

Hydraulic indoor unit			SMK-80/CD30GN1 (For use with MHA-V4/6/8W/D2N1)	SMK-160/CD30GN1-B (For use with MHA-V10/12/14/16W/D2N1)	SMK-160/CSD45GN1-B (For use with MHA-V12/14/16W/D2RN1)
Power supply		V/Ph/Hz	220-240/1/50	220-240/1/50	380-415/3/50
Type			Heating&Cooling	Heating&Cooling	Heating&Cooling
Function	Space heating	Low	°C 25~55, default 35	25~55, default 35	25~55, default 35
		High	°C 35~60, default 45	35~60, default 45	35~60, default 45
	Space cooling	Low	°C 7~25, default 7	7~25, default 7	7~25, default 7
		High	°C 18~25, default 18	18~25, default 18	18~25, default 18
	Sanitary hot water	°C	40~60, default 45	40~60, default 45	40~60, default 45
Max. current		A	13.5	13.5	4.0
Noise level (Sound Power) ³		dB(A)	41	41	41
Dimension (WxHxD)		mm	400x690x427	400x690x427	400x690x427
Packing (WxHxD)		mm	515x935x515	515x935x515	515x935x515
Net/gross weight		kg	43/51	54/62	54/62
Water pipeline	Water inlet pipe	mm	DN25	DN25	DN25
	Water outlet pipe	mm	DN25	DN25	DN25
	Drainage pipe	mm	Φ16	Φ16	Φ16
Water pump	Pump head	m	6	7.5	7.5
	Size	kW	1.5+1.5	1.5+1.5	1.5+1.5+1.5
Electric heater	Quantity		2	2	3
	Expansion tank volume	L	3	3	3
Water side heat exchanger		Type	Plate	Plate	Plate
Controller			KJRH-120H/BMKO-E	KJRH-120H/BMKO-E	KJRH-120H/BMKO-E

Nominal capacity is based on the following conditions:

1. Condition 1: Heating mode air inlet at 7°C and water outlet at 35°C with ΔT at 5°C, Cooling mode air inlet at 35°C and water outlet at 18°C with ΔT at 5°C
2. Condition 2: Heating mode air inlet at 7°C and water outlet at 45°C with ΔT at 5°C, Cooling mode air inlet at 35°C and water outlet at 7°C with ΔT at 5°C
3. Noise level is test at 1m in open field
4. The above data test reference standard EN14511

DC Inverter M-Thermal



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



A++ rated energy efficiency

DC inverter M-thermal integrates the latest technological innovations, which ensures precise temperature regulation and energy efficiency. So it makes a significant contribution to the limiting the impact on the environment.

- ❖ DC inverter compressor, stepless adjustment, precisely controls power output according to energy demand.
- ❖ DC fan motor, speed is precisely controlled by heat pump system to ensure energy efficiency.
- ❖ DC water pump, low energy consumption and high efficiency
- ❖ NF&CE certification

All-in-one solution for any application

M thermal can provide one integrated solution for space heating/cooling and sanitary water. It not just only supply hot water fan coil, floor heating system, sanitary water tank, but also introduce the solar collector, gas furnace, boiler and other heat source to the system.



Flexible installation

- ❖ Compact structure design hydronic indoor unit is easy for installation.
- ❖ Configured with wired controller.
- ❖ Water pipe is connected between indoor unit and indoor heating appliances, no frozen risk and saves much insulation work.



Hydraulic indoor unit



Wired controller

Enhanced comfort

- ❖ Precisely temperature control and automatic outlet water temperature adjustment provide more comfort.
- ❖ Consistent performance at lower ambient temperatures even at -20°C. Build-in electric heater, providing hot water in extremely cold weather.
- ❖ Silent mode.

