

ASPIRCOMFORT PRO X 460H

DECENTRALISED VMC UNIT WITH HEAT PUMP AND THERMO-DYNAMIC RECOVERY

- For commercial applications, schools, offices
- Very high recovery efficiency >90%
- BLDC compressor and fans
- Horizontal installation
- Low noise levels



Complete unit capable of independently integrating the ventilation requirements and integrating the cooling thermal requirements of the served rooms. The unit is complete with all components for its operation and ready to use.

ASPIRCOMFORT PRO X is a unit designed for room air renewal. The ease of installation through two 160 mm diameter holes and the high fresh air flow rate allows the application in situations such as residential buildings, schools, surgeries, offices and all contexts where air exchange is required.

Thermodynamic recovery allows integration with respect to environmental climatic conditions, helping the air conditioning system to meet indoor comfort. In addition, the injected air is always at a temperature close to or better than the room temperature, thus ensuring a higher perceived comfort.

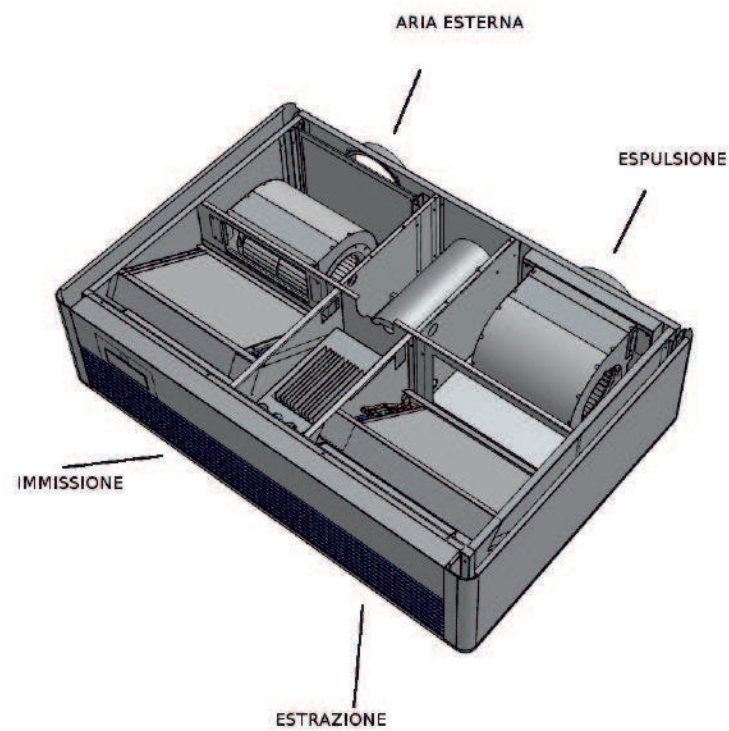
The unit consists of a monoblock including every component for correct operation: fans, cooling circuit with high efficiency compressors, air filtration sections and high efficiency counterflow heat recovery unit.

SPECIFICATIONS

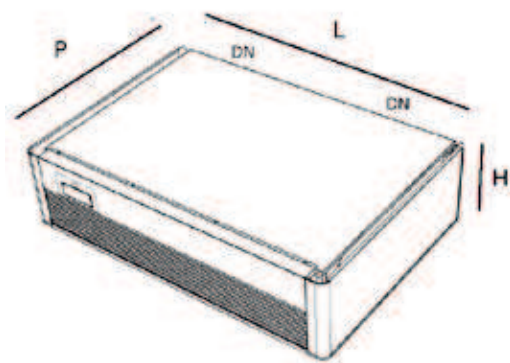
- Constant flow centrifugal fans with directly coupled brushless electronic motor and modulating control; the fans operate in various modes controlled mainly by the air quality sensor located inside the unit.
- The inverter refrigeration unit allows active recovery of energy from the exhaust air. The thermodynamic recovery allows, thanks to its cooling circuit, to supply energy to the environment in a higher quantity than that taken away by the ventilation for 90% of the unit's operation.
- ePM1 filter located after the coil to completely filter out any impurities in the intake air. On the outside air there is a Coarse pre-filter that protects the cleanliness of the unit.
- Self-supporting sheet metal frame. Self-supporting sheet metal structure, externally painted (in the visible versions), with polyethylene and EPDM thermal and acoustic insulation in between.
- Cooling circuit made of brazed copper complete with high-efficiency BLDC compressor, filter dryer, finned coils, electronic expansion valve, reversing valve and safety devices.
- Electric panel on-board the unit with microprocessor and dedicated regulation. Fan management with air quality probe, display and temperature setpoint, timed dirty filter management, panel with graphic interface on board the machine and remote control included.
- The unit is arranged in advance for the installation of a UV lamp (accessory cod. AP20984), which enables a germicidal action to be carried out on the air introduced from outside through the effect of UVC; the lamp is activated automatically according to the quality of the room air.
- The unit is equipped with a power cable with Shuko plug.

