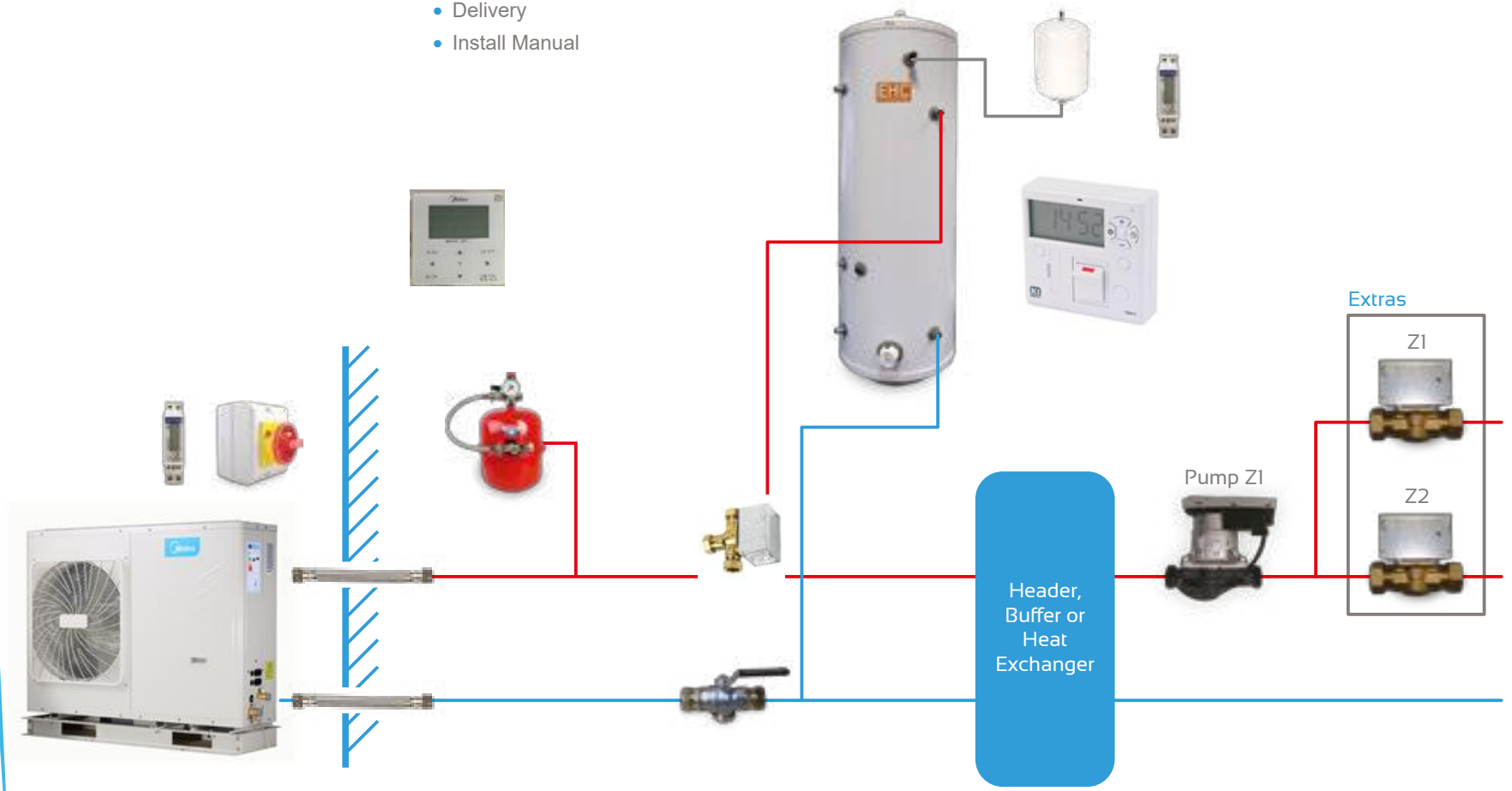
Heating & Hot Water, Multiple Zones

- Midea Unit
- 2 x hitachi adapters
- 2x Flexi Hoses
- 2x small Feet
- Filter Ball
- Robokit
- 1x Wilo Pump
- 1x 28mm 3 Port valve
- Glycol
- Header
- 32A Isolator
- 13A Fused Spur
- 2x Electric Meter
- Immersion heater timer
- Cylinder
- Delivery
- Install Manual



