

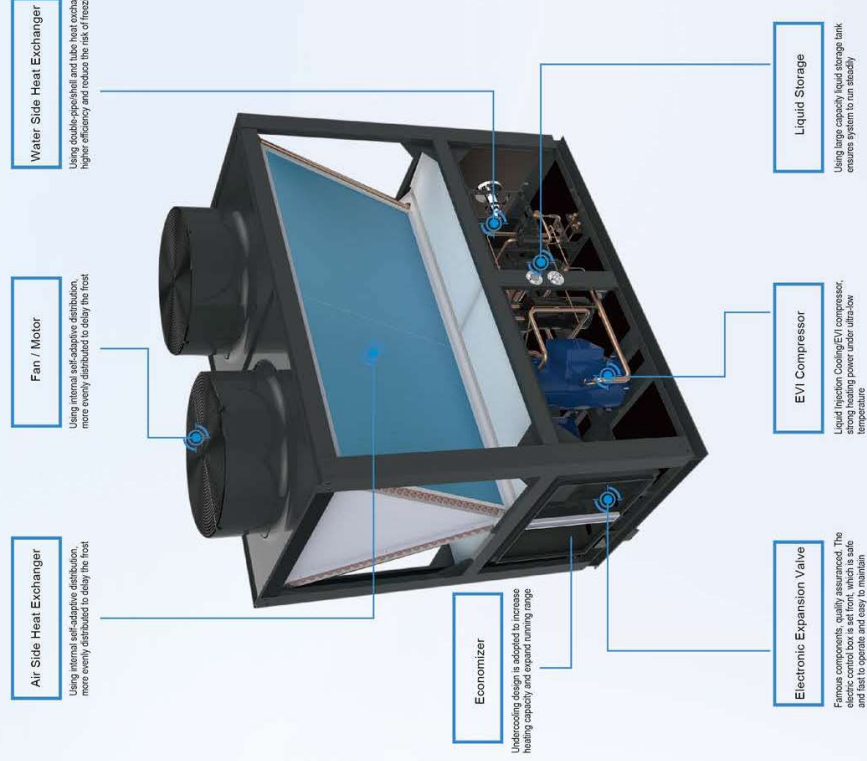
Commercial Heating & Cooling Heat Pump



- | | | |
|--------------------|---------------------------------|---------------------------------|
| | | |
| Cooling & Heating | Friendly Refrigerant | Wide-range Operation |
| | | |
| Modular Control | Small Footprint | High Efficiency & Energy Saving |
| | | |
| Stable Performance | Multi-level Capacity Adjustment | Intelligent Control System |

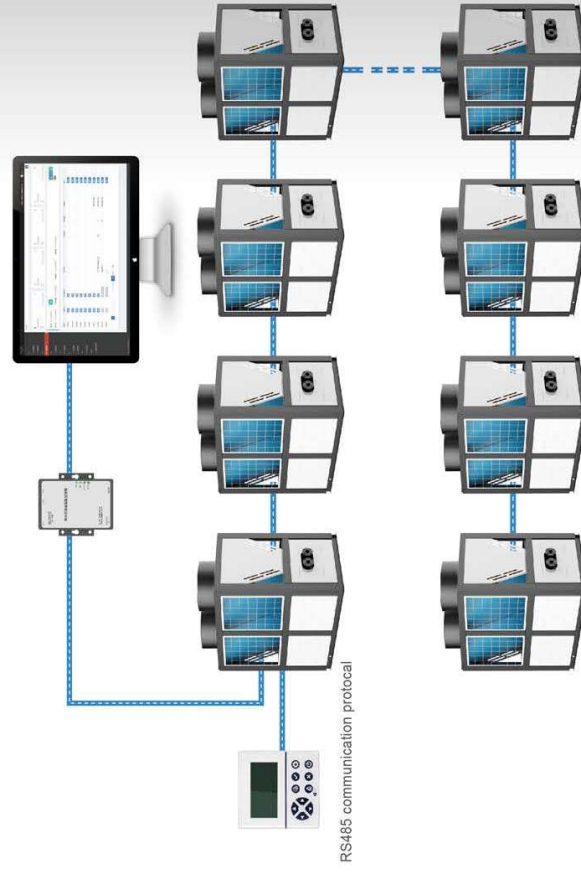
Features Multi-Protection

- | | | | | |
|----------------------------------|------------------------------------|---------------------|-----------------------|-----------------------------|
| | | | | |
| High and Low Pressure Protection | Reverse (Missing) Phase Protection | Frost Protection | Prevent Freezing | Frequent Restart Protection |
| | | | | |
| Overload Protection | Discharge Temp. Protection | Overheat Protection | Water Flow Protection | Sensor Failure Protection |

