



MP3energy FRESH

Counterflow Heat Recovery Units
Air flow from 250 to 2000 m³/h

MP3energy

Heat recovery units



FRESH heat recovery units

Horizontal High Efficiency Heat Recovery unit for residential and commercial application. Suitable for ceiling installation, indoor

Construction – Self - supporting frame in sheet metal galvanized steel with polyurethane thermal and acoustic insulation from thickness of 10mm. Integrated motorized bypass for free cooling.

Heat recovery – Eurovent certified. High efficiency counterflow heat exchanger in polypropylene or aluminum.

Filters - Fresh air intake: ISO 16890 Coarse 60% (G4 EN779)
Return air intake: ISO 16890 Coarse 60% (G4 EN779).
ePM1 55% (F7 EN 779) filters available as optional

Fans – EC motors plug-fans

Control - Built-in electric box with PCB and remote display. Modbus communication protocol, bypass function. Possibility to manage electric pre and post heaters. Management of hot/cold water coils. Management of switching on/off of external humidifier and dehumidifier. Optional Bluetooth connection with APP for remote control of the unit via smartphone or tablet.

Sanitization - MP3 oXy ionization system available as external optional (not integrated in the unit), tested in Padua University and approved by TUV Hessen.

FRESH- a- b- c- d

a	Size
02	400 m ³ /h
05	750 m ³ /h
08	1000 m ³ /h
12	1500 m ³ /h
15	2000 m ³ /h
20	3200 m ³ /h

b	Control
E	Evolution

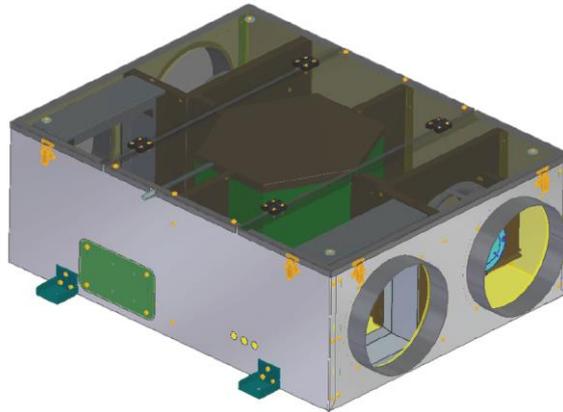
c	Flow configuration
1	Configuration 1

d	Heat recovery efficiency
8	high efficiency heat recovery



ENVIRONMENTAL COMFORT

Merge in a consistent and reliable way the needs arising from climatization and the environmental protection. The answer to this challenge is just in design, development and production of advanced units with high efficiency energy recovery that leads to substantial energy savings, so to maximize the respect for the environment and save money.

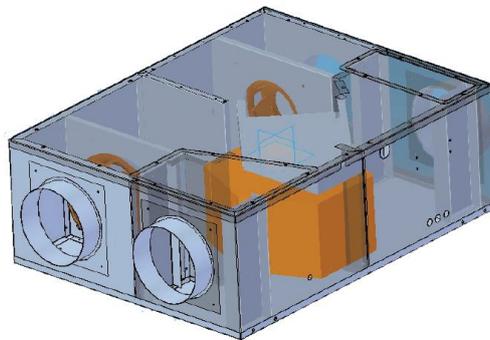


HIGH EFFICIENCY

The offer of high tech solutions in air treatment, the developing of new devices, free cooling and roof top units characterized by an high efficiency level are the FRESH system that can meet any situation, even the most singular and demanding ones. The wide range, the high productive standards, the search for maximum quality and low energy consumptions, they all contribute to consider the MP 3 machines, high performance units.

ENERGY SAVING

Design of the units, together with the high quality of the components, is a key part in realizing MP3 Units. Another key factor is the factory startup test. This phase allows us to optimize the designed performances of the units for to minimize energy requirements.



The heat recovery unit FRESH is a ventilation system with heat exchange and the following advantages:

- It facilitates a good ventilation inside the buildings, it permits the correct fresh air change and it extracts humidity in excess and bad smells. It permits a significant energy saving thanks to the high heat recovery efficiency
- Low adsorbing electric energy adsorbing thanks to the electronically controlled fan motors.
- Complete Erp 2018 version with integrated electronic control, bypass regulation, which allows free cooling in summer with cool night air and filter cleaning check - Inspection and maintenance of filters easily accessible from below by means of panels with screws

The FRESH H ventilation unit is a ventilation system with heat recovery for horizontal counter ceiling or ceiling installation.

