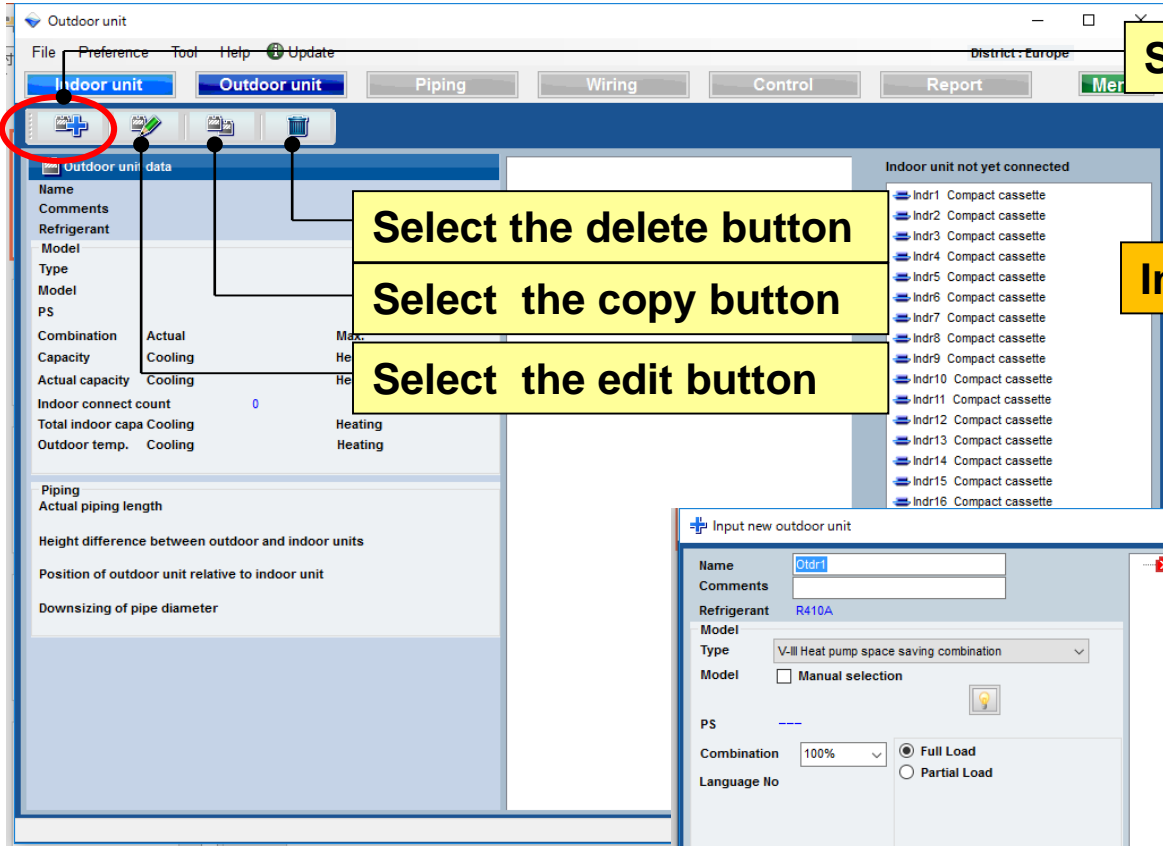


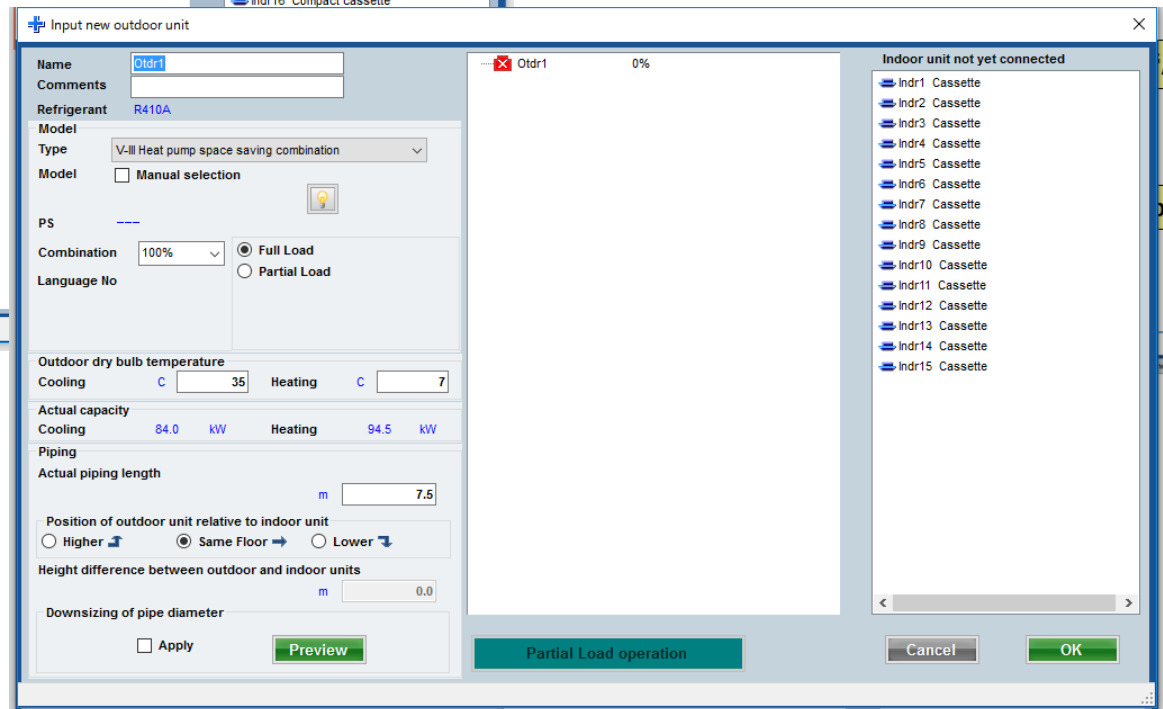
Outdoor unit (1/4)



Select "Add new outdoor unit"



Input new outdoor unit



Outdoor unit (2/4)

Preference input name display

Input comments. (Limitation ten characters)
It is possible to write freely. (Ex. : Roof top, 1F)

Select type of outdoor unit

Select Model of outdoor unit

Outdoor capacity list

Select connected limitation. If connected limitation is exceeded, outdoor unit is automatically changed to the model above.

Select Load type

Input design conditions of outdoor unit .
If you don't decide design conditions, input it under the ratings condition of cooling "35C" and heating "7C".

Input the value of "Actual piping Length" and "Height difference".
Select position of outdoor unit relative to indoor unit. (*1)

Downsizing of pipe diameter (*1)

Partial Load operation

Partial load operation

(*1) The loss coefficient is automatically calculated.

Outdoor unit (3/4)

Red mark means outside design conditions.

Use the indoor unit registration screen to set the indoor unit to be grouped. (Drag&drop)

The model of outdoor unit and Indoor unit are selected automatically.

