CMEV air handling unit

11058028
VEX4080

EXHAUSTO VEX4000 is a range of units suitable for many ventilation forms. The various section types can be combined and configured for practically any need. The units in the VEX4000 series cover a capacity range from 1050 to 36,000 m³/h.

PRODUCT BENEFITS
• Extremely energy-efficient air-handling unit
• 13 modules, which can be combined to meet your exact solution
• Eurovent and RLT-certified
• EXcon, integrated control system

REGULATIONS AND COMPLIANCES
Eurovent Certification no. : 16.01.020

Principles of operation

The VEX 4000 brings fresh, filtered air into the building and recovers heat from exhaust air using its high-efficiency heat exchanger. The incoming air can be heated and/or cooled using a comprehensive range of coils.

Product description

ENERGY-EFFICIENT MODULAR UNITS WITH HIGH DEGREE OF FLEXIBILITY
With VEX4000 you can meet the energy requirements of the future via EC motor technology, high-performance heat exchangers and integrated reversible heat pump.

COMPACT FLEXIBILITY
The VEX4000 series covers 10 sizes, which means the optimal size of unit can be found for your ventilation requirements, and the many different modules give you the freedom to put together your own air handling unit to meet your exact project requirements.

All sections are mutually compatible in each model size, allowing the complete unit to preserve the same overall width and height. The units are available in LEFT and RIGHT versions.

EXCON CONTROL SYSTEM
All VEX4000 units are available with integrated control systems for advanced control of airflow, heating, cooling, humidification, etc. However, it is also possible to order VEX4000 without a control system.

EXHAUSTO's patented adaptive pressure control, which constantly optimises the pressure in the unit to match what the building requires, makes it possible to reduce your energy consumption even further than the traditional pressure regulation methods on the market (CAV, VAV and DVC).

EXSELECTPRO
VEX4000 is calculated and configured using the Eurovent and RLT-certified calculation program EXselectPRO .

The program is used for configuration and energy calculations according to project requirements. The output consists of detailed technical data, dimensional sketches and energy calculations and the associated labels.

Fields of application

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

Installation

• equipment rooms / terraces
• indoors / outdoors
• in-line duct connection or choice of two vertical fixings
• rectangular connections
• choice of left or right side for equipment fittings

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Main characteristics

- ER Rotary heat exchanger
- CF 2 types of counterflow heat exchangers
- EX - Crossflow heat exchanger
- FAN/FX - Plenum fan and filter
- RHP - Reversible heat pump
- RHP-ER – Reversible heat pump with rotary heat exchanger
- HW - Water heating coil
- CW - Water cooling coil
- DX - Cooling coil for direct expansion
- HWR - Heat recovery coil (special solution for shops)
- HE - Electric heating coil
- IC - Integrated DX cooling
- ICC - Integrated DX cooling with rotor and cold recovery
- MR - Mixer and recirculation section
- MS – Damper
- SP - Empty section
- RF - Cover for outdoor installation

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Supplementary characteristics

- Patented automatic leakage control (ALC™) prevents transfer of exhaust air and prevents the recirculation of airborne particles and gases, including viral particles.
- Selection of filters and pre-filter to guarantee air quality
- VEX4000 is a hygiene-certified unit in accordance with VDI 6022-1. All of the unit's modules and parts are easily accessible for inspection and cleaning in order to prevent harmful bacteria or particles, and the unit has been certified by an independent laboratory (Synlab).
- EXcon 100% Plug & Play control:
- Constant airflow
- Constant pressure
- Patented adaptive pressure regulation
- Variable airflow with CO2/VOC sensor (0–10 V signal)
- Regulated pressure: optimal pressure regulation is used to adapt the pressure setpoint according to the measured airflow, ensuring energy efficiency
- Temperature control
- Integrated clock: operating hours can be controlled with timer
- BMS communication protocols:
- Integrated webserver - TCP/IP RJ45
- Modbus RTU RS485
- BACnet TCP/IP
- LON (optional)
- Version without automatic control system also available

Accessories

Description	Variants
Smoke sensor	11058417
Standalone detector trip device 230/24V	11906103
MOTOR SF24A-S2 ON/OFF	11055064
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 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	11069100