Wiring Diagram Heating & Hot Water

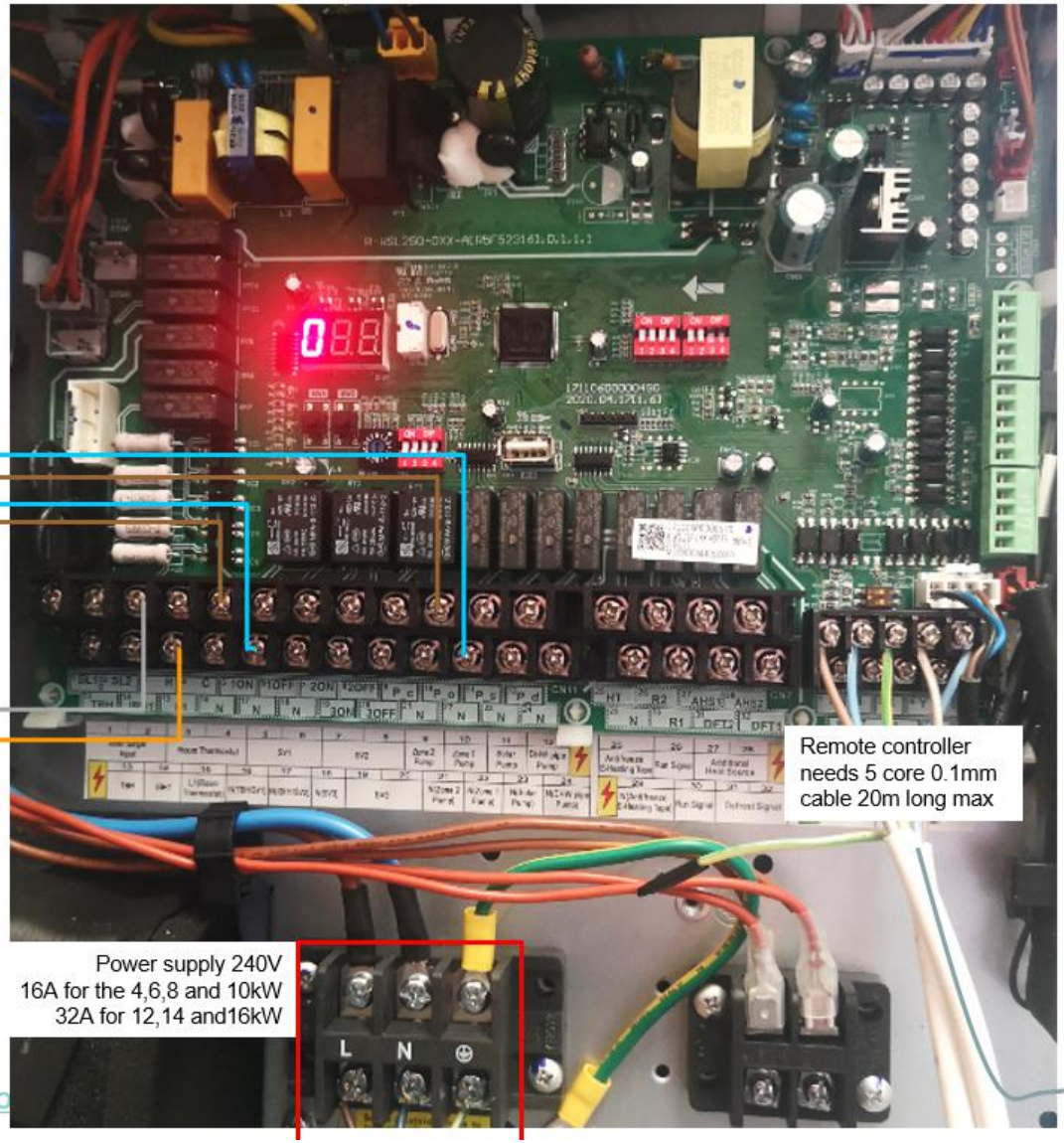
Midea

Freedom Heat Pumps
SALES | SERVICE | SUCCESS

SV1 powers AB to B for hot water mode
Tube A to house and B to cylinder

Pump PO

SV1



Run signal for heating from UFH or stats 240Vac

Remote controller needs 5 core 0.1mm cable 20m long max

Cylinder sensor included in the unit 10m long, you can extend to 20m with 1mm flex.