Allows healthy ventilation inside the home and the correct air exchange of the rooms and extracting excess moisture and bad smells with a really cheap investment...

MAIN TECHNICAL FEATURES

Self - supporting frame in sheet metal galvanized steel with polyurethane thermal and acoustic insulation from thickness of 10mm

Allows considerable energy savings thanks to the cross-flow heat exchanger in polypropylene or aluminum, with over 80% efficiency.

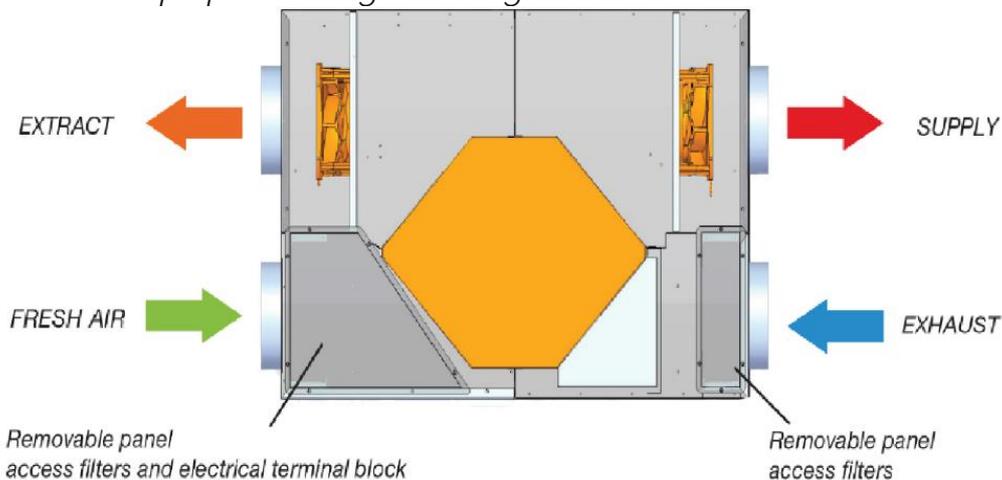
Low power consumption and the setup from remote display through which it is possible to vary the flow rate from 10% to 100%, set the opening of the bypass damper, display the outside air temperature and/or room temperatures.

Integrated bypass for the free cooling in spring/summer with the fresh night air (automatic operation).

Ready for easy connection to the network and the remote control.

Inspection and maintenance of filters (in class G4 according to EN779- ISO coarse 60%) easy to access for filter maintenance through front panels with quick closures.

Bracket kit included for false ceiling mounting series.



General data sheet

FRESH 02

Structure: Self-supporting structure frame

Insulation: Thermal and acoustic insulation with panel in self-extinguishing polyurethane foam thk. 10 mm

Fans (2): Plug fan EC CRBB/3 190 230 V 50/60 Hz 1 F 0,5 A 68 W 3920 rpm IP 54

Voltage rating: 230 V 50-60 Hz Max absorption: 1,0 A 140W

Heat exchanger: polypropylene high efficiency cross flow heat exchanger.

Filters according to DIN EN 779: Class G4 filters (ISO coarse 60%) at low pressure drop for recovery and renovation

Dimension: 300 mm x 240 mm x 98 mm

Speed: Speed rate from 10% to 100% with changing 1%

Discharge with air speed at set 85%: 250 m³/h con 100 Pa of external pressure

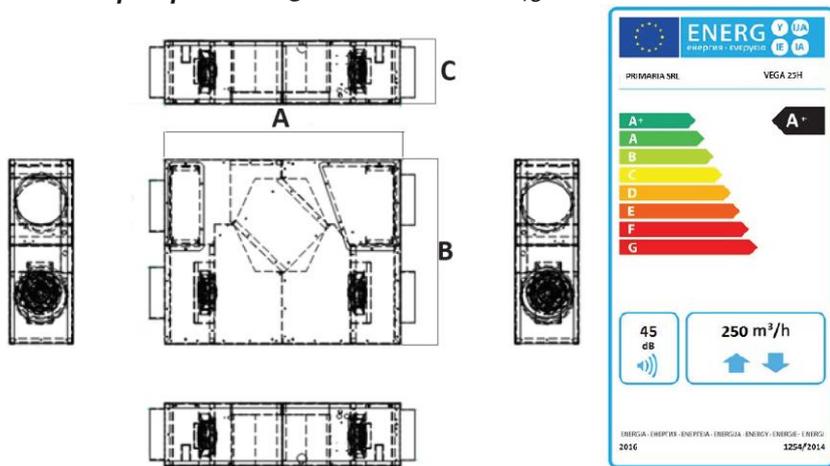
Operating conditions: Environmental temperature (internal) range from 0 °C to 45 °C

