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		
Heating1	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
Heating2	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
Heating3	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
Cooling4	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
Cooling5	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 class6	Water outlet at 35°C	class	A+++									
	Water outlet at 55°C	class	A++									
Refrigerant	Type(GWP)		R32(675)									
	Charged volume	kg	1.40			1.40			1.75			
Sound power Level7		dB	55	58	59	60	65	65	68	65	65	68
Unit dimension (WxHxD)		mm	1295x792x429			1385x945x526						
Packing dimension (WxHxD)		mm	1375x965x475			1465x1120x560						
Net/Gross weight		kg	98/121		121/148		144/170			160/188		
Outdoor air temperature range	Cooling	°C	-5~43									
	Heating	°C	-25~35									
	DHW	°C	-25~43									
Water side heat exchanger			Plate type									
Water pump	Max. pump head	m	9									
Water side connection		mm	R1"		R5/4"							
Backup E-heater8	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									
	Power supply 9kW		380-415/3/50									
Water outlet temperature range	Cooling	°C	5~25									
	Heating	°C	25~65									
	DHW（tank）	°C	30~60									

Split

Outdoor unit model name MHA-			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
Indoor unit model name			HB-A60/CGN8-B		HB-A100/CGN8-B				HB-A160/CGN8-B			
Heating1	Capacity	kW	4.25	6.20	8.30	10.0	12.1	14.5	16.0	12.1	14.5	16.0
	Rated input	kW	0.82	1.24	1.60	2.00	2.44	3.09	3.56	2.44	3.09	3.56
	COP		5.20	5.00	5.20	5.00	4.95	4.70	4.50	4.95	4.70	4.50
Heating2	Capacity	W	4.35	6.35	8.20	10.0	12.3	14.2	16.0	12.3	14.2	16.0
	Rated input	W	1.14	1.69	2.08	2.63	3.24	3.89	4.44	3.24	3.89	4.44
	COP		3.80	3.75	3.95	3.80	3.80	3.65	3.60	3.80	3.65	3.60
Heating3	Capacity	W	4.40	6.00	7.50	9.50	12.0	13.8	16.0	12.0	13.8	16.0
	Rated input	W	1.49	2.00	2.36	3.06	3.87	4.60	5.52	3.87	4.60	5.52
	COP		2.95	3.00	3.18	3.10	3.10	3.00	2.90	3.10	3.00	2.90
Cooling4	Capacity	W	4.50	6.55	8.40	10.00	12.00	13.50	14.90	12.00	13.50	14.90
	Rated input	W	0.81	1.34	1.66	2.08	3.00	3.75	4.38	3.00	3.75	4.38
	EER		5.55	4.90	5.05	4.80	4.00	3.60	3.40	4.00	3.60	3.40
Cooling5	Capacity	W	4.70	7.00	7.40	8.20	11.6	12.7	14.0	11.6	12.7	14.0
	Rated input	W	1.36	2.33	2.19	2.48	4.22	4.98	5.71	4.22	4.98	5.71
	EER		3.45	3.00	3.38	3.30	2.75	2.55	2.45	2.75	2.55	2.45
Seasonal space heating energy efficiency class6	Water outlet at 35°C	class	A+++									
	Water outlet at 55°C	class	A++									
OUTDOOR UNIT												
Power supply		V/Ph/Hz	220-240/1/50							380-415/3/50		
Refrigerant	Type(GWP)		R32(675)									
	Charged volume	kg	1.50		1.65		1.84					
Sound power Level8		dB(A)	56	58	59	60	64	65	68	64	65	68
Unit dimension (WxHxD)		mm	1008x712x426		1118x865x523							
Packing dimension (WxHxD)		mm	1065x800x485		1180x890x560							
Net/Gross weight		kg	58/64		77/88		96/110			112/125		
Outdoor air temperature range	Cooling	°C	-5~43									
	Heating	°C	-25~35									
	DHW	°C	-25~43									
INDOOR UNIT												
Unit dimension (WxHxD)		mm	420x790x270									
Packing dimension (WxHxD)		mm	525x1050x360									
Net/Gross weight		kg	37/43				39/45					
Water pump	Max. pump head	m	9									
Backup E-heater9	Standard mounted	kW	/									
	Optional	kW	3/9									
	Capacity steps		1/3									
	Power supply 3kW	V/Ph/Hz	220-240/1/50									
	Power supply 9kW		380-415/3/50									
Water outlet temperature range	Cooling	°C	5~25									
	Heating	°C	25~65									
	DHW（tank）	°C	30~60									
Sound power level8		dB(A)	38	38	42	42	43	43	43	43	43	43

