

CLIMOS F 200

Central ventilation device with heat recovery

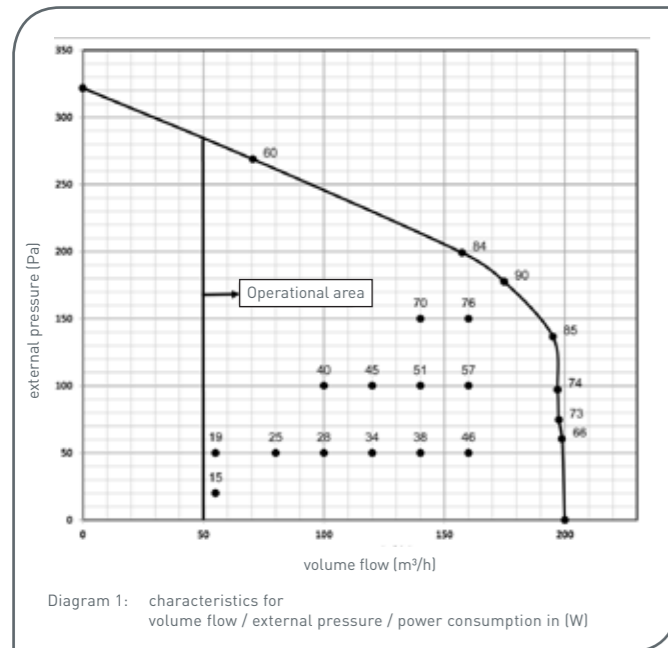


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Characteristics



Note:

The figured number values in the diagram of the p-V-characteristic curve give the power consumption in [W] in the corresponding operating points without activated integrated defroster.

Other instructions

Connection of control panels and components:

- Delivery contains 1,5 m CAT-5 cable for the connection between RJ-45-jack at the ventilation device and RJ-45-jack of the adapter board
- For the installation of the control panels the flush mounted box is necessary
- Control line: J-Y(St)Y 2x2x0,6 screened, max. 25 m
- Flush mounted box, data cable, terminal box by customer

Adjustment values of the fan speeds at the LED control panel in relation to the nominal value setting:

Fan speeds LED control panel	nominal value setting [%]
1	20
2	33
3	46
4	60
5	73
6	81
7	100

PAUL . The passive activists



Since the foundation by Grad.-Engineer Eberhard Paul in the year 1994, the company is among the pioneers and technology leaders in the ventilation sector. The starting point was already, at the beginning of the nineties, the idea of a new heat exchanger in counter flow channel principle. From the beginning, the west saxonian company has committed itself as specialist of high-efficient heat recovery in the living spaces ventilation and already in 1996 presented the first ventilation unit with heat recovery. Many innovative product developments, patents and distinctions succeeded. For the living space ventilation device THERMOS PAUL received in 2002, as a first company in Germany, the certificate „passive house adequate components“ of the Passive house Institute Dr. Wolfgang Feist in Darmstadt. In 2009 moved into today's head office in Reinsdorf in Zwickau. Consequently, following the company philosophy, the new administration wing was erected in passive house building method. In the year 2010, with the new NOVUS 300, PAUL brought to the market the device with today's best passive house certificated heat recovery. PAUL offers Europe-wide a range of high quality, passive house certified devices Made in Germany and is among the sector leaders in the segment living spaces ventilation. In 2014, the around seventy members team of the „passive activists“, celebrates the 20th anniversary of the foundation.

Technical description

- Compact heat recovery unit for the central comfort ventilation
- for dwellings up to 150 m² floor area
- Volume flow rate: 50 up to 200 m³/h
- Equipment as standard with enthalpy exchanger (humidity exchanger) with selective polymer membrane
- Version „Comfort“ with integrated defroster and TFT touch panel as control unit
- Version „Basic“ without integrated defroster, optionally with TFT touch panel or LED control panel
- especially adequate for new buildings and renovations with difficult installation points
- flat construction type for the false ceiling installation, customised drywall revision flap optionally available
- no condensate drain necessary
- summer ventilation function
- Equipped as standard with intake air filter and extract air filter of the filter class G4, optional pollen filter F7
- control panel: TFT touch panel with colour display, optional: LED control panel (only version „Basic“)
- Casing of galvanised powder-coated sheet steel, high quality polypropylene internal lining for high heat insulation and good device noise protection

