

Tank unit

Model	PT300	PT500	PT300-V2
Volume total	279 L	476 L	285 L
Volume coil	9.4 L	13 L	16 L
Area coil	1.6m ²	2.13m ²	2.7m ²
Material coil	Steel - S235 ϕ 33.7 x 2.6 mm		
Material tank	Steel - S275g=3.0 mm		
Cabinet	Side / Top / - plate (PS)		
Material	Side - plate polystyrene g=1 mm Top - plate polystyrene g=2 mm		
Color (powder coated 1 layer)	Side - White Top - RAL7001		Covers - White RAL 9016 Top - RAL7001
Isolation tank	EPS200 (30kg/m ³) + Nonwoven PET (1kg/m ²)		
Stand by heat loss	90W (PN-EN 12897:2016; (EU) No 812/2013)	98W (PN-EN 12897:2016; (EU) No 812/2013)	96W (PN-EN 12897:2016; (EU) No 812/2013)
Design pressure tank	1.0 MPa (10 bar)		
Design pressure coil	1.6 MPa (16 bar)		
Power coil 70/10/45°C (2.5m ³ /h)	26 kW	34 kW	53.9kW
Efficiency coil 70/10/45°C	640 L/h	855 L/h	1288 L/h
Water quality sanitary hot water	≤EU directive nr.98/83/EF		
Water quality, system	≤EU directive nr.98/83/EF		
Max. operating temperature tank	85°C		
Min. operating temperature tank	5°C		
Max. operating temperature coil	110°C		
Connection water system	G1" external thread		
Connection sanitary hot water	G1" external thread		
Inner surface corrosion protection	Enamel - DIN 4753-3:2013 - Part 3		
Corrosion protection	Mg-anode		
Height (adjustment)	1634 mm (20 _{+15/-0})	1835 mm (20 _{+15/-0})	1705mm (20 _{+15/-0})
Min. required ceiling height	2000 mm		
Width	ϕ 673 mm	ϕ 832 mm	ϕ 675mm
Depth	743 mm	897 mm	785mm
Weight net product	115 kg	156 kg	138kg
Weight incl. pallet incl. packing	140 kg	196 kg	164kg
Weight packaging: Wood	29 kg	39 kg	25.4kg
Weight packaging: EPS	0.5 kg		
Weight packaging: Plastics	0.1 kg		
Packaging volume /dim	1.1 m ³ / 1840x790 x750 (mm)	1.75 m ³ / 2040x950 x910 (mm)	1.12 m ³ / 1910x790 x750 (mm)
Part number	MCD001A009	MCD001A010	MCD001A025

Technical specifications

Outdoor units

Adapted to RoHS directive

Outdoor model			FDCM100VNX-W
Power source			1 phase 230V 50Hz
Heating nominal capacity	condition 1	kW	10.0(6.4 – 11.0)
	condition 2	kW	10.0(4.5 – 11.0)
Heating power consumption	condition 1	kW	2.90
	condition 2	kW	2.33
COP	condition 1		3.45
	condition 2		4.29
Cooling nominal capacity	condition 1	kW	8.50(3.7 – 9.5)
	condition 2	kW	11.0(4.0 – 11.0)
Cooling power consumption	condition 1	kW	2.98
	condition 2	kW	2.97
EER	condition 1		2.85
	condition 2		3.70
Operation range (Outdoor air temperature)	Heating	°C	-25 – 43
	Cooling	°C	15 – 43
Operation range (Water temperature)	Heating	°C	25 - 60(65 with immersion heater)
	Cooling	°C	7 – 25
System water flow	Heating	L/s	0.15 – 0.42
	Cooling	L/s	0.2 – 0.42
Min. system water flow at 100% circulation pump speed		L/s	0.26
Water volume		L	1.2
Max. current		A	21
Recommended fuse rating		A	30
Starting current		A	5
Deviation, incoming supply			-15 – +10%
Outdoor Unit	Height	mm	1120
	Width	mm	1160
	Depth	mm	440
	Packaging volume/dim	m ³	0.6
	Weight	kg	104
	Color		Stucco White
	IP grade		IP24
	Sound power level	dB(A)	60
	Sound power level(Max)	dB(A)	60
	Sound power level(Silent mode)	dB(A)	56
	Sound pressure level*	dB(A)	45
	Sound pressure level(Silent mode)	dB(A)	42
	Air flow (Cooling/Heating)	m ³ /min	53
	Type of compressor		RMT5134SWP4(Twin rotary type)
	Starting method		Direct line start
	Refrigerant oil	liter	0.9 M-MB75
	Heat exchanger		M shape fin & inner grooved tubing
	Plate heat exchanger		R041-H70WX-S5C3B
	Ref control		EEV
	Defrost control		Reversing cycle
	Fan		Propeller fan x 1
	Fan motor	W	59x 1
	Shock & vibration absorber		Rubber sleeve (for compressor)
	Electric heater (base)	W	120
	Safety equipment		Internal thermostat for fan motor Abnormal discharge temperature protection
	Power and signal line from indoor unit		3 cores 5.5mm ² (Power line), 3 cores 0.5mm ² (Signal line)
	Refrigerant		R32
	Refrigerant volume	kg	2.0
	Drain		Hole size: φ 20 ×3 pcs.
	Insulation for piping		Necessary (both Inlet & Outlet)
Weight incl. pallet incl. packing	kg	120	
Weight packing: Wood	kg	8.0	
Weight packing: EPS	kg	0.6	
Weight packing: Plastics	kg	0.1	
Weight packing: Carton board	kg	7.0	
Part number MHIAE		PCA003F169A	