Commercial Air Conditioner Division

Midea Group

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

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

Commercial Air Conditioners 2020

# M-Thermal Mono/Split A Series

DC Inverter | R32 | 65°C | -25°C

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)


GWP
■ R32 ■ R410A
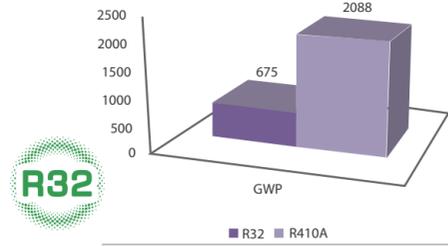
Inverter system design

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.
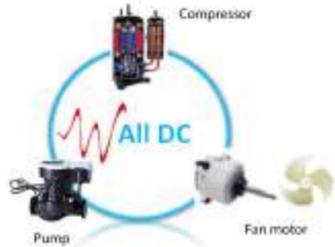
Powerful heating with high efficiency

❖ 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+++

65℃   -25℃
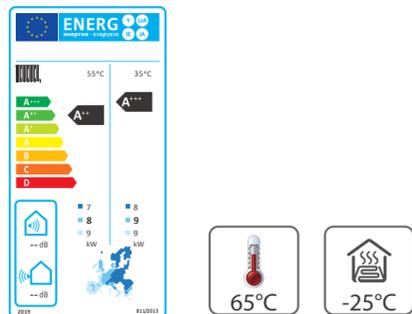
Structure innovation

❖ 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
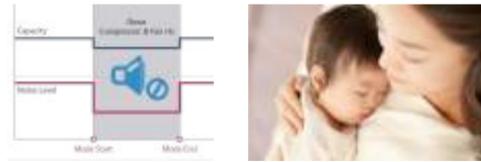
Multi-function wired controller and APP control

❖ 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
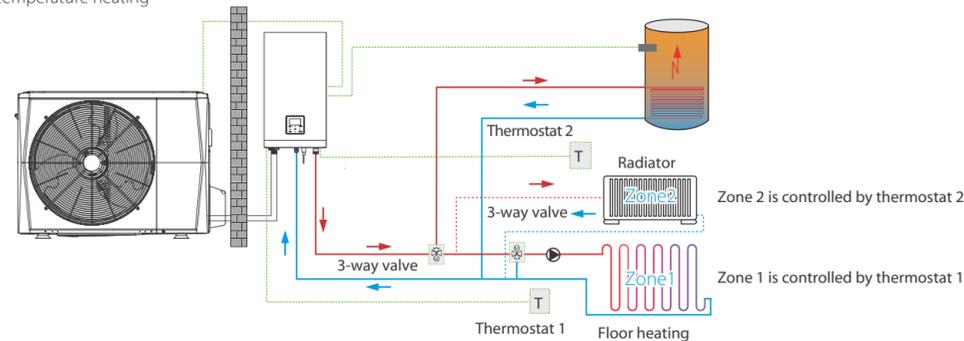

Climate curve function

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.
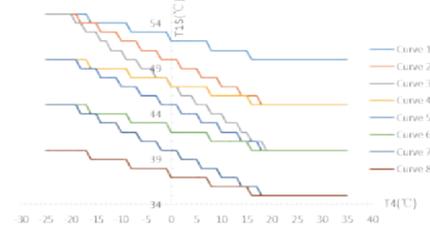