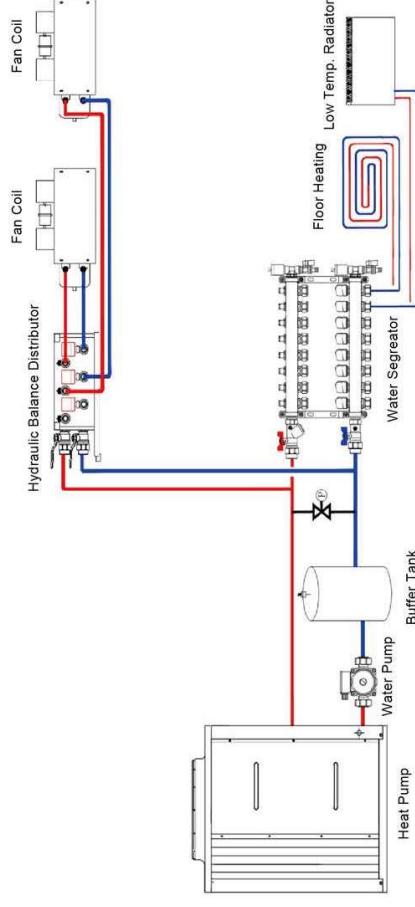


Modular Control

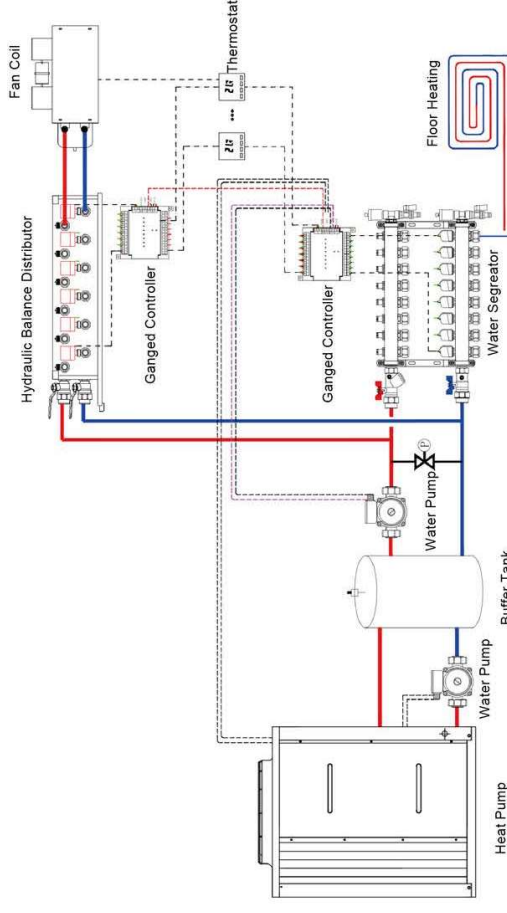
- ☆ **Easy Disassembly and Easy Installation**
The Metal coaming can be fully knocked-down for daily maintenance easily.
- ☆ **Start By Stage**
The machine is made with modular structure and in the same system, the modules can start by stage with equal distribution of loads to reduce the impact of unit starting current on the power grid and ensure a long life.
- ☆ **Modular Connection**
Different models and module can be freely connected and can be parallel running max. 16 units together. And it's easy to compat and extend more different model and module together according to the installation site features.
- ☆ **Modular Backup Running**
Modular multi-system design ensure the whole system remain in running even if any error appeared on one or on more compressors or on modular units because of the different modular unit can be backup for each other.
- ☆ **Modular Rotation Running**
The Controller can alternately set the priority for starting which modular unit to balance the working time for all the modular unit, which ensure the reliability and service life of the machine.
- ☆ **Intelligent Control System**
Single Wire Controller can control Max. 16 modular connected units, it can control each modular unit of start and stop sequence, control the system running parameter, active warning of faults in the unit and the user can read the running state and failure state from it.
- ☆ **Long Distance Monitoring System**
You can control the machine by computer and APP at home at anytime.