The screenshot displays the 'Input new outdoor unit' dialog box in the Design Simulator. The dialog is divided into two panes. The left pane shows the configuration for the outdoor unit, including Name (Otdr1), Refrigerant (R410A), Model (VR-II Heat Recovery space saving combination), and various operational settings like PS (Full Load), Combination (100%), and Outdoor dry bulb temperature (Cooling: 35, Heating: 7). The right pane shows a list of indoor units, with 'Indr1 Cassette' through 'Indr15 Cassette'. A red 'X' mark is visible next to 'Otdr1' in the top bar, indicating outside design conditions. A green arrow points from the indoor unit list to the outdoor unit settings. Below this, a second dialog box shows the outdoor unit model set to 'AJY270GALH' and the indoor unit list populated with 'AJY270GALH' models. A blue arrow points from the indoor unit list in the second dialog to the text box below.

Outdoor unit (4/4)

Input new outdoor unit

Name: Oldr1
Comments:
Refrigerant: R410A
Model: VR-II Heat Recovery space saving combination
Type: Manual selection
PS: 3N, 400V, 50Hz
Combination: 100% Full Load Partial Load
Language No: 100 %
Outdoor dry bulb temperature: Cooling C: 35 Heating C: 7
Actual capacity: Cooling 84.0 kW Heating 94.5 kW
Piping: Actual piping length: 7.5 m
Position of outdoor unit relative to indoor unit: Higher Same Floor Lower
Height difference between outdoor and indoor units: 0.0 m