Nominal duct diameter: Ø 200 mm

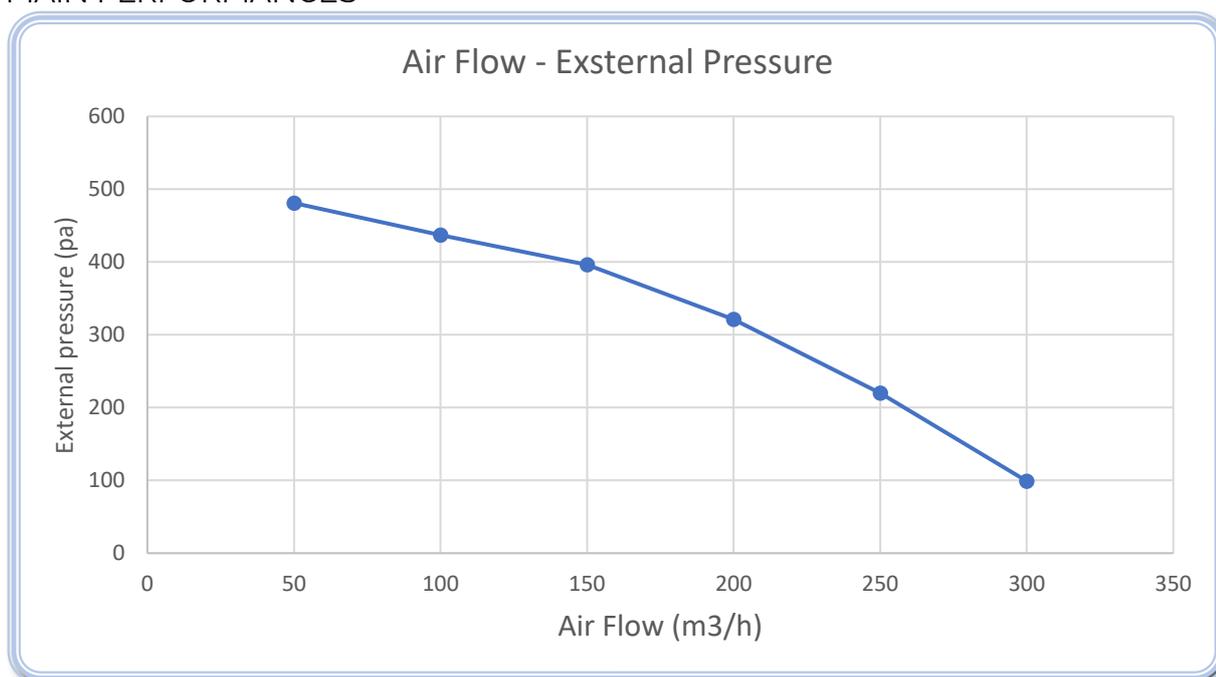
Dimensions without spigots and condense discharge pipe (l x d x h):

925 (A) x 726 (B) x 250 (C) mm weight 38kg

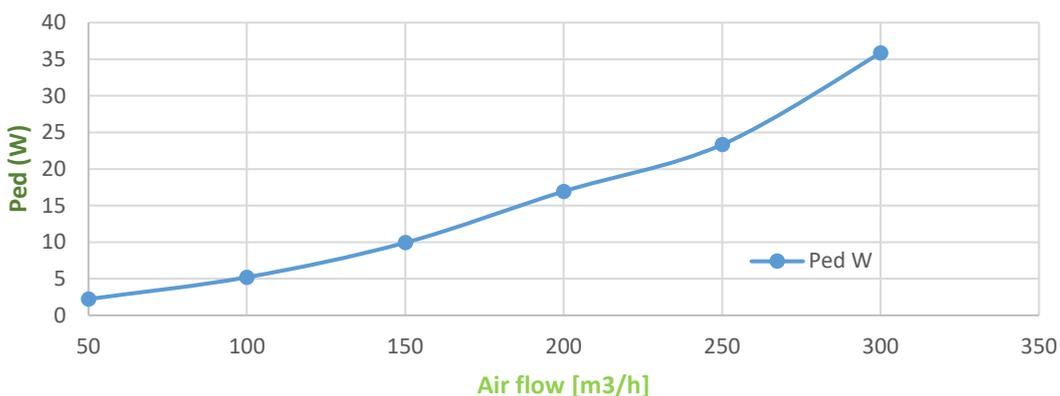
Noise in open field at a 3 mt (ducted unit) 45 dB (A)



