Split box

Model	HSB60-W	HSB100-W	HSB140
General conditions			
Power source	230V AC50Hz		
Recommended fuse	6 A		
Pipe size refrigerant (ref)	Gas: OD12.7, liquid: OD6.35 (1/2”; 1/4”)	Gas: OD15.9, liquid: OD9.5 (5/8”; 3/8”)	
Capacity	For 6 kW outdoor unit	For up to 12 kW outdoor unit	For 16 kW outdoor unit
Indoor unit (split type, splitbox)			
IP grade	IP21		
Connection water system	Compression fitting 22 mm	Compression fitting 28 mm	
Connection refrigerant system	Flare		
Maximum allowed water pressure	1.0 MPa		
Maximum allowed water temperature	90 °C		
Maximum allowed refrigerant pressure	4.15 MPa		
Maximum allowed refrigerant temperature	110°C		
Supply heating temperature range	25 – 58°C		
Supply cooling temperature range	7 – 25°C		
Heat exchanger	Plate heat exchanger Alfa Laval ACH18-52H-F	Plate heat exchanger Alfa Laval ACH-30EQ-80H	Plate heat exchanger Alfa Laval ACH-30EQ-120H
Total volume heat exchanger (water side)	1 L	3 L	4 L
Water quality	≤ EU-direktiv nr. 98/83/EF		
Ambient conditions	5 – 35°C Max relative humidity 95%		
Height	400 mm		
Width	460 mm		
Depth	250 mm		
Weight net	16 kg	18 kg	23 kg
Weight including packaging	21 kg		26 kg
Part number MHIAE	MCD001A016	MCD001A018	MCD001A013
Enclosed	Wall bracket for mounting, Ball valve with particle filter	Wall bracket for mounting, Ball valve with particle filter Flare reduction	Wall bracket for mounting, Ball valve with particle filter

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	1.6m²	2.13m²	2.7m²
Material coil	Steel - S235 ϕ 33.7 × 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/m³) + Nonwoven PET (1kg/m²)		
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 (2.5m³/h)	26 kW	34 kW	53.9kW
Ef ciency 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 m³/ 1840x790 x750 (mm)	1.75 m³/ 2040x950 x910 (mm)	1.12 m³/ 1910x790 x750 (mm)
Part number	MCD001A009	MCD001A010	MCD001A025

Technical specifications

Model			FDCW140VNX-A
Power source			1 phase 230V 50Hz
Heating nominal capacity	condition 1	kW	16.0 (5.8 – 16.0)
	condition 2	kW	16.0 (4.2 – 16.0)
Heating power consumption	condition 1	kW	4.83
	condition 2	kW	3.81
COP	condition 1		3.31
	condition 2		4.2
Cooling nominal capacity	condition 1	kW	11.8 (3.1 – 11.8)
	condition 2	kW	16.5 (5.2 – 16.5)
Cooling power consumption	condition 1	kW	4.45
	condition 2	kW	4.36
EER	condition 1		2.65
	condition 2		3.78
Operation range (Otutdoor temperature)		Heating	-20 – 43
		Cooling	15 – 43
Operation range (Water temperature)		Heating	25 – 58 (65 with immersion heater)
		Cooling	7 – 25
System water flow		L /s	0.19 – 0.79
Min. system water flow at 100% circulation pump speed		L /s	0.40
Max. current		A	25
Recommended fuse rating		A	30
Starting current		A	5
Deviation, incoming supply			-15 – +10%
Max. refrigerant pipe length		m	30
Max. height difference between IU and OU		m	7
Height		mm	1300
Width		mm	970
Depth		mm	370 (+80 with foot rail)
Weight		kg	105
Color			Stucco White
Sound Power level *1		dB(A)	71
Sound Power level (silent mode)		dB(A)	68
Sound Pressure level *2		dB(A)	54
Sound Pressure level (silent mode)		dB(A)	51
Air flow		m^3/min	100
Type of compressor			RMT5134MDE2
Refrigerant oil		liter	0.9 M-MA68
Heat exchanger			M fin & inner grooved tubing
Refrigerant control			EEV
Defrost control			Reversing cycle
Fan			Proeller fan x 2
Fan motor		W	86 x 2
Shock & vibration absorber			Rubber sleeve (for compressor)
Electric heater (crankcase / base)		W	20 / 120
Safety equipment			Internal thermostat for fan motor
Power and signal line from indoor unit			3 cores 5.5mm^2 + 2 cores 1.5mm^2
Refrigerant			R410A
Refrigerant volume (pipe length without additional charge)		kg (m)	4.0 (15)
Dimensions, refrigerant pipe		mm (inch)	Gas pipe: OD 15.88 (5/8") Liquid pipe: OD 9.52 (3/8")
Refrigerant pipe connections			Flare

Test conditions

		Water temperature	Outdoor air temperature
Heating	condition 1	45°C out / 40°Cin	7°CDB / 6°CWB
	condition 2	35°Cout / 30°Cin	
Cooling	condition 1	7°Cout / 12°Cin	35°CDB
	condition 2	18°Cout / 23°Cin	

*1: Test condition for sound power level
Temperature condition: Heating condition 2
*2: Test condition for sound pressure level
FDCW60VNX-A
Calculated from sound power level
FDCW71,100,140,VNX-A
Temperature condition: Heating condition 2
Mike position 1m away in front of outdoor unit at the height of 1m

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	MCD501A004
Internet connection function*	Included
Language	English, Swedish, German, French, Spanish, Finnish, Lithuanian, Czech, Polish, 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

Installation requirements

Indoor unit	HMA60-W HMS60-W HSB60-W	HMA100-W HMS100-W HSB100-W	HMA100-W HMS100-W HSB100-W	HMS140-S HSB140
Outdoor unit	**FDCW60VNX-A**	**FDCW71VNX-A**	**FDCW100VNX-A**	**FDCW140VNX-A**
Max. pressure, climate system	0.3MPa (3.0bar)			
Max. temperature, climate system	65℃			
Max. temperature in indoor unit	65℃			
Max. temperature from external heat source	65℃			
Max. supply temperature with compressor	58℃			
Min. supply temperature cooling	7℃			
Max. supply temperature cooling	25℃			
Min. volume, climate system without underfloor cooling application	50L	80L	80L	150L
Min. volume, climate system with underfloor cooling application	50L	80L	100L	150L
Max. flow, climate system	0.29L/s	0.38L/s	0.57L/s	0.79L/s
Min. flow, climate system	0.12L/s	0.19L/s	0.29L/s	0.39L/s
Nominal system flow heating (△T=5K)	0.29L/s (6kW,7/45℃)	0.38L/s (8kW,7/45℃)	0.43L/s(9kW,7/45℃)	0.79L/s(16.5kW,7/45℃)
Nominal system flow cooling (△T=5K)	0.28L/s(5.8kW,35/7℃)	0.34L/s(7.1kW,35/7℃)	0.38L/s(8kW,35/7℃)	0.56L/s(11.8kW,35/7℃)

External circulation pump must be used when the pressure drop in the system is greater than the available external pressure. In such case, a bypass line with non-return valve must be installed.

Use an overflow valve if system flow cannot be guaranteed.