

## Air handling unit

11069287  
VEX570-C4

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.

## Air handling unit

11069287  
VEX570-C4

## 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/m<sup>3</sup>,
- 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 CO<sub>2</sub>/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 |
|--|------------|
| VEX570 rain hood                                     | 11069038   |
| Flexible sleeve rectangular/circular D630 VEX570     | 11069054   |
| Rigid adapter piece VEX570                           | 11069046   |
| Flexible sleeve MS Pro rectangular 1210x510mm VEX570 | 11069094   |

## Consumables

| Désignations                             | References |
|--|------------|
| ePM1 flat filter kit 60% (F7) for VEX570 | 11069062   |
| G4 flat filter kit VEX570                | 11069070   |
| M5 flat filter kit VEX570                | 11100734   |
| F9 flat filter kit VEX570                | 11100744   |
| G4 pre-filter kit VEX570 pre-21/02/2018  | 11069086   |
| F7 HE flat filter kit VEX570 AN          | 11069078   |

## Options

|        |
|--------|
| base   |
| C69381 |
| C02    |

Air handling unit

## 11069287

### VEX570-C4

#### Options

|            |
|------------|
| DEBCON     |
| E69389     |
| EXTENSION  |
| EXTER      |
| F69381     |
| F7         |
| F7+F9      |
| FILAIRE    |
| G4+F9      |
| G4_S       |
| G69370     |
| HAUTEFF    |
| L69370     |
| M5+F7      |
| M5+F7HE    |
| M5+F9      |
| M5_R       |
| M5_S       |
| PRECON     |
| PREDEBCON  |
| PREFILTRE  |
| PREFILTRE2 |
| PRESS      |
| S69370     |
| S69381     |
| S69389     |
| TACTILE    |
| ZAS024     |

#### Associated services

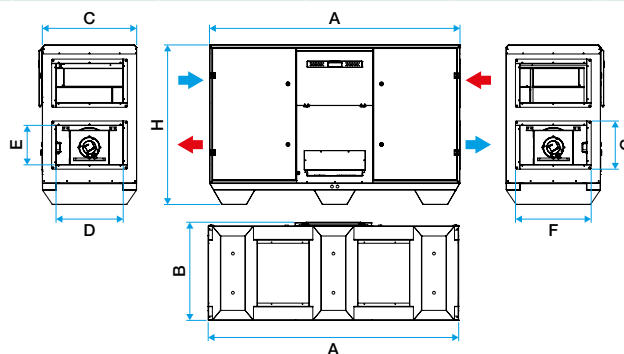
Commissioning

#### General data

| References | Insulation density (kg/m <sup>3</sup> ) | Thickness of insulation (mm) | Available filters                         | Connection direction | Type of exchanger | Type of motor | Type of impeller |
|------------|---|------------------------------|---|----------------------|-------------------|---------------|------------------|
| 11069287   | 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) |
|------------|--------|--------|--------|--------|--------|--------|--------|--------|-------------|
| 11069287   | 2502   | 1569   | 1540   | 1210   | 510    | 1240   | 540    | 1693   | 660         |



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.

## Air handling unit

# 11069287

## VEX570-C4

### Airflow data

| References | Minimum airflow | Max. airflow (m³/h) |
|------------|-----------------|---------------------|
| 11069287   | 1100            | 5500                |

### Thermal data

| References | Max. exchanger output (%) | Max. current absorbed (kW) |
|------------|---------------------------|----------------------------|
| 11069287   | 95                        | 4,131                      |

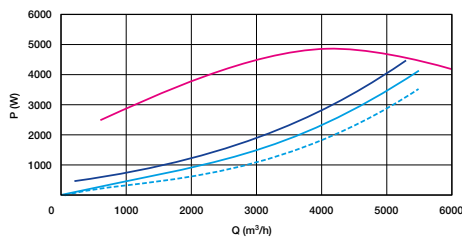
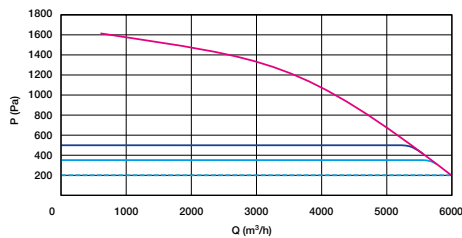
### Electrical datas

| References | Max. power of electrical coil 1 (kW) | Max. electrical output of unit (kW) | Electrical coil voltage 1 | Unit voltage (V) |
|------------|--------------------------------------|-------------------------------------|---------------------------|------------------|
| 11069287   | 18.7                                 | 5                                   | 3x400                     | 400              |

### Regulatory data

| References | Test values as per standard EN 1886 |
|------------|-------------------------------------|
| 11069287   | 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 VEX570-C4