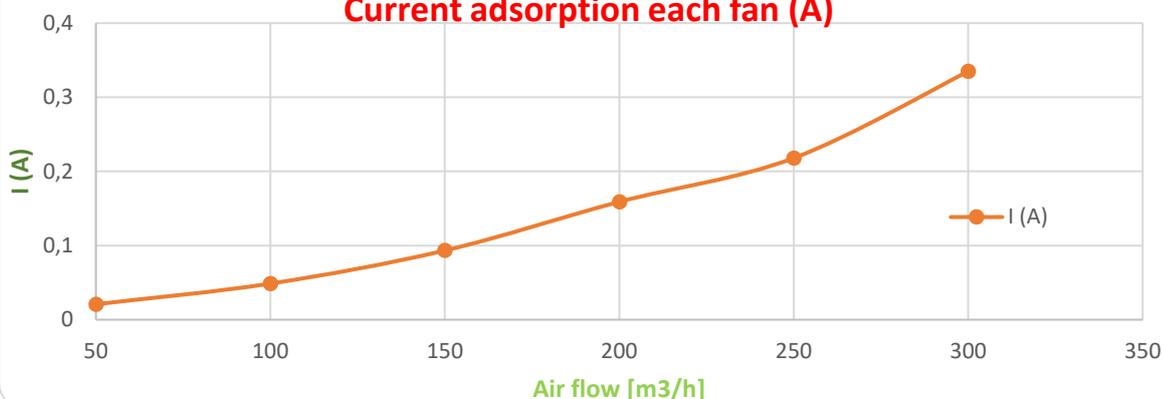
MAIN PERFORMANCES



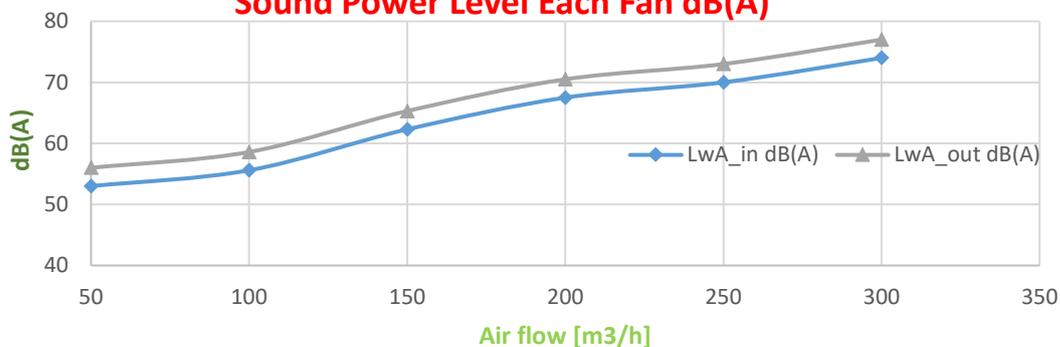
Power absorption each fan (W)