TFT touch panel with colour display

Function keys:

- Stand by (shaded display), power consumption <1W
- Fan speeds 1 - 3 (in 1 % steps programmable)
- Absence mode (interval controlled fan speeds 1)
- Boost ventilation (duration between 15 to 120 min, individually adjustable)
- Automatic mode operation time controlled (individually adjustable weekly time program in 15 min. steps for every day of the week)
- Sensor automatic mode, optional with external sensors (CO₂, humidity, air quality)
- Menu (access to information, adjustment and set up menus)
- Password protected key lock for inactive display surface

Displays:

- Text and symbol driven menu representation
- Filter change control display (days of the remaining run-time of the filter)
- Error message through message symbol
- Info error display in the menu informations

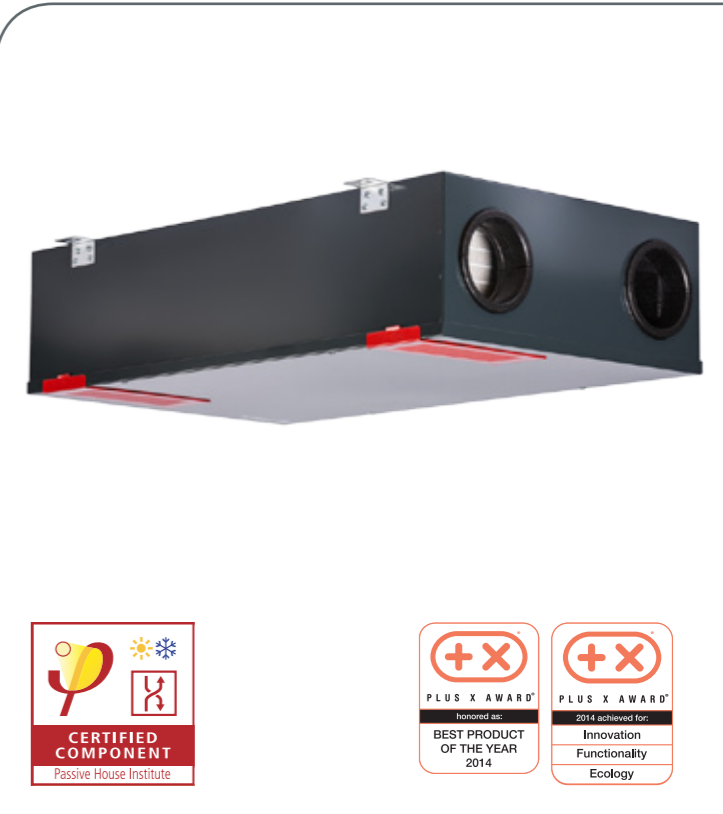
LED control panel

Function keys:

- Stand by (no LED display of the fan speeds), power consump. <1W
- Fan speeds 1 to 7 (fixed adjusted values)
- Boost ventilation (duration 15 min, level 7 fixed adjusted)
- Operating mode „only supply air“ or „only exhaust air“ (for summer cooling)
- Reset for filter change

Displays:

- Filter change control display (LED display through button reset filter change)
- Error message by means of LED codification



