

3. Specifications

3.1 WH-MDC05J3E5

Item		Unit	Refrigerant System		
Performance Test Condition			EN 14511 / EN14825		
Cooling Capacity		Condition (Ambient/Water)	A35W7		
		kW	5.00		
		BTU/h	17100		
		kcal/h	4300		
Cooling EER		W/W	3.31		
		kcal/hW	2.85		
Heating Capacity		Condition (Ambient/Water)	A7W35	A2W35	
		kW	5.00	5.00	
		BTU/h	17100	17100	
		kcal/h	4300	4300	
Heating COP		W/W	5.08	3.57	
		kcal/hW	4.37	3.07	
Heating ErP	Low Temperature Application (W35)		Warmer	Average	Colder
	Application	Climate			
	Pdesign	kW	5.0	5.0	6.0
	Tbivalent / TOL	°C	2 / 2	-10 / -10	-15 / -22
	SCOP / ns	(W/W) / %	6.00 / 237	5.12 / 202	4.08 / 160
	Annual Consumption	kWh	1113	2018	3625
	Class		A+++	A+++	A++
	Medium Temperature Application (W55)		Warmer	Average	Colder
	Application	Climate			
	Pdesign	kW	4.0	5.0	4.0
	Tbivalent / TOL	°C	2 / 2	-10 / -10	-15 / -22
	SCOP / ns	(W/W) / %	4.20 / 165	3.63 / 142	2.95 / 115
	Annual Consumption	kWh	1274	2849	3338
	Class		A+++	A++	A+
Noise Level		Condition (Ambient/Water)	A35W7	A7W35	A2W35
		dB (A)	Cooling: 49	Heating: 48	
		Power Level dB	Cooling: 65	Heating: 64 Heating: 59***	
Air Flow		m³/min (ft³/min)	Cooling: 51.0 (1800) Heating: 39.8 (1410)		
Refrigeration Control Device			Expansion Valve		
Refrigeration Oil		cm³	FW50S (900)		
Refrigerant (R32)		kg (oz)	1.30 (45.9)		
F-GAS	GWP		675		
	CO2eq (ton) (Precharged / Maximum)		0.878 / -		
Compressor	Type		Hermetic Motor		
	Motor Type		Brushless (4-poles)		
	Rated Output	kW	1.70		

Item		Unit	Refrigerant System
Fan	Type		Propeller Fan
	Material		PP
	Motor Type		DC Motor (8-poles)
	Input Power	W	-
	Output Power	W	60
	Fan Speed	rpm	Cooling: 650 Heating: 520
Heat Exchanger	Fin material		Aluminium (Pre Coat)
	Fin Type		Corrugated Fin
	Row × Stage × FPI		2 × 30 × 17
	Size (W × H × L)	mm	38.1 × 762 × 903.8:873.8

Item		Unit	Mono Bloc Unit		
Power Source (Phase, Voltage, Cycle)		Ø	Single		
		V	230		
		Hz	50		
Input Power		Condition (Ambient/Water)	A35W7	A7W35	A2W35
		kW	Cooling: 1.51	Heating: 0.985	Heating: 1.40
Maximum Input Power For Heatpump System		kW	2.59		
Power Supply 1 : Phase (Ø) / Max. Current (A) / Max. Input Power (W)			1Ø / 12.0 / 2.59k		
Power Supply 2 : Phase (Ø) / Max. Current (A) / Max. Input Power (W)			1Ø / 13.0 / 3.00k		
Power Supply 3 : Phase (Ø) / Max. Current (A) / Max. Input Power (W)			- / - / -		
Starting Current		A	4.7		
Running Current		Condition (Ambient/Water)	A35W7	A7W35	A2W35
		A	Cooling: 7.0	Heating: 4.7	Heating: 6.6
Maximum Current For Heatpump System		A	12.0		
Power Factor Power factor means total figure of compressor and outdoor fan motor.		%	Cooling: 94	Heating: 91	Heating: 93
Dimension	Height	mm (inch)	865 (34-1/16)		
	Width	mm (inch)	1283 (50-17/32)		
	Depth	mm (inch)	320 (12-5/8)		
Net Weight		kg (lbs)	99 (218)		
Power Cord	Number of core		-		
	Length	m (ft)	-		
Thermostat			Electronic Control		
Protection Device			Electronic Control		

Item		Unit	Water System
Performance Test Condition			EN 14511 / EN14825
Operation Range	Outdoor Ambient	°C	Cooling: 10 ~ 43 Heating: -20 ~ 35
	Water Outlet	°C	Cooling: 5 ~ 20 Heating: 20 ~ 55 (Below Ambient -15°C) 20 ~ 60 (Above Ambient -10°C)
Internal Pressure Differential		kPa	Cooling: 12.0 Heating: 12.0
Water Pipe Connector (in.)			(1-1/4)
Water Drain Hose Inner Diameter		mm (inch)	15.0 (19/32)
Pump	Motor Type		DC Motor
	Input Power	W	173
Hot Water Coil	Type		Brazed Plate
	No. of Plates		36
	Size (H × W × L)	mm	68.3 × 121 × 333
	Water Flow Rate	l/min (m³/h)	Cooling: 14.3 (0.9) Heating: 14.3 (0.9)
Pressure Relief Valve Water Circuit		kPa	Open: 300, Close: 210 and below
Flow Switch			Electronic Sensor
Protection Device		A	Residual Current Circuit Breaker (40)
Expansion Vessel	Volume	l	6
	MWP	bar	3
Capacity of Integrated Electric Heater		kW	3.00

Note:

- Cooling capacities are based on outdoor air temperature of 35°C Dry Bulb with controlled indoor water inlet temperature of 12°C and water outlet temperature of 7°C.
- Heating capacities are based on outdoor air temperature of 7°C Dry Bulb (44.6°F Dry Bulb), 6°C Wet Bulb (42.8°F Wet Bulb) with controlled indoor water inlet temperature of 30°C and water outlet temperature of 35°C.
- Specification are subjected to change without prior notice for further improvement.
- Flow rate indicated are based on nominal capacity adjustment of leaving water temperature (LWT) 35°C and =5°C

*** The sound power level is measured with accordance to EN12102 under conditions of the EN14825.