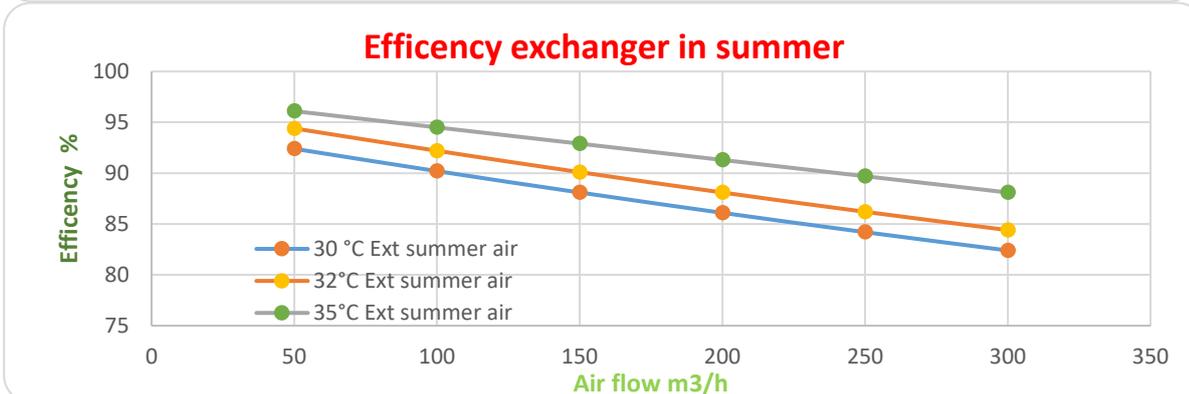
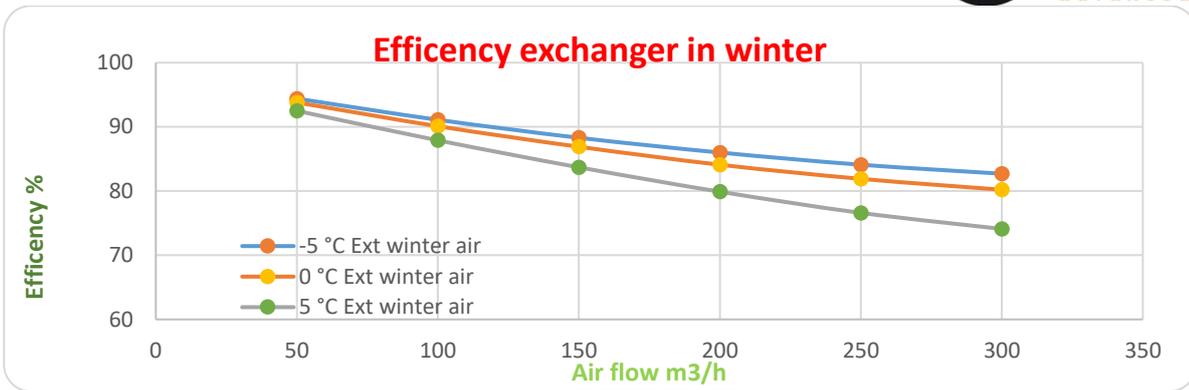


Current adsorption each fan (A)

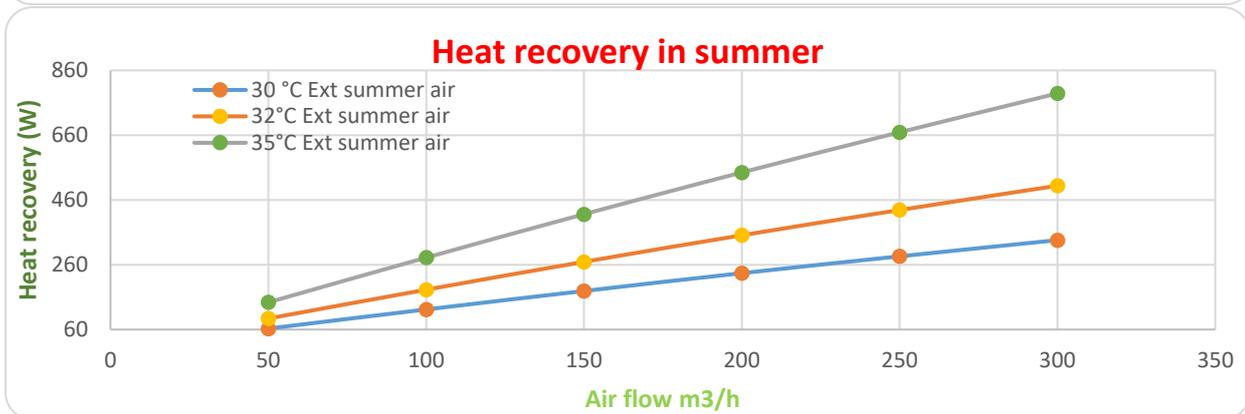
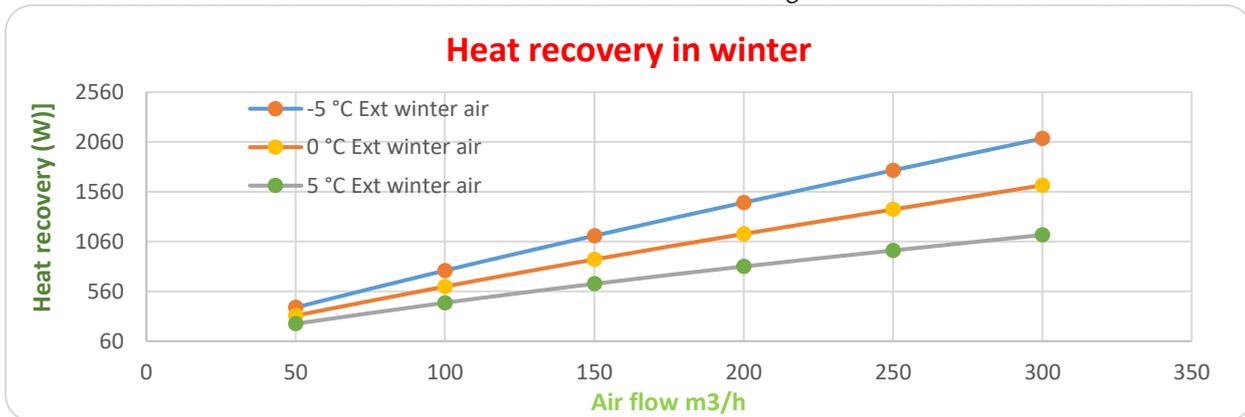


