

Contents

1. Design Tab.....	6
1.1. Building.....	7
1.2. Equipment.....	8
1.2.1. Indoor Unit.....	8
1.2.1.1. Search.....	10
1.2.1.1.1. VRF General Indoor Unit.....	12
1.2.1.1.1.1. Design Condition.....	12
1.2.1.1.1.2. Indoor Unit Information.....	13
1.2.1.1.2. VRF Hydro HE.....	15
1.2.1.1.2.1. Design Condition.....	15
1.2.1.1.2.2. Indoor Unit Information.....	16
1.2.1.1.3. VRF Hydro HT.....	18
1.2.1.1.3.1. Design Condition.....	18
1.2.1.1.3.2. Indoor Unit Information.....	19
1.2.1.1.4. VRF OAP Duct.....	20
1.2.1.1.4.1. Design Condition.....	20
1.2.1.1.4.2. Indoor Unit Information.....	21
1.2.1.1.5. Single Indoor Unit.....	23
1.2.1.1.5.1. Design Condition.....	23
1.2.1.1.5.2. Indoor Unit Information.....	24
1.2.1.1.6. FJM Indoor Unit.....	25
1.2.1.1.6.1. Design Condition.....	25
1.2.1.1.6.2. Indoor Unit Information.....	26
1.2.1.1.7. Chiller FCU.....	27
1.2.1.1.7.1. Design Condition.....	27
1.2.1.1.7.2. Indoor Unit Information.....	28
1.2.1.1.8. EHS General Indoor Unit.....	30
1.2.1.1.8.1. Design Condition.....	30
1.2.1.1.8.2. Indoor Unit Information.....	31

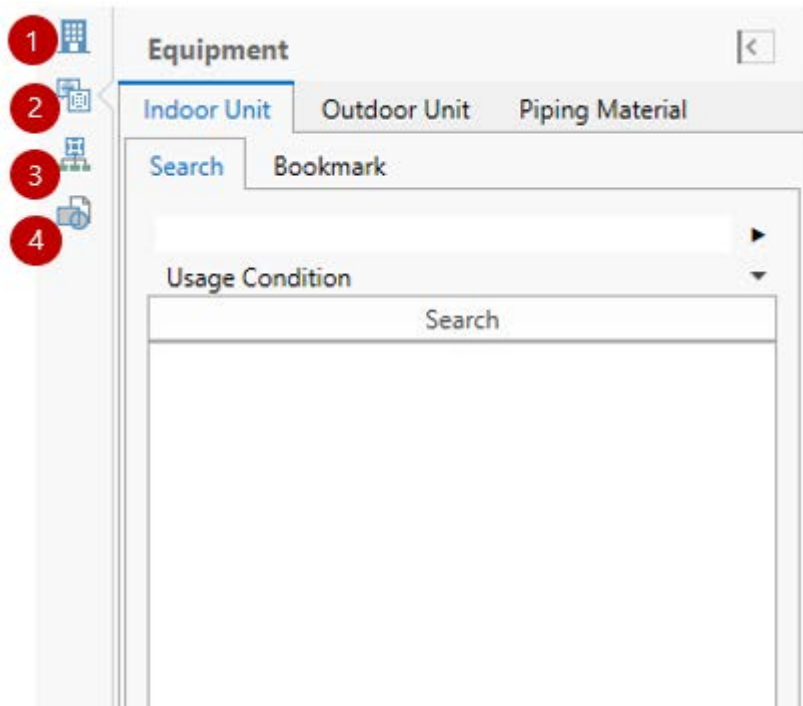
1.2.1.1.9. EHS Hydro	33
1.2.1.1.9.1. Design Condition	33
1.2.1.1.9.2. Indoor Unit Information.....	34
1.2.1.1.10. ERV.....	35
1.2.1.1.10.1. Design Condition.....	35
1.2.1.1.10.2. Indoor Unit Information	36
1.2.1.1.11. Split DOAS	38
1.2.1.1.11.1. Design Condition.....	38
1.2.1.1.11.2. Indoor Unit Information	38
1.2.1.1.12. Packaged DOAS	39
1.2.1.1.12.1. Design Condition.....	39
1.2.1.1.12.2. Indoor Unit Information	40
1.2.1.1.13. User Equipment.....	41
1.2.1.1.13.1. Design Condition.....	41
1.2.1.1.13.2. Indoor Unit Information	42
1.2.1.2. Bookmark	43
1.2.1.3. Placement.....	44
1.2.1.3.1. Placement Method.....	44
1.2.1.3.1.1. Drag & Drop	44
1.2.1.3.1.2. Add Indoor Unit Button.....	45
1.2.1.3.2. Placement of attachment to the wall.....	46
1.2.1.3.3. Offset placement from the wall.....	47
1.2.1.3.4. Placement in the center of the room.....	48
1.2.1.3.5. User placement.....	49
1.2.1.3.6. Installation Position.....	49
1.2.2. Outdoor Unit	50
1.2.2.1. Search.....	51
1.2.2.1.1. VRF General Outdoor Unit	53
1.2.2.1.1.1. Design Condition	53
1.2.2.1.1.2. Outdoor Unit Information.....	54
1.2.2.1.2. VRF Water Outdoor Unit.....	56

1.2.2.1.2.1. Design Condition	56
1.2.2.1.2.2. Outdoor Unit Information	57
1.2.2.1.3. Single Outdoor Unit	59
1.2.2.1.3.1. Design Condition	59
1.2.2.1.3.2. Outdoor Unit Information	60
1.2.2.1.4. FJM Outdoor Unit	61
1.2.2.1.4.1. Design Condition	61
1.2.2.1.4.2. Outdoor Unit Information	62
1.2.2.1.5. Chiller Outdoor Units Group	63
1.2.2.1.5.1. Design Condition	63
1.2.2.1.5.2. Outdoor Unit Information	64
1.2.2.1.6. EHS Outdoor Unit	66
1.2.2.1.6.1. Design Condition	66
1.2.2.1.6.2. Outdoor Unit Information	67
1.2.2.1.7. Split DOAS General Outdoor Unit	67
1.2.2.1.7.1. Design Condition	67
1.2.2.1.7.2. Outdoor Unit Information	67
1.2.2.1.8. Split DOAS Water Outdoor Unit	67
1.2.2.1.8.1. Design Condition	67
1.2.2.1.8.2. Outdoor Unit Information	68
1.2.2.2. Placement (Command : DVMDRAWOUTDOOR)	69
1.2.2.2.1. Placement Method	69
1.2.2.2.1.1. Drag & Drop	69
1.2.2.2.1.2. Add Outdoor Unit Button	70
1.2.2.2.2. Placement for Single outdoor unit	71
1.2.2.2.3. Placement for Module Outdoor Unit	72
1.2.2.2.4. Placement Chiller Outdoor Unit Group	73
1.2.3. Piping Material	74
1.2.3.1.1. Placement Method	74
1.3. Current System	76
1.3.1. Summary	77

1.3.1.1. VRF General.....	77
1.3.1.2. VRF Home(Single Piping).....	78
1.3.1.3. VRF Home(Multi Piping).....	79
1.3.1.4. CAC Non DPM	79
1.3.1.5. CAD DPM	80
1.3.1.6. PAC	81
1.3.1.7. RAC.....	81
1.3.1.8. FJM	82
1.3.1.9. Chiller Only	83
1.3.1.10. Chiller All.....	84
1.3.1.11. EHS Tank Included Mono	85
1.3.1.12. EHS Tank Excluded Mono	85
1.3.1.13. EHS Tank Included Split	86
1.3.1.14. EHS Tank Excluded Split.....	87
1.3.1.15. EHS TDM Plus A2A Indoor Unit Included	87
1.3.1.16. EHS TDM Plus A2A Indoor Unit Excluded.....	88
1.3.1.17. Ventilation Split DOAS.....	89
1.3.1.18. Ventilation Packaged DOAS	89
1.3.1.19. Ventilation ERV.....	90
1.3.2. Equipment.....	91
1.3.2.1. View by room load	92
1.3.2.2. View by equipment location	93
1.3.2.3. Placement of unconnected equipment.....	94
1.3.3. Check Result.....	95
1.4. Block.....	96

1. Design Tab


You can check the design space and equipment information of the project, check the information of the activated system, or design the equipment.



- ① Building : Check the space (floor, room) configuration of the project and whether the area object is set.
- ② Equipment : The equipment (indoor unit, outdoor unit, piping material) of the activated system is searched and placed in the drawing.
- ③ Current System : Check an overview of the active system, designed equipment, and check results.
- ④ Block : You can manage blocks for use in drawings and place them in drawings.

1.1. Building

You can check the space (floor, room) configuration of the project under design and whether or not the area object is set, and double-click the space item to easily find the area object in the drawing.



	CTC(kW)
test	
R	
4F	
Room 1	0.00
Room 2	0.00
Room 3	0.00
3F	
Room 1	0.00
Room 2	0.00
Room 3	0.00
2F	
Room 1	0.00
Room 2	0.00
Room 3	0.00
1F	
Room 1	0.00
Room 2	0.00
Room 3	0.00
B1	

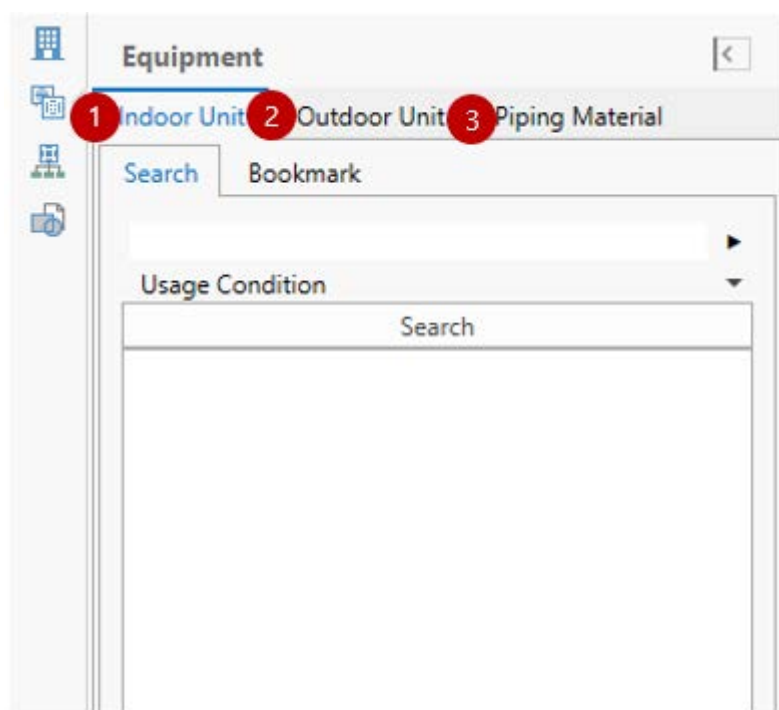
- ① Project Name : The name of the project currently being designed is displayed.
- ② Floors to which area object is specified : The floor name is displayed under the project name, and if the area object is a specified floor, the name is displayed in black. When double-clicking, the area object in the drawing is zoom in.
- ③ Floors where no area object is specified : The floor name is displayed under the project name, and if an area object is not specified, the name is displayed in red.
- ④ Rooms to which area object is specified : The room name is displayed under the floor name, and if the area object is a specified room, the name is displayed in black. When double-clicking,

the area object in the drawing is zoom in.

- ⑤ Rooms where no area object is specified : The room name is displayed under the floor name, and if the room object is not specified, the name is displayed in red.
- ⑥ Required load for cooling room : The cooling load set in the room is display.
- ⑦ Fold : Fold the design tab to the left.

1.2. Equipment

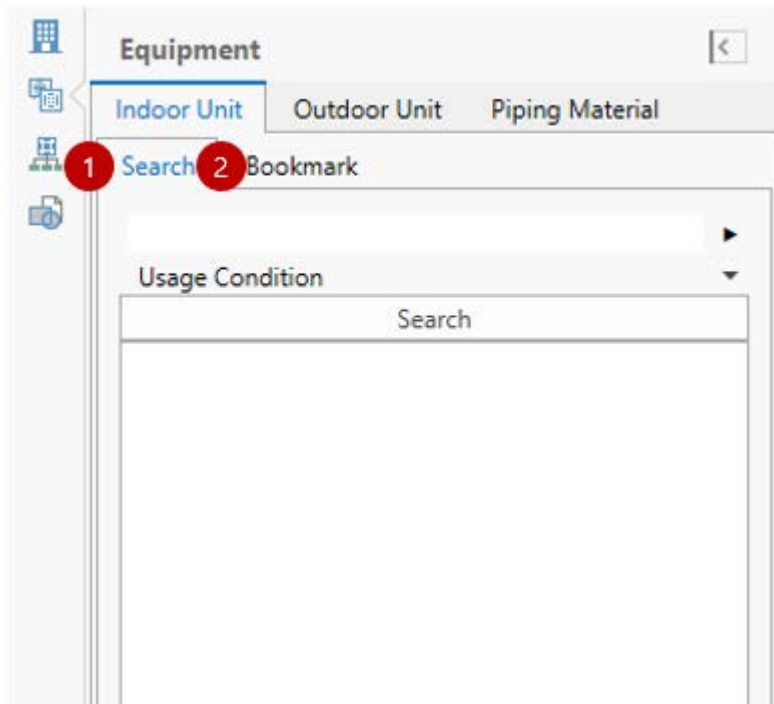
In the Equipment tab, you can search for equipment to be designed (indoor unit, outdoor unit, piping material) and place the equipment by dragging and dropping it into the drawing.



- ① Indoor Unit : You can search and design indoor units in the currently active system.
- ② Outdoor Unit : You can search and design outdoor units in the currently active system.
- ③ Piping Material : Design piping materials.

1.2.1. Indoor Unit

In the Indoor Unit tab, you can search for the indoor unit to be designed and place the indoor unit by dragging and dropping it on the drawing. In addition, you can design indoor units quickly and easily by registering indoor units that you often design to your favorites.



- ① Search : You can search and design indoor units in the currently active system.
- ② Bookmark : You can quickly design by registering indoor units that you often design.

1.2.1.1. Search

It is a common option for all indoor units, and selectively sets the hierarchy and specification conditions for indoor unit search.

The screenshot displays the 'Equipment' search interface. At the top, there are tabs for 'Indoor Unit', 'Outdoor Unit', and 'Piping Material'. Below these are 'Search' and 'Bookmark' buttons. A sidebar on the left contains icons for building, equipment, and a search icon, with a red circle '1' next to the search icon. The main area is titled 'Usage Condition' and contains several filter options, each with a red circle number: 'Operation Mode' (HP) with circle '3', 'Power Specification' (1 | 2 | 208-230 | 60) with circle '4', 'Compressor Type' (SSC Scroll) with circle '5', 'Sales Status' (Active) with circle '6', 'Capacity Range' (0.00 ~ 0.00 kW) with circle '7', 'Model Code' with circle '8', 'EEV' (Included) with circle '9', and 'Drain Pump' (Included) with circle '10'. A red circle '2' is next to a right-pointing arrow. Below the filters is a 'Search' button with a red circle '11'. The search results area is a large empty box with a red circle '12' in the center. At the bottom, there is a legend with red circle '13' for 'Planned' (blue square), 'Running' (green square), and 'EOL' (yellow square). Below the legend are two buttons: 'Add Indoor Unit' with red circle '14' and 'Modify' with red circle '15'.

- ① Model Hierarchy : Select Hierarchy as a must-have option for indoor unit search.
- ② Usage Condition : A list of specifications conditions can be displayed and folded/unfolded as an indoor unit search condition.
- ③ Operation Mode : Select operation mode as a selection option for indoor unit search.
- ④ Power Specification : Select the power specification as a selection option for indoor unit search.
- ⑤ Compressor Type : Select the compressor type as the selection option for indoor unit search.
- ⑥ Sales Status : Select sales status as a selection option for indoor unit search.
- ⑦ Capacity Range : Enter the range of cooling capacity as a selection option for indoor unit search.
- ⑧ Model Code : Enter part of the model code as a selection option for indoor unit search.
- ⑨ EEV : Select whether to include EEV as a selection option for indoor unit search.
- ⑩ Drain Pump : Select whether to include a drain pump as a selection option for indoor unit search.
- ⑪ Search : When the search button is clicked, the indoor unit of the entered condition is searched and displayed in the indoor unit list.
- ⑫ Indoor Unit List : A list of searched indoor units is displayed and can be placed on the drawing by dragging.
- ⑬ Operation Information Legend : The color legend of the searched indoor units' operation information is displayed.
- ⑭ Add Indoor Unit : When the button is clicked, the indoor unit selected from the indoor unit list is placed on the drawing.
- ⑮ Modify : When the button is clicked, the indoor unit selected in the drawing is modified with the indoor unit selected from the indoor unit list.

1.2.1.1.1. VRF General Indoor Unit

1.2.1.1.1.1. Design Condition

The screenshot shows the 'Equipment' window with the 'Indoor Unit' tab selected. The 'Design Condition' section is expanded, showing various parameters and a list of indoor units. Red circles with numbers 1 through 9 highlight specific elements:

- 1: Expand arrow for 'Cassette/360'.
- 2: 'Design Condition' header.
- 3: 'Airflow Mode' dropdown menu.
- 4: 'Indoor Cooling DB' input field.
- 5: 'Indoor Cooling WB' input field.
- 6: 'Indoor Heating DB' input field.
- 7: 'Cooling Load' radio button and input field.
- 8: 'Sensible Heat Load' radio button and input field.
- 9: 'Heating Load' radio button and input field.

The 'Search' section below displays a list of indoor units with their specifications:

Model	5.20	3.60	6.00	1	0.00
AM052KN4PBH1	5.20	3.60	4.39	1	0.00
	kW	kW	kW	EA	%
AM060KN4PBH1	6.00	4.20	6.80	1	0.00
	6.00	4.20	4.89	1	0.00
	kW	kW	kW	EA	%
AM072KN4PBH1	7.20	5.10	8.10	1	0.00
	7.20	5.10	5.89	1	0.00
	kW	kW	kW	EA	%
AM083KN4PBH1	8.30	5.80	9.30	1	0.00
	8.30	5.80	6.78	1	0.00
	kW	kW	kW	EA	%
AM100KN4PBH1					

Legend: ■ Planned ■ Running ■ EOL

Buttons: Add Indoor Unit, Modify

① Model Hierarchy : Select the indoor unit's hierarchy

- ② Design Condition : A list of design conditions can be displayed and folded/unfolded.
- ③ Airflow Mode : Select the airflow mode for indoor unit design.
- ④ Indoor Cooling DB : Enter the indoor cooling dry bulb temperature for indoor unit design. Design condition values set at the time of project creation are set as default values.
- ⑤ Indoor Cooling WB : Enter the indoor cooling wet bulb temperature for indoor unit design. Design condition values set at the time of project creation are set as default values.
- ⑥ Indoor Heating DB : Enter the indoor heating dry bulb temperature for indoor unit design. Design condition values set at the time of project creation are set as default values.
- ⑦ Cooling Load : Optionally input cooling load for indoor unit design.
- ⑧ Sensible Heat Load : Optionally input sensible heat load for indoor unit design.
- ⑨ Heating Load : Optionally input heating load for indoor unit design.

1.2.1.1.1.2. Indoor Unit Information



- ① Color : Colors are displayed according to the indoor unit's operation mode. (See operation mode legend)
- ② Image : The indoor unit image is displayed. The description is displayed as a tool tip.
- ③ Error : If an error occurs during indoor unit capacity correction, the symbol is displayed. An error message is displayed as a tool tip.
- ④ Model Code : The indoor unit's model code is displayed. The description is displayed as a tool tip.
- ⑤ Rated Cooling Total Capacity : The rated cooling total capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑥ Rated Sensible Heating Capacity : The rated sensible heating capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑦ Rated Heating Total Capacity : The rated heating total capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑧ Corrected Cooling Total Capacity : The corrected cooling total capacity of the indoor unit is

displayed. The description is displayed as a tool tip.

- ⑨ Corrected Sensible Heating Capacity : The corrected sensible heating capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑩ Corrected Heating Total Capacity : The corrected heating total capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑪ Indoor Unit Qty. : The number of indoor units is displayed and can be set. The description is displayed as a tool tip.
- ⑫ Load Profile : The load profile according to the cooling load, sensible heat load, and heating load entered in the design conditions is displayed. The description is displayed as a tool tip.