Filters

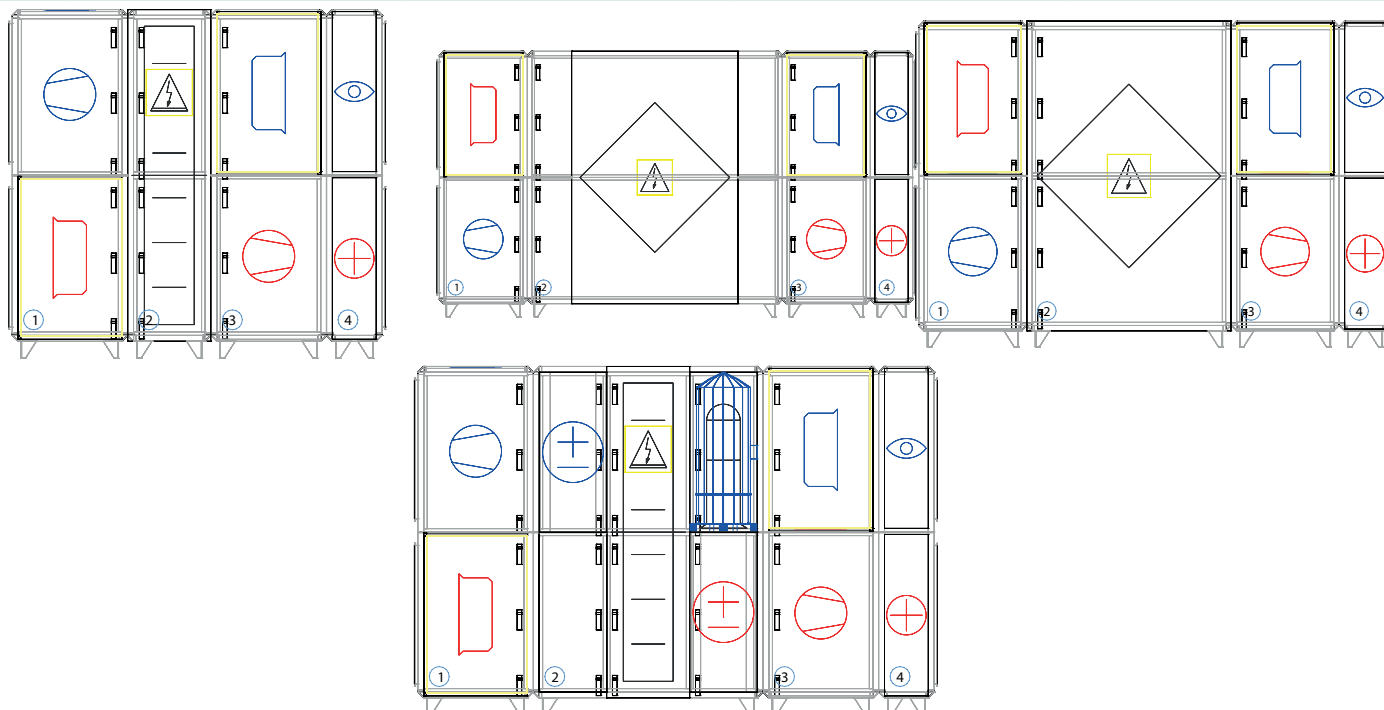| Description	Variants
Bag filter for VEX4080, short – ePM10 50%	11100825
Bag filter for VEX4080, long – ePM10 50%	11100826
Bag filter for VEX4080, short – ePM1 65%	11100827
Bag filter for VEX4080, long – ePM1 65%	11100828
Bag filter for VEX4080, short – ePM1 65% carbon	11100829
Bag filter for VEX4080, long – ePM1 65% carbon	11100830
Bag filter for VEX4080, short – ePM1 85%	11100831
Bag filter for VEX4080, long – ePM1 85%	11100832

General data

Variants	Insulation density (kg/m³)	Thickness of insulation (mm)	Connection direction	Type of exchanger	Type of motor	Type of impeller
11058028	60	50	Horizontal, Vertical	Crossflow, Rotary	EC	Backward curve

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Dimensional data

Variants	A (mm)	B (mm)	C (mm)	Weight (kg)
11058028	2724	2494	2325	1699

Airflow data

Variants	Max. airflow (m³/h)
11058028	22000

Electrical datas

Variants	Electrical coil voltage 1	Unit voltage (V)
11058028	230/400	230/400

Regulatory data

Variants	Test values as per standard EN 1886
11058028	D2, L1, L1, F9, T2, TB3

Installation