Sound Power Level Each Fan dB(A)





REFERENCE CONDITIONS: INTERNAL WINTER AIR 20°C R.H. 50% INTERNAL SUMMER AIR 26°C R.H. 50%



FRESH 05

Structure: Self- supporting structure frame

Insulation: Thermal and acoustic insulation with panel in self-extinguishing polyurethane foam thk. 10 mm

Fans (2): Plug fan EC CRBB/3 225/088M 230 V 50/60 Hz 1 F 1,1 A 170 W 2900 rpm IP 54

Voltage rating: 230 V 50-60 Hz Max absorption: 2,2 A 340W

Heat exchanger: polypropylene high efficiency counterflow heat exchanger.

Filters according to DIN EN 779: Class G4 filters (ISO coarse 60%) at low pressure drop for recovery and renovation

Dimensions: 300mm x 300mm x 98mm

Speed: Speed rate from 10% to 100% with changing 1%

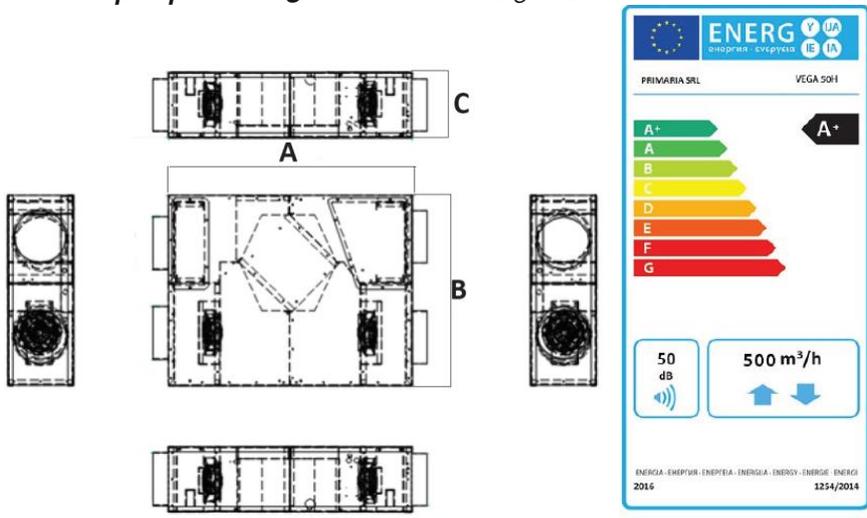
Discharge with air speed at set 85%: 500 m³/h con 150 Pa of external pressure

Operating conditions: Environmental temperature (internal) range from 0 °C to 45 °C

