

Technical specifications
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 |

Technical specifications

| Model | | FDCW100VNX-A | |
|---|-------------|---------------------|--|
| Power source | | 1 phase 230V 50Hz | |
| Heating nominal capacity | condition 1 | kW | 9.0 (3.5 – 11.0) |
| | condition 2 | kW | 9.2 (3.5 – 10.0) |
| Heating power consumption | condition 1 | kW | 2.62 |
| | condition 2 | kW | 2.15 |
| COP | condition 1 | | 3.44 |
| | condition 2 | | 4.28 |
| Cooling nominal capacity | condition 1 | kW | 8.0 (3.0 – 9.0) |
| | condition 2 | kW | 11.0 (3.3 – 12.0) |
| Cooling power consumption | condition 1 | kW | 2.85 |
| | condition 2 | kW | 3.04 |
| EER | condition 1 | | 2.81 |
| | condition 2 | | 3.62 |
| Operation range (Outdoor 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 | 0.12 – 0.57 |
| Min. system water flow at 100% circulation pump speed | | L /s | 0.24 |
| Max. current | | A | 23 |
| 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 | 845 |
| Width | | mm | 970 |
| Depth | | mm | 370 (+80 with foot rail) |
| Weight | | kg | 81 |
| Color | | | Stucco White |
| Sound Power level *1 | | dB(A) | 64.5 |
| Sound Power level (silent mode) | | dB(A) | 62 |
| Sound Pressure level *2 | | dB(A) | 50 |
| Sound Pressure level (silent mode) | | dB(A) | 47 |
| Air flow | | m ³ /min | 73 |
| Type of compressor | | | RMT5126MDE2 |
| Refrigerant oil | | liter | 0.9 M-MA68 |
| Heat exchanger | | | straight fin & inner grooved tubing |
| Refrigerant control | | | EEV |
| Defrost control | | | Reversing cycle |
| Fan | | | Propeller fan x 1 |
| Fan motor | | W | 86 x 1 |
| 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) | 2.9 (15) (At service code P : 3.08 (18)) |
| 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°C | | | |
| Max. temperature in indoor unit | 65°C | | | |
| Max. temperature from external heat source | 65°C | | | |
| Max. supply temperature with compressor | 58°C | | | |
| Min. supply temperature cooling | 7°C | | | |
| Max. supply temperature cooling | 25°C | | | |
| 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 ($\Delta T=5K$) | 0.29L/s (6kW,7/45°C) | 0.38L/s (8kW,7/45°C) | 0.43L/s(9kW,7/45°C) | 0.79L/s(16.5kW,7/45°C) |
| Nominal system flow cooling ($\Delta T=5K$) | 0.28L/s(5.8kW,35/7°C) | 0.34L/s(7.1kW,35/7°C) | 0.38L/s(8kW,35/7°C) | 0.56L/s(11.8kW,35/7°C) |

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.