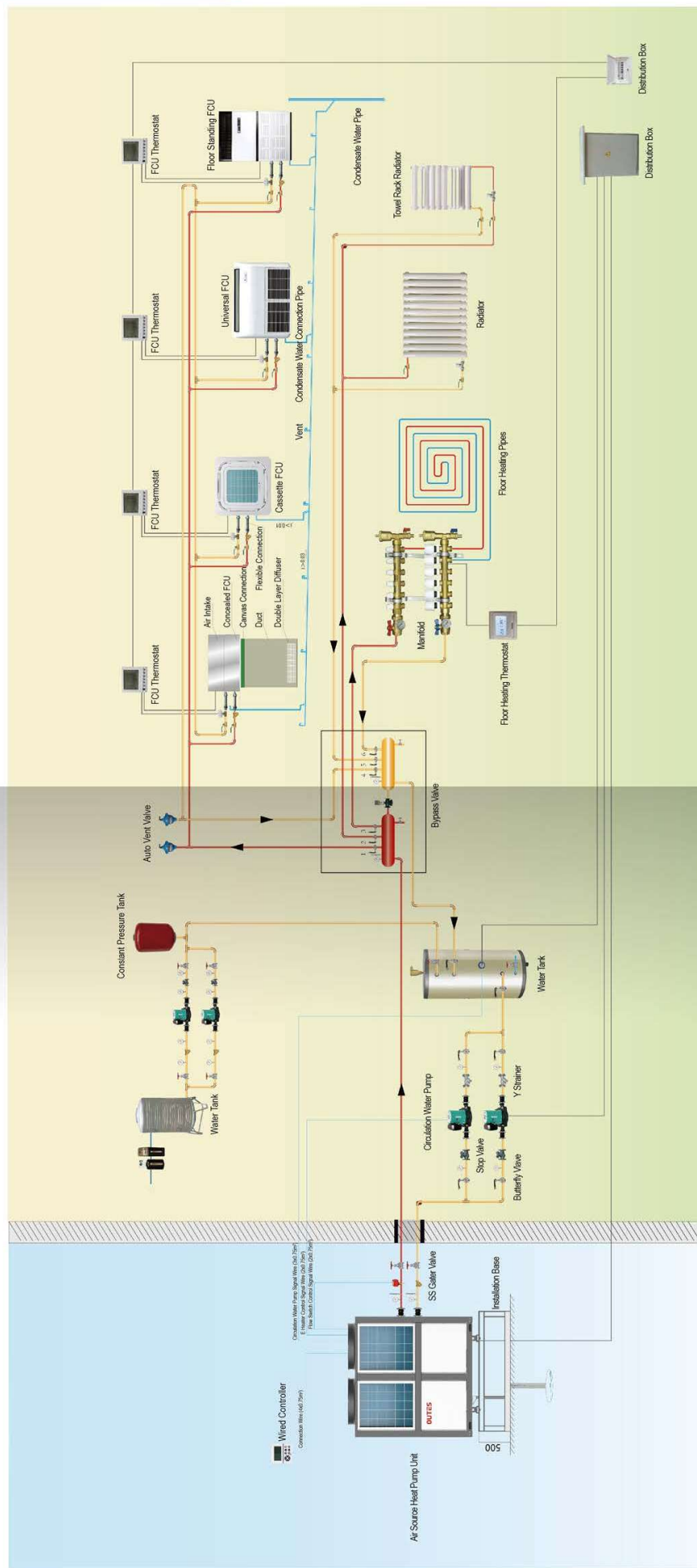


Primary Circulation System



Secondary Circulation System





35 | OUTES



Commercial Heating & Cooling Heat Pump (EVI) Hydraulic Kits(Optional)

Hydro Box	Model	/	AH408EHP	AH418EHP	AH419EHP	Optional
Power Supply	/	/	220V~240V/50Hz	220V~240V/50Hz	220V~240V/50Hz	
Electric Heater	/	kW	3.0	3.0	3.0	Electric Heater
Water Pump Band	/		Grundfos	Grundfos	Grundfos	
Water Flow	/	m³/h	1.46	2.5	3.18	Water Pump
Pump Input Power	/	W	140	180	180	
Expansion Tank Volume	/	L	5.0	5.0	5.0	Expansion Tank
Noise	/	dB(A)	≤30	≤30	≤30	
Net Weight	/	kg	35	35	35	
Net Dimension (L×W×H)	/	mm	520×800×308	520×800×308	520×800×308	
Packing Dimension (L×W×H)	/	mm	570×870×420	570×870×420	570×870×420	



