

# VENTOS 50 DC

STAND-ALONE COMFORT VENTILATION 'MVHR' UNIT

 **PAUL**  
WÄRMERÜCKGEWINNUNG



## Models

- 1) Single-room unit – standard model (upper picture)
- 2) Ductable unit – special model (lower picture)

## PRODUCT DESCRIPTION

The Comfort Ventilation unit **ventos 50 DC** was specifically developed for decentralised mechanical ventilation heat recovery (MVHR). Like all PAUL Comfort Ventilation systems, it features the high-efficiency counter-flow channel-type heat exchanger (protected by German and European patents). It is particularly well suited for the renovation of apartments, offices etc... Due to its functional design, it can be used either as a single-room unit (model with ventilation grilles) or can be ducted (housing design with duct sockets) as stand-alone ventilation of annexed rooms. Preferably, the unit is mounted to the inner face of an exterior wall; the customer simply needs to provide two holes with a diameter of 150 mm. The visually appealing radiator-style design makes it ideal for surface mounting or the unit can be recessed into the wall with just the cover panel visible.

The two highly efficient electronically commutated 48 VDC radial fans can be varied in 7 steps by means of a membrane keypad. Further functions of the user-friendly control system are intake/exhaust balancing, supply-only or extract-only operation (summer ventilation), automatic frost protection, filter monitoring, and condensate monitoring. Optionally, the control can be connected to a weekday timer in association with an external programmer. The PAUL Comfort Ventilation unit is a fully soundproofed and heat-insulated design – without thermal bridges. A G4 filter, or optionally F8 pollen filter, cleans the intake air. On the extract side, a G4 filter protects the unit from dirt and contamination.



Membrane keypad for manual control integrated flush with surface in housing top



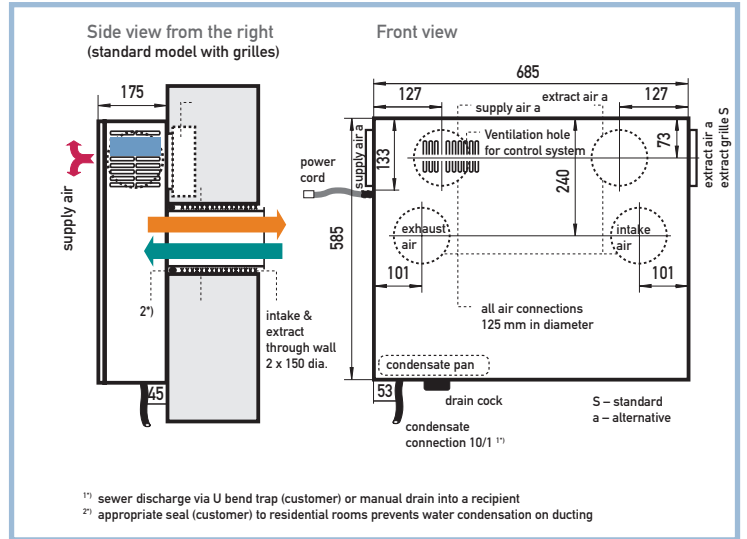
External programmer with weekday timer matching the PEHA home switch program (option)