Partial Load operation

Cancel OK

Indoor unit not yet connected

- Oldr1 AJY270GALH 98.8%
 - Indr1 AUXD18GALH
 - Indr2 AUXD18GALH
 - Indr3 AUXD18GALH
 - Indr4 AUXD18GALH
 - Indr5 AUXD18GALH
 - Indr6 AUXD18GALH
 - Indr7 AUXD18GALH
 - Indr8 AUXD18GALH
 - Indr9 AUXD18GALH
 - Indr10 AUXD18GALH
 - Indr11 AUXD18GALH
 - Indr12 AUXD18GALH
 - Indr13 AUXD18GALH
 - Indr14 AUXD18GALH
 - Indr15 AUXD18GALH

Select "OK"

Outdoor unit and indoor unit product information and image display.

Piping Wiring Control Report Menu

Oldr1 AJY270GALH 98.8%

Indoor unit not yet connected


Model	VR-II Heat Recovery space saving combination		
Type	AJY270GALH		
Model	AJY270GALH		
PS	3N, 400V, 50Hz		
Combination	Actual	98.8%	Max. 100%
Capacity	Cooling	85.0 kW	Heating 95.0 kW
Actual capacity	Cooling	84.0 kW	Heating 94.5 kW
Indoor connect count	15		
Total indoor capa	Cooling	84.0 kW	Heating 94.5 kW
Outdoor temp.	Cooling	35C	Heating 7C

Piping

Actual piping length: 7.5m

Height difference between outdoor and indoor units: 0.0m

Position of outdoor unit relative to indoor unit: Same Floor



Indoor unit

Select "Indoor unit"

Confirm detail specifications on the Indoor unit screen .

Indoor unit

File Preference Tool Help Update

Indoor unit Outdoor unit Rq TC TC Rq SC SC Rq HC HC

Details of indoor unit

Indoor unit type image

Name	Comments	Model	Tmp C (C%)	Tmp H (C)	Rq TC (kW)	TC (kW)	Rq SC (kW)	SC (kW)	Rq HC (kW)	HC (kW)
Indr1		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr2		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr3		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr4		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr5		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr6		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr7		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr8		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr9		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr10		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr11		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr12		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr13		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr14		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr15		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0

Indoor unit type image

Indoor unit value

Model
AUXD18GALH
Capacity
5.6 kW
Fan air flow rate
High / 319.4 l/s
Sound pressure level
36 dB(A)
Input power
39 W

Indoor unit

File Preference Tool Help Update

Indoor unit Outdoor unit Rq TC TC Rq SC SC Rq HC HC

Details of indoor unit

Indoor unit type image

Name	Comments	Model	Tmp C (C%)	Tmp H (C)	Rq TC (kW)	TC (kW)	Rq SC (kW)	SC (kW)	Rq HC (kW)	HC (kW)
Indr1		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr2		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr3		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr4		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr5		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr6		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr7		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr8		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr9		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr10		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr11		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr12		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr13		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr14		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0
Indr15		AUXD18GALH	27.0/ 43.4	20	0.5	5.0	0.5	4.1	0.5	6.0

Indoor unit type image

Indoor unit value

Model
AUXD18GALH
Capacity
5.6 kW
Fan air flow rate
High / 319.4 l/s
Sound pressure level
36 dB(A)
Input power
39 W

Outdoor capacity list (1/3)

Input new outdoor unit

Name: Otdr1
Comments:
Refrigerant: R410A
Model: AJYA90GALH
Type: VR-II Heat Recovery space saving combination
PS: 3N, 400V, 50Hz
Combination: 100%
Language No: 100%

Outdoor dry bulb temperature
Cooling: 35 Heating: 7
Actual capacity
Cooling: 28.0 kW Heating: 31.5 kW
Piping
Actual piping length: 7.5 m
Position of outdoor unit relative to indoor unit: Same Floor
Height difference between outdoor and indoor units: 0.0 m

Otdr1 AJYA90GALH 100%
Indr1 AUXD18GALH
Indr2 AUXD18GALH
Indr3 AUXD18GALH
Indr4 AUXD18GALH
Indr5 AUXD18GALH

The connection % and capacity are calculated and the largest outdoor unit from the combination value is selected when connected.