Power supply 240V
16A for the 4,6,8 and 10kW
32A for 12,14 and16kW

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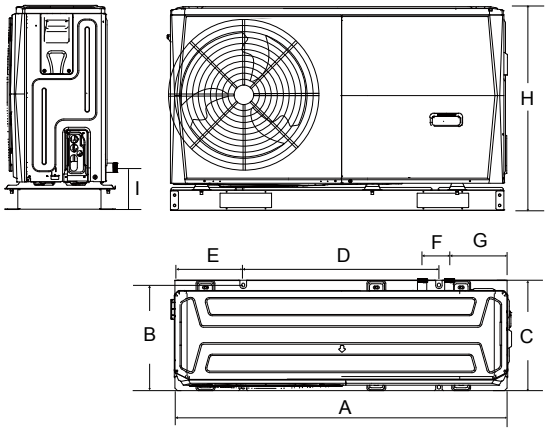
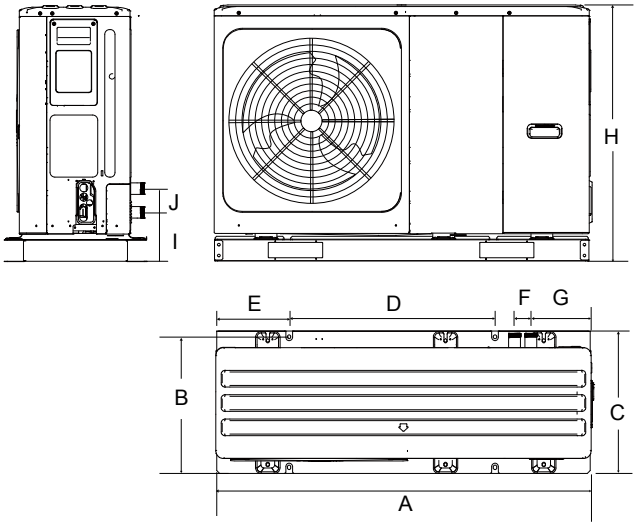
Dimensions



4/6 kW (unit: mm)



8/10/12/14/16 kW (unit: mm)

Model	A	B	C	D	E	F	G	H	I	J
4/6kW	1295	397	429	760	265	105	225	792	161	/
8/10/12/14/16kW	1385	482	526	760	270	60	221	945	182	81

Specifications

Mono

Outdoor unit model MHC-				V4W/D2N8-B	V6W/D2N8-B	V8W/D2N8-B	V10W/D2N8-B	V12W/D2N8-B	V14W/D2N8-B	V16W/D2N8-B	V12W/D2RN8-B	V14W/D2RN8-B	V16W/D2RN8-B
Power supply			V/Ph/Hz	220-240/1/50							380-415/3/50		
Heating[1]	Capacity		kW	4.20	6.35	8.40	10.0	12.1	14.5	15.9	12.1	14.5	15.9
	Rated input		kW	0.82	1.28	1.63	2.02	2.44	3.15	3.53	2.44	3.15	3.53
	COP			5.10	4.95	5.15	4.95	4.95	4.60	4.50	4.95	4.60	4.50
Heating[2]	Capacity		kW	4.30	6.30	8.10	10.0	12.3	14.1	16.0	12.3	14.1	16.0
	Rated input		kW	1.13	1.70	2.10	2.67	3.32	3.92	4.57	3.32	3.92	4.57
	COP			3.80	3.70	3.85	3.75	3.70	3.60	3.50	3.70	3.60	3.50
Heating[3]	Capacity		kW	4.40	6.00	7.50	9.50	11.9	13.8	16.0	11.9	13.8	16.0
	Rated input		kW	1.49	2.03	2.36	3.06	3.90	4.68	5.61	3.90	4.68	5.61
	COP			2.95	2.95	3.18	3.10	3.05	2.95	2.85	3.05	2.95	2.85
Cooling[4]	Capacity		kW	4.50	6.50	8.30	9.90	12.00	13.50	14.90	12.00	13.50	14.90
	Rated input		kW	0.82	1.35	1.64	2.18	3.04	3.75	4.38	3.04	3.75	4.38
	EER			5.50	4.80	5.05	4.55	3.95	3.60	3.40	3.95	3.60	3.40
Cooling[5]	Capacity		kW	4.70	7.00	7.45	8.20	11.5	12.4	14.0	11.5	12.4	14.0
	Rated input		kW	1.36	2.33	2.22	2.52	4.18	4.96	5.60	4.18	4.96	5.60
	EER			3.45	3.00	3.35	3.25	2.75	2.50	2.50	2.75	2.50	2.50
Seasonal space heating energy efficiency class[6]	Water outlet at 35℃		class	A+++									
	Water outlet at 55℃		class	A++									
Refrigerant	Type(GWP)			R32(675)									
	Charged volume		kg	1.40		1.40		1.75					
Sound power Level[7]			dB	55	58	59	60	65	65	68	65	65	68
Unit dimension (WxHxD)			mm	1295×792×400		1385x945x410							
Packing dimension (WxHxD)			mm	1375x965x475		1465x1120x560							
Net/Gross weight			kg	98/121		121/148		144/170			160/188		
Outdoor air temperature range	Cooling		℃	-5～43									
	Heating		℃	-25～35									
	DHW		℃	-25～43									
Water side heat exchanger				Plate type									
Water pump	Max. pump head		m	9									
Water side connection			mm	R1"		R5/4"							
Backup E-heater[8]	Standard mounted		kW	/									
	Optional		kW	3	3	3/9	3/9	3/9	3/9	3/9	3/9	3/9	3/9
	Capacity steps			1	1	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3
	Power supply	3kW	V/Ph/Hz	220-240/1/50									
		9kW		380-415/3/50									
Water outlet temperature range	Cooling		℃	5～25									
	Heating		℃	25～65									
	DHW（tank）		℃	30～60									