1.2.1.1.2. VRF Hydro HE

1.2.1.1.2.1. Design Condition

The screenshot shows the 'Equipment' configuration window for an 'Indoor Unit'. The 'Design Condition' tab is active. The configuration includes fields for Cooling LWT, Heating LWT, ΔT (Entering Water and Leaving Water), Flow Rate, Cooling Load, and Heating Load. A search bar is located below the configuration fields, and a table of search results is displayed below the search bar. The table lists two models: AM320FN8DBH1 and AM520FN8DBH1, with their respective design conditions and efficiency values.

Equipment Configuration - Design Condition

Hydro unit/High Efficiency (HE) - 50°C

Usage Condition

Design Condition

Cooling LWT: 0.0 °C

Heating LWT: 0.0 °C

ΔT (Entering Water and Leaving Water): 5.0 °C

Flow Rate: LPM

Cooling Load: 0.00 kW

Heating Load: 0.00 kW

Search Results

Model	Cooling LWT (°C)	Heating LWT (°C)	ΔT (°C)	Cooling Load (kW)	Heating Load (kW)	Flow Rate (LPM)	Efficiency (EA %)
AM320FN8DBH1	29.00	32.00	5.0	0.00	0.00	1	0.00
AM520FN8DBH1	46.40	52.00	5.0	0.00	0.00	1	0.00

Planned Running EOL

Add Indoor Unit Modify

① Model Hierarchy : Select the indoor unit's hierarchy

- ② Design Condition : A list of design conditions can be displayed and folded/unfolded.
- ③ Cooling LWT : Enter the cooling leaving water temperature for indoor unit design. Design condition values set at the time of project creation are set as default values.
- ④ Heating LWT : Enter the heating leaving water temperature for indoor unit design. Design condition values set at the time of project creation are set as default values.
- ⑤ ΔT (Entering Water and Leaving Water) : Optionally input the ΔT (Entering Water and Leaving Water) for indoor unit design.
- ⑥ Flow Rate : Optionally input flow rate for indoor unit design.
- ⑦ Cooling Load : Optionally input cooling load for indoor unit design.
- ⑧ Heating Load : Optionally input heating load for indoor unit design.

1.2.1.1.2.2. Indoor Unit Information



- ① Color : Colors are displayed according to the indoor unit's operation mode. (See operation mode legend)
- ② Image : The indoor unit image is displayed. The description is displayed as a tool tip.
- ③ Error : If an error occurs during indoor unit capacity correction, the symbol is displayed. An error message is displayed as a tool tip.
- ④ Model Code : The indoor unit's model code is displayed. The description is displayed as a tool tip.
- ⑤ Rated Cooling Total Capacity : The rated cooling total capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑥ Rated Heating Total Capacity : The rated heating total capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑦ Cooling EWT : The indoor unit's cooling entering water temperature is displayed. The description is displayed as a tool tip.
- ⑧ Corrected Cooling Total Capacity : The corrected cooling total capacity of the indoor unit is displayed. The description is displayed as a tool tip.

- ⑨ Corrected Heating Total Capacity : The corrected heating total capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑩ Heating EWT : The heating entering water temperature of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑪ Indoor Unit Qty. : The number of indoor units is displayed and can be set. The description is displayed as a tool tip.
- ⑫ Load Profile : The load profile according to the cooling load, sensible heat load, and heating load entered in the design conditions is displayed. The description is displayed as a tool tip.

1.2.1.1.3. VRF Hydro HT

1.2.1.1.3.1. Design Condition

The screenshot shows the 'Equipment' configuration window for an 'Indoor Unit'. The window has tabs for 'Indoor Unit', 'Outdoor Unit', and 'Piping Material'. The 'Indoor Unit' tab is active, showing a 'Search' and 'Bookmark' section. Below this, the 'Hydro unit/High Temperature (HT) - 80°C' is selected. The 'Usage Condition' is set to 'Design Condition'. The 'Heating LWT' is 0.0 °C. The 'ΔT (Entering Water and Leaving Water)' is 5.0 °C. The 'Flow Rate' is 0.00 LPM. The 'Heating Load' is 0.00 kW. Below these settings, a 'Search' section lists three units: AM160FNBFB1, AM250FNBFB1, and AM250FNBFB1. Each unit entry shows its power (16.00 kW, 25.00 kW, 25.00 kW), temperature (-5.0 °C), and efficiency (1 EA, 0.00 %). The units are color-coded: Planned (blue), Running (green), and EOL (yellow). The legend at the bottom indicates: Planned (blue square), Running (green square), EOL (yellow square). The 'Add Indoor Unit' and 'Modify' buttons are at the bottom.

Equipment

Indoor Unit Outdoor Unit Piping Material

Search Bookmark

Hydro unit/High Temperature (HT) - 80°C

Usage Condition

Design Condition

Heating LWT 0.0 °C

ΔT (Entering Water and Leaving Water) 5.0 °C

Flow Rate 0.00 LPM

Heating Load 0.00 kW

Search

AM160FNBFB1
16.00
0.00 -5.0 1 0.00
kW °C EA %

AM250FNBFB1
25.00
0.00 -5.0 1 0.00
kW °C EA %

AM250FNBFB1
25.00
0.00 -5.0 1 0.00
kW °C EA %

Planned Running EOL

Add Indoor Unit Modify

① Model Hierarchy : Select the indoor unit's hierarchy

- ② Design Condition : A list of design conditions can be displayed and folded/unfolded.
- ③ Heating LWT : Enter the heating leaving water temperature for indoor unit design. Design condition values set at the time of project creation are set as default values.
- ④ ΔT (Entering Water and Leaving Water) : Optionally input the ΔT (Entering Water and Leaving Water) for indoor unit design.
- ⑤ Flow Rate : Optionally input flow rate for indoor unit design.
- ⑥ Heating Load : Optionally input heating load for indoor unit design.

1.2.1.1.3.2. Indoor Unit Information



- ① Color : Colors are displayed according to the indoor unit's operation mode. (See operation mode legend)
- ② Image : The indoor unit image is displayed. The description is displayed as a tool tip.
- ③ Error : If an error occurs during indoor unit capacity correction, the symbol is displayed. An error message is displayed as a tool tip.
- ④ Model Code : The indoor unit's model code is displayed. The description is displayed as a tool tip.
- ⑤ Rated Heating Total Capacity : The rated heating total capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑥ Corrected Heating Total Capacity : The corrected heating total capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑦ Heating EWT : The heating entering water temperature of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑧ Indoor Unit Qty. : The number of indoor units is displayed and can be set. The description is displayed as a tool tip.
- ⑨ Load Profile : The load profile according to the cooling load, sensible heat load, and heating load entered in the design conditions is displayed. The description is displayed as a tool tip.

1.2.1.1.4. VRF OAP Duct

1.2.1.1.4.1. Design Condition

Equipment

Indoor Unit Outdoor Unit Piping Material

Search Bookmark

Ventilation/Outside Air Processing (OAP) 1

Usage Condition

Design Condition 2

Airflow Mode High 3

Cooling Discharge Temperature 18.0 °C 4

Heating Discharge Temperature 25.0 5

Required Ventilation Volume CMM 6

☒ Time 7

Ventilation Rate per Hour 1 8

Room Volume 0.00 m 9

☐ Personnel 10

Ventilation Rate per Person CMM 11

Occupants 1 12

Search

Model	21.10	9.61	13.77	28	1	0.00
AM072J/NESCH/AA	6.57	4.78	15.01	CMM	EA	%
	kW	kW	kW			

Model	28.13	12.75	17.29	35	1	0.00
AM096J/NESCH/AA	8.73	6.36	18.69	CMM	EA	%
	kW	kW	kW			

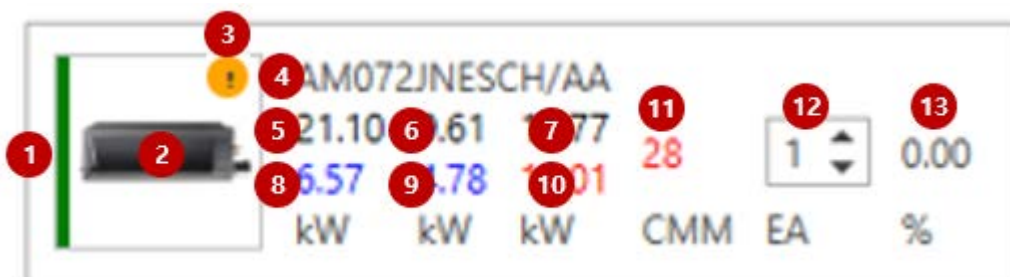
Planned Running EOL

Add Indoor Unit Modify

① Model Hierarchy : Select the indoor unit's hierarchy

- ② Design Condition : A list of design conditions can be displayed and folded/unfolded.
- ③ Airflow Mode : Select the airflow mode for indoor unit design.
- ④ Cooling Discharge Temperature : Enter the cooling discharge temperature for indoor unit design. Design condition values set at the time of project creation are set as default values.
- ⑤ Heating Discharge Temperature : Enter the heating discharge temperature for indoor unit design. Design condition values set at the time of project creation are set as default values.
- ⑥ Required Ventilation Volume : Enter the required ventilation volume for indoor unit design. When setting the time or personnel conditions, the required ventilation volume is automatically calculated.
- ⑦ Time : When checked, the ventilation rate per hour and the room volume are activated, and the required ventilation volume can be calculated based on the time.
- ⑧ Ventilation Rate per Hour : Enter the ventilation rate per hour. When entering a value, the required ventilation volume is automatically calculated.
- ⑨ Room Volume : Enter the room volume. When entering a value, the required ventilation volume is automatically calculated.
- ⑩ Personnel : When checked, the ventilation rate per person and occupants are activated, and the required ventilation volume can be calculated based on the person
- ⑪ Ventilation Rate per Person : Enter the ventilation rate per person. When entering a value, the required ventilation volume is automatically calculated.
- ⑫ Occupants : Enter the occupants. When entering a value, the required ventilation volume is automatically calculated.

1.2.1.1.4.2. Indoor Unit Information

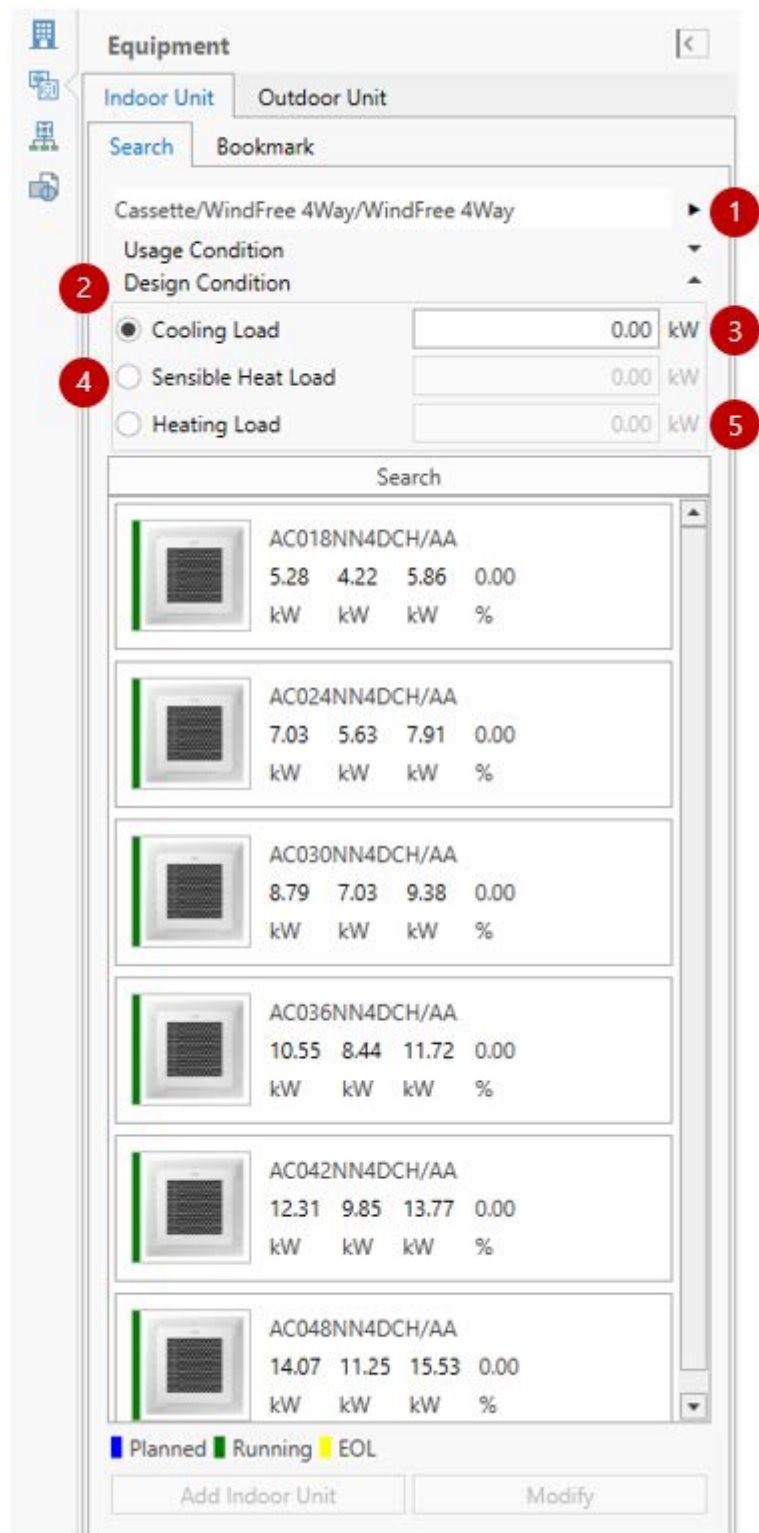


- ① Color : Colors are displayed according to the indoor unit's operation mode. (See operation mode legend)
- ② Image : The indoor unit image is displayed. The description is displayed as a tool tip.
- ③ Error : If an error occurs during indoor unit capacity correction, the symbol is displayed. An error message is displayed as a tool tip.

- ④ Model Code : The indoor unit's model code is displayed. The description is displayed as a tool tip.
- ⑤ Rated Cooling Total Capacity : The rated cooling total capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑥ Rated Sensible Heating Capacity : The rated sensible heating capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑦ Rated Heating Total Capacity : The rated heating total capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑧ Corrected Cooling Total Capacity : The corrected cooling total capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑨ Corrected Sensible Heating Capacity : The corrected sensible heating capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑩ Corrected Heating Total Capacity : The corrected heating total capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑪ Rated Airflow(High) : The rated airflow(high) of the indoor unit is displayed. The description is displayed as a tip.
- ⑫ Indoor Unit Qty. : The number of indoor units is displayed and can be set. The description is displayed as a tool tip.
- ⑬ Load Profile : The load profile according to the cooling load, sensible heat load, and heating load entered in the design conditions is displayed. The description is displayed as a tool tip.

1.2.1.1.5. Single Indoor Unit

1.2.1.1.5.1. Design Condition



Equipment

Indoor Unit Outdoor Unit

Search Bookmark

Cassette/WindFree 4Way/WindFree 4Way

Usage Condition

Design Condition

☒ Cooling Load 0.00 kW

☐ Sensible Heat Load 0.00 kW

☐ Heating Load 0.00 kW

Search

Model	Power (kW)	Capacity (kW)	Efficiency (%)	Status
AC018NN4DCH/AA	5.28	4.22	5.86	0.00
AC024NN4DCH/AA	7.03	5.63	7.91	0.00
AC030NN4DCH/AA	8.79	7.03	9.38	0.00
AC036NN4DCH/AA	10.55	8.44	11.72	0.00
AC042NN4DCH/AA	12.31	9.85	13.77	0.00
AC048NN4DCH/AA	14.07	11.25	15.53	0.00

Planned Running EOL

Add Indoor Unit Modify

① Model Hierarchy : Select the indoor unit's hierarchy

- ② Design Condition : A list of design conditions can be displayed and folded/unfolded.
- ③ Cooling Load : Optionally input cooling load for indoor unit design.
- ④ Sensible Heat Load : Optionally input sensible heat load for indoor unit design.
- ⑤ Heating Load : Optionally input heating load for indoor unit design.

1.2.1.1.5.2. Indoor Unit Information



- ① Color : Colors are displayed according to the indoor unit's operation mode. (See operation mode legend)
- ② Image : The indoor unit image is displayed. The description is displayed as a tool tip.
- ③ Error : If an error occurs during indoor unit capacity correction, the symbol is displayed. An error message is displayed as a tool tip.
- ④ Model Code : The indoor unit's model code is displayed. The description is displayed as a tool tip.
- ⑤ Rated Cooling Total Capacity : The rated cooling total capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑥ Rated Sensible Heating Capacity : The rated sensible heating capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑦ Rated Heating Total Capacity : The rated heating total capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑧ Load Profile : The load profile according to the cooling load, sensible heat load, and heating load entered in the design conditions is displayed. The description is displayed as a tool tip.

1.2.1.1.6. FJM Indoor Unit

1.2.1.1.6.1. Design Condition

Equipment

Indoor Unit Outdoor Unit

Search Bookmark

Cassette/WindFree 4Way 600*600(2*2)

Usage Condition





Design Condition

☒ Cooling Load 0.00 kW

☐ Sensible Heat Load 0.00 kW

☐ Heating Load 0.00 kW

Search

	AJ009NBNDCH/AA	2.61	1.88	2.90	0.00	9
		kW	kW	kW	%	
	AJ009TNNDCH/AA	2.61	1.93	2.90	0.00	9
		kW	kW	kW	%	
	AJ018NBNDCH/AA	5.19	3.75	5.60	0.00	18
		kW	kW	kW	%	
	AJ018TNNDCH/AA	5.19	3.87	5.60	0.00	18
		kW	kW	kW	%	

Planned Running EOL

Add Indoor Unit Modify

① Model Hierarchy : Select the indoor unit's hierarchy

- ② Design Condition : A list of design conditions can be displayed and folded/unfolded.
- ③ Cooling Load : Optionally input cooling load for indoor unit design.
- ④ Sensible Heat Load : Optionally input sensible heat load for indoor unit design.
- ⑤ Heating Load : Optionally input heating load for indoor unit design.

1.2.1.1.6.2. Indoor Unit Information



- ① Color : Colors are displayed according to the indoor unit's operation mode. (See operation mode legend)
- ② Image : The indoor unit image is displayed. The description is displayed as a tool tip.
- ③ Error : If an error occurs during indoor unit capacity correction, the symbol is displayed. An error message is displayed as a tool tip.
- ④ Model Code : The indoor unit's model code is displayed. The description is displayed as a tool tip.
- ⑤ Rated Cooling Total Capacity : The rated cooling total capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑥ Rated Sensible Heating Capacity : The rated sensible heating capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑦ Rated Heating Total Capacity : The rated heating total capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑧ Load Profile : The load profile according to the cooling load, sensible heat load, and heating load entered in the design conditions is displayed. The description is displayed as a tool tip.
- ⑨ Combination Index : Display the combination index of the indoor unit.