Test conditions

		Water temperature	Outdoor air temperature
Heating	condition 1	45°C _{out} / 40°C _{in}	7°C _{DB} / 6°C _{WB}
	condition 2	35°C _{out} / 30°C _{in}	
Cooling	condition 1	7°C _{out} / 12°C _{in}	35°C _{DB}
	condition 2	18°C _{out} / 23°C _{in}	

Test condition for sound power level*

Temperature condition: Heating condition 2

MIC position: 1m away in front of outdoor unit

Test condition for sound pressure level*

Temperature condition: Heating condition 2

MIC position: 1m away in front of outdoor unit

Seasonal space heating energy efficiency (η_s) & Rated heat output (Prated)

Medium-temperature application

Outdoor unit	FDCM100VNX-W		FDCM140VNX-W	
Indoor unit	HMM100		-	
	Prated (kW)	η_s	Prated (kW)	η_s
η_s 55 Average climate Seasonal Space Heating Energy Efficiency Class	8.0	136	12.0	133
	A++		A++	
η_s 55 Warmer climate	9.0	172	12.0	165
η_s 55 Colder climate	11.0	115	16.0	107

Low-temperature application

Outdoor unit	FDCM100VNX-W		FDCM140VNX-W	
Indoor unit	HMM100		-	
	Prated (kW)	η_s	Prated (kW)	η_s
η_s 35 Average climate Seasonal Space Heating Energy Efficiency Class	8.0	191	12.0	181
	A+++		A+++	
η_s 35 Warmer climate	9.0	259	12.0	229
η_s 35 Colder climate	11.0	150	16.0	136

Outdoor unit	FDCM100VNX-W	
Indoor unit	HMM100	
	COP _{DHW}	η_{wh} (*1)
η_{wh} Average climate Energy Efficiency Class	2.14	87
	A	
η_{wh} 35 Warmer climate	2.54	105
η_{wh} 35 Warmer climate	1.84	74
Load profile	XL	

*1 COP_{DHW} / 2.5 *100

This technical information is based on the European regulations listed below.

1. COMMISSION REGULATION (EU) No.813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters.
2. COMMISSION DELEGATED REGULATION (EU) No.811/2013 of 18 February 2013 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar device.

Technical specifications

RC-HY40-W	
Electrical data	
Power source voltage	230V 50Hz
Enclosure class	IP21
Rated value for impulse voltage	4kV
Option connections	
Max. number of air/water heat pumps	8
Max. number of sensors	8
Max. number of charge pumps with internal accessory cards	4
Max. number of charge pumps with external accessory cards	8
Max. number of outputs for additional heat step	3
Miscellaneous	
Area of operation	- 25 – 70 °C
Ambient temperature	5 – 35 °C
Dimensions and weight	
Width	354mm
Depth	123mm
Height	400mm
Net weight	4.4kg
Gross weight	4.6kg
Part number MHIAE	MCD501A004
Internet connection function*	Included
Language	English, Swedish, German, French, Spanish, Finnish, Lithuanian, Czech, Dutch, Norwegian, Danish, Estonian, Latvian, Russian, Italian, Hungarian, Slovenian, Turkish, Croatian, Romanian, Icelandic, Portuguese

*Function is provided by myUpTech AB., which monitors operation data and control unit through internet