Notes:
1. Evaporator air in 7℃, 85% R.H., Condenser water in/out 30/35℃
2. Evaporator air in 7℃, 85% R.H., Condenser water in/out 40/45℃
3. Evaporator air in 7℃, 85% R.H., Condenser water in/out 47/55℃
4. Condenser air in 35℃, Evaporator water in/out 23/18℃
5. Condenser air in 35℃, Evaporator water in/out 12/7℃
6. Seasonal space heating energy efficiency class testes in average climate general conditions.
7. Testing standard: EN12102-1.
8. Backup electric heater is built into all models.For three phase type backup electric heater, 3/6kW can be achieved by changing DIP switch when heat pump is equipped with 9kW.
9. Relevant EU standards and legislation: EN14511; EN14825; EN50564; EN12102; (EU) No 811/2013; (EU) No 813/2013; OJ 2014/C 207/02:2014.

M-Thermal Mono A Series

Midea

2020

DC Inverter R32 65℃ -25℃

Commercial Air Conditioner Division

Midea Group

Add.: Midea Headquarters Building, 6 Midea Avenue, Shunde, Foshan, Guangdong, China

Postal code: 528311

cac.midea.com www.midea-group.com

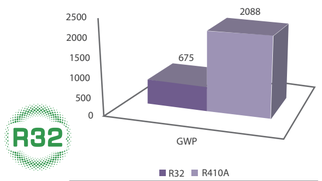
Quality Assurance ISO 9001 · Environmental Management ISO 14001 · Occupational Health and Safety Assessment OHSAS 18001

Note: Product specifications change from time to time as product improvements and developments are released and may vary from those in this document.

GD MIDEA Heating & Ventilating Equipment Co. Ltd participates in the ECP programme for LCP-HP. Check ongoing validity of certificate:www.eurovent-certification.com

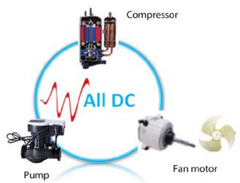
R32 environmental refrigerant

- Higher heat transfer coefficient and better performance
- Less charged volume is needed in the system
- Less costs and easier to get R32
- Lower GWP and carbon emission (GWP: Global Warming Potential)



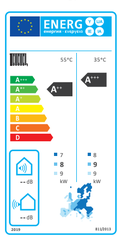
Inverter system design

All the units are equipped with DC compressor, DC fan motor, DC pump, which allows precise control of motor speed, ensuring that only the power necessary to perfectly match the real load is used and energy saving.



Powerful heating with high efficiency

- No capacity attenuation at -10℃ ambient temperature
- Operation range down to -25℃
- Maximum LWT reach 65℃
- Single point maximum COP 5.20
- SCOP 5.21, Energy efficiency level: A+++



Structure innovation

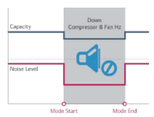
- Single fan compact structure design for big capacity with lower noise
- 270mm thinnest size in industry for indoor unit, which is ideal transformation plan for gas burner and convenient for replacing

Single fan structure
Greatly reduces noise!

270mm
Thinnest !