1.2.1.1.7. Chiller FCU

1.2.1.1.7.1. Design Condition

Equipment

Indoor Unit Outdoor Unit

Search Bookmark

Water FCU/360

Usage Condition

Design Condition

Airflow Mode High

Indoor Cooling WB 19.0 °C

Indoor Heating DB 20.0 °C

Cooling EWT 0.0 °C

Heating EWT 0.0 °C

ΔT (Entering Water and Leaving Water) 5.0 °C

Flow Rate LPM

Cooling Heat Transfer Load 0.00 kW

Sensible Heat Load 0.00 kW

Heating Heat Transfer Load 0.00 kW

Search

Model	6.00	4.70	11.50	0.0	1	0.00
	kW	kW	kW	°C	EA	%
AG060MN4PBH1	0.00	0.00	0.30	0.0	1	0.00
AG072MN4PBH1	7.20	5.70	12.50	0.0	1	0.00
AG090MN4PBH1	9.00	7.10	15.00	0.0	1	0.00
AG105MN4PBH1	10.50	8.20	18.00	0.0		

Planned Running EOL

Add Indoor Unit Modify

① Model Hierarchy : Select the indoor unit's hierarchy

- ② Design Condition : A list of design conditions can be displayed and folded/unfolded.
- ③ Airflow Mode : Select the airflow mode for indoor unit design.
- ④ Indoor Cooling DB : Enter the indoor cooling dry bulb temperature for indoor unit design. Design condition values set at the time of project creation are set as default values.
- ⑤ Indoor Heating DB : Enter the indoor heating dry bulb temperature for indoor unit design. Design condition values set at the time of project creation are set as default values.
- ⑥ Cooling LWT : Enter the cooling leaving water temperature for indoor unit design. Design condition values set at the time of project creation are set as default values.
- ⑦ Heating LWT : Enter the heating leaving water temperature for indoor unit design. Design condition values set at the time of project creation are set as default values.
- ⑧ ΔT (Entering Water and Leaving Water) : Optionally input the ΔT (Entering Water and Leaving Water) for indoor unit design.
- ⑨ Flow Rate : Optionally input flow rate for indoor unit design.
- ⑩ Cooling Load : Optionally input cooling load for indoor unit design.
- ⑪ Sensible Heat Load : Optionally input sensible heat load for indoor unit design.
- ⑫ Heating Load : Optionally input heating load for indoor unit design.

1.2.1.1.7.2. Indoor Unit Information



- ① Color : Colors are displayed according to the indoor unit's operation mode. (See operation mode legend)
- ② Image : The indoor unit image is displayed. The description is displayed as a tool tip.
- ③ Error : If an error occurs during indoor unit capacity correction, the symbol is displayed. An error message is displayed as a tool tip.
- ④ Model Code : The indoor unit's model code is displayed. The description is displayed as a tool tip.
- ⑤ Rated Cooling Total Capacity : The rated cooling total capacity of the indoor unit is displayed. The description is displayed as a tool tip.

- ⑥ Rated Sensible Heating Capacity : The rated sensible heating capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑦ Rated Heating Total Capacity : The rated heating total capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑧ Cooling LWT : The cooling leaving water temperature of the indoor unit's is displayed. The description is displayed as a tool tip.
- ⑨ Corrected Cooling Total Capacity : The corrected cooling total capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑩ Corrected Sensible Heating Capacity : The corrected sensible heating capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑪ Corrected Heating Total Capacity : The corrected heating total capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑫ Heating LWT : The heating leaving water temperature of the indoor unit's is displayed. The description is displayed as a tool tip.
- ⑬ Indoor Unit Qty. : The number of indoor units is displayed and can be set. The description is displayed as a tool tip.
- ⑭ Load Profile : The load profile according to the cooling load, sensible heat load, and heating load entered in the design conditions is displayed. The description is displayed as a tool tip.

1.2.1.1.8. EHS General Indoor Unit

1.2.1.1.8.1. Design Condition

Equipment

Indoor Unit Outdoor Unit Piping Material

Search Bookmark

TDM Plus/Wall Mounted ▶ 1

Usage Condition ▼

Design Condition ▲ 2

Indoor Cooling WB 19.0 °C 3

Indoor Heating DB 20.0 °C 4

☒ Cooling Heat Transfer Load 0.00 kW 5

☐ Sensible Heat Load 0.00 kW 6

☐ Heating Heat Transfer Load 0.00 kW 7

Search

	AE022MNADEH/EU	2.20	1.50	2.50	1	0.00
		2.20	1.50	2.30		
		kW	kW	kW	EA	%

	AE022TNXDEH/EU	2.20	1.50	2.50	1	0.00
		2.20	1.50	2.30		
		kW	kW	kW	EA	%

	AE028MNADEH/EU	2.80	1.90	3.20	1	0.00
		2.80	1.90	2.50		
		kW	kW	kW	EA	%

	AE028TNXDEH/EU	2.80	1.90	3.20	1	0.00
		2.80	1.90	2.50		
		kW	kW	kW	EA	%

	AE036MNADEH/EU	3.60	2.40	4.00	1	0.00
		3.60	2.40	3.20		
		kW	kW	kW	EA	%

Planned Running EOL

Add Indoor Unit Modify

① Model Hierarchy : Select the indoor unit's hierarchy

- ② Design Condition : A list of design conditions can be displayed and folded/unfolded.
- ③ Indoor Cooling WB : Enter the indoor cooling wet bulb temperature for indoor unit design. Design condition values set at the time of project creation are set as default values.
- ④ Indoor Heating DB : Enter the indoor heating dry bulb temperature for indoor unit design. Design condition values set at the time of project creation are set as default values.
- ⑤ Cooling Load : Optionally input cooling load for indoor unit design.
- ⑥ Sensible Heat Load : Optionally input sensible heat load for indoor unit design.
- ⑦ Heating Load : Optionally input heating load for indoor unit design.

1.2.1.1.8.2. Indoor Unit Information

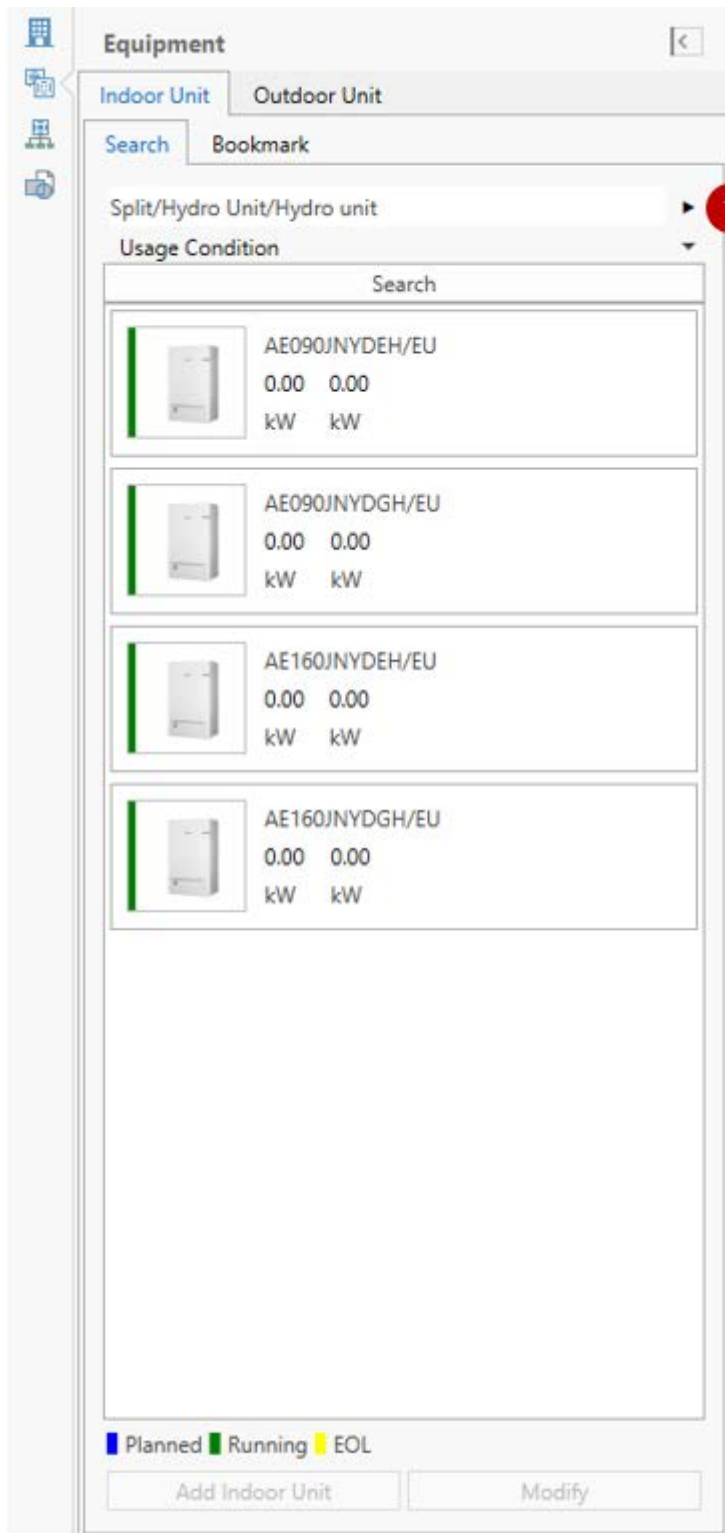


- ① Color : Colors are displayed according to the indoor unit's operation mode. (See operation mode legend)
- ② Image : The indoor unit image is displayed. The description is displayed as a tool tip.
- ③ Error : If an error occurs during indoor unit capacity correction, the symbol is displayed. An error message is displayed as a tool tip.
- ④ Model Code : The indoor unit's model code is displayed. The description is displayed as a tool tip.
- ⑤ Rated Cooling Total Capacity : The rated cooling total capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑥ Rated Sensible Heating Capacity : The rated sensible heating capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑦ Rated Heating Total Capacity : The rated heating total capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑧ Corrected Cooling Total Capacity : The corrected cooling total capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑨ Corrected Sensible Heating Capacity : The corrected sensible heating capacity of the indoor unit is displayed. The description is displayed as a tool tip.

- ⑩ Corrected Heating Total Capacity : The corrected heating total capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑪ Indoor Unit Qty. : The number of indoor units is displayed and can be set. The description is displayed as a tool tip.
- ⑫ Load Profile : The load profile according to the cooling load, sensible heat load, and heating load entered in the design conditions is displayed. The description is displayed as a tool tip.

1.2.1.1.9. EHS Hydro

1.2.1.1.9.1. Design Condition



Equipment





Indoor Unit Outdoor Unit

Search Bookmark

Split/Hydro Unit/Hydro unit

Usage Condition

Search

	AE090JNYDEH/EU 0.00 0.00 kW kW
	AE090JNYDGH/EU 0.00 0.00 kW kW
	AE160JNYDEH/EU 0.00 0.00 kW kW
	AE160JNYDGH/EU 0.00 0.00 kW kW

Planned Running EOL

Add Indoor Unit Modify

① Model Hierarchy : Select the indoor unit's hierarchy

1.2.1.1.9.2. Indoor Unit Information



- ① Color : Colors are displayed according to the indoor unit's operation mode. (See operation mode legend)
- ② Image : The indoor unit image is displayed. The description is displayed as a tool tip.
- ③ Error : If an error occurs during indoor unit capacity correction, the symbol is displayed. An error message is displayed as a tool tip.
- ④ Model Code : The indoor unit's model code is displayed. The description is displayed as a tool tip.
- ⑤ Rated Cooling Total Capacity : The rated cooling total capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑥ Rated Heating Total Capacity : The rated heating total capacity of the indoor unit is displayed. The description is displayed as a tool tip.

1.2.1.1.10. ERV

1.2.1.1.10.1. Design Condition

Equipment <

Indoor Unit

Search Bookmark

Energy Recovery Ventilation (ERV)/Energy Recovery Ventilator ▶ 1

Usage Condition ▼

Design Condition ▲ 2

Required Ventilation Volume [] CMM 3

☒ Time 4

Ventilation Rate per Hour [] 1 5

Room Volume [] 0.00 m³ 6

☐ Personnel 7

Ventilation Rate per Person [] CMM 8

Occupants [] 1 9

Search

	AN026J/SKLKN/EU	4	4	3	1	0.00
		CMM	CMM	CMM	EA	%
	AN035J/SKLKN/EU	6	6	4	1	0.00
		CMM	CMM	CMM	EA	%
	AN050J/SKLKN/EU	8	8	6	1	0.00
		CMM	CMM	CMM	EA	%
	AN080J/SKLKN/EU	13	13	9	1	0.00
		CMM	CMM	CMM	EA	%
	AN100J/SKLKN/EU					

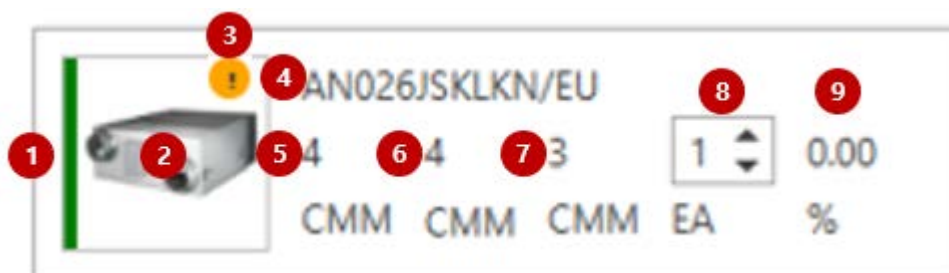
Planned Running EOL

Add Indoor Unit Modify

- ① Model Hierarchy : Select the indoor unit's hierarchy
- ② Design Condition : A list of design conditions can be displayed and folded/unfolded.

- ③ Required Ventilation Volume : Enter the required ventilation volume for indoor unit design. When setting the time or personnel conditions, the required ventilation volume is automatically calculated.
- ④ Time : When checked, the ventilation rate per hour and the room volume are activated, and the required ventilation volume can be calculated based on the time.
- ⑤ Ventilation Rate per Hour : Enter the ventilation rate per hour. When entering a value, the required ventilation volume is automatically calculated.
- ⑥ Room Volume : Enter the room volume. When entering a value, the required ventilation volume is automatically calculated.
- ⑦ Personnel : When checked, the ventilation rate per person and occupants are activated, and the required ventilation volume can be calculated based on the person
- ⑧ Ventilation Rate per Person : Enter the ventilation rate per person. When entering a value, the required ventilation volume is automatically calculated.
- ⑨ Occupants : Enter the occupants. When entering a value, the required ventilation volume is automatically calculated.

1.2.1.1.10.2. Indoor Unit Information



- ① Color : Colors are displayed according to the indoor unit's operation mode. (See operation mode legend)
- ② Image : The indoor unit image is displayed. The description is displayed as a tool tip.
- ③ Error : If an error occurs during indoor unit capacity correction, the symbol is displayed. An error message is displayed as a tool tip.
- ④ Model Code : The indoor unit's model code is displayed. The description is displayed as a tool tip.
- ⑤ Rated Airflow Turbo : Displays the rated airflow turbo. The description is displayed as a tool tip.
- ⑥ Rated Airflow High : Displays the rated airflow high. The description is displayed as a tool tip.
- ⑦ Rated Airflow Low : Displays the rated airflow low. The description is displayed as a tool tip.
- ⑧ Indoor Units Qty: Display or modify Indoor Units Qty. The description is displayed as a tool tip.

- ⑨ Load Profile : Displays the load profile according to the cooling load, sensible heat load, and heating load entered in the design conditions. The description is displayed as a tool tip.

1.2.1.1.11. Split DOAS

1.2.1.1.11.1. Design Condition

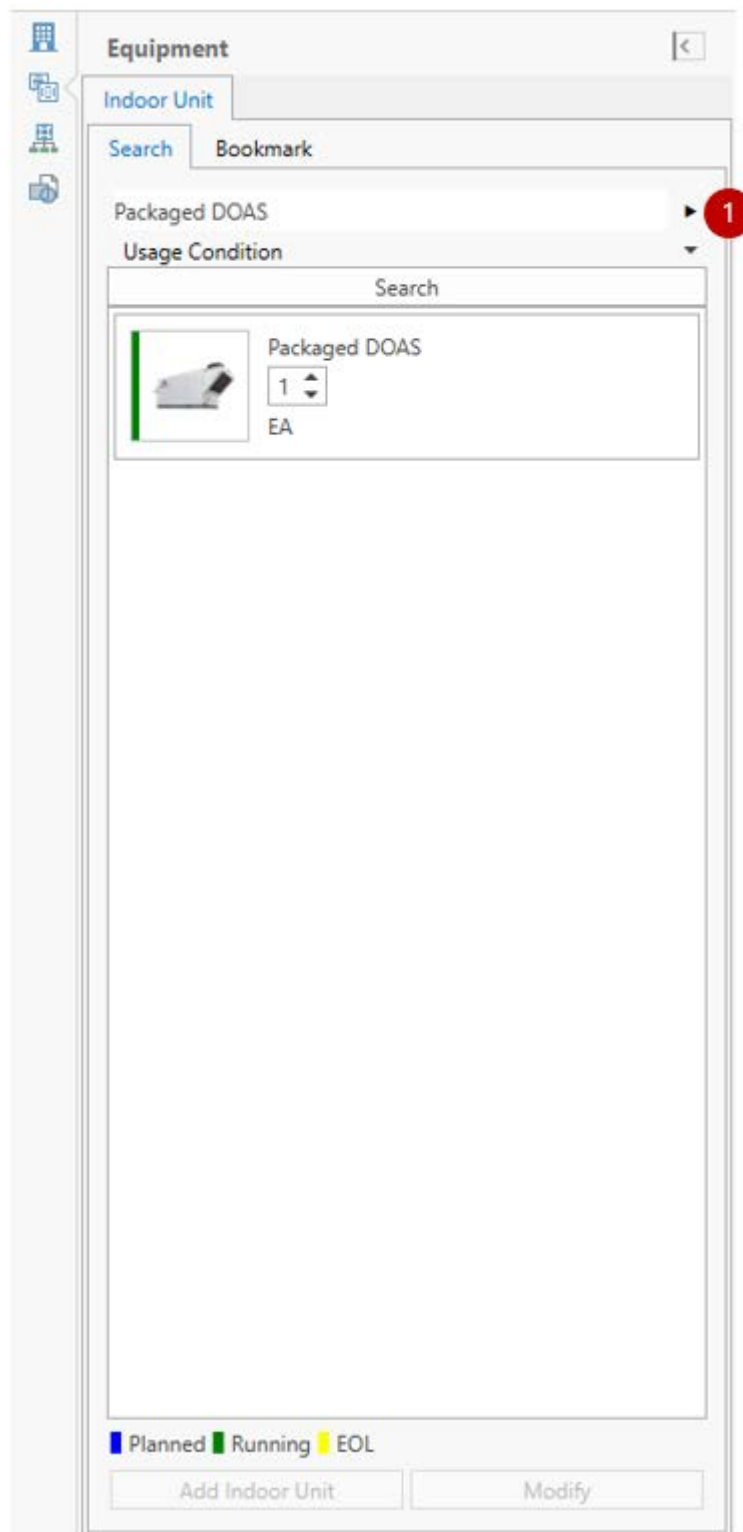
To be written later

1.2.1.1.11.2. Indoor Unit Information

To be written later

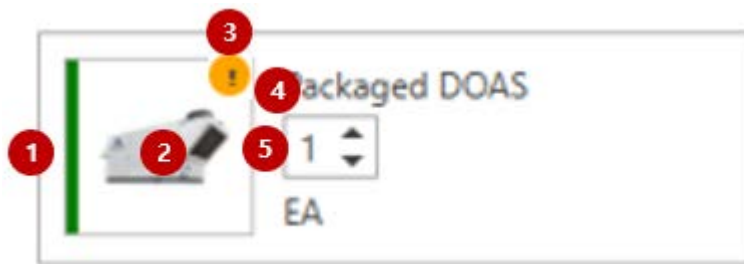
1.2.1.1.12. Packaged DOAS

1.2.1.1.12.1. Design Condition



① Model Hierarchy : Select the indoor unit's hierarchy

1.2.1.1.12.2. Indoor Unit Information



- ① Color : Colors are displayed according to the indoor unit's operation mode. (See operation mode legend)
- ② Image : The indoor unit image is displayed. The description is displayed as a tool tip.
- ③ Error : If an error occurs during indoor unit capacity correction, the symbol is displayed. An error message is displayed as a tool tip.
- ④ Model Code : The indoor unit's model code is displayed. The description is displayed as a tool tip.
- ⑤ Indoor Unit Qty. : The number of indoor units is displayed and can be set. The description is displayed as a tool tip.

