

Air handling unit

11050340

VEX560-C4 Pre-coated

VEX500-C4 is the air handling unit solution for bedrooms. It delivers a very good indoor air quality, a high level of comfort and restricts energy losses to a minimum.



VEX500-C4

PRODUCT BENEFITS

- the safety of C4 blended with the benefits of very high efficiency air handling (up to 95%),
- exclusive Aldes Smart Control® system,
- optimum air quality and thermal comfort.

REGLEMENTATIONS AND COMPLIANCES

Eurovent Certification no. : 13.03.001

Principles of operation

VEX500-C4 brings fresh, filtered air (up to 90% of PM1) into the building and recovers heat from exhaust air using its very high-efficiency heat exchanger. The incoming air can be heated and/or cooled using a full range of coils.

Product description

VEX500-C4 is the ideal high-performance solution for multi-occupancy housing and non-residential accommodation. Thanks to its very high-performance heat exchanger, its wide range of filters and coils, building occupants enjoy very good indoor air quality (up to ePM1 90%) alongside excellent thermal and acoustic comfort. VEX500-C4 also severely restricts energy losses to a minimum (up to 95% efficiency on Eurovent AAHE-certified heat exchanger).

Fields of application

Multi-occupancy residential housing, New, Refurbishment, Non-residential buildings

Installation

- equipment rooms / flat roofs,
- indoors /outdoors,
- in-line duct connections,
- rectangular connectors (circular adapters available as accessories),
- choice of utility connections side - left or right.

Reference arguments

- VEX560-C4 monobloc air handling unit with horizontal connection. • C4 fire certification. • High-efficiency counterflow plate heat exchanger (AAHE-certified). • EC motors and backward curve impellers. • 50 mm double-skin insulation. • Filtration up to ePM1 90%. • 100% adjustable bypass. • Pre-coated finish and anthracite grey access panel. • Multiple possibilities for built-in coils. • Aldes Smart Control system. • Built-in web server. • BMS via Modbus RTU and Bacnet TCP/IP.

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Main characteristics

- C4 solution: 400 °C 1/2 hour (Ø 160mm)
- pre-wired monobloc unit featuring self-supporting construction with dual-wall panels,
- 50 mm mineral wool insulation, density 40 kg/m³,
- high-efficiency counterflow plate heat exchanger up to 95% (AAHE-certified),
- EC motor and high-performance backward curve impeller,
- 100 % and adjustable bypass control,
- G4 filters (Coarse 60%) on exhaust, F7 (ePM1 60%) on fresh air,
- optional: M5 (ePM10 50%), F9 (ePM1 90%),
- wide range of coils,
- built-in switch,
- Aldes Smart Control® system:
 - constant speed,
 - constant airflow,
 - constant pressure,
 - variable airflow according to CO2/VOC probe (0-10V signal)
 - pressure control: adapts pressure to airflow measured, for very high energy efficiency,
 - built-in clock: timer control,
 - configuration & monitoring via:
 - remote touch-screen control,
 - web server,
 - BMS via ModbusRTU, Bacnet, TCP/IP.
 - defrosting by electrical coil on exhaust air or by imbalancing the bypass.

Supplementary characteristics

- coil options:
 - electrical,
 - electrical post-heating,
 - hot water with or without 3-way valve,
 - cold water with or without 3-way valve,
 - reversible (hot/cold) water with or without 3-way valve.
- aluminium or galvanised steel + paint condensate collection tray on heat exchanger,
- monobloc roof piece fitted in factory for outdoor versions,
- access to all components on the main panel via hinged, removable doors, and to control system via a specific central hatch,
- steel access doors pre-coated in dark grey (RAL 7016),
- galvanised steel or pre-coated external finish (RAL 9006) depending on the version,
- M0 interior finishes made of Z275 galvanised steel.