Zones control more flexibility

❖ 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

Thermostat 2
Radiator
Zone2   Zone 2 is controlled by thermostat 2
3-way valve
3-way valve
Zone1   Zone 1 is controlled by thermostat 1
Thermostat 1   Floor 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.
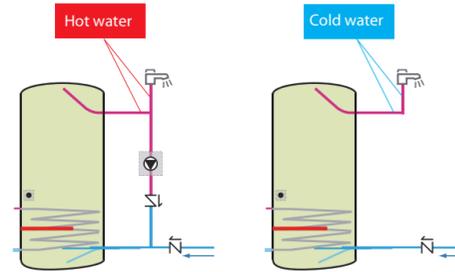
USB function

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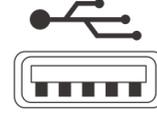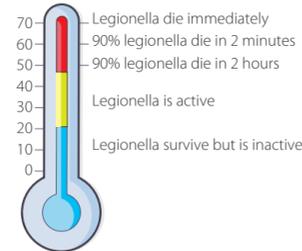

DHW pump function

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.

Hot water   Cold water

Disinfect function

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

70 — Legionella die immediately
60 — 90% legionella die in 2 minutes
50 — 90% legionella die in 2 hours
40
30 — Legionella is active
20
10 — Legionella survive but is inactive
0

Mode combination

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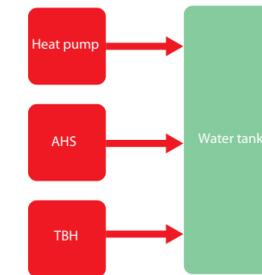

Auto & DHW mode

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.
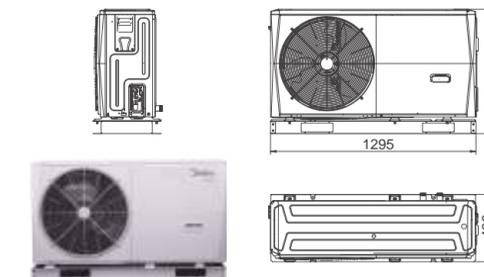
Heat pump
AHS
TBH
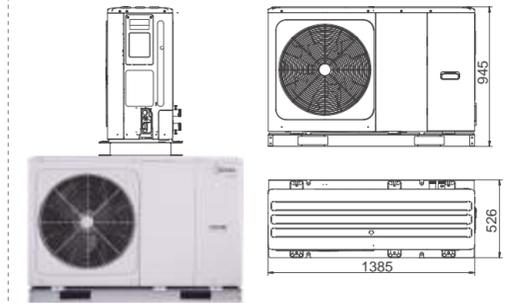Water tank

Additional control

❖ Remote control for ON/OFF, TBH, AHS
❖ Balance tank temperature sensor (field supplied) ensures accurate water temperature control
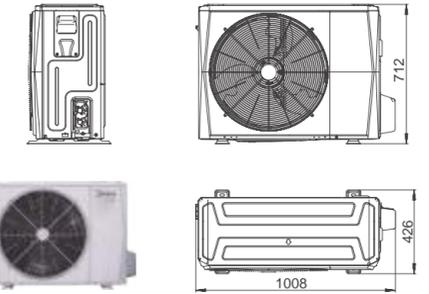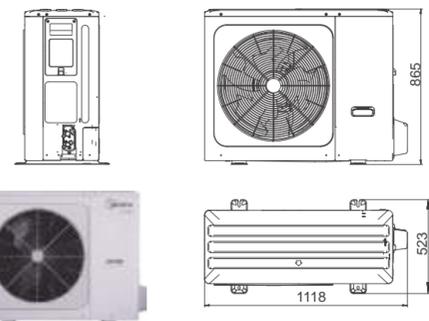
Unit Dimensions (Unit: mm)

Mono 4~6kW

1295
792
428

Mono 8~16kW

945
526
1385

Split outdoor unit 4~6kW

712
426
1008

Split outdoor unit 8~16kW

885
523
1118

Split indoor unit

270
420
790