1.2.1.1.13. User Equipment

1.2.1.1.13.1. Design Condition

The screenshot shows the 'Equipment' dialog box with the 'Indoor Unit' tab selected. The 'Design Condition' section is active, showing three radio button options: 'Cooling Heat Transfer Load' (selected), 'Sensible Heat Load', and 'Heating Heat Transfer Load'. Each option has a corresponding input field with a value of 0.00 and a unit of kW. Below this is a 'Search' section with a list of three air handling units: CAC-AHU2, AHU 10HP, and AHU 30HP. Each unit entry includes a small icon, a table of values (3.46, 2.49, 3.11 for CAC-AHU2; 28.00, 0.00, 32.60 for AHU 10HP; 84.00, 0.00, 97.80 for AHU 30HP), a unit selector (EA), and a percentage field (0.00%). At the bottom, there is a legend for 'Planned' (blue), 'Running' (green), and 'EOL' (yellow), and two buttons: 'Add Indoor Unit' and 'Modify'.

Equipment

Indoor Unit Outdoor Unit Piping Material

Search Bookmark

User Equipment/Air Handling Unit ▶ 1

Usage Condition ▼

Design Condition ▲ 2

☒ Cooling Heat Transfer Load 0.00 kW 3

☐ Sensible Heat Load 0.00 kW 4

☐ Heating Heat Transfer Load 0.00 kW 5

Search

Icon	Model	Value 1	Value 2	Value 3	Unit	Value 4
	CAC-AHU2	3.46	2.49	3.11	EA	0.00
		kW	kW	kW		%
	AHU 10HP	28.00	0.00	32.60	EA	0.00
		kW	kW	kW		%
	AHU 30HP	84.00	0.00	97.80	EA	0.00
		kW	kW	kW		%

Planned Running EOL

Add Indoor Unit Modify

① Model Hierarchy : Select the indoor unit's hierarchy

- ② Design Condition : A list of design conditions can be displayed and folded/unfolded.
- ③ Cooling Load : Optionally input cooling load for indoor unit design.
- ④ Sensible Heat Load : Optionally input sensible heat load for indoor unit design.
- ⑤ Heating Load : Optionally input heating load for indoor unit design.

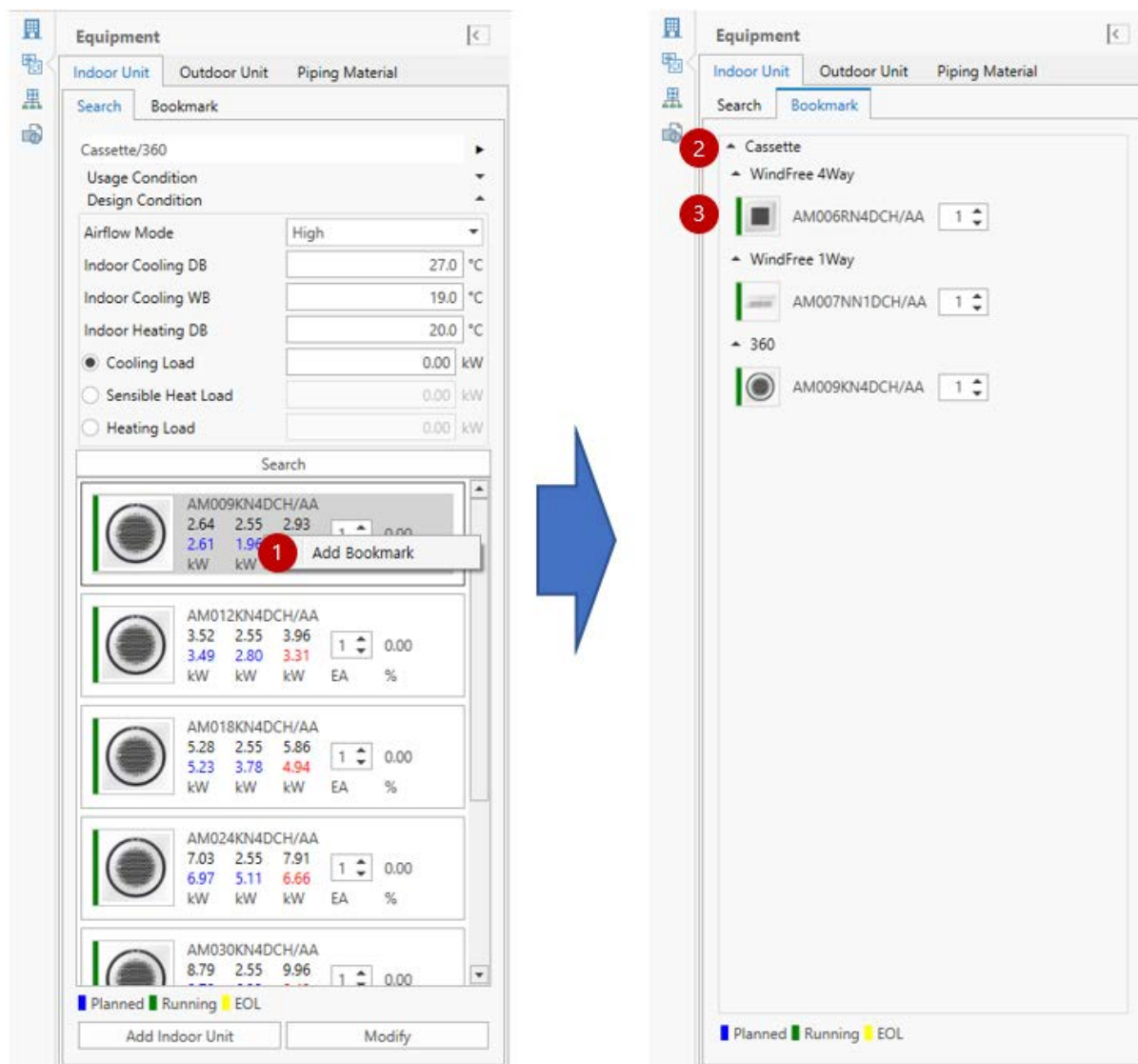
1.2.1.1.13.2. Indoor Unit Information



- ① Color : Colors are displayed according to the indoor unit's operation mode. (See operation mode legend)
- ② Image : The indoor unit image is displayed. The description is displayed as a tool tip.
- ③ Error : If an error occurs during indoor unit capacity correction, the symbol is displayed. An error message is displayed as a tool tip.
- ④ Model Code : The indoor unit's model code is displayed. The description is displayed as a tool tip.
- ⑤ Rated Cooling Total Capacity : The rated cooling total capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑥ Rated Sensible Heating Capacity : The rated sensible heating capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑦ Rated Heating Total Capacity : The rated heating total capacity of the indoor unit is displayed. The description is displayed as a tool tip.
- ⑧ Indoor Unit Qty. : The number of indoor units is displayed and can be set. The description is displayed as a tool tip.
- ⑨ Load Profile : The load profile according to the cooling load, sensible heat load, and heating load entered in the design conditions is displayed. The description is displayed as a tool tip.

1.2.1.2. Bookmark

Clicking the right mouse button on the searched indoor unit in the indoor unit search tab activates the "Add Bookmark" menu. Clicking the corresponding menu will add it to the indoor unit's bookmark list. When designing the system later, only models compatible with the system will be displayed in the bookmark list. You can place indoor units by dragging them from the bookmark list to the drawing.



- ① Add Bookmark : Add the indoor unit to the list of bookmark.
- ② Classification : Indoor units are represented by classification and can be folded/unfolded.
- ③ Indoor Unit : The added indoor unit's operation information, image, model code, number of units, etc. are displayed, and the number of units can be entered.

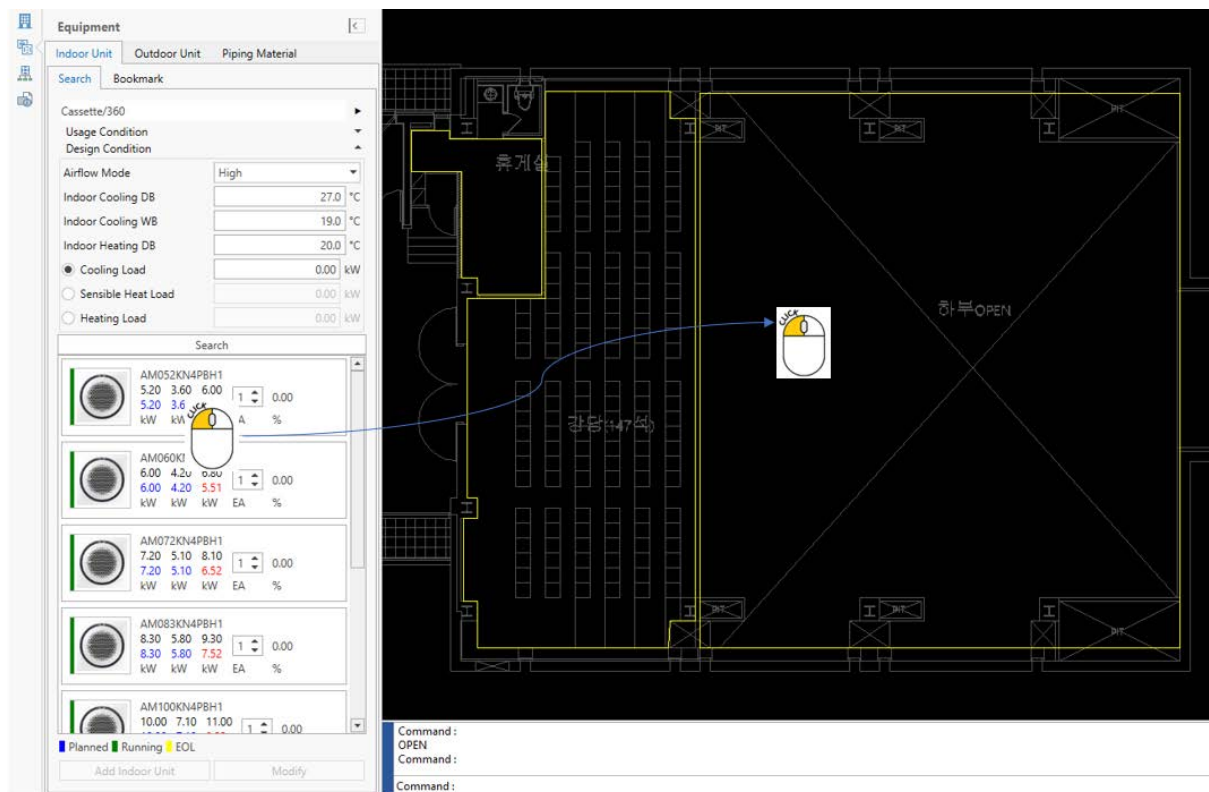
1.2.1.3. Placement

Command : DVMDRAWINDOOR

1.2.1.3.1. Placement Method

1.2.1.3.1.1. Drag & Drop

You can place an indoor unit by dragging it from the searched indoor unit list or the bookmark list to the drawing.



1.2.1.3.1.2. Add Indoor Unit Button

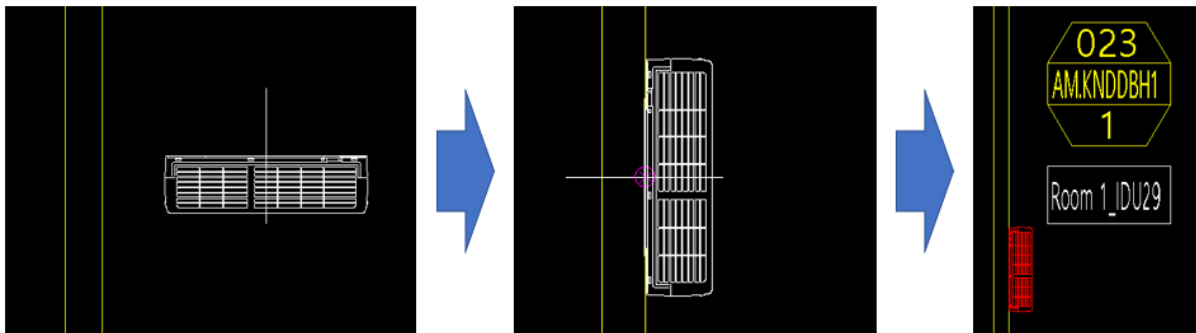
After selecting the indoor unit to be placed from the searched indoor unit list, you can place it by clicking the "Add Indoor Unit" button.

The screenshot shows a software window titled "Equipment" with tabs for "Indoor Unit", "Outdoor Unit", and "Piping Material". The "Indoor Unit" tab is active, showing a search results list. The list includes units like AM052KN4PBH1, AM060KN4PBH1, AM072KN4PBH1, AM083KN4PBH1, and AM100KN4PBH1. Each unit entry displays a circular icon, a table of values (5.20, 3.60, 6.00 for AM052; 6.00, 4.20, 6.80 for AM060; 7.20, 5.10, 8.10 for AM072; 8.30, 5.80, 9.30 for AM083; 10.00, 7.10, 11.00 for AM100), a quantity selector (set to 1), and a power value (0.00 kW). Below the list, a legend indicates "Planned" (blue), "Running" (green), and "EQI" (yellow). At the bottom, the "Add Indoor Unit" button is highlighted with a red rectangular box, and a "Modify" button is also visible.

Unit Model	Value 1	Value 2	Value 3	Quantity	Power (kW)
AM052KN4PBH1	5.20	3.60	6.00	1	0.00
AM060KN4PBH1	6.00	4.20	6.80	1	0.00
AM072KN4PBH1	7.20	5.10	8.10	1	0.00
AM083KN4PBH1	8.30	5.80	9.30	1	0.00
AM100KN4PBH1	10.00	7.10	11.00	1	0.00

1.2.1.3.2. Placement of attachment to the wall

In the case of an indoor unit that is attached to the wall, such as a wall-mounted indoor unit type, the indoor unit is attached by placing the mouse near the line. During placement, you can change the insertion point by pressing the TAB key, and you can change the placement direction of the indoor unit by pressing the CTRL key.

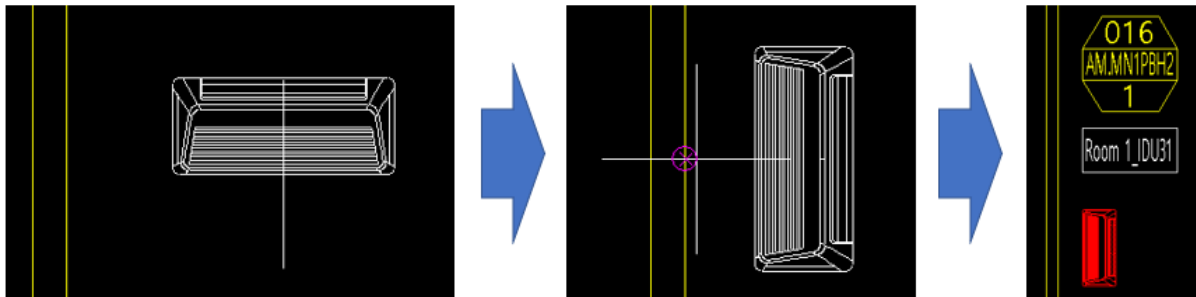


> Command Window

> Specify insert point (TAB : Change base point, CTRL : Change Direction) : Pick a point to insert the indoor unit. Press the TAB key to change the reference point, and press the CTRL key to change the direction of the indoor unit. If there is more than one indoor unit to be placed, the command is repeated as many as the number of indoor units to be placed.

1.2.1.3.3. Offset placement from the wall

If it is arranged based on a certain distance from the wall like the 1Way indoor unit type, if you place the mouse near the line, enter the distance from the wall and the indoor unit is attached. During placement, you can change the insertion point by pressing the TAB key, and you can change the placement direction of the indoor unit by pressing the CTRL key.



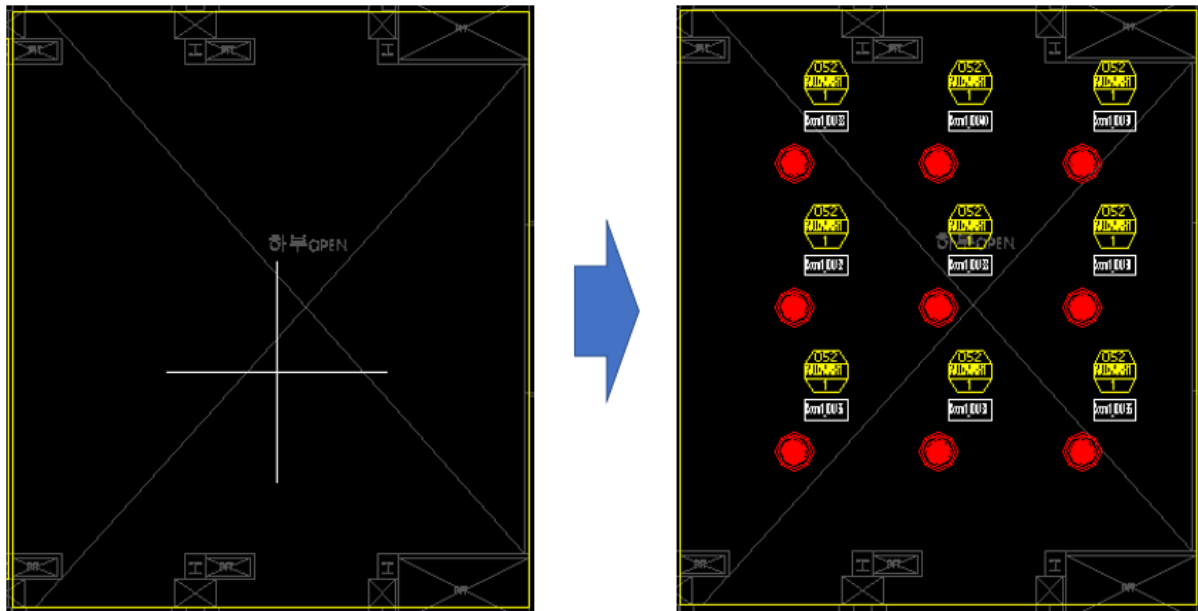
> Command Window

> Enter separation distance <300> : Enter the separation distance from the wall.

> Specify insert point (TAB : Change base point, CTRL : Change Direction) : Pick a point to insert the indoor unit. Press the TAB key to change the reference point, and press the CTRL key to change the direction of the indoor unit. If there is more than one indoor unit to be placed, the command is repeated as many as the number of indoor units to be placed.

1.2.1.3.4. Placement in the center of the room

For indoor units that are not attached to the wall, such as 4Way or 360 type, and if there are more than one indoor unit to be placed, it can be placed in the center.

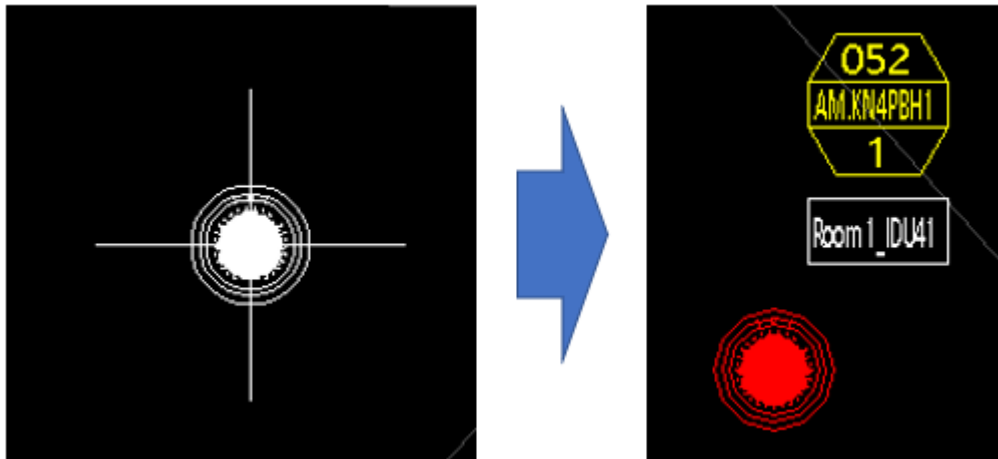


> Command Window

- > Select indoor unit arrangement method [Center(C)/User deployment(U)]<Center(C)> : Enter 'C' to start centering.
- > Enter the number of rows <1> : Enter the number of rows.
- > Enter the separation distance between horizontal <3000> : Enter the horizontal separation distance.
- > Enter the separation distance between vertical <3000> : Enter the vertical separation distance.
- > Enter the rotation angle <0.00> : Enter the rotation angle of the indoor units.