Input new outdoor unit

Name: Otdr1
Comments:
Refrigerant: R410A
Model: AJYA90GALH
Type: VR-II Heat Recovery space saving combination
PS: 3N, 400V, 50Hz
Combination: 100%
Language No: 100%

Outdoor dry bulb temperature
Cooling: Heating:
Actual capacity
Cooling: 28.0 kW Heating:
Piping

Otdr1 AJYA90GALH 100%
Indr1 AUXD18GALH
Indr2 AUXD18GALH
Indr3 AUXD18GALH
Indr4 AUXD18GALH
Indr5 AUXD18GALH

Outdoor capacity list

Combination (%)	HP	Capacity (kW)	Model name	Outdoor unit	Outdoor unit	Outdoor unit
100.0	10	28.0	AJYA90GALH	AJYA90GALH		
83.6	12	33.5	AJY108GALH	AJY108GALH		
70.0	14	40.0	AJY126GALH	AJY126GALH		

Upper bound: 100%
Lower bound: 70%
Calculate

Cancel OK

Use the "outdoor capacity list" to be able to specify the range of the connection % and capacity calculation ratio and to be able to select the outdoor unit from several candidates

Outdoor capacity list (2/3)

Modify outdoor unit

+ Input new outdoor unit

Name Otdr1

Comments

Refrigerant R410A

Model

Type VR-II Heat Recovery space saving combination

Model Manual selection

AJHA72GALH

PS 3N, 400V, 50Hz

Select "Outdoor capacity list"



Open "Outdoor capacity list"

Outdoor capacity list

Combination (%)	HP	Capacity (kW)	Model name	Outdoor unit	Outdoor unit	Outdoor unit
62.9	10	28.0	AJHA90GALH	AJHA90GALH		
52.5	12	33.5	AJH108GALH	AJH108GALH		

Upper bound 70%

Lower bound 50%

Calculate

Cancel OK

Select "bound"

Select "Calculation"



Outdoor units in the range are displayed in the list.

Outdoor capacity list (3/3)

Outdoor capacity list

Combination (%)	HP	Capacity (kW)	Model name	Outdoor unit	Outdoor unit	Outdoor unit
62.9	10	28.0	AJHA90GALH	AJHA90GALH		
52.5	12	33.5	AJH108GALH	AJH108GALH		

Modify outdoor unit

Name: Otdr1
Comments:
Refrigerant: R410A
Model Type: VR-II Heat Recovery space saving combination
Model: Manual selection
AJHA90GALH
PS: 3N, 400V, 50Hz
Combination: 70%
Language No: 70 %
Full Load (selected)
Partial Load
Outdoor dry bulb temperature: Cooling C 35.0, Heating C 7.0
Actual capacity: Cooling 17.6 kW, Heating 20.8 kW
Piping: Actual piping length m 7.5
Position of outdoor unit relative to indoor unit: Higher, Same Floor (selected), Lower
Height difference between outdoor and indoor units m 0.0

Cancel OK

Select "Optimal outdoor model"

Partial load function (1/6)

When Partial load is used, outdoor unit capacity can be lowered by adjusting indoor unit operation rate.

① When selected indoor unit performs 100% operation
→ Use Full load.

② Select when models are selected in consideration of non-operating indoor unit from all air conditioners. Operating ratio (%) can be set for cooling and heating.
→ Use Partial load.

③ Models are selected on the assumption that there are partial operating indoor units and 100% operating indoor units for each room.
→ Use Partial load operation.

Partial load operation (2/6)

Select Full load

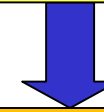
Select Partial load
*“Partial Load” value can be also set from “Preference”

Select Partial load operation

Partial Load operation

Partial load operation (3/6)

Select "Partial load operation"



Open "Partial load operation"

Input new outdoor unit

Name: Otdr1
Comments:
Refrigerant: R410A
Model: VR-II Heat Recovery space saving combination
Type:
Model: Manual selection
AJHA72GALH
PS: 3N, 400V, 50Hz
Combination: 100%
Language No: 100 %
Operating ratio C: 20%
Operating ratio H: 20%

Outdoor dry bulb temperature
Cooling: C 35.0 Heating: C 7
Actual capacity
Cooling: 16.5 kW Heating: 19.5 kW
Piping
Actual piping length: m 7.5
Position of outdoor unit relative to indoor unit
 Higher Same Floor Lower
Height difference between outdoor and indoor units: m 0