Hydraulic Box Including 3kW Electric Heater, Water Pump, Three Way Valves, Expansion Tank & Discharge Valve



Model	/	AH408E	AH418E	AH419E
Power Supply	/	220~240V/IN/50Hz	220~240V/IN/50Hz	220~240V/IN/50Hz
Heating- A7 C/W35 C	/	kW	8.5	14.5
Rated Heating Capacity(1)	/	kW	2.15	16.0
Heating Input Power(1)	/	kW	3.95	3.93
COP(1)	/	WW	8.2	13.9
Rated Heating Capacity(2)	/	kW	2.66	4.19
Heating Input Power(2)	/	kW	3.08	3.32
COP(2)	/	WW	6.7	10
Rated Cooling Capacity	/	kW	2.6	4.1
Cooling Input Power	/	kW	2.58	2.44
EER	/	WW	3.4	5.9
Rated Input Power	/	kW	-25~49	-25~49
Working Condition	/	°C	R410A	R410A
Refrigerant Type	/	/	Copland/scroll	Copland/scroll
Compressor Brand	/	/	ON/OFF	ON/OFF
Compressor Type	/	/	Plate	Plate
Water Side Heat Exchanger	/	/	1.46	2.49
Rated Water Flow	/	m³/h	≤60	≤63
Noise Level	/	dB(A)	100	150
Net Weight	/	kg	1038×406×740	1038×406×1410
Net Dimension (L×W×H)	/	mm	1086×446×820	1086×446×1490
Packing Dimension (L×W×H)	/	mm	54108/162	27/54/64
Container Loading(20/40/40H)	/	Unit		27/54/64

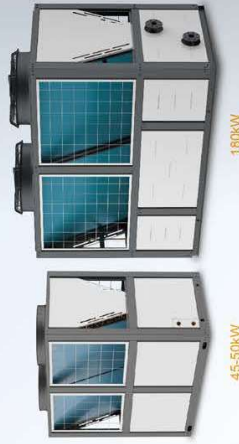
Remark:
1. Condition Heating: Ambient Temp (DBWB) 7°C/8°C, Water Temp (In/Out) 35°C/35°C;
2. Condition Heating: Ambient Temp (DBWB) 7°C/8°C, Water Temp (In/Out) 35°C/35°C;
3. Cooling: Ambient Temp (DBWB) 35°C/24°C, Water Temp (In/Out) 12°C/7°C;
4. The above data test reference EN14825:2016.
5. The above data is for reference only and might be changed without prior notice.



Model	/	AH440Ee	AH445Ee	AH490Ee	AH490Ee
Power Supply	/	380V/3N/50Hz	380V/3N/50Hz	380V/3N/50Hz	380V/3N/50Hz
Heating- A7 C/W35 C	/	kW	39.4	45.2	90.3
Rated Heating Capacity(1)	/	kW	10.2	11.6	21.4
Heating Input Power(1)	/	kW	3.85	3.90	4.21
COP(1)	/	WW	37.5	43.0	86.0
Rated Heating Capacity(2)	/	kW	11.3	12.3	23.5
Heating Input Power(2)	/	kW	3.3	3.5	3.7
COP(2)	/	WW	34.5	37.5	69.0
Rated Cooling Capacity	/	kW	11.5	13.2	23.7
Cooling Input Power	/	kW	3.00	2.84	2.91
EER	/	WW	19.7	22.0	38.2
Rated Input Power	/	kW	-25~49	-25~49	-25~49
Working Condition	/	°C	R410A	R410A	R410A
Refrigerant Type	/	/	Danfloss/Scroll	Copland/scroll	Danfloss/Scroll
Compressor Brand	/	/	ON/OFF	ON/OFF	ON/OFF
Compressor Type	/	/	Shell-and-tube	Shell-and-tube	Shell-and-tube
Water Side Heat Exchanger	/	/	5.9	6.5	11.9
Rated Water Flow	/	m³/h	≤65	≤65	≤70
Noise Level	/	dB(A)	380	380	910
Net Weight	/	kg	1600×900×1660	1600×900×1660	2042×1170×2128
Net Dimension (L×W×H)	/	mm	1650×1010×1760	1650×1010×1760	2200×1450×2350
Packing Dimension (L×W×H)	/	mm	1224/24	1224/24	2220×1286×2340
Container Loading(20/40/40H)	/	Unit			5/9/9

Remark:
1. Condition Heating: Ambient Temp (DBWB) 7°C/8°C, Water Temp (In/Out) 35°C/35°C;
2. Condition Heating: Ambient Temp (DBWB) 7°C/8°C, Water Temp (In/Out) 35°C/35°C;
3. Cooling: Ambient Temp (DBWB) 35°C/24°C, Water Temp (In/Out) 12°C/7°C;
4. The above data test reference EN14825:2016.
5. The above data is for reference only and might be changed without prior notice.

