

Air handling unit

11050323
VEX640 Pre-coated

VEX600 is the air handling unit solution with a small footprint. It delivers a very good indoor air quality, a high level of comfort and restricts energy losses to a minimum.



VEX600

PRODUCT BENEFITS

- air handling units producing very high efficiency (up to 95%),
- optimal air quality and thermal comfort,
- excellent acoustic performance,

REGLEMENTATIONS AND COMPLIANCES

Eurovent Certification no. : 13.03.001

Principles of operation

VEX600 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

VEX600 is the ideal high-performance solution for non-residential buildings where floor space is at a premium. 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. VEX600 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/ cabinets,
- indoors,
- vertical duct connections,
- rectangular connectors (circular adapters available as accessories).

Reference arguments

- VEX640 monobloc air handling unit with vertical connection.
- High-efficiency counterflow plate heat exchanger (AAHE-certified).
- EC motors and backward curve impellers.
- 2300 m³/h.
- 50 mm double-skin insulation.
- Filtration up to ePM1 90%.
- 100% adjustable bypass.
- Anthracite 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.

Air handling unit

11050323

VEX640 Pre-coated

Main characteristics

- pre-wired monobloc unit featuring self-supporting construction with dual-wall panels,
- duct connections on top of unit,
- 50 mm mineral wool insulation, density 40 kg/m³,
- high-efficiency counterflow heat exchanger up to 95% (AAHE-certified),
- EC motor and high-performance backward curve impeller,
- 100 % and adjustable bypass control,
- G4 filter (Coarse 60%) on exhaust, F7 (ePM1 60%) on fresh air,
- optional: M5 (ePM10 50%), F9 (ePM1 90%),
- optional 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,
 - built-in webserver,
 - BMS via ModbusRTU, Bacnet, TCP/IP.
- de-icing by electrical coil on exhaust air or by controlled bypass opening

Air handling unit

11050323
VEX640 Pre-coated

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,
- 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
Sens CO2 sensor	11017090
Flexible sleeve MS Pro rectangular/circular insulated VEX640 D450	11068346
Flexible sleeve MS Pro rectangular/circular VEX640 D450	11068414
Rigid adapter piece VEX640	11068384
Motorised shut-off damper VEX430, VEX530 and VEX640	11069018
Ambient temp° transmitter	11069100
Motor Sfa-S2 On/Off 24/230V	11055045
Standalone detector trip device 230/24V	11906103
Smoke sensor	11058417

Consumables

Désignations	References
F7 flat filter VEX430/630an 640ae 530	11069058
G4 flat filter kit VEX630an 640ae 430/530	11069066
G4 flat filter kit VEX640an 440/540	11069067
F7 HE filter kit VEX640 AN	11100428
M5 pre-filter kit Fresh Air (AN) / Extract air (AE) for VEX430	11100554
F9 flat filter kit VEX540/VEX640	11100741
FILTER KIT M5 FLAT VEX640 fresh air VEX440/VEX540	11100555
ePM1 flat filter 60% (F7) VEX440/VEX640 fresh air and VEX540	11069059

Options

base
F7+F9
G4+F9
M5+F7
M5+F9
M5_R
M5_S
C78957
CO2
DEBCON
E68410
E78656
F7
F78957
FILAIRE
G4_S
G68418
HAUTEFF
L68418
M5+F7HE
PRECON

Air handling unit

11050323

VEX640 Pre-coated

Options

PREDEBCON
PREFILTRE
PREFILTRE2
PRESS
S68410
S68418
S78656
S78957
TACTILE

Associated services

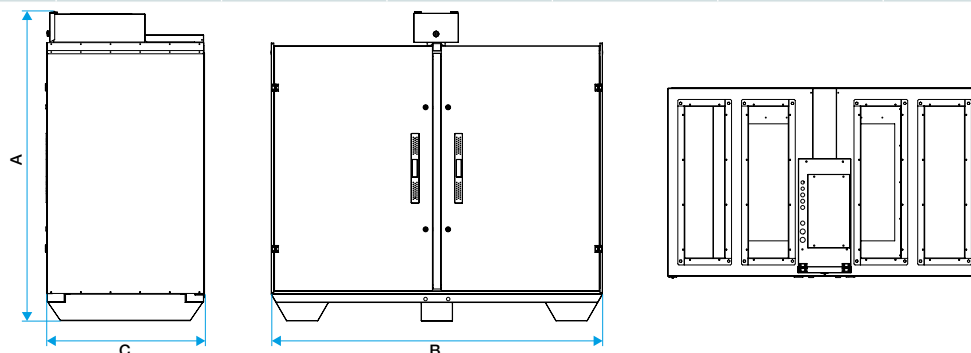
Commissioning

General data

References	Insulation density (kg/m ³)	Thickness of insulation (mm)	Available filters	Connection direction	Type of exchanger	Type of motor	Type of impeller
11050323	40	50	Coarse 65%, ePM10 50%, ePM1 60%, ePM1 90%	Vertical	With plates	EC	Backward curve

Dimensional data

References	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Weight (kg)	Connection h (mm)	Connection l (mm)
11050323	1724	1900	909	740	340	365	340	740



Dimensions VEX600

Dimensions are given as a guide only. Make your selection in the Selector VEX software to obtain the actual, detailed characteristics of your unit.

Airflow data

References	Max. airflow (m ³ /h)
11050323	2500

Thermal data

References	Max. exchanger output (%)	Max. current absorbed (kW)
11050323	95	1,4

Electrical datas

References	Max. power of electrical coil 1 (kW)	Max. electrical output of unit (kW)	Electrical coil voltage 1	Unit voltage (V)
11050323	7.5	1,4	3x400	230

Regulatory data

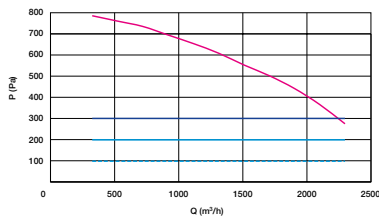
References	Test values as per standard EN 1886
11050323	D1, L2, F7, T3, TB2

Air handling unit

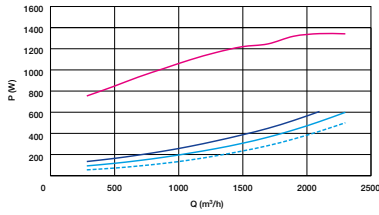
11050323

VEX640 Pre-coated

Curve



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



Airflow and power VEX640