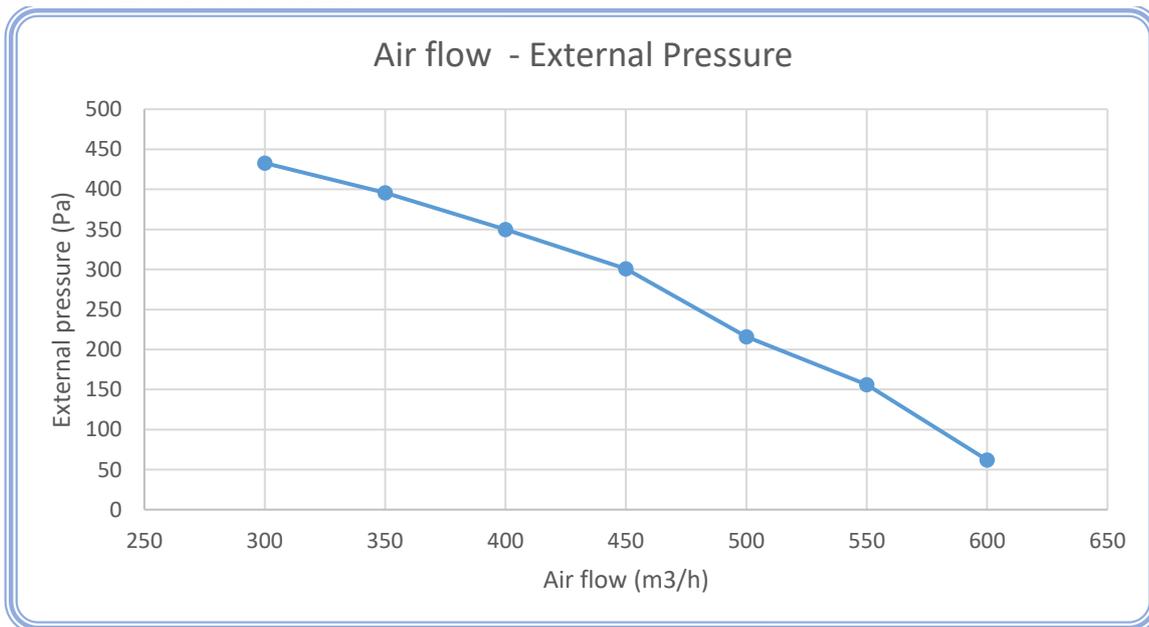
Nominal duct diameter: Ø 200 mm

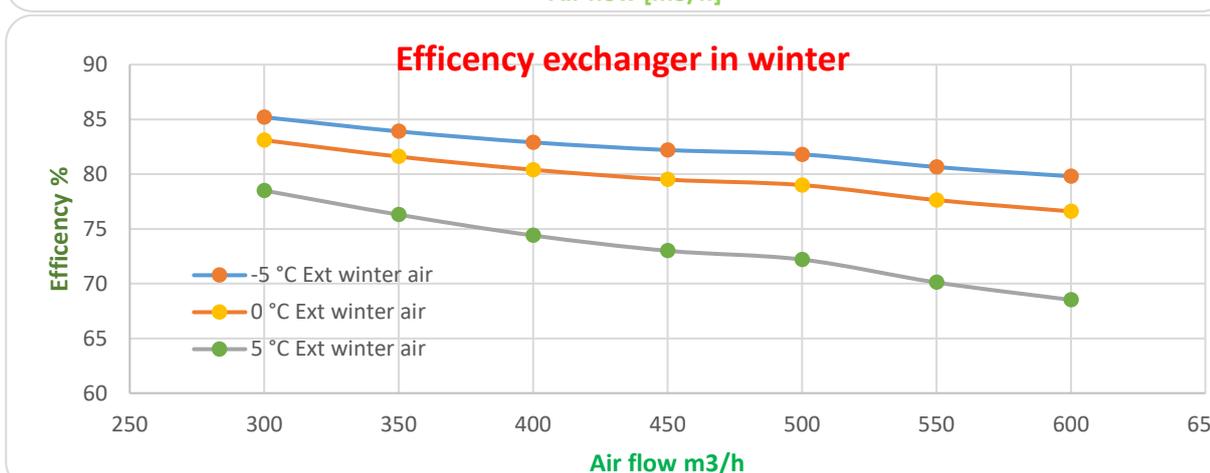
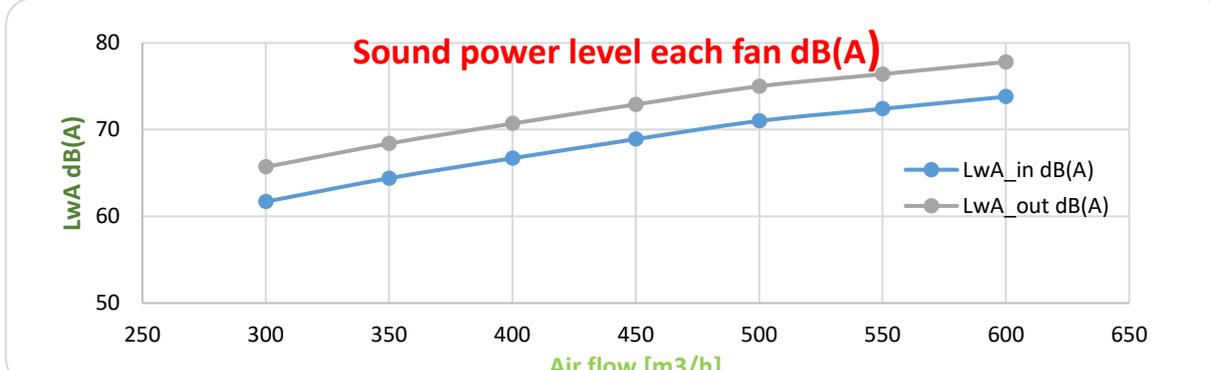
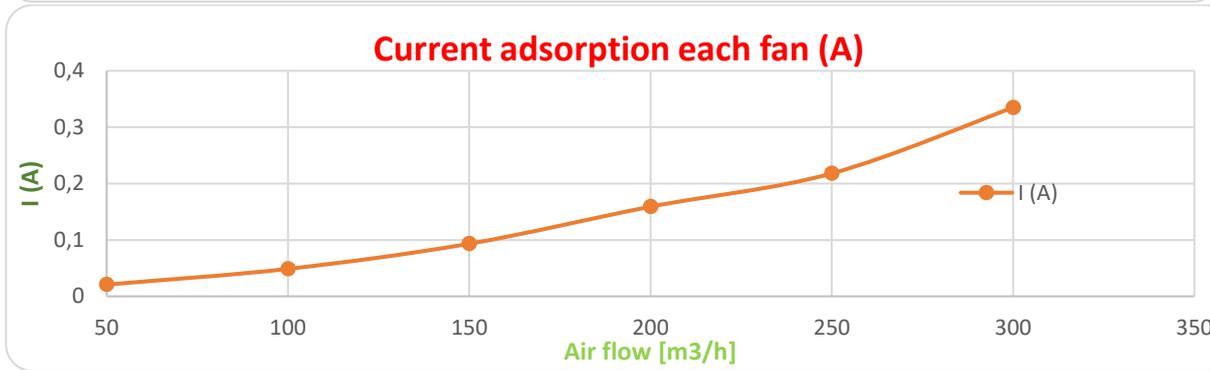