1.2.1.3.5. User placement

For indoor units that are not attached to the wall, such as the 4Way or 360 type, user arrangement is possible.



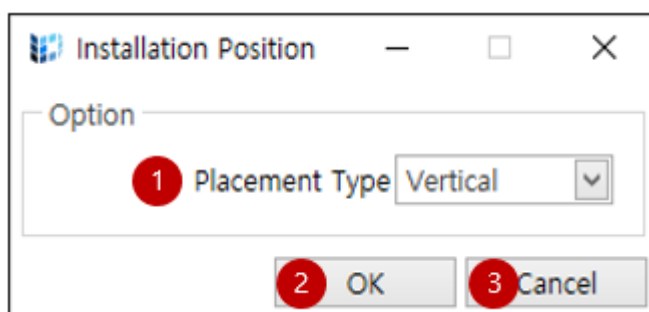
> **Command Window**

> **Select indoor unit arrangement method [Center(C)/User deployment(U)]<Center(C)> : Enter 'U' to start placing users.**

> **Enter the rotation angle <0.00> : Enter the rotation angle of the indoor units.**

1.2.1.3.6. Installation Position

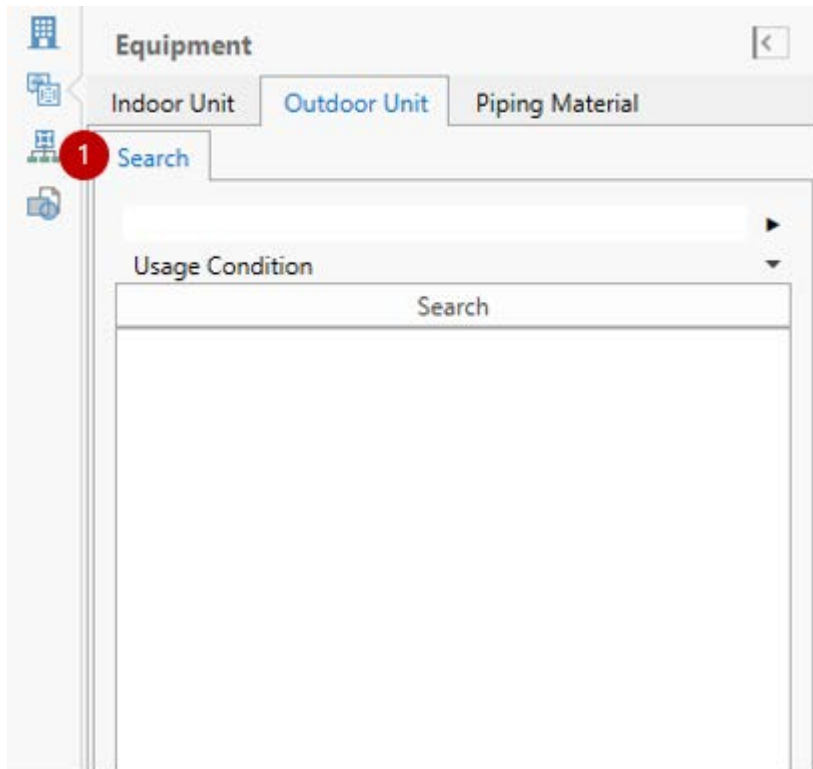
If the indoor unit to be placed is Multi Position AHU, the installation option window is activated.



- ① Placement Type : Select the arrangement of the indoor unit.
- ② OK : The indoor unit starts to be placed and the window is closed.
- ③ Cancel : Cancel the placement of the indoor unit and close the window.

1.2.2. Outdoor Unit

In the outdoor unit tab, you can search for the outdoor unit to be designed and place the outdoor unit by dragging and dropping it on the drawing.



- ① Search : You can search and design outdoor units in the currently active system.

1.2.2.1. Search

It is a common option for all outdoor units, and selectively sets the hierarchy and specification conditions for outdoor unit search.

The screenshot shows the 'Equipment' search interface. At the top, there are tabs for 'Indoor Unit', 'Outdoor Unit' (which is selected), and 'Piping Material'. Below the tabs is a 'Search' button. The main area is titled 'Usage Condition' and contains several filter options, each with a checkbox and a dropdown menu or input field. The filters are: 'Operation Mode' (HP), 'Power Specification' (1 | 2 | 120 | 60), 'Compressor Type' (SSC Scroll), 'Sales Status' (Active), 'Capacity Range' (0.00 ~ 0.00 kW), 'Model Code' (empty), 'EEV' (Included), and 'Drain Pump' (Included). Below the filters is a large empty box labeled 'Search'. At the bottom, there is a legend for 'Planned' (blue), 'Running' (green), and 'EOL' (yellow). Below the legend are two buttons: 'Add Outdoor Unit' and 'Modify'.

1. Search button

2. Usage Condition header

3. Operation Mode

4. Power Specification

5. Compressor Type

6. Sales Status

7. Capacity Range

8. Model Code

9. EEV

10. Drain Pump

11. Search button

12. Search results area

13. Legend: Planned Running EOL

14. Add Outdoor Unit button

15. Modify button

- ① Model Hierarchy : Select Hierarchy as a must-have option for outdoor unit search.
- ② Usage Condition : A list of specifications conditions can be displayed and folded/unfolded as an outdoor unit search condition.
- ③ Operation Mode : Select operation mode as a selection option for outdoor unit search.
- ④ Power Specification : Select the power specification as a selection option for outdoor unit search.
- ⑤ Compressor Type : Select the compressor type as the selection option for outdoor unit search.
- ⑥ Sales Status : Select sales status as a selection option for outdoor unit search.
- ⑦ Capacity Range : Enter the range of cooling capacity as a selection option for outdoor unit search.
- ⑧ Model Code : Enter part of the model code as a selection option for outdoor unit search.
- ⑨ EEV : Select whether to include EEV as a selection option for outdoor unit search.
- ⑩ Drain Pump : Select whether to include a drain pump as a selection option for outdoor unit search.
- ⑪ Search : When the search button is clicked, the outdoor unit of the entered condition is searched and displayed in the outdoor unit list.
- ⑫ Outdoor Unit List : A list of searched outdoor units is displayed and can be placed on the drawing by dragging.
- ⑬ Operation Information Legend : The color legend of the searched outdoor units' operation information is displayed.
- ⑭ Add Outdoor Unit : When the button is clicked, the outdoor unit selected from the outdoor unit list is placed on the drawing.
- ⑮ Modify : When the button is clicked, the outdoor unit selected in the drawing is modified with the indoor unit selected from the outdoor unit list.

1.2.2.1.1. VRF General Outdoor Unit

1.2.2.1.1.1. Design Condition

Equipment [<]

Indoor Unit **Outdoor Unit** Piping Material

Search

1 DVM S/Heat Pump

2 Required Condition

3 Combination Table 460V, with 18 ton modul

4 Usage Condition

5 Design Condition

6 Hydro Operating Simultaneously ☒

7 Maximum Indoor Unit 100.00 %

8 Combination Ratio 80.00 %

9 Continuous Cooling Operation under -5°C (23°F) ☐

10 Altitude 0.00 m

Defrosting Correction ☐

Search			
	AM192HXVAJH2AA	56.27	63.30
		55.22	63.63
		kW	kW
			0.00
			%
	AM216KXVGJH/AA	63.30	71.22
		62.12	72.75
		kW	kW
			0.00
			%
	AM408KXVGJH2AA	119.57	134.52
		117.35	136.38
		kW	kW
			0.00
			%
	AM432KXVGJH2AA	126.61	142.43
		124.25	145.50
		kW	kW
			0.00
			%

Planned Running EOL

Add Outdoor Unit Modify

① Model Hierarchy : Select the outdoor unit's hierarchy

② Required conditions : A list of required conditions is displayed and can be folded/unfolded.

- ③ Combination table : Select a combination table for outdoor unit design.
- ④ Design Condition : A list of design conditions is displayed and can be folded/unfolded.
- ⑤ Hydro Operating Simultaneously : It checks whether hydro is operated simultaneously for outdoor unit design.
- ⑥ Maximum Indoor Unit Combination Ratio : Select or enter the upper limit of the indoor unit combination ratio for outdoor unit design.
- ⑦ Maximum Hydro Combination Ratio : Select or enter the upper limit of the hydro combination rate for the outdoor unit design.
- ⑧ Continuous Cooling Operation under -5°C (23°F) : Select whether to operate continuous cooling operation below -5°C (23°F) for outdoor unit design.
- ⑨ Altitude : Select or enter altitude correction and altitude for outdoor unit design.
- ⑩ Defrosting Correction : Select whether to correction for defrost for outdoor unit design.

1.2.2.1.1.2. Outdoor Unit Information



- ① Color : Colors are displayed according to the outdoor unit's operation mode. (See operation mode legend)
- ② Image : The outdoor unit image is displayed. The description is displayed as a tool tip.
- ③ Error : If an error occurs during outdoor unit capacity correction, the symbol is displayed. An error message is displayed as a tool tip.
- ④ Model Code : The outdoor unit's model code is displayed. The description is displayed as a tool tip.
- ⑤ Rated Cooling Total Capacity : The rated cooling total capacity of the outdoor unit is displayed. The description is displayed as a tool tip.
- ⑥ Rated Heating Total Capacity : The rated heating total capacity of the outdoor unit is displayed. The description is displayed as a tool tip.
- ⑦ Corrected Cooling Total Capacity : The corrected cooling total capacity of the outdoor unit is displayed. The description is displayed as a tool tip.

- ⑧ Corrected Heating Total Capacity : The corrected heating total capacity of the outdoor unit is displayed. The description is displayed as a tool tip.
- ⑨ Combination Ratio : The combination ratio of the outdoor unit is displayed. The description is displayed as a tool tip.

1.2.2.1.2. VRF Water Outdoor Unit

1.2.2.1.2.1. Design Condition

The screenshot shows the 'Equipment' window with the 'Outdoor Unit' tab selected. The window is divided into several sections:

- Search:** A search bar at the top of the main panel.
- Model Hierarchy:** A tree view on the left showing the hierarchy of the outdoor unit.
- Required Condition:** A section with expandable/collapsible items:
 - Combination Table:** A dropdown menu showing '2017_Premium_Energy Ef'.
 - Usage Condition:** A dropdown menu.
 - Design Condition:** A dropdown menu.
 - Hydro Operating Simultaneously:** A checkbox that is checked.
 - Maximum Indoor Unit Combination Ratio:** A dropdown menu showing '100.00 %'.
 - Maximum Hydro Combination Ratio:** A dropdown menu showing '80.00 %'.
 - Cooling EWT:** A text input field showing '30.0 °C'.
 - Heating EWT:** A text input field showing '20.0 °C'.
 - Flow Rate:** A text input field showing 'LPM'.
 - Glycol Type:** A checkbox and a dropdown menu showing 'Ethylene Glycol'.
 - Glycol Concentration:** A text input field showing '0.00 %'.
- Search Results:** A table at the bottom showing search results for outdoor units. The table has columns for the unit model, cooling capacity (kW), heating capacity (kW), cooling EWT (°C), and glycol concentration (%).

Red circles with numbers 1 through 12 are overlaid on the image, pointing to specific elements:

- Model Hierarchy
- Required Condition
- Combination Table
- Design Condition
- Hydro Operating Simultaneously
- Maximum Indoor Unit Combination Ratio
- Maximum Hydro Combination Ratio
- Cooling EWT
- Heating EWT
- Flow Rate
- Glycol Type
- Glycol Concentration

The search results table is as follows:

Model	Cooling Capacity (kW)	Heating Capacity (kW)	Cooling EWT (°C)	Glycol Concentration (%)
AM072HXWAJR/AA	21.10	23.74	0.0	0.00
AM096HXWAJR/AA	28.13	31.65	0.0	0.00
AM120HXWAJR/AA	35.17	39.56	0.0	0.00
AM144HXWAJR2AA	42.20	47.48	0.0	0.00

Legend: ■ Planned ■ Running ■ EOL

Buttons: Add Outdoor Unit, Modify

- ① Model Hierarchy : Select the outdoor unit's hierarchy
- ② Required conditions : A list of required conditions is displayed and can be folded/unfolded.

- ③ Combination table : Select a combination table for outdoor unit design.
- ④ Design Condition : A list of design conditions is displayed and can be folded/unfolded.
- ⑤ Hydro Operating Simultaneously : It checks whether hydro is operated simultaneously for outdoor unit design.
- ⑥ Maximum Indoor Unit Combination Ratio : Select or enter the upper limit of the indoor unit combination ratio for outdoor unit design.
- ⑦ Maximum Hydro Combination Ratio : Select or enter the upper limit of the hydro combination rate for the outdoor unit design.
- ⑧ Cooling EWT : Enter the cooling entering water temperature for the outdoor unit design. Design condition values set at the time of project creation are set as default values.
- ⑨ Heating EWT : Enter the heating entering water temperature for the outdoor unit design. Design condition values set at the time of project creation are set as default values.
- ⑩ Flow Rate : Enter the flow rate for the outdoor unit design.
- ⑪ Glycol Type : Select whether or not antifreeze correction and type of antifreeze for outdoor unit design.
- ⑫ Glycol Concentration : Enter the antifreeze concentration for the outdoor unit design.

1.2.2.1.2.2. Outdoor Unit Information



- ① Color : Colors are displayed according to the outdoor unit's operation mode. (See operation mode legend)
- ② Image : The outdoor unit image is displayed. The description is displayed as a tool tip.
- ③ Error : If an error occurs during outdoor unit capacity correction, the symbol is displayed. An error message is displayed as a tool tip.
- ④ Model Code : The outdoor unit's model code is displayed. The description is displayed as a tool tip.
- ⑤ Rated Cooling Total Capacity : The rated cooling total capacity of the outdoor unit is displayed. The description is displayed as a tool tip.

- ⑥ Rated Heating Total Capacity : The rated heating total capacity of the outdoor unit is displayed. The description is displayed as a tool tip.
- ⑦ Cooling LWT : The outdoor unit's cooling leaving water temperature is displayed. The description is displayed as a tool tip.
- ⑧ Corrected Cooling Total Capacity : The corrected cooling total capacity of the outdoor unit is displayed. The description is displayed as a tool tip.
- ⑨ Corrected Heating Total Capacity : The corrected heating total capacity of the outdoor unit is displayed. The description is displayed as a tool tip.
- ⑩ Heating LWT : The outdoor unit's heating leaving water temperature is displayed. The description is displayed as a tool tip.
- ⑪ Combination Ratio : The combination ratio of the outdoor unit is displayed. The description is displayed as a tool tip.

1.2.2.1.3. Single Outdoor Unit

1.2.2.1.3.1. Design Condition



Equipment

Indoor Unit Outdoor Unit

Search

Wall Mounted/Cooling Only/Cooling only Low ambient Usage Condition

Search

	AC018MXSCCC/AA	5.28	0.00	kW	kW
	AC024MXSCCC/AA	7.03	0.00	kW	kW
	AC030MXSCCC/AA	8.79	0.00	kW	kW
	AC036MXSCCC/AA	10.55	0.00	kW	kW

Planned Running EOL

Add Outdoor Unit Modify

① Model Hierarchy : Select the outdoor unit's hierarchy

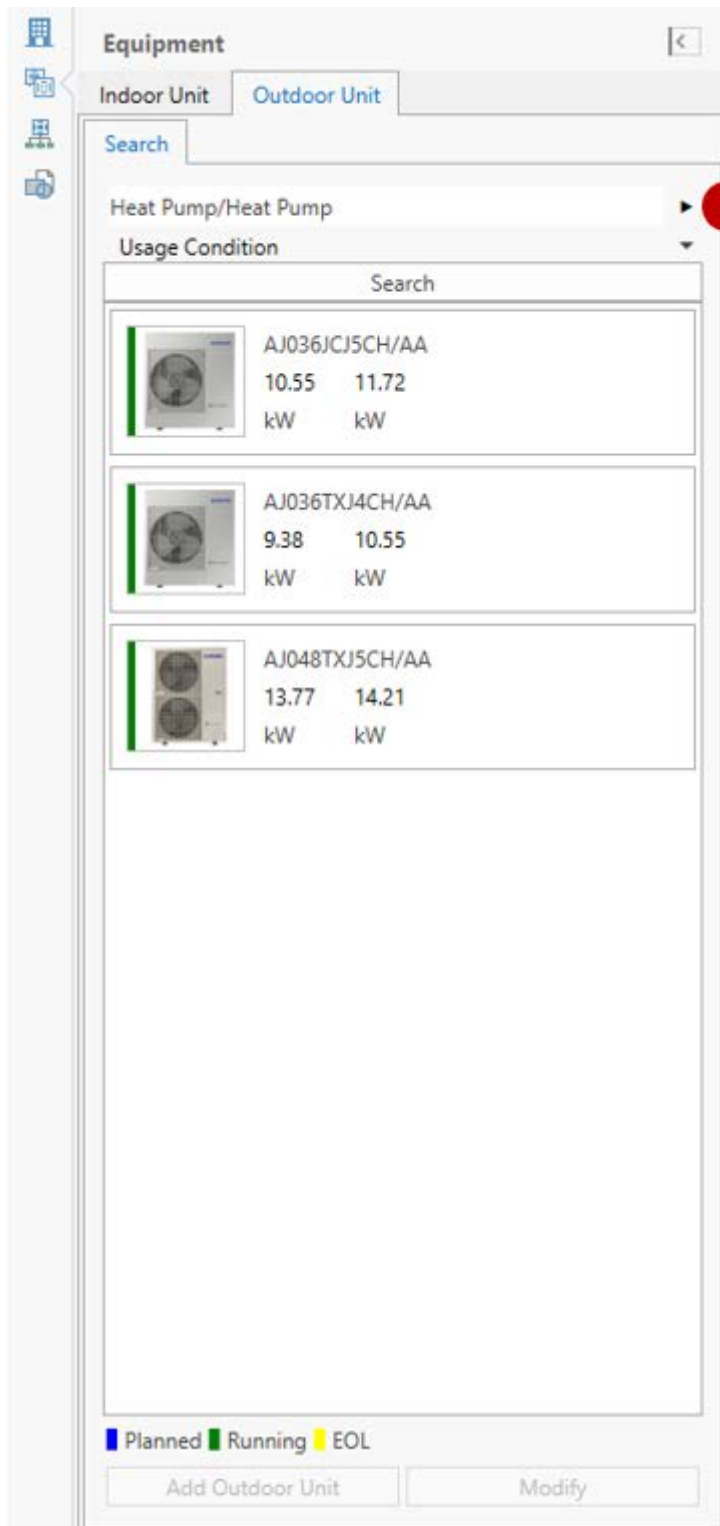
1.2.2.1.3.2. Outdoor Unit Information



- ① Color : Colors are displayed according to the outdoor unit's operation mode. (See operation mode legend)
- ② Image : The outdoor unit image is displayed. The description is displayed as a tool tip.
- ③ Error : If an error occurs during outdoor unit capacity correction, the symbol is displayed. An error message is displayed as a tool tip.
- ④ Model Code : The outdoor unit's model code is displayed. The description is displayed as a tool tip.
- ⑤ Rated Cooling Total Capacity : The rated cooling total capacity of the outdoor unit is displayed. The description is displayed as a tool tip.
- ⑥ Rated Heating Total Capacity : The rated heating total capacity of the outdoor unit is displayed. The description is displayed as a tool tip.

1.2.2.1.4. FJM Outdoor Unit

1.2.2.1.4.1. Design Condition



Equipment




Indoor Unit Outdoor Unit

Search

Heat Pump/Heat Pump

Usage Condition

Search

	AJ036JCJ5CH/AA	10.55	11.72	kW	kW
	AJ036TXJ4CH/AA	9.38	10.55	kW	kW
	AJ048TXJ5CH/AA	13.77	14.21	kW	kW

Planned Running EOL

Add Outdoor Unit Modify

① Model Hierarchy : Select the outdoor unit's hierarchy

1.2.2.1.4.2. Outdoor Unit Information



- ① Color : Colors are displayed according to the outdoor unit's operation mode. (See operation mode legend)
- ② Image : The outdoor unit image is displayed. The description is displayed as a tool tip.
- ③ Error : If an error occurs during outdoor unit capacity correction, the symbol is displayed. An error message is displayed as a tool tip.
- ④ Model Code : The outdoor unit's model code is displayed. The description is displayed as a tool tip.
- ⑤ Rated Cooling Total Capacity : The rated cooling total capacity of the outdoor unit is displayed. The description is displayed as a tool tip.
- ⑥ Rated Heating Total Capacity : The rated heating total capacity of the outdoor unit is displayed. The description is displayed as a tool tip.

