



RDCD 3.5 SH

- > Domestic HRU
- > 90% Efficiency
- > High Pressure

DESCRIPTION

The RDCD 3.5 SH is our latest generation ceiling mounted HRV system, perfect for medium sized homes. The unit includes our high efficiency heat exchange system, by-pass and EC brushless plug fan as standard. The unit has control options including MODBUS.

CONSTRUCTION

Galvanised steel casing. PVC heat exchanger.

Options:

- F7 filter (G4 included as standard)

Installation:

- Horizontal (left or right)
- Vertical (left or right)

MODELS

RDCD 3.5 SH

CONTROLS

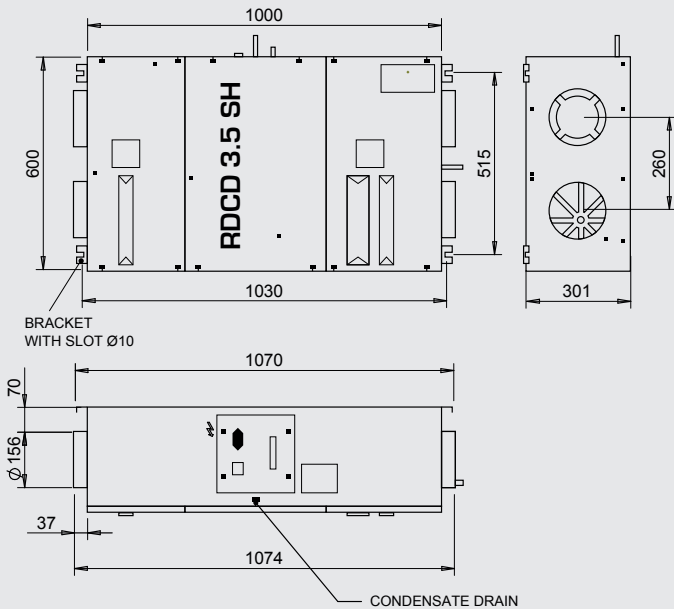
All options include Speed, By-Pass, Frost Protection and Filter Indicator control.

4B-RF: Includes booster function

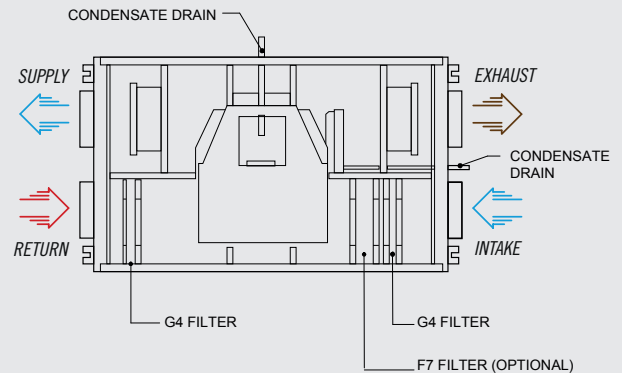
RH-RF: Includes humidity control

C02-RF: Includes CO₂ control

RDCD 3.5 SH



INTERNAL VIEW



REMARKS

All dimensions are given in mm.
Wireless Plug & Play control system included.

FAN PERFORMANCE

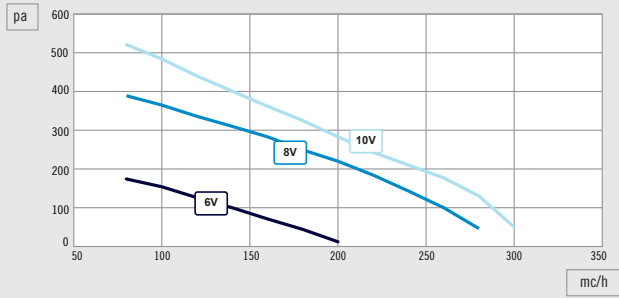
| | RDCD 3.5 SH |
|-----------------------|-------------|
| Power consumption (W) | 83 |
| RPM | 3200 |
| Current (A) | 0.75 |
| Voltage (V) (HZ) | 230V 50Hz |

AIR FLOW PERFORMANCE

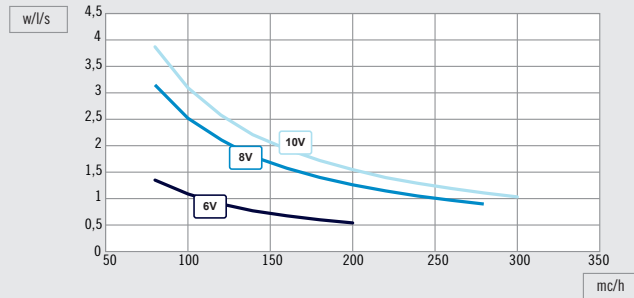
| | RDCD 3.5 SH |
|--------------------------------------|-------------|
| Nominal air flow (m ³ /h) | 280 |
| Useful static pressure (Pa) | 100 |