Specifications

DC Inverter outdoor unit			MHA-V4W/D2N1	MHA-V6W/D2N1	MHA-V8W/D2N1
Power supply	V/Ph/Hz		220-240/1/50		
Heating ¹	Capacity	kW	4.0	6.0	8.0
	COP		4.80	4.60	4.40
Heating ²	Capacity	kW	4.0	5.6	7.4
	COP		3.45	3.40	3.30
Cooling ¹	Capacity	kW	4.0	6.0	8.0
	EER		4.60	4.40	4.30
Cooling ²	Capacity	kW	4.1	6.1	6.5
	EER		3.00	2.80	2.80
Max. current	A		14.0		
Dimension (W×H×D)	mm		975×862×355		
Packing (W×H×D)	mm		1020×915×410		
Net/gross weight	kg		56.8/64		
Noise level (Sound Power) ³	dB(A)		62		
Compressor	Type		Twin-rotary		
Fan motor	Type		DC motor		
Air side heat exchanger	Type		Fin-coil		
Refrigerant	Type/Quantity	kg	R410A/2.4		
	Throttle type		Electric expansion valve		
Ambient temperature range	Cooling	°C	-5~46		
	Heating	°C	-20~25		
	Sanitary hot water	°C	-20~43		

DC Inverter outdoor unit			MHA-V10W/D2N1	MHA-V12W/D2N1	MHA-V14W/D2N1	MHA-V16W/D2N1
Power supply	V/Ph/Hz		220-240/1/50			
Heating ¹	Capacity	kW	10.0	12.0	14.0	15.5
	COP		4.60	4.40	4.15	4.1
Heating ²	Capacity	kW	10.7	12.1	14.1	15.2
	COP		3.51	3.46	3.14	3.07
Cooling ¹	Capacity	kW	10.0	11.2	13.0	14.0
	EER		4.50	4.10	4.00	3.80
Cooling ²	Capacity	kW	9.1	11.1	12.6	13.1
	EER		2.73	2.55	2.44	2.39
Max. current	A		26.0			
Dimension (W×H×D)	mm		900×1327×320			
Packing (W×H×D)	mm		1016×1377×435			
Net/gross weight	kg		109/121			
Noise level (Sound Power) ³	dB(A)		65	66	69	71
Compressor	Type		Twin-rotary			
Fan motor	Type		DC motor			
Air side heat exchanger	Type		Fin-coil			
Refrigerant	Type/Quantity	kg	R410A/3.8			
	Throttle type		Electric expansion valve			
Ambient temperature range	Cooling	°C	-5~46			
	Heating	°C	-20~25			
	Sanitary hot water	°C	-20~43			

DC Inverter outdoor unit			MHA-V12W/D2RN1	MHA-V14W/D2RN1	MHA-V16W/D2RN1
Power supply	V/Ph/Hz		380-415/3/50		
Heating ¹	Capacity	kW	12.0	14.0	15.5
	COP		4.40	4.15	4.1
Heating ²	Capacity	kW	12.2	12.9	15.2
	COP		3.21	3.18	3.08
Cooling ¹	Capacity	kW	11.2	13.0	14.0
	EER		4.10	4.00	3.80
Cooling ²	Capacity	kW	10.1	12.0	13.5
	EER		2.59	2.44	2.26
Max. current	A		9		
Dimension (W×H×D)	mm		900×1327×320		
Packing (W×H×D)	mm		1016×1377×435		
Net/gross weight	kg		109/121		
Noise level (Sound Power) ³	dB(A)		66	69	71
Compressor	Type		Twin-rotary		
Fan motor	Type		DC motor		
Air side heat exchanger	Type		Fin-coil		
Refrigerant	Type/Quantity	kg	R410A/3.8		
	Throttle type		Electric expansion valve		
Ambient temperature range	Cooling	°C	-5~46		
	Heating	°C	-20~25		
	Sanitary hot water	°C	-20~43		

Nominal capacity is based on the following conditions:

- Condition 1: Heating mode air inlet at 7°C and water outlet at 35°C with ΔT at 5°C, Cooling mode air inlet at 35°C and water outlet at 18°C with ΔT at 5°C
- Condition 2: Heating mode air inlet at 7°C and water outlet at 45°C with ΔT at 5°C, Cooling mode air inlet at 35°C and water outlet at 7°C with ΔT at 5°C
- Noise level is test at 1m in open field
- The above data test reference standard EN14511