

HEAT RECOVERY UNITS

ASPIRCOMFORT 300HV

- ➔ Heat recovery unit with high efficiency up to 90%
- ➔ Horizontal/vertical installation
- ➔ CH193VMC remote panel



CE

DESCRIPTION:

Fan unit complete with heat recovery unit dedicated to air renewal without wasting energy. The unit is particularly suited for single family units, flats and all cases where the rated air flow rates do not exceed 302 m³/h.

CHARACTERISTICS:

- Self-supporting sheet metal frame; galvanised sheet metal panels with thermal and acoustic insulation with 10mm-thick polyethylene.
- Polypropylene high output counter current cross flow exchanger; low freezing and operating temperatures down to -25°, very high exchange efficiency.
- Brushless fans with electronic motor and modulating control; very high efficiency and low noise levels.
- EPM1 filters with low head loss; easily removable in either horizontal or vertical positioning.
- Electrical panel complete with electronic board and connections for the remote touch panel.
- CH193VMC control panel mandatory for unit operation with capacitive touch for installation on 503 box.
- Thanks to its construction features and components, the unit is able to reach recovery efficiencies of more than 90%; in the winter and summer seasons there is considerable energy recovery of the renewal air introduced into the room.

UNIT CONFIGURATION

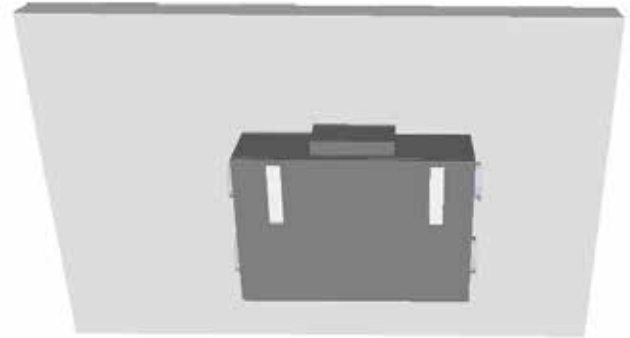
Code	Maximum flow rate
AP20054	302 m ³ /h

The unit can be installed horizontally or vertically with the same unit code. There are therefore two condensation evacuation trays inside the unit.

■ TYPE OF INSTALLATION

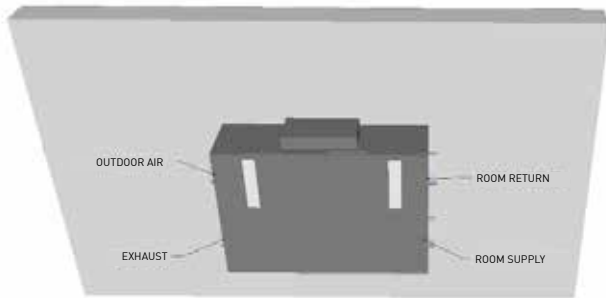


CEILING - Horizontal

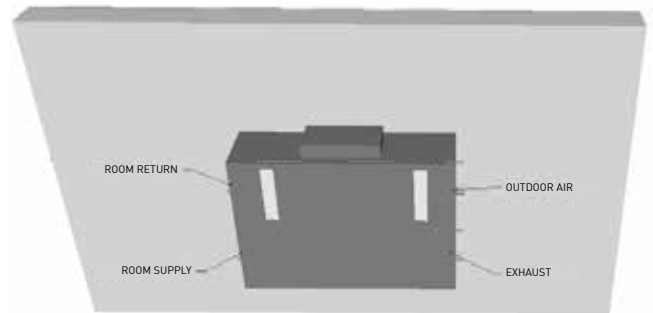


WALL - Vertical

It is possible to select the desired configuration specifying version H1 or H2 in the order; H1 is the supply standard;



STANDARD VERSION



CUSTOMISABLE VERSION

The units are shown seen from below (horizontal installation), from the front (vertical installation)

ECODESIGN CLASSIFICATION

Below is a summary of the classification of the various models according to European regulation 1253/2014 and 1254/2014

B

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
- Ecodesign 2009/125/EC

TECHNICAL FEATURES

Fans

Type of Fans		Backward blade radial - directly-coupled electronic motor - 0/10 V signal
Number of Fans	Nr.	2
Air flow rate	m ³ /h	302
Useful pressure	Pa	100

Heat exchanger

Type of exchanger		Counter current plates - polypropylene
Number of Exchangers	Nr.	1
Recovery efficiency	%	85.2