Commercial Heating Only Heat Pump (EVI)



R410a

Model	/	AHh45Ee	AHh50Ee	AHh180Ee
Power Supply	/	380V/3N/50Hz	380V/3N/50Hz	380V/3N/50Hz
Heating- A7 C/W35C	kW	42.0	47.3	178.5
Heating Input Power	kW	10.9	12.1	47.0
COP	WW	3.85	3.90	3.80
Rating Heating Capacity	kW	40.0	45.0	170.0
Heating- A7 C/W35C	kW	11.3	12.7	47.90
COP	WW	3.54	3.54	3.55
Rating Heating Capacity	kW	19.9	23.5	92.1
Heating- A-12/W41	kW	9.02	10.6	40.3
COP	WW	2.21	2.22	2.27
Rated Input Power	kW	16.6	17.6	70.6
Min. Working Temperature (Heating)	°C	-30	-30	-30
Refrigerant Type	/	R410A	R410A	R410A
Compressor Brand/Type	/	Danfoss/Scroll	Danfoss/Scroll	Danfoss/Scroll
Capacity Adjustable	/	ON/OFF	ON/OFF	ON/OFF
Water side Heat Exchanger	/	Tube in Tube	Tube in Tube	Tube in Tube
Rated Water Flow	m³/h	6.9	7.7	29.2
Noise	dB(A)	≤65	≤65	≤70
Net Weight	kg	400	450	1480
Net Dimension (L×W×H)	mm	1600×900×1660	1600×900×1660	2860×1450×2335
Packing Dimension (L×W×H)	mm	1650×1010×1760	1650×1010×1760	2930×1500×2450
Container Loading(20'/40'H)	Unit	7/14/14	7/14/14	4/8/8

Remark:
1. Heating Ambient temp. (DBWB): 7.2/6°C, Water temp. (In/Out): 30/17/35°C;
2. Cooling Ambient temp. (DBWB): 35°C/24°C, Water temp. (In/Out): 12/7/7°C;
3. The above data is for reference only and might be changed without prior notice.

Commercial Heating & Cooling Heat Pump



R410a

Model	/	AHc-65e	AHc-130e
Power Supply	/	380V/3N/50Hz	380V/3N/50Hz
Rating Cooling Capacity	kW	65.0	130.0
Cooling- A35 C/W7 C	kW	20.3	40.6
EER	WW	3.20	3.20
Heating Capacity	kW	73.5	147.0
Heating- A7 C/W35C	kW	19.1	37.7
COP	WW	3.85	3.90
Rating Heating Capacity	kW	70.0	140.0
Heating- A7 C/W45C	kW	20.5	41.0
COP	WW	3.41	3.41
Rated Input Power	kW	30.5	60.6
Min. Working Temperature (Heating)	°C	-15	-15
Refrigerant Type	/	R410A	R410A
Compressor Brand/Type	/	Copeland/Scroll	Copeland/Scroll
Capacity Adjustable	/	ON/OFF	ON/OFF
Water side Heat Exchanger	/	Shell&Tube	Shell&Tube
Rated Water Flow	m³/h	11.2	22.4
Noise	dB(A)	≤65	≤68
Net Weight	kg	590	1000
Net Dimension (L×W×H)	mm	1930×941×2135	2340×1500×2350
Packing Dimension (L×W×H)	mm	1980×1040×2235	2390×1550×2450
Container Loading(20'/40'H)	Unit	6/12/12	N/A/5/5

Remark:
1. Cooling Ambient temp. (DBWB): 35°C/24°C, Water temp. (In/Out): 12/7/7°C;
2. Heating Ambient temp. (DBWB): 7.2/6°C, Water temp. (In/Out): 30/17/35°C;
3. The above data is for reference only and might be changed without prior notice.