1.2.2.1.5. Chiller Outdoor Units Group

1.2.2.1.5.1. Design Condition

Equipment

Indoor Unit Outdoor Unit

Search

Air-cooled Modular Chiller/Heat Pump

Usage Condition

Design Condition

Cooling Load 0.00 kW

Heating Load 0.00 kW

Operation Mode Heating and Cooling

Correction Criteria Cooling

Product Type Pump Excluded

Cooling LWT 7.0 °C

Heating LWT 45.0 °C

☒ ΔT (Entering Water and Leaving Water) 5.0 °C

☐ Flow Rate LPM

☐ Glycol Type Ethylene Glycol

Glycol Concentration 50.00 %

☐ Altitude 0.00 m

Defrosting Correction ☐

Search



Planned Running EOL

Add Outdoor Unit Modify

- ① Model Hierarchy : Select the outdoor unit's hierarchy
- ② Design Condition : A list of design conditions is displayed and can be folded/unfolded.

- ③ Cooling Load : Enter the required cooling load for the outdoor unit design.
- ④ Heating Load : Enter the required heating load for the outdoor unit design.
- ⑤ Operation Mode : Select the operation mode for outdoor unit design.
- ⑥ Correction Criteria : Select Correction criteria for outdoor unit design.
- ⑦ Product Type : Select the product type for your outdoor unit design.
- ⑧ Cooling LWT : Enter the cooling leaving water temperature for the outdoor unit design. Design condition values set at the time of project creation are set as default values.
- ⑨ Heating LWT : Enter the heating leaving water temperature for the outdoor unit design. Design condition values set at the time of project creation are set as default values.
- ⑩ ΔT (Entering Water and Leaving Water) : Optionally input the ΔT (Entering Water and Leaving Water) for outdoor unit design.
- ⑪ Flow Rate : Optionally input flow rate for outdoor unit design.
- ⑫ Glycol Type : Select whether or not antifreeze correction and type of antifreeze for outdoor unit design.
- ⑬ Glycol Concentration : Enter the antifreeze concentration for the outdoor unit design.
- ⑭ Altitude : Enter the altitude correction and altitude for the outdoor unit design.
- ⑮ Defrosting Correction : Select whether to defrosting correction for outdoor unit design.

1.2.2.1.5.2. Outdoor Unit Information

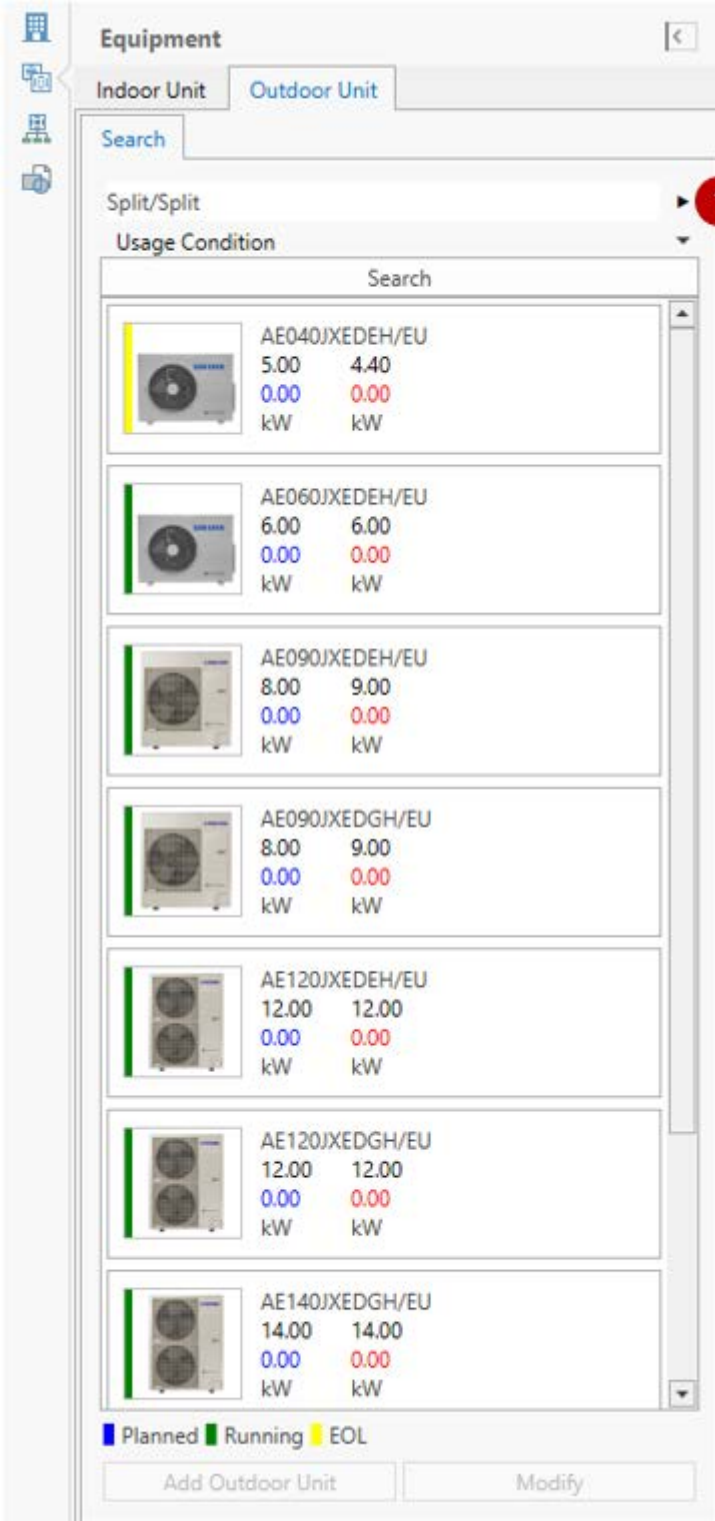
1 Product Image	2 Model Code	3 Qty	4 Power Specif...	Cooling				Heating				13 Flow Rate	14 Pressure Hei...
				5 Correction C...	6 Power Input	7 Load Profile	8 EW Temp.	9 Correction C...	10 Power Input	11 Load Profile	12 EW Temp.		
		EA		kW	kW	%	°C	kW	kW	%	°C	LPM	kPa
	AG010KSVA...	1	3 3 208-2...	38.25	9.58	0.00	12.0	26.59	11.96	0.00	40.0	181	130.79
	AG010KSVAJ...	1	3 3 460 60	38.25	9.58	0.00	12.0	26.59	11.96	0.00	40.0	181	130.79
	AG015KSVA...	1	3 3 208-2...	54.48	15.70	0.00	12.0	31.32	14.12	0.00	40.0	261	0.00
	AG015KSVAJ...	1	3 3 460 60	54.48	15.70	0.00	12.0	31.32	14.12	0.00	40.0	261	0.00
	AG010KSVA...	2	3 3 208-2...	76.50	19.16	0.00	12.0	53.19	23.91	0.00	40.0	363	130.79
	AG010KSVAJ...	2	3 3 460 60	76.50	19.16	0.00	12.0	53.19	23.91	0.00	40.0	363	130.79

- ① Product Image : Colors and images are displayed according to the operating information of the chiller. (See operating information legend)
- ② Model Code : The chiller's model code is displayed.
- ③ Qty : The number of the chiller unit is displayed.
- ④ Power Specification : The power specifications of the chiller are displayed.
- ⑤ Corrected Cooling Capacity : The corrected cooling capacity of the chiller is displayed.

- ⑥ Cooling Power Input : The cooling power input of the chiller is displayed.
- ⑦ Cooling Load Profile : The cooling load profile of the chiller is displayed.
- ⑧ Cooling EWT : The cooling entering water temperature of the chiller is displayed.
- ⑨ Corrected Heating Capacity : The corrected heating capacity of the chiller is displayed.
- ⑩ Heating Power Input : The heating power input of the chiller is displayed.
- ⑪ Heating Load Profile : The heating load profile of the chiller is displayed.
- ⑫ Heating EWT : The heating entering water temperature of the chiller is displayed.
- ⑬ Flow Rate : The flow rate of the chiller is displayed.
- ⑭ Pressure Height Difference : The pressure drop of the chiller is displayed.

1.2.2.1.6. EHS Outdoor Unit

1.2.2.1.6.1. Design Condition



Equipment








Indoor Unit Outdoor Unit

Search

Split/Split 1

Usage Condition

Search

	AE040JXEDEH/EU 5.00 4.40 0.00 0.00 kW kW
	AE060JXEDEH/EU 6.00 6.00 0.00 0.00 kW kW
	AE090JXEDEH/EU 8.00 9.00 0.00 0.00 kW kW
	AE090JXEDGH/EU 8.00 9.00 0.00 0.00 kW kW
	AE120JXEDEH/EU 12.00 12.00 0.00 0.00 kW kW
	AE120JXEDGH/EU 12.00 12.00 0.00 0.00 kW kW
	AE140JXEDGH/EU 14.00 14.00 0.00 0.00 kW kW

Planned Running EOL

Add Outdoor Unit Modify

① Model Hierarchy : Select the outdoor unit's hierarchy

1.2.2.1.6.2. Outdoor Unit Information



- ① Color : Colors are displayed according to the outdoor unit's operation mode. (See operation mode legend)
- ② Image : The outdoor unit image is displayed. The description is displayed as a tool tip.
- ③ Error : If an error occurs during outdoor unit capacity correction, the symbol is displayed. An error message is displayed as a tool tip.
- ④ Model Code : The outdoor unit's model code is displayed. The description is displayed as a tool tip.
- ⑤ Rated Cooling Total Capacity : The rated cooling total capacity of the outdoor unit is displayed. The description is displayed as a tool tip.
- ⑥ Rated Heating Total Capacity : The rated heating total capacity of the outdoor unit is displayed. The description is displayed as a tool tip.
- ⑦ Corrected Cooling Total Capacity : The corrected cooling total capacity of the outdoor unit is displayed. The description is displayed as a tool tip.
- ⑧ Corrected Heating Total Capacity : The corrected heating total capacity of the outdoor unit is displayed. The description is displayed as a tool tip.

1.2.2.1.7. Split DOAS General Outdoor Unit

1.2.2.1.7.1. Design Condition

To be written later

1.2.2.1.7.2. Outdoor Unit Information

To be written later

1.2.2.1.8. Split DOAS Water Outdoor Unit

1.2.2.1.8.1. Design Condition

To be written later

1.2.2.1.8.2. Outdoor Unit Information

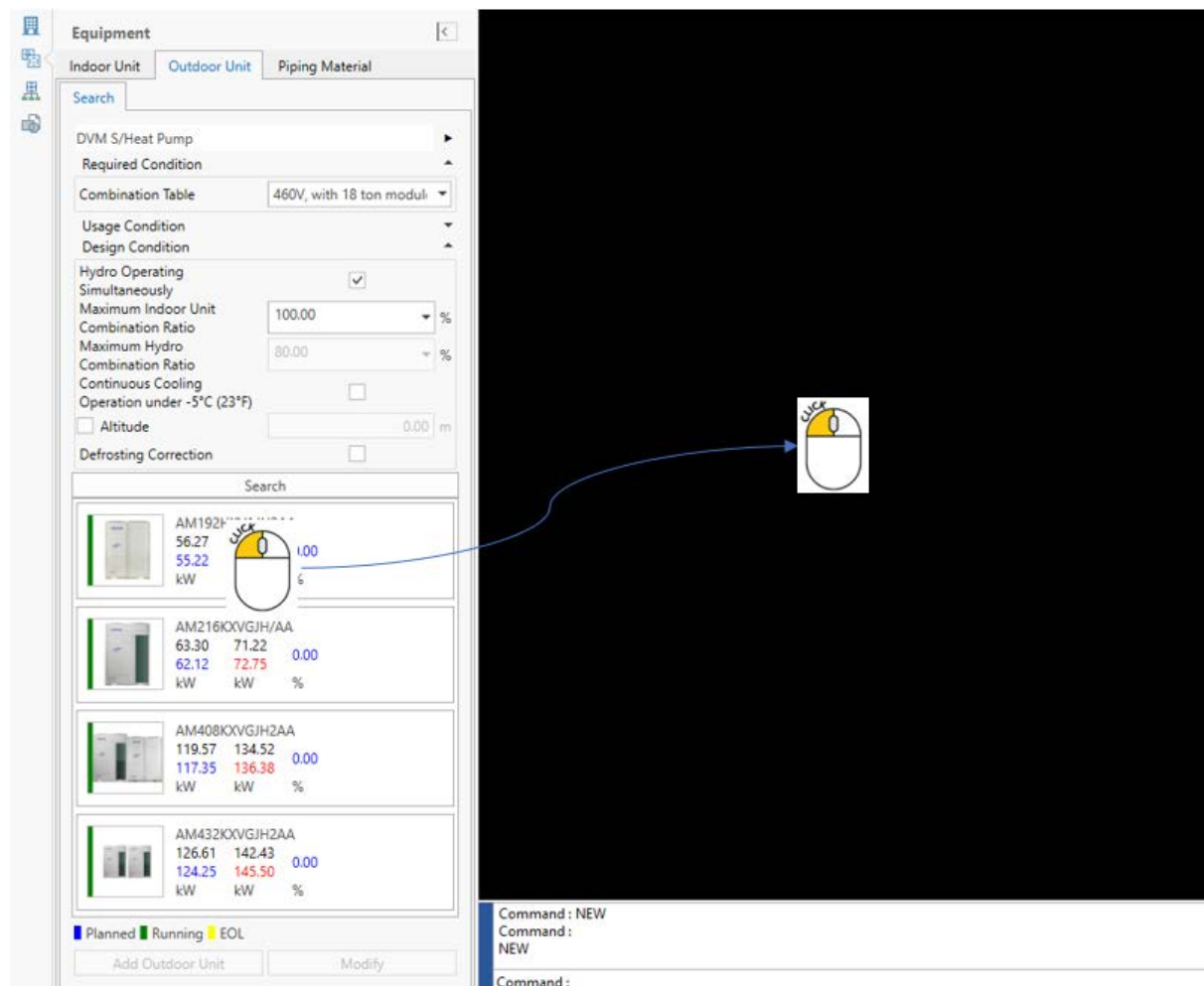
To be written later

1.2.2.2. Placement (Command : DVMDRAWOUTDOOR)

1.2.2.2.1. Placement Method

1.2.2.2.1.1. Drag & Drop

You can place an outdoor unit by dragging it to the drawing from the searched outdoor unit list.



1.2.2.2.1.2. Add Outdoor Unit Button

After selecting the outdoor unit to be placed from the searched outdoor unit list, click the "Add outdoor unit" button to place it.

Equipment

Indoor Unit **Outdoor Unit** Piping Material

Search

DVM S/Heat Pump

Required Condition

Combination Table 460V, with 18 ton modul

Usage Condition

Design Condition

Hydro Operating ☒

Simultaneously

Maximum Indoor Unit 100.00 %

Combination Ratio

Maximum Hydro 80.00 %

Combination Ratio


Continuous Cooling


Operation under -5°C (23°F)


☐ Altitude 0.00 m


Defrosting Correction ☐

Search

	AM192HXVAJH2AA	56.27	63.30	0.00
		55.22	63.63	
		kW	kW	%

	AM216KXVGJH/AA	63.30	71.22	0.00
		62.12	72.75	
		kW	kW	%

	AM408KXVGJH2AA	119.57	134.52	0.00
		117.35	136.38	
		kW	kW	%

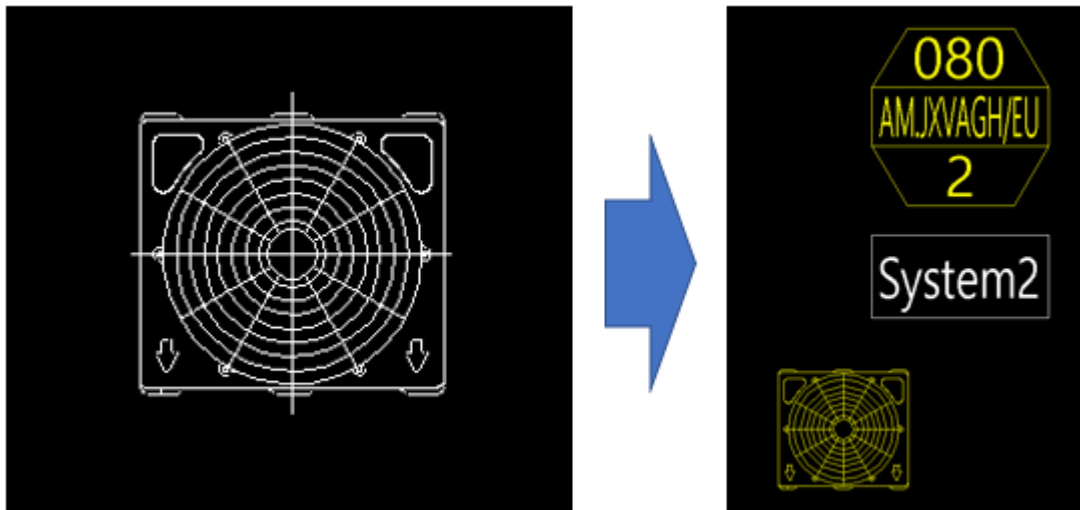
	AM432KXVGJH2AA	126.61	142.43	0.00
		124.25	145.50	
		kW	kW	%

■ Planned ■ Running ■ EOL

Add Outdoor Unit Modify

1.2.2.2.2. Placement for Single outdoor unit

Place the single outdoor unit on the drawing. During placement, you can change the insertion point by pressing the TAB key, and you can change the placement direction of the indoor unit by pressing the CTRL key.



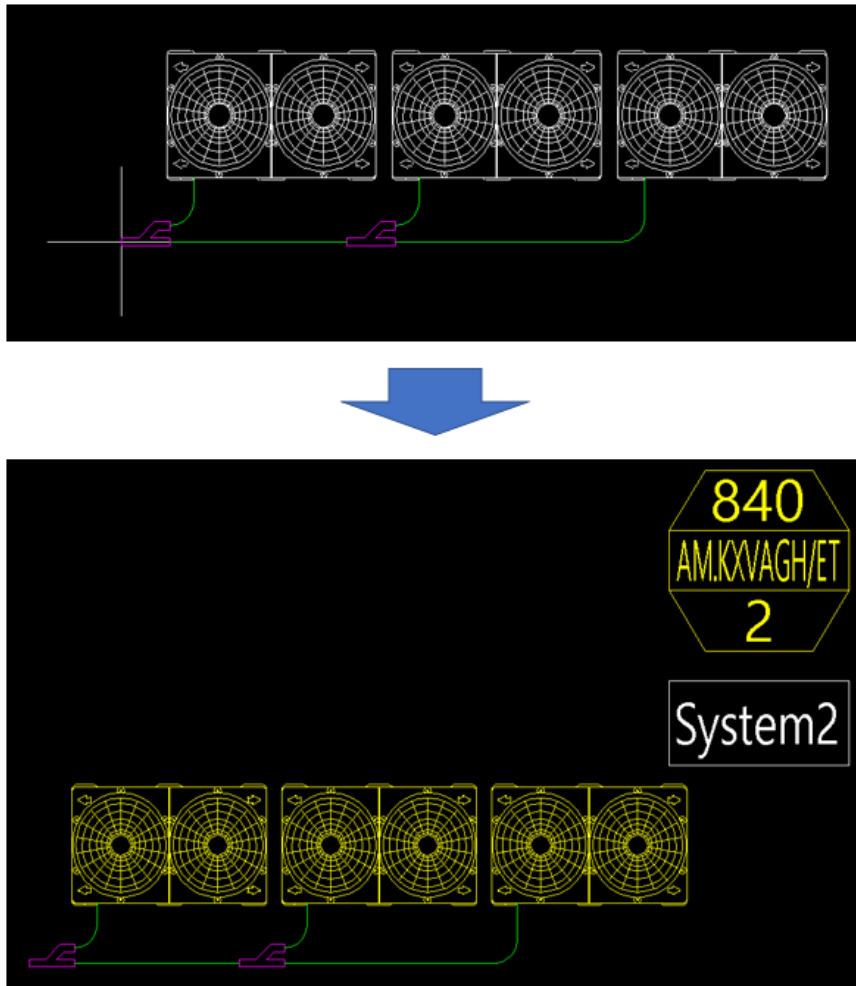
> Command Window

> Specify insert point (TAB : Change base point, CTRL : Change Direction) : Pick a point to insert the outdoor unit. Press the TAB key to change the reference point, and press the CTRL key to change the direction of the outdoor device.