Filters

Type of filters		Flat Filters
Filtration class		ePM1

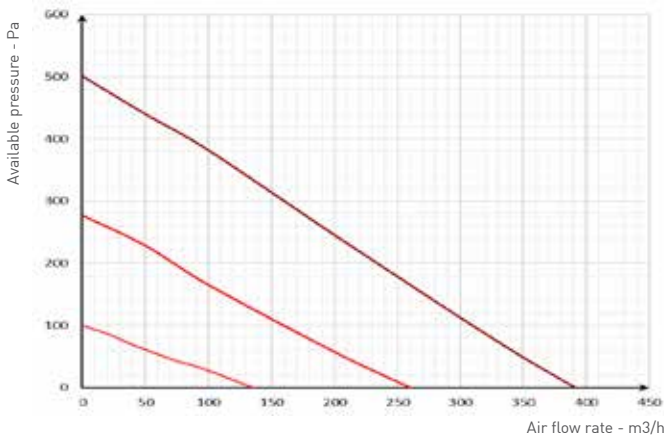
Acoustic data (Data referring to standard UNI EN 3741 and UNI EN 3744)

Sound power L _w generated by the structure	dB(A)	63
Sound power L _w irradiated in the duct	dB(A)	68
Average sound pressure L _p at 1m	dB(A)	49.5
Average sound pressure L _p at 3m	dB(A)	41.7

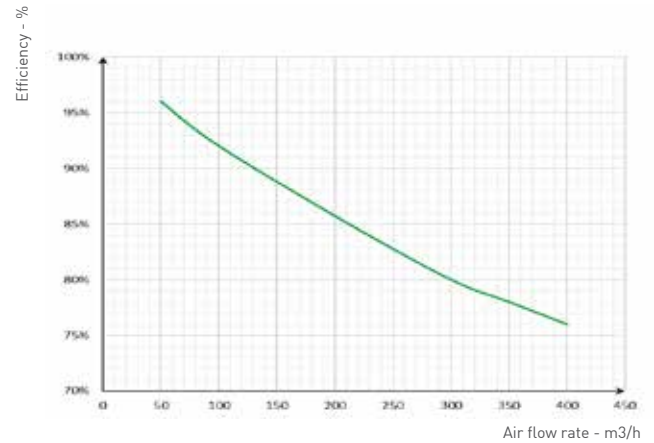
Electrical Data

Power supply voltage	V	230 / 1 / 50 Hz.
Absorbed current	A	1.6
Protection rating	IP	44

AERAULIC PERFORMANCE



THERMAL EFFICIENCY



Curves referring to the following conditions (UNI EN 13141-7) : Outdoor air 7° - 70% R.h. - Indoor air 20° -28% R.h.

ERP DATA ECODESIGN AP20054

			Standard	Vers. with enthalpic recovery unit	
A	Supplier name or trademark		Fantini Cosmi	Fantini Cosmi	
B	Model identification		Aspircomfort 300HV	Aspircomfort 300HV	
C	Version		AP20054 + Regulator CH193VMC with T, RH, Voc, CO2eq	AP20054 + Regulator CH193VMC with T, RH, Voc, CO2eq	
	SEC	Kwh/m2	COLD	-69.9	-67.67
			AVERAGE	-28.9	-31.90
			WARM	-5.1	-8.78
SEC CLASS		B	B		
D	Declared type		UVR - Bidirectional	UVR - Bidirectional	
E	Type of installed drive		Variable speed drive	Variable speed drive	
F	Heat recovery system		Recovery	Recovery	
G	Heat recovery thermal efficiency	%	85.2	77.90	
H	Maximum flow rate	M3/s	0.083	0.083	
I	Electric power input at the maximum flow rate	W/h	170	170	
J	Sound power level	Lwa	64	64	
K	Reference flow rate	M3/s	0.058	0.058	
L	Reference pressure	Pa	50	50	
M	SPI	W / m3/h	0.476	0.4710	
N	Control factor	CLTR	1	1	
O	Declared maximum leak percentages	%	5.8 int. / 6.1 ext.	5.8 int. / 6.1 ext.	
Q	Position and description of the signal relative to the filter		Shown on the filter inspection of the unit and on the instructions manual	Shown on the filter inspection of the unit and on the instructions manual	
S	Website for disassembly instructions		www.fantinicosmi.it	www.fantinicosmi.it	

SPECIFICATION ITEM

Fan unit with very high output heat recovery, compact dimensions for universal ceiling, floor or wall installation with side fittings.

Specific unit for ventilation in single residential buildings and collective flats with low energy demand.

Tested and classified according to Ecodesign European regulation ref. 1253/2015 and 1254/2014.

CONSTRUCTION FEATURES

structure built with simple galvanised sheet metal panelling and with polyethylene adhesive insulation, 10mm thickness; compact dimensions and reduced height for straight forward installation with easily accessible panel for maintenance and inspection.

