

CMEV air handling unit

11061078

VEX525

VEX500 is the air handling unit solution that delivers very good indoor air quality (ePM1 filter 90%) and a high level of comfort while limiting energy losses to a minimum.



PRODUCT BENEFITS

- air handling units producing very high efficiency (up to 95%),
- exclusive Aldes Smart Control® system,
- optimal air quality and thermal comfort,

REGULATIONS AND COMPLIANCES

Eurovent Certification no. : 13.03.001

Principles of operation

VEX500 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.

Produktbeskrivelse

VEX400 is the ideal high-performance solution for small non-residential buildings. 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. VEX400 also severely restricts energy losses to a minimum (up to 95% efficiency on Eurovent AAHE-certified heat exchanger).

Fields of application

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

- VEX525 monobloc air handling unit, horizontal connection.
- High-efficiency counterflow plate heat exchanger (AAHE certified)
- EC motor and backward curve impellers
- 1300 m³/h.
- 50 mm dual skin insulation
- Filtration up to ePM1 90%
- 100% adjustable bypass
- Anthracite grey access panel.
- Multiple possibilities for built-in coils
- Aldes Smart Control system
- Integrated web server
- BMS via Modbus RTU and Bacnet TCP/IP
- Available in pre-coated version.

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Main characteristics

- 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% (AAHU-certified),
- EC motor and high-performance backward curve impeller,
- 100 % and adjustable bypass control,
- G4 filters (Coarse 60%) on exhaust and F7 (ePM1 60%) on fresh air as standard,
- 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 sensor (0-10 V 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,
 - built-in webserver,
 - BMS via ModbusRTU, Bacnet, TCP/IP.
- de-icing by electrical coil on exhaust air or by controlled bypass opening

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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
Sens CO2 sensor	11017090
VEX525 rain hood	11069033
Flexible sleeve rectangular/circular D355 VEX525	11069049
Rigid adapter piece VEX525	11069041
MOTOR DAMPER ISOL. VEX525	11069017
Temperature sensor, Modbus, room P_ACCESSORIES_DFE1106910-1 P_ACCESSORIES_DFE1106910-2 P_ACCESSORIES_DFE1106910-3 P_ACCESSORIES_DFE1106910-4 P_ACCESSORIES_DFE1106911-3 P_ACCESSORIES_DFE1106911-4 P_ACCESSORIES_DFE1106911-5 P_ACCESSORIES_DFE1109026-3 P_ACCESSORIES_DFE1109026-4 P_ACCESSORIES_DFE1109026-5 P_ACCESSORIES_DFE1109026-6 P_ACCESSORIES_DFE1109026-7 P_ACCESSORIES_DFE1109026-8	11069100
Optiflex, flex tube Ø90 (antistatic and antibacterial) OPTIFLEX round OPTIFLEX oval duct (antistatic and antibacterial)	
Optiflex, flex tube Ø75 (antistatic and antibacterial) OPTIFLEX round Optiflex, flex pipe Ø75 (antistatic) Optiflex, flex pipe Ø90 (antistatic)	
OCTA-Ø160 sound attenuator P_ACCESSORIES_DFE1110014-2	
Motor Sfa-S2 On/Off 24/230V	11055045
Standalone detector trip device 230/24V	11906103
Smoke sensor	11058417
Flexible sleeve MS Pro rectangular 510x310 mm VEX525	11069089
Flat adapter piece rectangular-circular VEX525 and VEX525-C4	11069199

Filters

Description	Variants
F7 flat filter kit VEX525	11069057
G4 flat filter kit VEX525	11069065
G4 pre-filter kit VEX525 pre-21/02/2018	11069081
M5 flat filter kit VEX525	11100731
F9 flat filter kit VEX525	11100739

Associated services

Commissioning

General data

Variants	Insulation density (kg/m³)	Thickness of insulation (mm)	Type of motor
11061078	40	50	EC

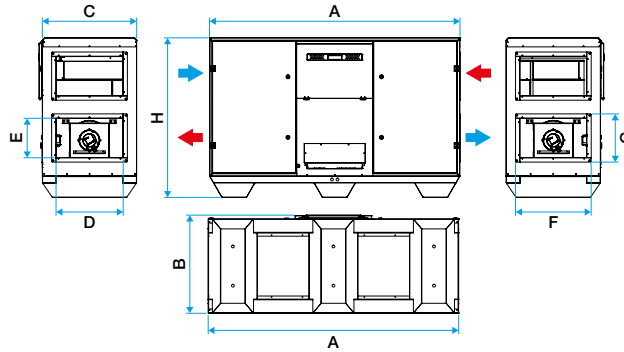
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Dimensional data

Variants	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	Weight (kg)
11061078	1823	769	704	510	310	540	340	1161	239



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	Max. airflow (m³/h)
11061078	1400

Heat recovery data

Variants	Max. exchanger output (%)	Max. current absorbed (kW)
11061078	95	0,856

Electrical datas

Variants	Max. power of electrical coil 1 (kW)	Max. electrical output of unit (kW)	Electrical coil voltage 1	Unit voltage (V)
11061078	3.74	0,98	3x400	230

Regulatory data

Variants	Test values as per standard EN 1886
11061078	D1, L2, F7, T3, TB2,

Principles of operation



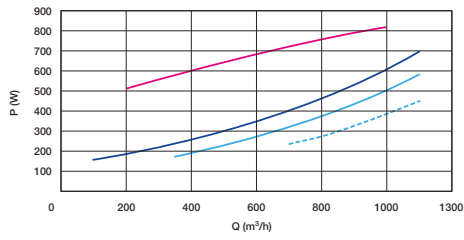
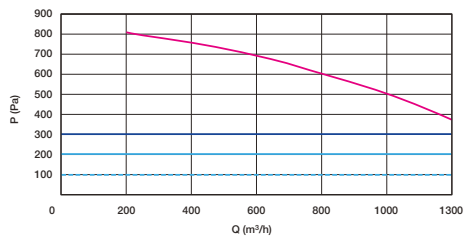
View of airflows in a VEX500

Eclaté VEX500

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Curve



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