> Enter the rotation angle <0.00> : Enter the rotation angle of the outdoor unit.

1.2.2.2.3. Placement for Module Outdoor Unit

Place the module outdoor unit on the drawing. During placement, you can change the insertion point by pressing the TAB key, and you can change the placement direction of the outdoor unit by pressing the CTRL key.



> Command Window

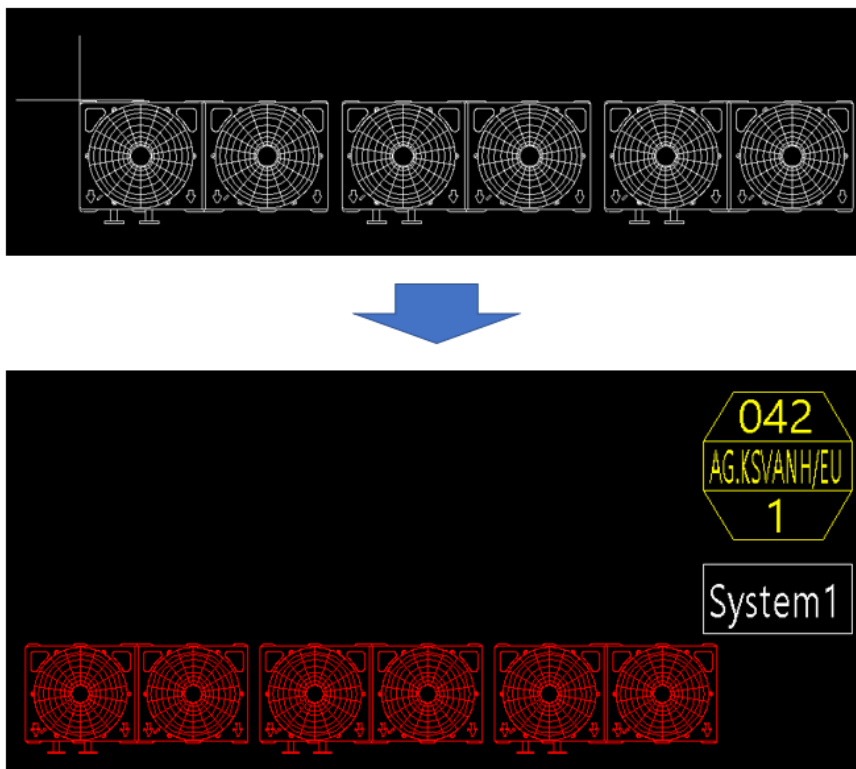
- > Select outdoor unit pipe direction [Left(L)/Right(R)] <Left(L)> : Enter the outdoor unit placement direction.
- > Distance between outdoor unit and the piping <400> : Enter the distance between the outdoor unit and the pipe.
- > Distance between outdoor units <MAX 1900.6> <100> : Enter the distance between outdoor units.
- > Specify insert point (TAB : Change base point, CTRL : Change Direction) : Pick the insertion

point.

> Enter the rotation angle<0.00> : Enter the rotation angle.

1.2.2.2.4. Placement Chiller Outdoor Unit Group

Place a group of chillers on the drawing. During placement, you can change the insertion point by pressing the TAB key, and you can change the placement direction of the indoor unit by pressing the CTRL key.



> Command Window

> Number per row<2> : Enter the number per rows.

> Width Distance <100> : Enter the horizontal distance

> Specify insert point (TAB : Change base point, CTRL : Change Direction) : Pick the insertion point.

> Enter the rotation angle<0.00> : Enter the rotation angle.

1.2.3. Piping Material

Command

Y-joint : DVMDRAWJOINT

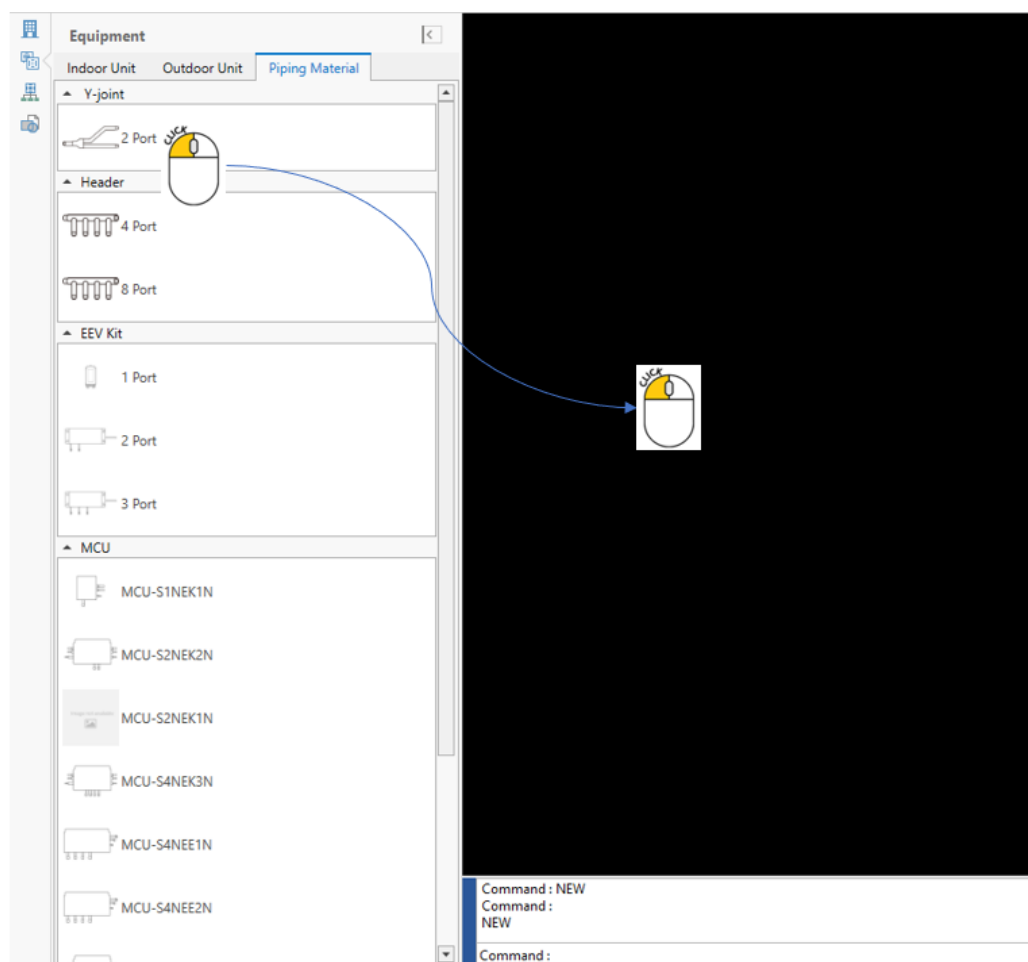
Header : DVMDRAWHEADER

EEV Kit: DVMDRAWEEVKIT

MCU/HRC : DVMDRAWMCU

1.2.3.1.1. Placement Method

You can place pipe materials by dragging them from the pipe material list to the drawing. During placement, you can change the insertion base point by pressing the TAB key, and you can change the placement direction of the pipe material by pressing the CTRL key.



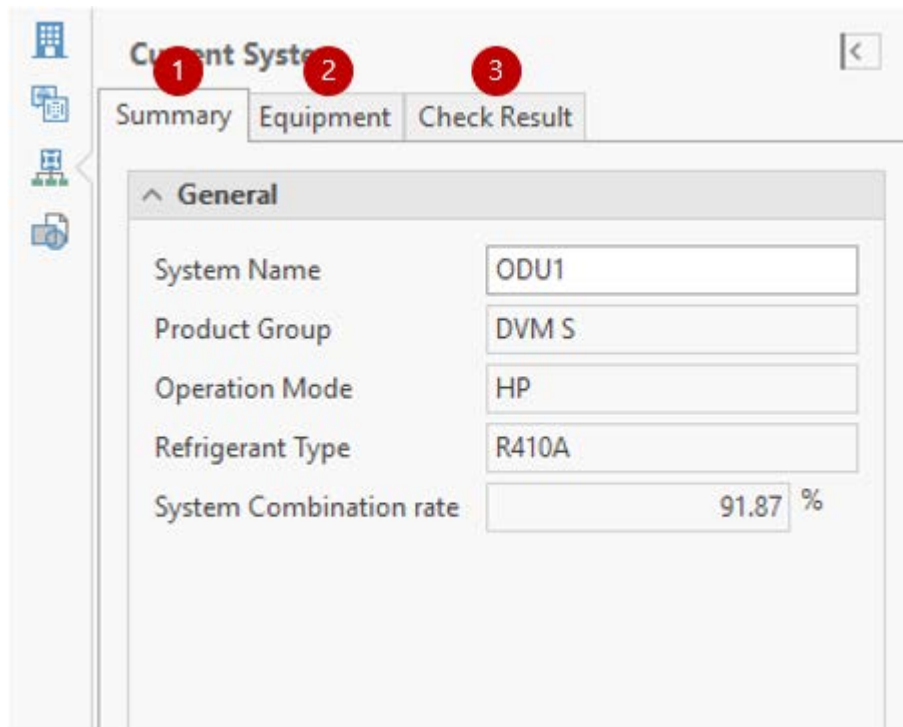
> **Command Window**

> **Specify insert point (TAB : Change base point, CTRL : Change Direction) : Pick the insertion point.**

> **Enter the rotation angle<0.00> : Enter the rotation angle.**

1.3. Current System

You can check the summary of the currently active system, equipment, and system check results, and place unconnected equipment on the drawing.



The screenshot shows a software interface titled 'Current System' with a left sidebar containing icons for building, equipment, and drawing. The main area has three tabs: 'Summary' (marked with a red circle 1), 'Equipment' (marked with a red circle 2), and 'Check Result' (marked with a red circle 3). The 'Summary' tab is active, displaying a 'General' section with the following fields:

^ General	
System Name	ODU1
Product Group	DVM S
Operation Mode	HP
Refrigerant Type	R410A
System Combination rate	91.87 %

- ① Summary : Check summary information of the currently active system.
- ② Equipment : You can check the status of the indoor/outdoor units of the currently active system based on the space (floor, room), and place unconnected indoor/outdoor units on the drawing.
- ③ Check Result : Check the currently active system check result.

1.3.1. Summary

Display an overview of the currently active system.

Current System [Back]

Summary | Equipment | Check Result

1 ^ **General**

System Name	ODU1
Product Group	DVM S
Operation Mode	HP
Refrigerant Type	R410A
System Combination rate	91.87 %

2

- ① General : A group of system summary information is displayed and can be folded/unfolded.
- ② Items : Items of system summary information are displayed.

1.3.1.1. VRF General

Current System [Back]

Summary | Equipment | Check Result

1 ^ **General**

1 System Name	VRF General
2 Product Group	VRF (DVM)
3 Operation Mode	
4 Refrigerant Type	R410A
5 System Combination rate	0.00 %

- ① System Name : The name of the system is displayed and can be modified.
- ② Product Group : The family of systems is displayed.
- ③ Operation Mode : The operating mode of the system is displayed.
- ④ Refrigerant Type : The type of refrigerant in the system is displayed.
- ⑤ System Combination Rate : The combination rate of the system is displayed.

1.3.1.2. VRF Home(Single Piping)

The screenshot shows a software interface for configuring a VRF system. The main window is titled 'Current System' and has three tabs: 'Summary', 'Equipment', and 'Check Result'. The 'Summary' tab is active, and the 'General' section is expanded. Five fields are listed, each with a red circle and a number indicating its position in a sequence:

Field	Value
1 System Name	DVM Home (Single Piping)
2 Product Group	VRF (DVM)
3 Operation Mode	
4 Refrigerant Type	R410A
5 System Combination rate	0.00 %

- ① System Name : The name of the system is displayed and can be modified.
- ② Product Group : The family of systems is displayed.
- ③ Operation Mode : The operating mode of the system is displayed.
- ④ Refrigerant Type : The type of refrigerant in the system is displayed.
- ⑤ System Combination Rate : The combination rate of the system is displayed.

1.3.1.3. VRF Home(Multi Piping)

Current System

Summary | Equipment | Check Result

^ General

1	System Name	DVM Home (Multi Piping)
2	Product Group	DVM Home (다배관)
3	Operation Mode	
4	Refrigerant Type	R410A
5	System Combination rate	0.00 %
6	Indoor Unit Qty.	3 EA

- ① System Name : The name of the system is displayed and can be modified.
- ② Product Group : The family of systems is displayed.
- ③ Operation Mode : The operating mode of the system is displayed.
- ④ Refrigerant Type : The type of refrigerant in the system is displayed.
- ⑤ System Combination Rate : The combination rate of the system is displayed.
- ⑥ Indoor Unit Qty. : The number of indoor units in the system is displayed.

1.3.1.4. CAC Non DPM

Current System

Summary | Equipment | Check Result

^ General

1	System Name	CAC Non DPM
2	Product Group	Single split (CAC)
3	Operation Mode	
4	Refrigerant Type	R410A
5	<input type="checkbox"/> DPM	

- ① System Name : The name of the system is displayed and can be modified.
- ② Product Group : The family of systems is displayed.
- ③ Operation Mode : The operating mode of the system is displayed.
- ④ Refrigerant Type : The type of refrigerant in the system is displayed.
- ⑤ DPM : Whether or not DPM is displayed.

1.3.1.5. CAD DPM

Current System

Summary Equipment Check Result

General

1 System Name CAC DPM

2 Product Group Single split (CAC)

3 Operation Mode

4 Refrigerant Type R410A

5 ☒ DPM

6 Indoor Unit Qty. 3 EA

- ① System Name : The name of the system is displayed and can be modified.
- ② Product Group : The family of systems is displayed.
- ③ Operation Mode : The operating mode of the system is displayed.
- ④ Refrigerant Type : The type of refrigerant in the system is displayed.
- ⑤ DPM : Whether or not DPM is displayed.
- ⑥ Indoor Unit Qty. : The number of indoor units in the system is displayed.

1.3.1.6. PAC

Current System

Summary Equipment Check Result

General

1 System Name Single PAC

2 Product Group 싱글 PAC

3 Operation Mode

4 Refrigerant Type R410A

- ① System Name : The name of the system is displayed and can be modified.
- ② Product Group : The family of systems is displayed.
- ③ Operation Mode : The operating mode of the system is displayed.
- ④ Refrigerant Type : The type of refrigerant in the system is displayed.

1.3.1.7. RAC

Current System

Summary Equipment Check Result

General

1 System Name Single split (RAC)

2 Product Group Single split (RAC)

3 Operation Mode

4 Refrigerant Type R410A

- ① System Name : The name of the system is displayed and can be modified.
- ② Product Group : The family of systems is displayed.
- ③ Operation Mode : The operating mode of the system is displayed.
- ④ Refrigerant Type : The type of refrigerant in the system is displayed.

1.3.1.8. FJM

The screenshot shows a software window titled 'Current System' with a navigation pane on the left and a main content area. The main area has three tabs: 'Summary', 'Equipment', and 'Check Result'. The 'General' section is expanded, showing a list of system parameters. Each parameter is numbered in a red circle on the left. The parameters and their values are:

Number	Parameter	Value
1	System Name	Multi Split (FJM)
2	Product Group	Multi Split (FJM)
3	Operation Mode	
4	Refrigerant Type	R410A
5	System Combination rate	0.00 %
6	Indoor Unit Qty.	4 EA
7	Combination Index	9+9+12+18

- ① System Name : The name of the system is displayed and can be modified.
- ② Product Group : The family of systems is displayed.
- ③ Operation Mode : The operating mode of the system is displayed.
- ④ Refrigerant Type : The type of refrigerant in the system is displayed.
- ⑤ System Combination Rate : The combination rate of the system is displayed.
- ⑥ Indoor Unit Qty. : The number of indoor units in the system is displayed.
- ⑦ Combination Index : The combination index of the indoor units of the system is displayed.

1.3.1.9. Chiller Only

Current System [<]

Summary Equipment Check Result

^ General

1	System Name	Chiller Only
2	Product Group	Air-cooled Modular Chiller
3	Design Type	Chiller Only
4	Product Type	
5	Operation Mode	
6	Selection criteria	

- ① System Name : The name of the system is displayed and can be modified.
- ② Product Group : The family of systems is displayed.
- ③ Design Type : The design type of the chiller system is displayed.
- ④ Product Type : The product type of the system is displayed.
- ⑤ Operation Mode : The design operation mode of the system is displayed.
- ⑥ Selection criteria : The system's selection criteria are displayed.

1.3.1.10. Chiller All

The screenshot shows a software interface titled 'Current System' with a navigation pane on the left and a main content area. The main area has three tabs: 'Summary', 'Equipment', and 'Check Result'. The 'Summary' tab is active, showing a 'General' section with the following fields:

Field	Value
System Name	Chiller All
Product Group	Air-cooled Modular Chiller
Design Type	Chiller + AHU/FCU
Product Type	
Operation Mode	
Selection criteria	

Red circles with numbers 1 through 6 are placed to the left of the first six fields, corresponding to the list below.

- ① System Name : The name of the system is displayed and can be modified.
- ② Product Group : The family of systems is displayed.
- ③ Design Type : The design type of the chiller system is displayed.
- ④ Product Type : The product type of the system is displayed.
- ⑤ Operation Mode : The design operation mode of the system is displayed.
- ⑥ Selection criteria : The system's selection criteria are displayed.

1.3.1.11. EHS Tank Included Mono

The screenshot shows the 'Current System' configuration window with three tabs: 'Summary', 'Equipment', and 'Check Result'. The 'Summary' tab is active, displaying a 'General' section with five fields. Red circles with numbers 1 through 5 are placed to the left of each field label for identification.

Field Label	Value
1 System Name	EHS Tank Included Mono
2 Product Group	Mono
3 Operation Mode	
4 Refrigerant Type	R410A
5 Tank	Included

- ① System Name : The name of the system is displayed and can be modified.
- ② Product Group : The family of systems is displayed.
- ③ Operation Mode : The operating mode of the system is displayed.
- ④ Refrigerant Type : The type of refrigerant in the system is displayed.
- ⑤ Tank : Whether the tank is included or not is displayed.

1.3.1.12. EHS Tank Excluded Mono

The screenshot shows the 'Current System' configuration window with three tabs: 'Summary', 'Equipment', and 'Check Result'. The 'Summary' tab is active, displaying a 'General' section with five fields. Red circles with numbers 1 through 5 are placed to the left of each field label for identification.

Field Label	Value
1 System Name	EHS Tank Excluded Mono
2 Product Group	Mono
3 Operation Mode	
4 Refrigerant Type	R410A
5 Tank	Excluded

- ① System Name : The name of the system is displayed and can be modified.

- ② Product Group : The family of systems is displayed.
- ③ Operation Mode : The operating mode of the system is displayed.
- ④ Refrigerant Type : The type of refrigerant in the system is displayed.
- ⑤ Tank : Whether the tank is included or not is displayed.

1.3.1.13. EHS Tank Included Split

The screenshot shows a software window titled "Current System" with a navigation pane on the left and a main content area. The main area has three tabs: "Summary", "Equipment", and "Check Result". The "Summary" tab is active, and within it, the "General" section is expanded. Five red circular callouts with white numbers 1 through 5 are positioned to the left of the form fields. The fields and their values are: "System Name" (EHS Tank Included Split), "Product Group" (Split), "Operation Mode" (empty), "Refrigerant Type" (R410A), and "Tank" (Included).

