

Air handling unit

11058029

VEX4090

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,
- minimum noise level,
- compact modules with multiple variants.

REGLEMENTATIONS 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.

Fields of application

New, Refurbishment, Non-residential buildings

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

- The ALC™ (Automatic Leakage Control) option is the patented solution that prevents the propagation of viruses by air handling units equipped with rotary heat exchangers. It measures, checks and constantly adjusts the pressure difference between supply and return airflows to ensure that no stale air comes into contact with the clean air produced by the unit.
- 10 models up to 30,000 m³/h.
- AHU certified 16.01.020
- Aluminium profile construction with double skin panels.
- External finish in Aluzinc AZ185: class 4 anti-corrosion performance. Contact us for details of other finishes.
- 50 mm mineral wool insulation (class A1 as per DIN4102) 65 kg/m³ density.
- EN 1886 values: D2, L1/L1, T2, TB3 (TB2 available soon) F9.
- Very low consumption EC motor with backward curve impeller, SFP optimised thanks to centrifugal fans with backward curve impeller mounted on direct drive.
- Easy access and maintenance: components fitted on slides, lit inspection hatches (optional), doors mounted on adjustable hinges and removable, with lockable handles.
- High-efficiency rotary heat exchanger (Eurovent AARE) with choice of 4 types of efficiency. Optional drain section to preserve indoor air quality.
- 4 types of exchangers:
 - standard aluminium exchanger,
 - hygroscopic,
 - sorption: ideal for hot and humid climates,
 - epoxy: ideal for corrosive atmospheres (saline).
- Counterflow heat exchanger (compliant with ERP 2016) in standard aluminium or epoxy finish. Corrosion-resistant condensate collection tray and built-in regulating bypass.
- Choice of filters to guarantee air quality: M5 bag filters (ePM10 65%), F7 (ePM1 65%), F9 (ePM1 65%) or F7C active carbon - consult us for other types of filters and pre-filters.
- Built-in switch.
- Fully plug & play EXcon control system:
 - constant airflow,
 - constant pressure,
 - variable airflow according to CO₂/VOC sensor (0-10 V signal),
 - controlled pressure: optimised pressure regulation which adapts the pressure set point according to the airflow measured, ensuring energy efficiency,
 - temperature management,
 - built-in clock: time periods managed by control system.
- Configuration & monitoring via touch-screen remote control.
- BMS communication protocols
 - Built-in webservice TCP/IP RJ45,
 - modbus RTU RS485,
 - BACnet TCP/IP,
 - LON (optional).
- Version without control system also available.
- Option compatible with VDI 6022

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Supplementary characteristics

- patented automatic leakage control (ALC™) prevents the transfer of exhaust air to supply air through the rotary heat exchanger under varying operating conditions and eliminates recirculation of airborne particles and gases, including virus particles.
- Choice of filters and prefilter to guaranty air quality
- choice of integrated cooling
- integrated switch,
- EXcon 100% Plug & Play control:
 - constant airflow,
 - constant pressure,
 - patented adaptive pressure control
 - variable airflow by CO₂/VOC sensor (0-10 V signal),
 - regulated pressure: optimal pressure control used to adapt pressure set point according to measured airflow, ensuring energy efficiency,
 - temperature control,
 - integrated clock: operating hours can be controlled with timer.
- BMS communication protocols :
 - integrated webservice TCP/IP RJ45,
 - ModbusRTU RS485,
 - BACnet TCP/IP,
 - LON (optional).
- version without controls also available,
- developed in accordance with the German Hygiene Standard VDI 6022.

Accessories

Désignations	References
Smoke sensor	11058417
Standalone detector trip device 230/24V	11906103
MOTOR SF24A-S2 ON/OFF	11055064

Associated services

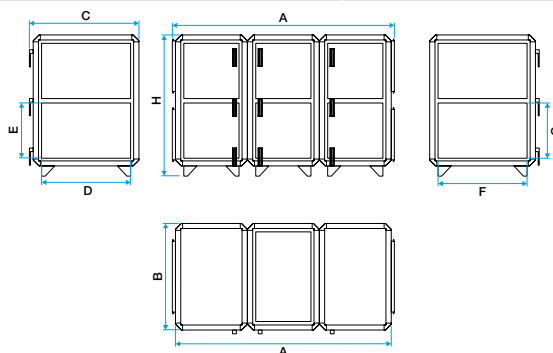
Commissioning

General data

References	Insulation density (kg/m ³)	Thickness of insulation (mm)	Connection direction	Type of exchanger	Type of motor	Type of impeller
11058029	60	50	Horizontal, Vertical	Rotary, Counterflow	EC	Backward curve

Dimensional data

References	A (mm)	B (mm)	C (mm)	Weight (kg)
11058029	2724	2744	2625	2233



Dimensions VEX4000

Airflow data

References	Max. airflow (m ³ /h)
11058029	25800

Electrical datas

References	Electrical coil voltage 1	Unit voltage (V)
11058029	230/400	230/400

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Regulatory data

References	Test values as per standard EN 1886
11058029	D2, L1, L1, F9, T2, TB3

Installation visual 1



Installation VEX4000