UNIT CONFIGURATION

Code	Maximum flow rate	Installation
AP20068	Up to 460 m3/h	horizontal



DIMENSIONS AND FUNCTIONAL SPACES



Width L	mm	1010
Depth P	mm	690
Height H	mm	255
DN Outdoor air/ exhaust	mm	162
DN Air supply / Air return	Mm	2 x 160
Condensation	Ø	20
Weight	kg	74

OPERATING LIMITS

HEATING	Indoor Air		Outdoor Air
	°C	10 / 25	-15 / 20
COOLING	Indoor Air		Outdoor Air
	°C	18 / 28	20 / 38

TECHNICAL FEATURES

Type of Fans	Forward-bladed centrifuges with Brushless motor With constant flow function	
Number of Fans	Nr.	2
Air flow B0 / V3 / V2 / V1	m3/h	460 / 400 / 240 / 140
Useful pressure	Pa	--
Compressor type	Rotary BLDC	
Refrigerant gas	R410A	
Filters	2x ePM1 80% + Coarse PREfilter	
Max. fan input power	kW	0.12
Max Compressor power input	kW	1.15
Power supply voltage	V/ph/Hz	220/1/50
Max Total input power	kW	1.27
Max total absorbed current	A	5.8
Sound pressure ²	dB(A)	43

(1) Outdoor air -5/80% RH - Indoor air 20°/50% RH - Nominal flow rate

(2) Sound pressure at nominal flow V3 at 3m in free field according to 3744

■ Technical data winter operation

Thermal capacity ¹	kW	3.62
Absorbed power	kW	0.84
Total COP		4.3

(1) Outdoor air -5°/80% RH - Indoor air 20°/50% RH - Nominal flow rate

■ Technical data summer operation

Thermal capacity ¹	kW	2.77
Absorbed power	kW	0.91
Total EER		3.0

(1) Outdoor air 35°/ 50% RH - Indoor air 27°/ 60% RH - Nominal flow rate

CERTIFICATIONS

The CE marking (applied on each machine) certifies compliance with the following Community standards:

- Low Voltage Directive 2014/35/EC
- Electromagnetic Compatibility Directive 2014/30/EC

SPECIFICATION ITEM

Active fan unit with thermodynamic heat recovery.

Specific unit for ventilation in environments with a need for ventilation and air treatment, such as residential, commercial and small tertiary environments.

CONSTRUCTION FEATURES

Self-supporting structure in galvanised sheet metal with aesthetic finish painted RAL9003.

Heat exchangers and flows with maximum tightness and no leakage from conventional heat exchangers;

Compact dimensions for straight forward ceiling installation with easily accessible lower panel for maintenance and inspection.

Circular inlets for air ducts to the outside with grilles, template and accessories supplied;

Quick filter inspection and condensate drain.

Cooling circuit with bldc high efficiency rotary compressor, thermal exchange coils, lamination part and safety parts.

Electrical panel with control boards and terminal blocks; forward-bladed centrifugal fans with EC motors with electronic flow control and low consumption; ePm1 class filters with low pressure drop on outdoor air and stale air and pre-filter on outdoor air.

Electric panel on-board the unit with microprocessor and dedicated regulation. Fan management, temperature display, timed dirty filter management, air quality sensor management with flow rate modulation.

Control panel integrated inside the unit and infrared remote control included.