Field	Value
System Name	EHS Tank Included Split
Product Group	Split
Operation Mode	
Refrigerant Type	R410A
Tank	Included

- ① System Name : The name of the system is displayed and can be modified.
- ② Product Group : The family of systems is displayed.
- ③ Operation Mode : The operating mode of the system is displayed.
- ④ Refrigerant Type : The type of refrigerant in the system is displayed.
- ⑤ Tank : Whether the tank is included or not is displayed.

1.3.1.14. EHS Tank Excluded Split

The screenshot shows the 'Current System' window with the 'Equipment' tab selected. The 'General' section is expanded, showing the following fields:

Field	Value
System Name	EHS Tank Excluded Split
Product Group	Split
Operation Mode	
Refrigerant Type	R410A
Tank	Excluded

Red circles with numbers 1 through 5 are placed to the left of the first five fields respectively.

- ① System Name : The name of the system is displayed and can be modified.
- ② Product Group : The family of systems is displayed.
- ③ Operation Mode : The operating mode of the system is displayed.
- ④ Refrigerant Type : The type of refrigerant in the system is displayed.
- ⑤ Tank : Whether the tank is included or not is displayed.

1.3.1.15. EHS TDM Plus A2A Indoor Unit Included

The screenshot shows the 'Current System' window with the 'Equipment' tab selected. The 'General' section is expanded, showing the following fields:

Field	Value
System Name	EHS TDM Plus A2A Included
Product Group	TDM Plus
Operation Mode	
Refrigerant Type	R410A
Air to Air Indoor Unit	Included
A2A Combination rate	0.00 %

Red circles with numbers 1 through 6 are placed to the left of the first six fields respectively.

- ① System Name : The name of the system is displayed and can be modified.
- ② Product Group : The family of systems is displayed.
- ③ Operation Mode : The operating mode of the system is displayed.
- ④ Refrigerant Type : The type of refrigerant in the system is displayed.
- ⑤ Air to Air Indoor Unit : Indicates whether air indoor units are included.
- ⑥ A2A Combination Rate : Air indoor unit combination ratio is displayed.

1.3.1.16. EHS TDM Plus A2A Indoor Unit Excluded

Current System	
Summary Equipment Check Result	
^ General	
1	System Name: EHS DTM Plus A2A Excluded
2	Product Group: TDM Plus
3	Operation Mode:
4	Refrigerant Type: R410A
5	Air to Air Indoor Unit: Excluded

- ① System Name : The name of the system is displayed and can be modified.
- ② Product Group : The family of systems is displayed.
- ③ Operation Mode : The operating mode of the system is displayed.
- ④ Refrigerant Type : The type of refrigerant in the system is displayed.
- ⑤ Air to Air Indoor Unit : Indicates whether air indoor units are included.

1.3.1.17. Ventilation Split DOAS

Current System

Summary Equipment Check Result

General

1 System Name Split DOAS

2 Product Group Split DOAS

3 Operation Mode

4 Refrigerant Type R410A

- ① System Name : The name of the system is displayed and can be modified.
- ② Product Group : The family of systems is displayed.
- ③ Operation Mode : The operating mode of the system is displayed.
- ④ Refrigerant Type : The type of refrigerant in the system is displayed.

1.3.1.18. Ventilation Packaged DOAS

Current System

Summary Equipment Check Result

General

1 System Name Packaged DOAS

2 Product Group Packaged DOAS

- ① System Name : The name of the system is displayed and can be modified.
- ② Product Group : The family of systems is displayed.

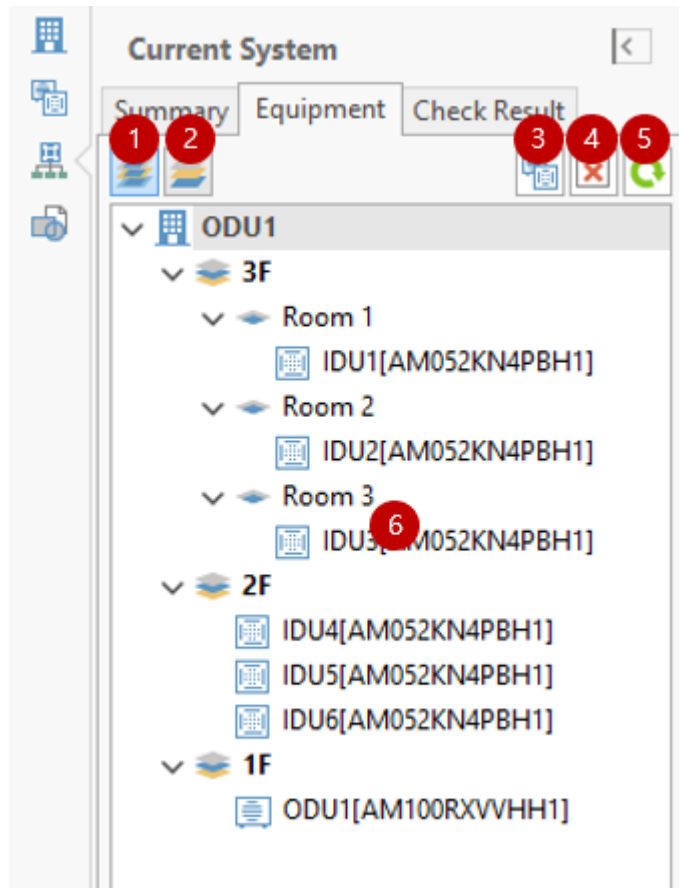
1.3.1.19. Ventilation ERV

The screenshot shows a software interface for configuring a 'Current System'. The window has a title bar with a back button. Below the title bar are three tabs: 'Summary', 'Equipment', and 'Check Result'. The 'Summary' tab is selected. Under the 'Summary' tab, there is a section titled 'General' with a collapse/expand arrow. Inside the 'General' section, there are two input fields: 'System Name' and 'Product Group'. The 'System Name' field contains the text 'ERV' and is marked with a red circle containing the number 1. The 'Product Group' field contains the text 'Energy Recovery Ventilation (ERV)' and is marked with a red circle containing the number 2. On the left side of the window, there is a vertical sidebar with several icons representing different system components.

- ① System Name : The name of the system is displayed and can be modified.
- ② Product Group : The family of systems is displayed.

1.3.2. Equipment

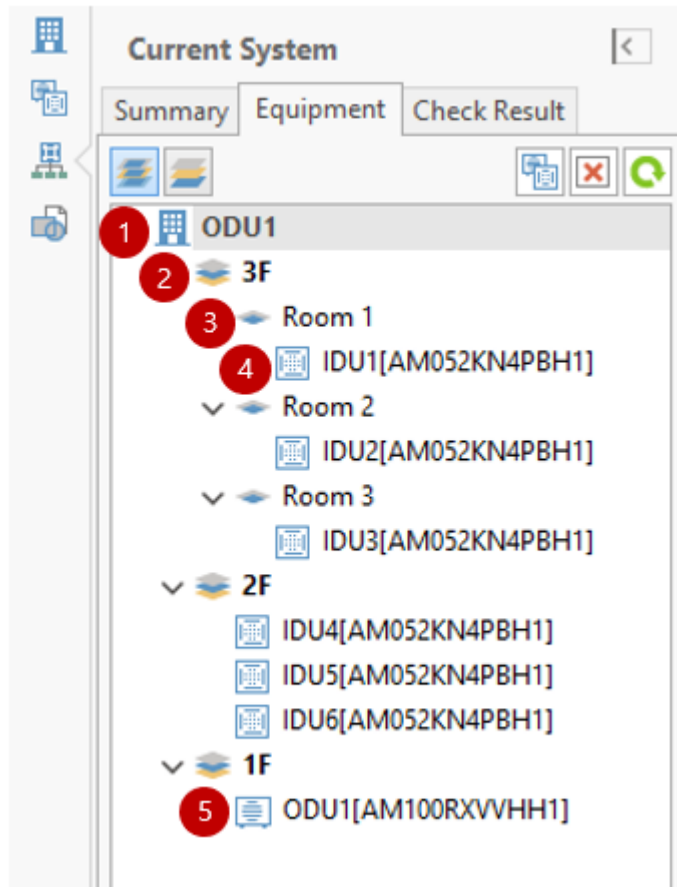
Checks the equipment of the currently active system and places unconnected equipment in the drawing.



- ① View by room load : Check the indoor and outdoor units by room load.
- ② View by equipment location : Check the indoor and outdoor units by location.
- ③ Placement of unconnected equipment : Place unconnected equipment on the drawing.
- ④ Remove unconnected equipment : Remove unconnected equipment from the current system.
- ⑤ Update : Update the equipment list.
- ⑥ Equipment list : Check the list of equipment.

1.3.2.1. View by room load

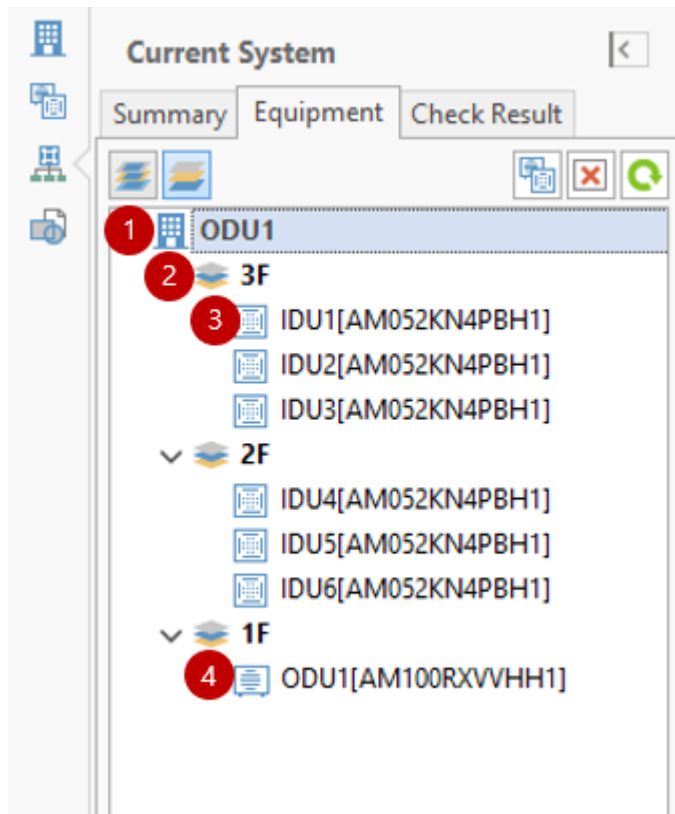
The equipment in charge is displayed based on the room load.



- ① System : The system icon and name are displayed.
- ② Floors : The floor icon and name are displayed. If there is a connected area object when double-clicking, the area is zoom in.
- ③ Rooms : The room icon and name are displayed. If there is a connected area object when double-clicking, the area is zoom in.
- ④ Indoor Units : The indoor unit icon and name are displayed. If there is a connected area object when double-clicking, the area is zoom in.
- ⑤ Outdoor Unit : The outdoor unit icon and name are displayed. If there is a connected area object when double-clicking, the area is zoom in.

1.3.2.2. View by equipment location

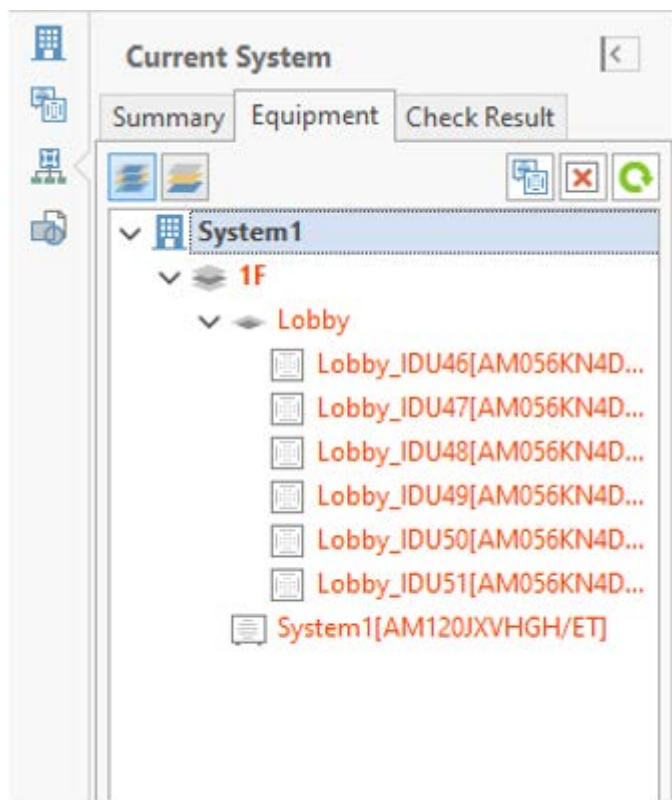
Equipment is displayed based on the placed position.



- ① System : The system icon and name are displayed.
- ② Floors : The floor icon and name are displayed. If there is a connected area object when double-clicking, the area is zoom in.
- ③ Indoor Units : The indoor unit icon and name are displayed. If there is a connected area object when double-clicking, the area is zoom in.
- ④ Outdoor Unit : The outdoor unit icon and name are displayed. If there is a connected area object when double-clicking, the area is zoom in.

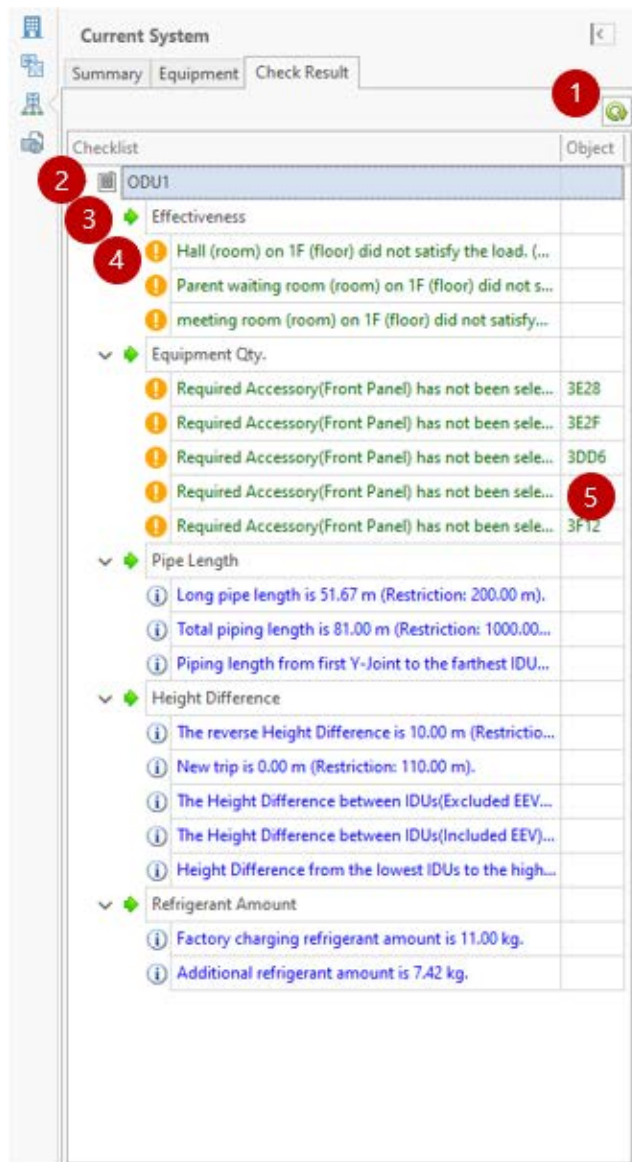
1.3.2.3. Placement of unconnected equipment

When .NDPS(DVM Pro 2.0 Sales Project File), .DVMC(DVM Pro 1.0 CAD Project File), and .DVMS (DVM Pro 1.0 Sales Project File) are opened, drawing objects are displayed as equipments that are not connected to the equipment list. Unconnected equipments can be placed on the drawing. (Refer to how to arrange indoor and outdoor units)



1.3.3. Check Result

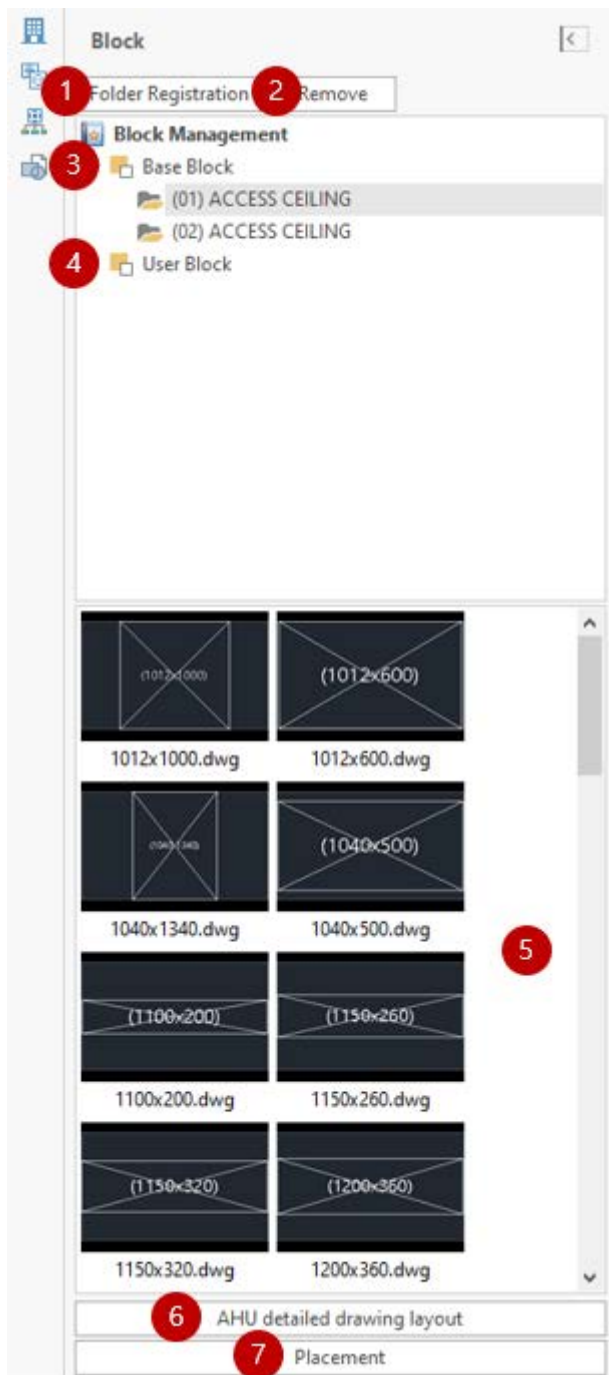
The system check result is displayed.



- ① Update : The system check result is updated.
- ② System : The system icon and name are displayed.
- ③ Types : The type of check item is displayed.
- ④ Items : The message of the check result item is displayed. Red for errors, green for warnings, and blue for information. The message displayed depends on the system-specific design state.
- ⑤ Object : The object handle corresponding to the message of the item is displayed, and the object is zoom in when you double-click the item.

1.4. Block

Blocks provided by the system and users can register and manage a separate block folder and place managed blocks in drawings.



- ① Folder Registration : Select the folder where blocks are located on the user's computer and register them as user blocks.

- ② Remove : Removes the folder selected in the folder list from the list.
- ③ Base Block : Block folders provided by the system are displayed.
- ④ User Block : Block folders registered by the user are displayed.
- ⑤ Block List : Blocks existing in the folder selected from the block list are displayed.
- ⑥ AHU detailed drawing layout : Place the AHU Kit detail drawing of the designed direct expansion AHU on the drawing. The configuration of the AHU Kit can be set in the Accessories tab.

> Command Window

> Select AHU : Select direct expansion AHU in drawing

> Specify insert point : Pick the insertion point.

> Enter the rotation angle <0.00> : Enter the angle of rotation of the block.

- ⑦ Placement : Places the block selected in the block list on the drawing.

> Command Window

> Specify the insert point : Pick the insertion point of the block.

> X scale ratio:<1> : Enter the scale factor for the X axis.

> Y scale ratio <Use x scale ratio> : Enter the scale factor for the Y axis.

> Specify rotation angle<0.00>: Enter the angle of rotation of the block.