Partial Load operation

Partial Load operation

Full Load operation Partial Load operation

Outdoor Model
Combination: 150%
Rated Capacity
Cooling
Heating
Actual Capacity(outdoor)
Cooling
Heating
Actual Capacity(indoor)
Cooling
Heating

Partial load ratio
 Operating ratio designation
Cooling: 88 %
Heating: 88 %
 Partial Indoor designation

Reset Check capacity
Cancel OK

The "Indoor / Outdoor" operating ratio can be changed

The operation ratio of all indoor units can be changed

Partial load operation (4/6)

Partial Load operation

Full Load operation Partial Load operation

Combination 150%

Partial load ratio
 Operating ratio designation Cooling 88 %
Heating 88 %
 Partial Indoor designation

Reset Check capacity OK Cancel

Select "Check capacity"



The calculation results appears.

Partial Load operation

Combination 150%

Partial load ratio
 Operating ratio designation Cooling 88 %
Heating 88 %
 Partial Indoor designation

	Full Load operation	Partial Load operation
Outdoor Model	AJY216LALBH	AJY198LALBH
Combination	132.4%	144.2%
Rated Capacity		
Cooling	68.0 kW	62.4 kW
Heating	76.5 kW	70.0 kW
Actual Capacity(outdoor)		
Cooling	69.9 kW	65.2 kW
Heating	60.6 kW	55.9 kW
Total indoor capa.		
Cooling	74.5 kW	74.5 kW
Heating	82.0 kW	82.0 kW
Actual Capacity(indoor)		
Cooling	74.5 kW	74.5 kW
Heating	60.5 kW	56 kW

Reset Check capacity OK Cancel

The calculation results are shown.

Left: Full load operation

Right: Partial load operation

Partial load operation (5/6)

Combination: 150%

Partial load ratio

Operating ratio designation

Partial Indoor designation

Cooling: 88 %

Heating: 88 %

Indoor Model	Check Cooling	Check Heating
ARXC60GATH	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ARXC60GATH	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ARXC60GATH	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ARXC60GATH	<input type="checkbox"/>	<input type="checkbox"/>
ARXC60GATH	<input type="checkbox"/>	<input type="checkbox"/>

Indoor Operating ratio

Check with the indoor unit is operating rate of 100%. Please enter the operating rate of the check without the indoor unit.

80 % 80 %

Reset Check capacity

Cancel OK

Select combination capacity

Select combination capacity

The operation ratio is re-calculated and displayed with the content set in "Partial indoor designation"

Check all

Select "Partial indoor designation"

Check with the indoor unit is operating rate of 100%.

Please enter the operating rate of the check without the indoor unit.

Partial load operation (6/6)

	Full Load operation	Partial Load operation
Outdoor Model	AJY216LALBH	AJY198LALBH
Combination	132.4%	144.2%
Rated Capacity		
Cooling	68.0 kW	62.4 kW
Heating	76.5 kW	70.0 kW
Actual Capacity(outdoor)		
Cooling	69.9 kW	65.2 kW
Heating	60.6 kW	55.9 kW
Total indoor capa.		
Cooling	74.5 kW	74.5 kW
Heating	82.0 kW	82.0 kW
Actual Capacity(indoor)		
Cooling	74.5 kW	74.5 kW
Heating	60.5 kW	56 kW

Combination: 150%

Partial load ratio:
 Operating ratio designation
Cooling: 88%
Heating: 88%
 Partial Indoor designation

Indoor Model	Check Cooling	Check Heating
ARXC60GATH	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ARXC60GATH	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ARXC60GATH	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ARXC60GATH	<input type="checkbox"/>	<input type="checkbox"/>
ARXC60GATH	<input type="checkbox"/>	<input type="checkbox"/>

Indoor Operating ratio
Check with the indoor unit is operating rate of 100%. Please enter the operating rate of the check without the indoor unit.
80% 80%

Reset Check capacity OK Cancel

The calculation results are shown.
Left: Full load operation
Right: Partial load operation

Downsizing of pipe diameter

The pipe diameter can be downsized by selecting “V-III and then setting the “Manual inputs pipe length” on the “Piping” screen (Only supported regions) (*2)

***2: The description of the “Downsizing of pipe diameter” is described on the “Piping” screen**