

CAMPUS 500 DC

COMFORT VENTILATION 'MVHR' UNIT FOR LARGE AIR FLOWS



PASSIVE
HOUSE
compliant
COMPONENT
Dr. Wolfgang Feist



Programmer
for automatic control
L x W x D (mm): 158 x 125 x 32



Membrane keypad
for manual control
with weekday timer (option)
within the PEHA switch programme

alternative:
system bus actuator

PRODUCT DESCRIPTION

The campus 500 DC is a mechanical ventilation heat recovery (MVHR) unit for ventilation systems with air flow rates of up to 600 m³/h. Like all Comfort Ventilation units by PAUL, it features a highly efficient counter-flow channel-type heat exchanger (protected by German and European patents). The unit is particularly well suited for the ventilation of large single-family houses, schools, nurseries, restaurants, offices or other public facilities.

Two energy-saving electronically commutated 48 VDC radial fans are used to convey air flows of up to 600 m³/h at an externally available pressure of 100 Pa.

The Comfort Ventilation unit can be operated via a membrane keypad (manual control), a programmer (automatic control), or actuators (power pack only) of a freely selectable building bus system. In the automatic mode, the air flow rate can be adjusted in 3 steps. Fan power for the 3 steps can be varied in 1% increments. Further possible features are: filter monitor function, intake/exhaust balancing, constant-flow control, e.g. for fireplace compliance (optional), and regulating a ground heat exchanger valve, controlling a motorised bypass valve, a frost protection heater, a back-up duct heater, or a heating circuit pump. The control system offers 8 independent programs allowing the user to preset different operating steps for the ventilation fans at different times during a day. Manual control of the ventilation steps is also possible. A special (optional) standby circuit limits the power input in the standby mode to less than 2 W.

The membrane keypad provides: 7-step control of air flows, boost operation, intake/exhaust balancing, supply-only or extract-only operation (summer ventilation), automatic frost protection and filter monitor function. Optionally, an additional boost switch and a weekday timer can be connected, and the unit can be adapted to fireplaces. A bypass shut-off insert for summer operation is standard equipment.

The PAUL MVHR unit is a fully soundproofed and heat-insulated design with no thermal bridges. The intake air is cleaned via a G4 filter or, optionally, via an F8 pollen filter. On the extract side, a G4-class filter protects the heat exchanger from contamination.

campus 500 DC

Unit dimensions:
Controller dimensions:
incl. optional frost prot.
and back-up heaters:

Installation:

Place of installation:

Duct connections:

Condensate:

Material:

Weight:

Filters:

Electrical connection:

Cable lengths:

Controls:

Protection:

Ventilators:

Power input/flow/
available pressure:

Heat recovery rate:

Sound pressure level:
acc. to DIN 3743-1
(3-m distance in dB[A])

Temperature range of
heat exchanger:

Summer operation:

Frost protection:

Back-up heating:

Information:

TECHNICAL DATA

H x W x D [mm]: 1832 x 680 x 780
L x W x D [mm]: 340 x 300 x 80

L x W x D [mm]: 340 x 300 x 140

raise by 100 to 200 mm from floor for
condensate discharge

frost free, preferably > 10°C

4 x air 250 mm in dia.

¾" hose connection

Housing:
galvanised steel plate, white powder
coated, 40 mm heat insulation,
no thermal bridges
Heat exchanger: plastic

145 kg

intake air: G4 or F8 (pollen filter),
extract air: G4

single-phase 230 V, 50 Hz, or
three-phase 3 x 230 V, 50 Hz for operating
two extra heaters (frost protection heater
and electric duct heater – automatic
control only) ready for connection –
no plug-in

- power cord (230 V): by customer
- MVHR unit to control unit: 3 m
- automatic controller to programmer:
max. 15 m (by customer)

- automatic controller with programmer
or
manual control with membrane keypad,
or
- actuator of bus system

IP 44 (MVHR unit)
IP 20 (control unit)

2 48VDC radial fans

see chart 1

approx. 85 to 95%

Step	60	80	100
Lp	35.6	35.7	39.7

can be used between -20°C and 40°C

- summer bypass, manual or motorised
(automatic control),
- extract-only (manual control)

- continuous slowing down of supply air
fan¹⁾ in manual control, or
- optional frost protection heater, or
- optional ground to air heat exchanger

¹⁾ with fireplace option

- hot water duct heater as external unit,
or
- electric duct heater as external unit

Subject to change in the interest of
technical progress.