Extremely silent

- Two level of silent mode provides more comfort
- Silent mode minimum sound power level 53dB

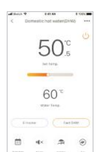


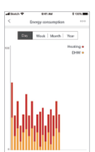
Multi-function wired controller and APP control

- Multiple languages meet customer needs
- Modbus protocol and network flexibility
- Maximum 6 units controlled by one controller and automatic addressing;available on 31 May, 2020
- Holiday away & Holiday home makes life convenient
- Built-in wifi module supports APP control

Through APP, user can

- Check the running state of heat pump, zone switch, operation mode and temperature.
- Set switch, operation mode and temperature of each zone
- Know energy consumption and energy-saving suggestion



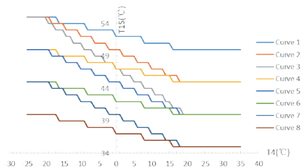


Smart Grid function

Heat pump adjusts the operation according to different electrical signals. Power consumption of the system can be automatically adjusted according to the peak and valley power to reduce the power consumption to the greatest extent

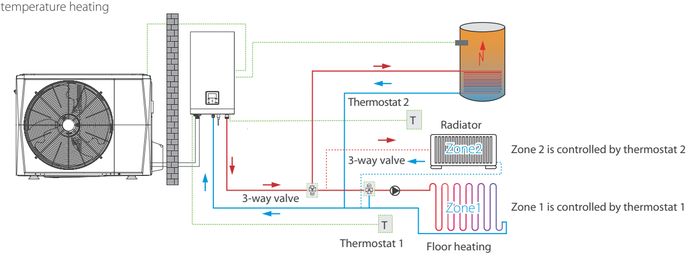
Climate curve function

Totally there are 32 climate correlation curves for choice and one custom curve is optional. Once the curve is selected, the unit set the outlet water temperature automatically according to the outdoor ambient temperature, which realizes intelligent control.



Zones control more flexibility

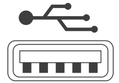
- More accurate low temperature area temperature control
- DC water pump accurate control of water flow and electromagnetic three-way valve cycle regulation to achieve stable low temperature heating



Hydronic adapter board is optional. With the help of hydronic box adapter board, maximum 8 thermostats for 8 rooms are available to control heat pump, which greatly improves the operation convenience.

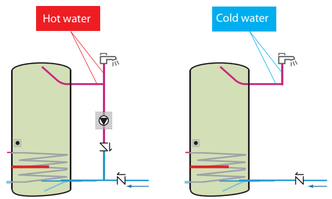
USB function

- Realize setting transmission between wired controllers
- Realize program upgrade with one key and save the time of on-site installation



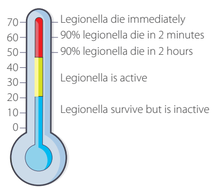
DHW pump function

The DHW pump function is used to return water in the water pipe net to the hot water tank according to set timer. With the function, when hot water is needed, hot water will flow out from tap immediately without waiting time.



Disinfect function

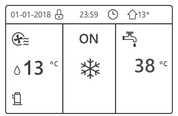
The disinfect function is used to kill legionella by 60-70 °C water to ensure the health and safety.



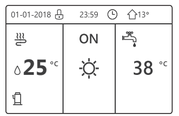
Mode combination

There are 4 single operation mode (Cool, Heat, DHW, Auto) and 3 combined operation mode to meet different demands of using.

Auto & DHW mode



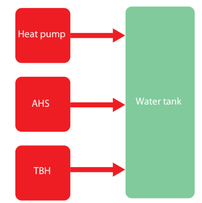
Cool & DHW mode



Heat & DHW mode

Fast DHW function

FAST DHW function is used to force the system to operate in DHW mode when hot water is needed urgently.

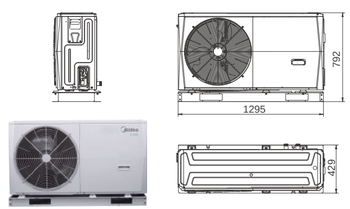


Additional control

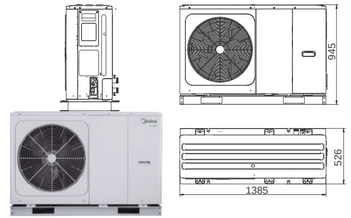
- Remote control for ON/OFF, TBH, AHS
- Balance tank temperature sensor (field supplied) ensures accurate water temperature control

Unit Dimensions (Unit: mm)

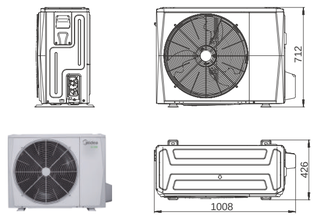
Mono 4~6kW



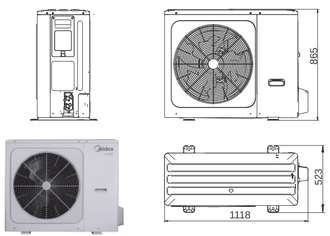
Mono 8~16kW



Split outdoor unit 4~6kW



Split outdoor unit 8~16kW



Split indoor unit