Circular inlets with sealing gasket for connection to air ducts.

Quick tool-free filter inspection and double discharge for condensation exhaust.

Electrical panel, excluded from the air flow with wall-mounted touch control.

Backward blade radial centrifugal fans with low consumption electronic speed control EC motors.

Polypropylene counter current flow static heat exchanger for very high recovery efficiencies of the sensitive (standard configuration) or enthalpic heat (code AP20391 mod. RCH-366/270).

Low head loss ePM1 class filters.

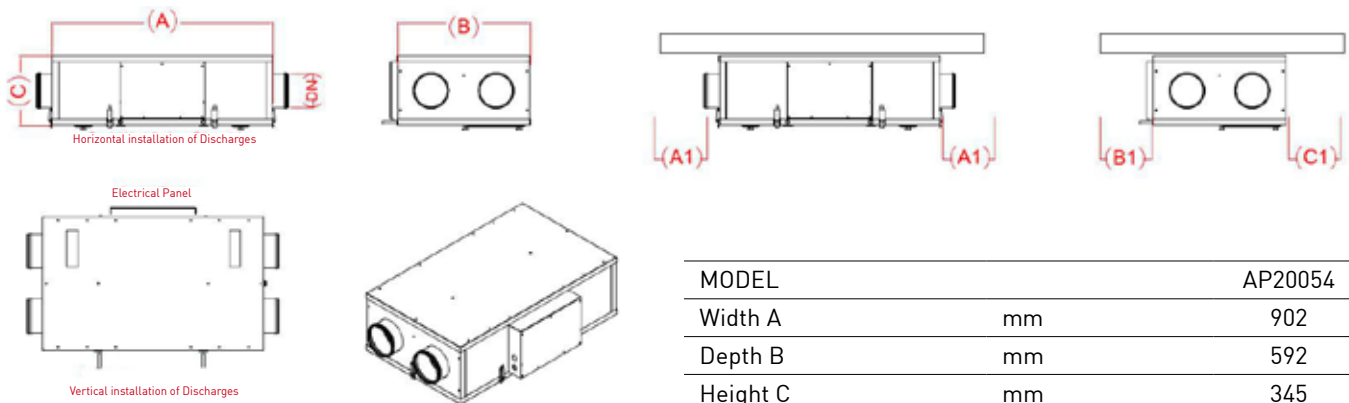
CONTROLS AND ADJUSTMENTS

Electronic board for 3-step speed control, antifreeze function and automatic bypass.

CH193VMC remote touch screen panel, semi-recessed for 503 box with on-board temperature, relative humidity and air quality sensors.

Temperature sensors on board the machine and possibility of hot water auxiliary coil control.

DIMENSIONS AND FUNCTIONAL SPACES



MODEL		AP20054
Width A	mm	902
Depth B	mm	592
Height C	mm	345
Diameter DN	∅	160
A1	mm	30
B1	mm	300
B1	mm	30
Weight	Kg	45
Condensation	∅	16
UNIT SEEN FROM ABOVE		

ADJUSTMENT (Mandatory)

CH193VMC - REMOTE CONTROL

Semi-recessed touch screen remote control for installation on 503 box;

Speed control and operating modes;

Equipped with temperature, relative humidity and air quality sensor for automatic control of VMC speed. Manual control of the by-pass and electric heating coil control.



ACCESSORIES

AP19430 - BE160-2

ELECTRIC HEATING COIL COMPLETE WITH REGULATION (FOR POST-HEATING OR PRE-HEATING MODE)

The electric pre/post heating units with circular cross section are built with galvanised sheet metal frame with shielded resistance.

They feature circular flanges that facilitate duct installation.

The side electrical box is already complete with cable gland to access the components inside:

- Auto-reset thermal protector;
- Manual-reset thermal protector;
- Contactor;
- Adjustable thermostat -35 +35
- Terminal board.

The thermostat installed on the coil makes it possible to directly adjust the supply air temperature



MODEL		BE160-2
Rated electric power	kW	1
Power supply	V	230 V / 1 / 50Hz
Absorption	A	4.5
Diameter	∅	160

AP20391 RCH-366/270

ENTHALPIC HEAT EXCHANGER FOR AP20054-AP20062-AP20066

Cross flow counter current enthalpic heat exchanger for heat and humidity recovery.

UNIT ORDER CODES

Models with high efficiency exchanger

Code	Model	Description
AP20054	Aspircomfort 300HV	Heat recovery unit, for universal installation, with flow rate of 302 m ³ /h
CH193VMC		Touch screen remote control (ordered separately)