

Push-pull heat recovery unit with remote control

HRU-WALL-RC



Description

HRU-WALL-RC is a bidirectional ventilation unit, often described as decentralized or push-pull, with regenerative ceramic heat exchanger. It is intended for single room installation, usually installed in synchronised pairs. The heat exchanger material together with its unique honeycomb structure gives a maximal 82% thermal efficiency ratio (74% acc. to 1254/2014 EU Directive reference measuring point). The casing is made of ABS. The operating principle is analogous to HRU-WALL - unit is working in alternating flow mode, switches the air flow directions every 40-120 seconds (push-pull) and it's equipped with energy efficient EC fan (maximum power consumption is only 6 W). The RC version has several advantages:

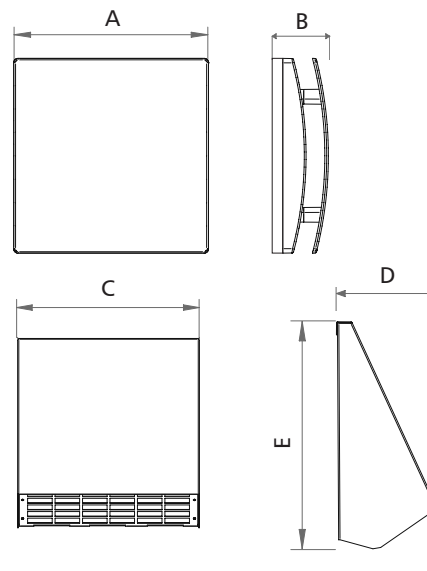
- Remote controller with an LCD
- 5 speeds: 20-30-40-50-60 m³/h
- Double filter (inner and outer side)
- Multicolour LED for status indication
- Automatically manages the cycle length in COMFORT mode
- Dirty filter visual indicator
- Boost function - maximum air flow for limited time – 5th speed for 15 minutes
- Integrated humidity sensor – smart humidity control, increases speed if rapid rise of relative humidity is measured
- Anti-frost protection
- Free-cooling - only one direction.

Product code example

Product code: **HRU-WALL-RC - 150 - 60**

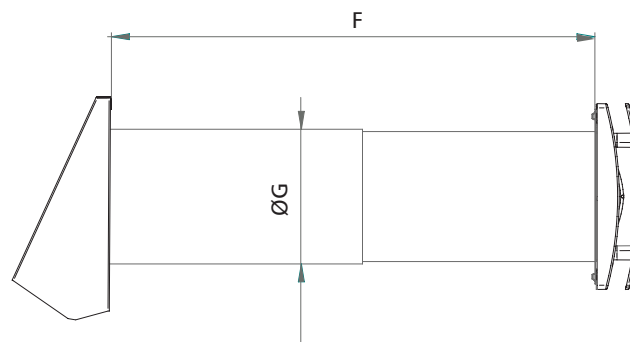
| | | | |
|----------|-------|-------|-------|
| type | _____ | _____ | _____ |
| diameter | _____ | _____ | _____ |
| capacity | _____ | _____ | _____ |

Dimensions



Fascia

| Type | A [mm] | B [mm] | C [mm] | D [mm] | E [mm] |
|--------------------|-----------|-----------|-----------|-----------|-----------|
| HRU-WALL-RC-150-60 | 218 | 76 | 252 | 114 | 262 |



| Type | F (mm) | G (mm) |
|--------------------|-----------|-----------|
| HRU-WALL-RC-150-60 | 300±560 | 158 |

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Intended use

Most effective method is to use two synchronised units which are installed in closely located rooms. In such configuration one can set the alternating operation on both devices (when one unit extracts air, the other one intakes). Such synchronisation maintains pre-chosen operation modes on all connected devices:

- **COMFORT**
inversion time varies, optimised for acoustic and thermal comfort
- **EFFICIENCY**
inversion time is fixed, optimised for maximum thermal efficiency

In order to synchronise units a wire connection must be established using 2-pole twisted pair cable. It is possible to connect up to 10 units and control them with one remote. Set of two HRU-WALL-RC-150 can provide up to 120m³ of fresh air per hour. Such amount is enough to create comfortable conditions for 4 people.

Example temperature values for the 3rd air supply speed

| Indoor temp. (°C) | Outdoor temp. (°C) | Air supply temp. (°C)* |
|-------------------|--------------------|------------------------|
| 20 | 0 | 17.4 |
| 20 | -10 | 16.1 |
| 20 | -20 | 14.8 |

* Supply air temperature measured at the 3rd air supply speed

Construction

1. Heat exchanger

The ceramic, regenerative heat exchanger is a central and most important part of the unit. It has a honeycomb structure for high thermal efficiency and double-sided air filters.



2. Energy efficient EC fan

Due to its advanced design and technology it consumes only 6W of power at its peak. Unique design winglet-type impeller, providing enhanced aerodynamic properties, low noise and increased efficiency. High efficient reversible EC motor with integral thermal protection, mounted on sealed for life high quality ball bearings. Designed for continuous reversible running.



3. Front cover

Made of high quality, impact and UV-resistant ABS.



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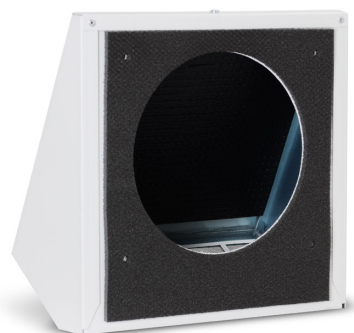
4. Telescopic inner pipe

Telescopic pipe adaptable to the wall thickness from 300-560 mm.



5. Outer grille

Outer grille with bug mesh.



6. Remote control

The unit is supplied with an infrared remote controller as standard, as well as its support base which can be wall mounted. A magnet keeps the controller attached to the base. The controller is equipped with an LCD display to visualise the setting to be transferred to the unit.



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Technical specifications

| HRU-WALL-RC-150-60 | |
|--------------------------------------|-------------------------|
| Air flow rate [m ³ /h] | 20 / 30 / 40 / 50 / 60 |
| Power [W] | 2 / 2,5 / 3,5 / 4,5 / 6 |
| Sound pressure [dB(A)] 3m | 10 / 14 / 20 / 24 / 26 |
| Ambient temp. [°C] | -20° +50° |
| Protection class | IPX4 |
| Frequency [Hz] | 50 |
| Voltage [V] | 220-240 |
| Weight [kg] | 4.40 |

Air efficiency measured as per ISO 5801.
Heat recovery efficiency as per EN 13141-8.
Sound level measured as per ISO 3746.

Energy class

| Model | Sound level (dB) | Air flow rate (m ³ /h) | Energy class |
|--------------------|---------------------|--------------------------------------|--------------|
| HRU-WALL-RC-150-60 | 40 | 60 | A |

