

CMEV air handling unit

11050339
VEX550-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.



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.

REGULATIONS 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

- VEX550-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-painted finish and an-thracite 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

Description	Variants
Flexible sleeve rectangular/circular D500 VEX550	11069052
Rigid adapter piece VEX550	11069044
VEX550 rain hood	11069036
Flexible sleeve MS Pro rectangular 510x310 mm VEX525	11069089
Flexible sleeve MS Pro rectangular 910x410 mm VEX550	11069092
Flexible sleeve rectangular/circular D355 VEX525	11069049

Filters

Description	Variants
ePM1 flat filter kit 60% (F7) for VEX550	11069060
G4 flat filter kit VEX550	11069068
G4 pre-filter kit VEX550 pre-21/02/2018	11069084
M5 flat filter kit VEX550	11100732
F9 flat filter kit VEX550	11100742

Options

base
C69383

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Options

C02
DEBCON
E69391
EXTENSION
EXTER
F69383
F7
F7+F9
FILAIRE
G4+F9
G4_S
G69372
HAUTEFF
L69372
M5+F7
M5+F7HE
M5+F9
M5_R
M5_S
PRECON
PREDEBCON
PREFILTRE
PREFILTRE2
PRESS
S69372
S69383
S69391
TACTILE

Associated services

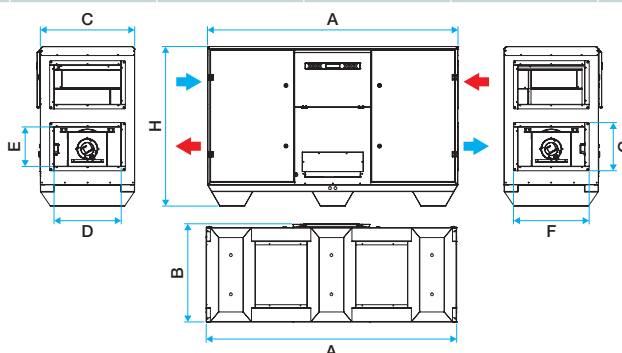
Commissioning

General data

Variants	Insulation density (kg/m³)	Thickness of insulation (mm)	Available filters	Connection direction	Type of exchanger	Type of motor	Type of impeller
11050339	40	50	Coarse 65%, ePM10 50%, ePM1 60%, ePM1 90%	Horizontal	Counterflow	EC	Backward curve

Dimensional data

Variants	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	Weight (kg)
11050339	2125	1311	1283	910	410	940	440	1470	494



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

Variants	Minimum airflow	Max. airflow (m³/h)
11050339	700	3500

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Heat recovery data

Variants	Max. exchanger output (%)	Max. current absorbed (kW)
11050339	95	2,456

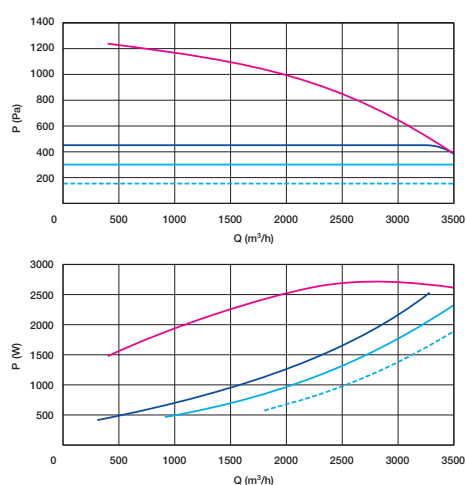
Electrical datas

Variants	Electrical coil voltage 1	Max. power of electrical coil 1 (kW)	Max. electrical output of unit (kW)	Unit voltage (V)
11050339	3x400	11.22	2,7	230

Regulatory data

Variants	Test values as per standard EN 1886
11050339	D1, L2, F7, T3, TB2

Curve



> Aerulic curves drawn up as per standard NF EN ISO 5801.

> P (Pa) = static pressure.

> P (W) = power consumption.