Accessories

| Désignations | References |
|--|------------|
| VEX560 rain hood | 11069037 |
| Flexible sleeve rectangular/circular D630 VEX560 | 11069053 |
| Rigid adapter piece VEX560 | 11069045 |
| Flexible sleeve MS Pro rectangular 910x510 mm VEX560 | 11069093 |

Consumables

| Désignations | References |
|--|------------|
| ePM1 flat filter kit 60% (F7) for VEX560 | 11069061 |
| G4 flat filter kit VEX560 | 11069069 |
| G4 pre-filter kit VEX560 pre-21/02/2018 | 11069085 |
| M5 flat filter kit VEX560 | 11100733 |
| F9 flat filter kit VEX560 | 11100743 |

Options

| |
|--------|
| base |
| C69382 |
| CO2 |
| DEBCON |

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Options

| |
|------------|
| E69390 |
| EXTENSION |
| EXTER |
| F69382 |
| F7 |
| F7+F9 |
| FILAIRE |
| G4+F9 |
| G4_S |
| G69371 |
| HAUTEFF |
| L69371 |
| M5+F7 |
| M5+F7HE |
| M5+F9 |
| M5_R |
| M5_S |
| PRECON |
| PREDEBCON |
| PREFILTRE |
| PREFILTRE2 |
| PRESS |
| S69371 |
| S69382 |
| S69390 |
| TACTILE |

Associated services

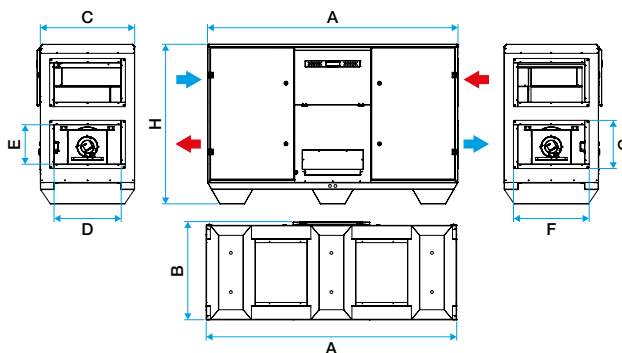
Commissioning

General data

| References | Insulation density (kg/m ³) | Thickness of insulation (mm) | Available filters | Connection direction | Type of exchanger | Type of motor | Type of impeller |
|------------|---|------------------------------|---|----------------------|-------------------|---------------|------------------|
| 11050340 | 40 | 50 | Coarse 65%, ePM10 50%, ePM1 60%, ePM1 90% | Horizontal | With plates | EC | Backward curve |

Dimensional data

| References | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | F (mm) | G (mm) | H (mm) | Weight (kg) |
|------------|--------|--------|--------|--------|--------|--------|--------|--------|-------------|
| 11050340 | 2502 | 1290 | 1262 | 910 | 510 | 940 | 540 | 1693 | 554 |



Dimensions VEX500-C4

Dimensions are given as a guide only. Make your selection in the Selector VEX software to obtain the actual characteristics of your unit.

Airflow data

| References | Minimum airflow | Max. airflow (m ³ /h) |
|------------|-----------------|----------------------------------|
| 11050340 | 900 | 4500 |

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Thermal data

| References | Max. exchanger output (%) | Max. current absorbed (kW) |
|------------|---------------------------|----------------------------|
| 11050340 | 95 | 2,8 |

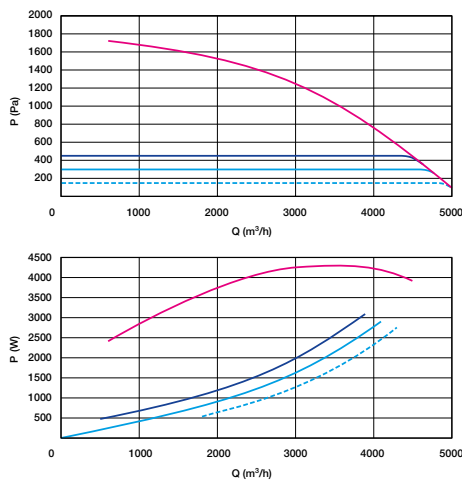
Electrical datas

| References | Max. power of electrical coil 1 (kW) | Max. electrical output of unit (kW) | Electrical coil voltage 1 | Unit voltage (V) |
|------------|--------------------------------------|-------------------------------------|---------------------------|------------------|
| 11050340 | 14.96 | 4,4 | 3x400 | 400 |

Regulatory data

| References | Test values as per standard EN 1886 |
|------------|-------------------------------------|
| 11050340 | D1, L2, F7, T3, TB2 |

Curve



- > Aeraulic curves drawn up as per standard NF EN ISO 5801.
- > P (Pa) = static pressure.
- > P (W) = power consumption.

Airflow and power VEX560-C4