

Air handling unit

11050321
VEX620 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

- VEX620 monobloc air handling unit with vertical connection.
- High-efficiency counterflow plate heat exchanger (AAHE-certified).
- EC motors and backward curve impellers.
- 1200 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.

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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 webservice,
 - BMS via ModbusRTU, Bacnet, TCP/IP.
- de-icing by electrical coil on exhaust air or by controlled bypass opening

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 VEX620 D315	11068348
Flexible sleeve MS Pro rectangular/circular VEX620 D315	11068416
Rigid adapter piece VEX620	11068386
MOTOR SHUT-OFF DAMPER VEX620	11068451
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 kit VEX620	11100290
G4 flat filter kit VEX620	11100292
F7 HE filter kit VEX620 AN	11100426
M5 flat filter kit VEX620	11100736
F9 flat filter kit VEX620	11100747

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Options

base
F7+F9
G4+F9
M5+F7
M5+F9
M5_R
M5_S
C78959
CO2
DEBCON
E68412
E78658
F7
F78959
FILAIRE
G4_S
G68420
HAUTEFF
L68420
M5+F7HE
PRECON
PREDEBCON
PREFILTRE
PREFILTRE2
PRESS
S68412
S68420
S78658
S78959
TACTILE

Associated services

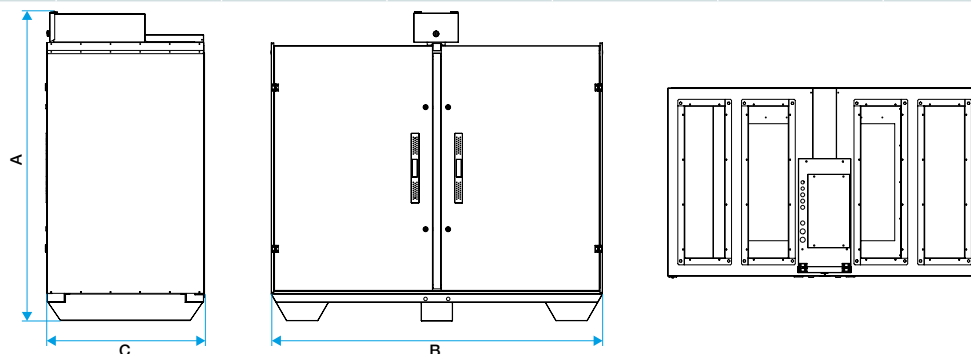
Commissioning

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
11050321	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)
11050321	1269	1200	840	685	190	230	190	685



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.

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Airflow data

References	Max. airflow (m³/h)
11050321	1200

Thermal data

References	Max. exchanger output (%)	Max. current absorbed (kW)
11050321	95	0,9

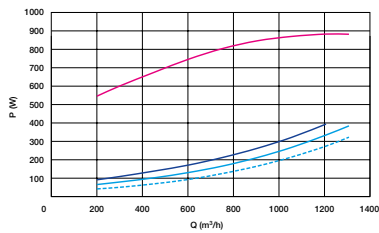
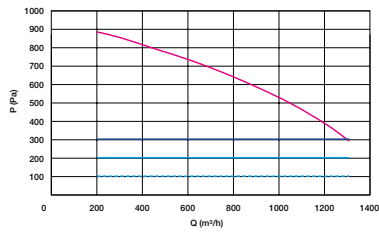
Electrical datas

References	Max. power of electrical coil 1 (kW)	Max. electrical output of unit (kW)	Electrical coil voltage 1	Unit voltage (V)
11050321	3.4	0,9	3x400	230

Regulatory data

References	Test values as per standard EN 1886
11050321	D1, L2, F7, T3, TB2

Curve



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

Airflow and power VEX620