RDCD 3.5 SH – SELECTION DATA

USEFUL STATIC PRESSURE ①



SPECIFIC FAN POWER ②

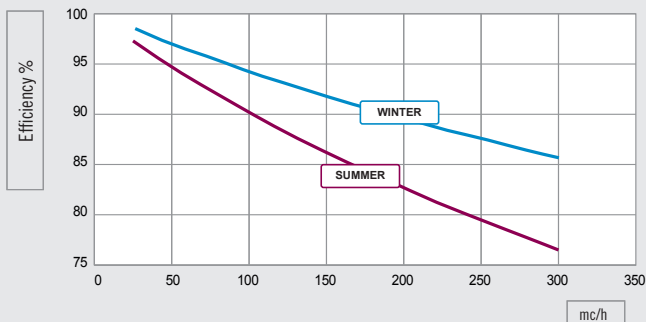


SUMMER EFFICIENCY

Fresh air: 32 °C / 50 % R.H. • Return air: 26 °C / 50 % R.H.

WINTER EFFICIENCY

Fresh air: -5 °C / 80 % R.H. • Return air: 20 °C / 50 % R.H.



RADIATED SOUND LEVEL

| VOLT | 10 | 9 | 8 | 7 | 6 |
|----------------|---------|---------|---------|---------|---------|
| FREQUENCY (HZ) | Lw (dB) | lw (dB) | Lw (dB) | lw (dB) | Lw (dB) |
| 63 | 51.8 | - | 51.4 | - | 44.6 |
| 125 | 53.3 | - | 51.9 | - | 46.8 |
| 250 | 51.9 | - | 51.9 | - | 48.7 |
| 500 | 53.3 | - | 50.9 | - | 42.7 |
| 1000 | 44.6 | - | 42.9 | - | 35.5 |
| 2000 | 43.7 | - | 42.1 | - | 34.4 |
| 4000 | 33.8 | - | 32.1 | - | 23.4 |
| 8000 | 26.9 | - | 25.5 | - | 22.4 |
| Sound Power | 59.0 | - | 57.9 | - | 52.5 |
| Sound Pressure | 42.4 | - | 41.0 | - | 34.6 |

F7 FILTER PRESSURE DROP

| mc/h | Pa |
|------|----|
| 50 | 10 |
| 100 | 15 |
| 150 | 30 |
| 200 | 40 |
| 250 | 50 |
| 300 | 65 |

*approximate values

- ① DATA WITH STANDARD G4 FILTERS
- ② DATA FOR SINGLE FAN

Performance EN 1314:7:2011 - EN ISO 5135:2003 certified.

| MODEL OPTIONS INSTALLED | 4B-RF | | | RH-RF / CO2-RF | | | RH-RF / CO2-RF local | | |
|---|---------------------|-------|------|---------------------|-------|-------|----------------------|-------|-------|
| | Temp. | Cold | Hot | Temp. | Cold | Hot | Temp. | Cold | Hot |
| Climate Reference | | | | | | | | | |
| SEC in [kWh/(m ² a)] | -31.93 | -68.6 | -9.2 | -35.9 | -73.3 | -12.7 | -40.48 | -78.7 | -16.7 |
| SEC Class | B | A+ | F | A | A+ | E | A | A+ | E |
| Declared Typology | UVR-B Bidirectional | | | UVR-B Bidirectional | | | UVR-B Bidirectional | | |
| Type of drive installed | Multi-speed drive | | | Variable speed | | | Variable speed | | |
| Type of heat recovery | Recuperative | | | Recuperative | | | Recuperative | | |
| Thermal efficiency ¹ | 83,2% | | | 83,2% | | | 83,2% | | |
| Maximum flow rate in [m ³ /h] ² | 280 | | | 280 | | | 280 | | |
| Maximum electric Power in [W] ³ | 172 | | | 172 | | | 172 | | |
| Sound Power Level (LWA) in [dB(A)] ³ | 44 | | | 44 | | | 44 | | |
| Reference flow rate [m ³ /h] ⁴ | 196 | | | 196 | | | 196 | | |
| Reference pressure difference in [Pa] | 50 | | | 50 | | | 50 | | |
| SPI in [W/m ³ /h] ⁵ | 0.36 | | | 0.36 | | | 0.36 | | |
| Control factor and typology | 1 | | | 0.85 | | | 0.65 | | |
| Declared maximum internal [%] ⁶ | 4.7 | | | 4.7 | | | 4.7 | | |
| Declared maximum external leakage [%] ⁶ | 3.2 | | | 3.2 | | | 3.2 | | |

- 1: Efficiency according EN13141-7:2010 at reference flow at 50 Pa;
- 2: Maximum flow at 100 Pa external pressure;
- 3: Casing radiation at reference flow rate at 50 Pa external pressure;
- 4: Reference flow rate is 70% of maximum flow at 50 Pa external pressure according EN13141-7:2010;

- 5: According EN13141-7:2010 at reference flow rate;
 - 6: According EN13141-7:2010;
- SEC: Specific Energy Consumption.

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RDCD 3.5 SH

A+

A

B

C

D

E

F

G

A

44
dB

280 m³/h

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