## ventos 50 DC

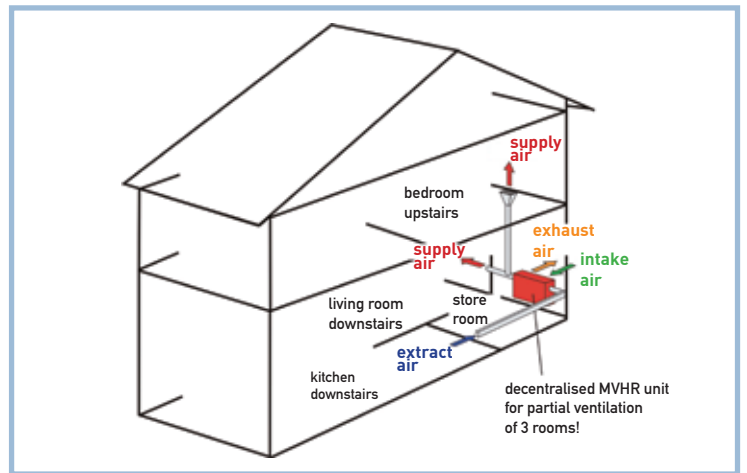
Dimensions:	W x D x H [mm]: 685 x 175 x 585										
Installation:	horizontal, wall mount										
Place of installation:	frost free, preferably > 10°C										
Grilles:	supply air: front panel; extract air: right-hand side (standard model)										
Duct connections:	2 x air 125 mm dia. for intake and exhaust air alternative ducting; optionally 2 sockets for supply and extract air 125 mm dia. (see picture 1)										
Condensate:	Condensate pan with integrated liquid level sensor (indication on programmer display) and 10 x 1 mm condensate hose (can be connected to the sewer via a dry trap by customer)										
Material:	Housing: galvanised steel, white powder coated; thermal bridge free heat insulation, soundproofed Heat exchanger: plastic										
Weight:	22 kg										
Filters:	intake air: G4, or F8 (pollen filter) extract air: G4										
Electrical connection:	230 V, 50 Hz; plug-in										
Cable lengths:	Power cord (230 V): 2.5 m										
Control:	Manual control via membrane keypad										
Protection:	IP 41										
Ventilators:	2 48VDC radial fans										
Power input:	11 to 62 kW										
Flow rate / available pressure:	see chart 1										
Heat recovery rate:	approx. 83% @ 40 m <sup>3</sup> /h										
Sound pressure level acc. to DIN EN ISO 3743-1: (3-m distance in dB(A))	<table border="1"> <thead> <tr> <th>Step</th> <th>1</th> <th>3</th> <th>5</th> <th>7</th> </tr> </thead> <tbody> <tr> <td>Lp</td> <td>15</td> <td>24</td> <td>31</td> <td>34</td> </tr> </tbody> </table>	Step	1	3	5	7	Lp	15	24	31	34
Step	1	3	5	7							
Lp	15	24	31	34							
Temperature range of heat exchanger:	can be used between -20°C and 40°C										
Summer operation:	supply-only or extract-only										
Frost protection:	<ul style="list-style-type: none"> <li>continuous slowing down of supply air fan</li> </ul>										
Back-up heating:	<ul style="list-style-type: none"> <li>hot water duct heater (duct model only)</li> <li>electric duct heater (duct model only)</li> </ul>										
Information:	Subject to change in the interest of technical progress.										

## TECHNICAL DATA

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Picture 1: Dimensions



Picture 2: Solution for partial ventilation with short ducting

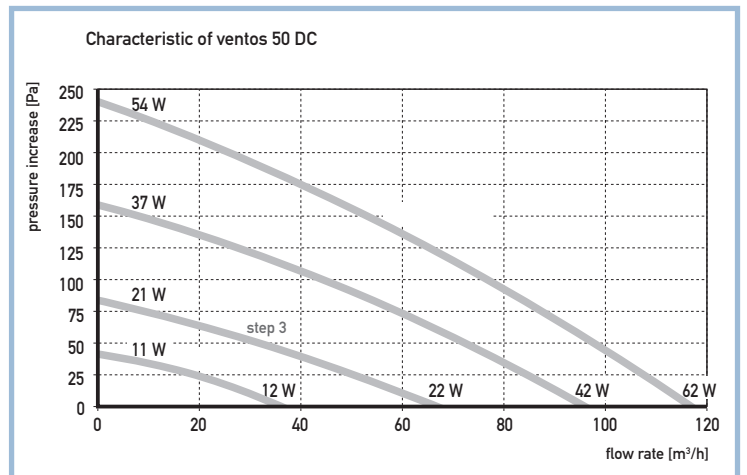


Chart 1: Characteristics for flow rate, externally available pressure and power input

- Environment award
- Innovation awards
- European and German patents
- Product of the Year award
- First Passiv Haus certified MVHR system
- Environment Oscar award
- INTEC award for Saxony

PAUL Comfort Ventilation obtained innovation awards both on the German state and Saxon regional levels, and received the German Environment Award (European-wide competition), as well as the Product of the Year and Environment Oscar awards.

PAUL offers equipment for controlled residential ventilation with efficiencies of up to 99% – groundbreaking in the industry.

Our motto is "New ideas in ventilation" – for fresh and healthy air in homes with energy saving systems for safeguarding the integrity of the environment.