Control



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Technical data

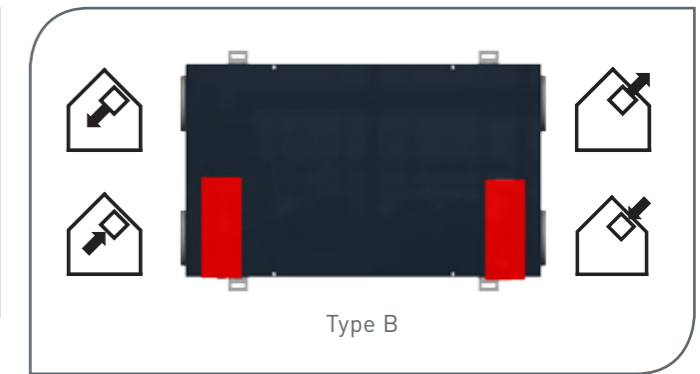
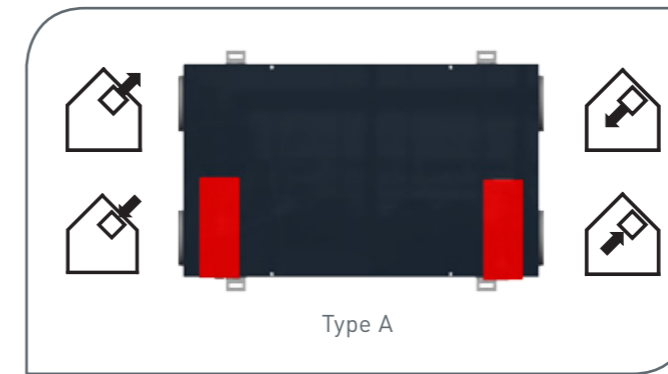
- Device dimensions: Width x Height x Depth (mm): 1019 x 250 x 594
- Possible mounting positions:
 - hanging from the cover or laying (horizontal)
 - wall hanging (horizontal or vertical)
 - other versions on demand
 „Please observe: the escaping air connection must be always on top!
 (Further information in the assembly instructions of the device.)
- Installation location: Frost-free interior area; ambient conditions < 70 % r. h. in 22 °C
- Tube connections: 4 air duct connectors DN 125 (sleeve dimensions)
- Material: Casing: galvanised steel plate, powder-coated, RAL 7016 (anthracite grey)
 Internal lining: expanded polypropylene EPP for heat and sound insulation
- Heat exchanger type:
 - Enthalpy exchanger (humidity heat exchanger) with polymer membrane, washable
- Weight: 25 kg
- Filter: Outside air: F5 or optional F7 (pollen filter), exhaust air: F5
- Electrical connection: 230 Vac, 50-60 Hz, ready-for-connection, cable with plug connection of a low power device
- Connection power: 0,14 kW / 0,75 kW ((without/with integrated defroster)
- Cable lengths:
 - Power cable (230 Vac): 2 m (scope of delivery)
 - CAT-5 cable: 1,5 m (scope of delivery)
 - variable between RJ-45 wall socket and control modules/external components (by customer)
- Control: Universal control
- Protection class & type: Protection class I (according to EN 60335), protection type IP 30 (according to DIN 40050)
- Ventilators: EC radial ventilators with integrated electronic, V constant controlled
- Volume flow, external pressure, Power consumption: Volumen flow area: 50-200 m³/h (characteristic curves see diagram 1)
- | Volume flow [m³/h] | External pressure [Pa] | Power consumption [W] |
|--------------------|------------------------|-----------------------|
| 80 | 50 | 25 |
| 100 | 100 | 40 |
| 140 | 100 | 51 |
| 198 | 60 | 66 |
- Table 1: selected operating parameters
- Efficiency criteria: 0,40 Wh/m³ (according to passive house certificate)
- Heat supply rate: 84 % (according to passive house certificate)
- Enthalpish heat supply rate: 111 % in 112 m³/h (enthalpy of the supply air flow in exterior luft humidity, tested according to DIN 4719)
- Sound pressure level according to DIN EN ISO 3743-1 (distance 3m)
- | Volume flow [m³/h] | Sound pressure level [dB(A)] |
|--------------------|------------------------------|
| 100 | 35,7 |
| 200 | 42,2 |
- Table 2: noise data device radiation
- Limitations of use: -20 °C to 40 °C (concerns electronic modules integrated in heat recovery unit)
- Freezing protection: integrated defrost heating (version „Comfort“), frost protection control (incl. anti-icing for downstream warm water heater battery)
- Air supplementary heating:
 - Warm water supplementary heater battery or
 - electrical supplementary heater battery (optional respectively as external unit)
- Options control:
 - digital I/O interface (e.g. contact for OFF of external)
 - Connecting possibility boost ventilation sensing device
 - Control of a heat circuit or air supplementary heater battery, as well as an electrical regulating flap at the geothermal heat exchanger (additional module necessary)
- Optional accessories:
 - 2 set design filter cover in RAL 3020 (traffic red) for the visible installation
 - drywall revision flap for the false ceiling installation

Design versions

- CLIMOS F 200 **Comfort**:
- with integrated defroster
 - with control unit TFT touch panel
 - Type A / Type B

- CLIMOS F 200 **Basic**:
- without integrated defroster
 - with control unit TFT touch panel or LED control panel
 - Type A / Type B

Construction types



Dimension drawings

