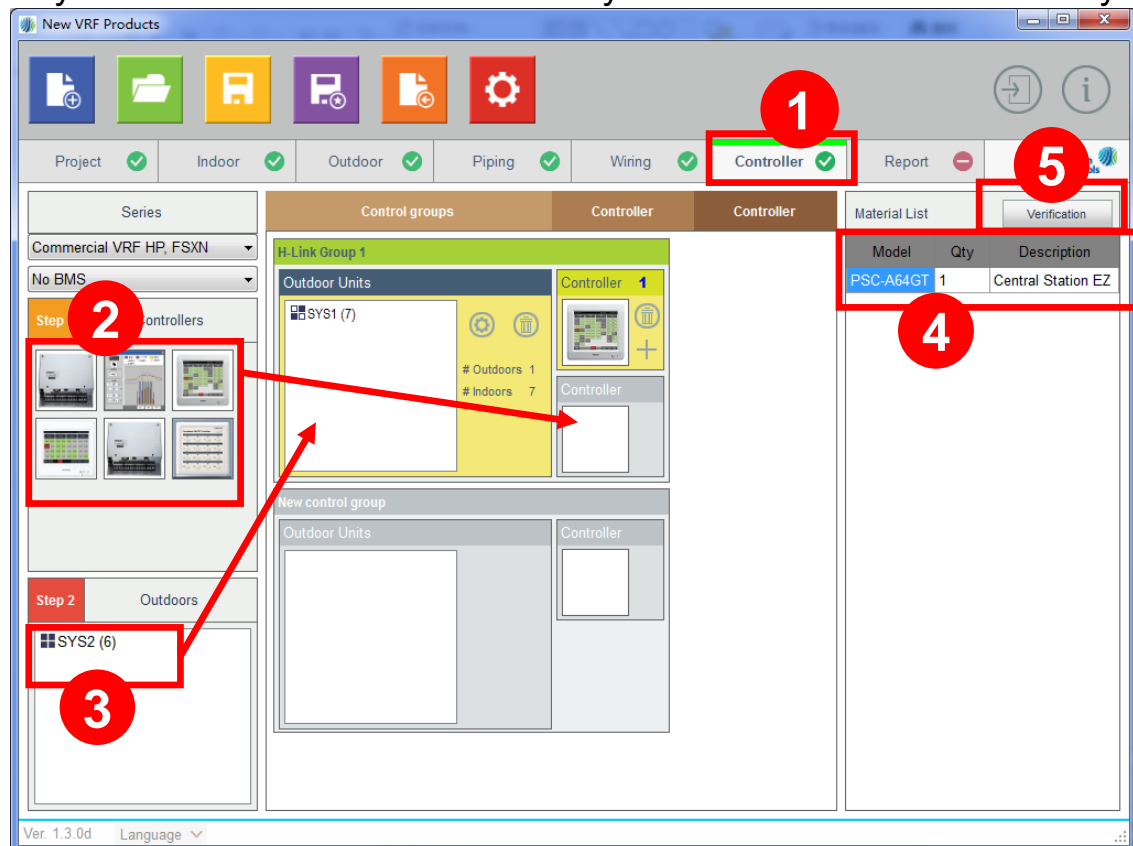
9. System Control

■ System Control

1. After system wiring, click “Controller” **tab** to go to VRF central control system selection
2. Drag and drop “Controller” from the left list to the “control box” in control groups interface
3. Drag and drop “SYS” from the left-bottom list to the “outdoor box” in control groups interface
4. The selected controller list will be shown in the right “Material List”
5. Press “Verification” and system will do the central control system verification automatically

Note:

1. The controller offering will be different due to different outdoor series.
2. Different controller will have different limitation for connectable outdoor/indoor number.



10. Save Project

■ Save Project

1. Click “Save” or “Save As” icon, “Save” interface will be shown
2. Select “New Project” checkbox and input “Project” name
3. Click “Save” button to save the current project

The screenshot shows the 'New VRF Products' software interface. The 'Save' dialog box is open, and the 'New Project' checkbox is selected. The 'Project' name is 'Project1'. The 'System Name' field is empty. The 'Save' button is highlighted with a red box.

1 Click "Save" or "Save As" icon, "Save" interface will be shown

2 Select "New Project" checkbox and input "Project" name

3 Click "Save" button to save the current project

Ver. 1.1.0 Language

11. Output Report

■ Output Report

1. After piping, click “Report” **tab** to go to “Report” main interface
2. Select output outdoor unit system by right “Report Contents” list
3. Click “Output Report” to output report in word format
4. Click “Output spreadsheet” to output report in Excel format
5. Click “Output dxf files” to output system piping in AutoCAD format