Distributed by:

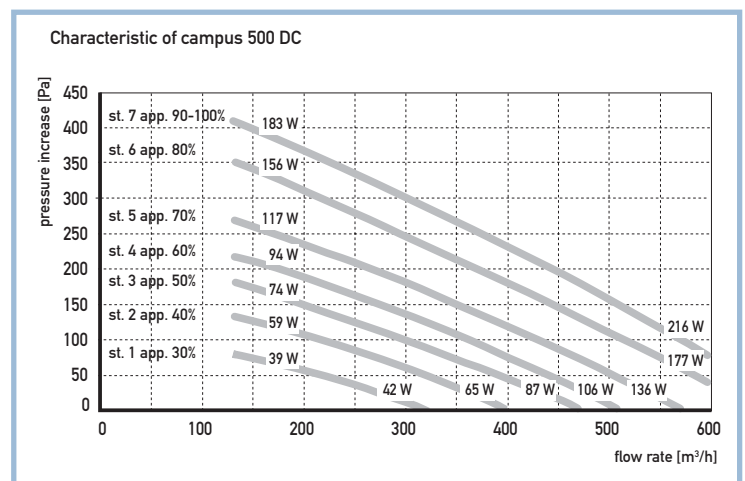
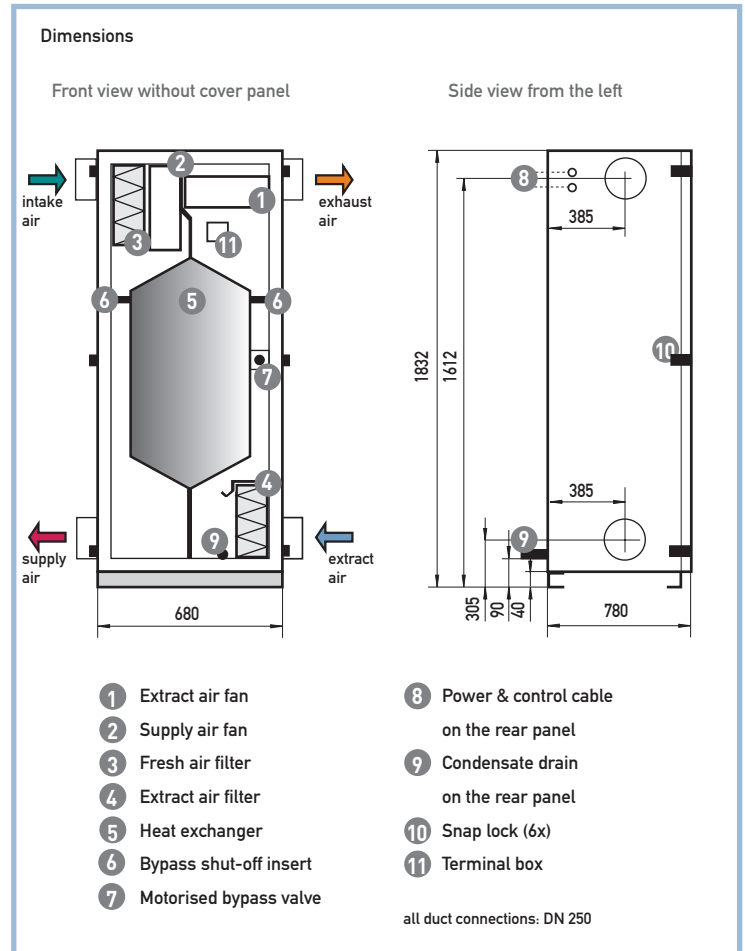


Chart 1: Characteristics for flow rate, externally available pressure and power input

- 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.