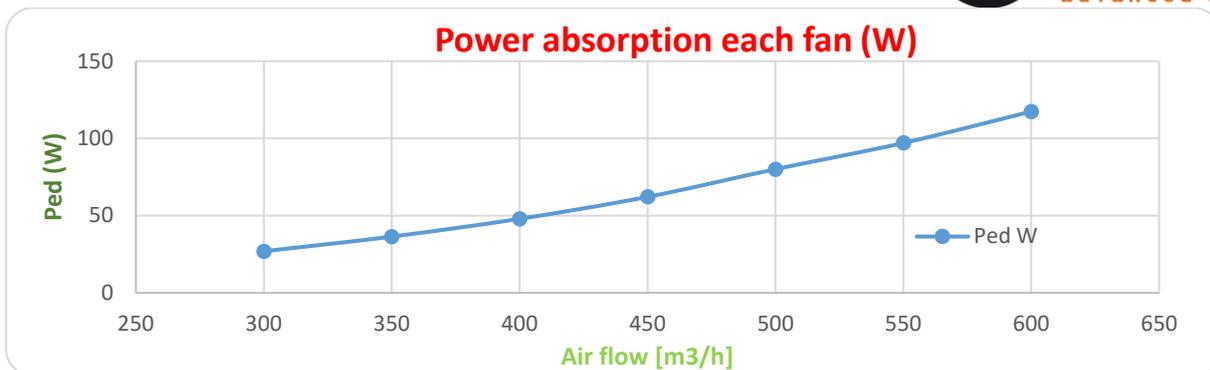
Dimensions without spigots and condense discharge pipe (l x d x h): 925(A) x 726(B) x 330(C) mm weight 45kg

Noise in open field at a 3 mt (ducted unit) 50 dB (A)

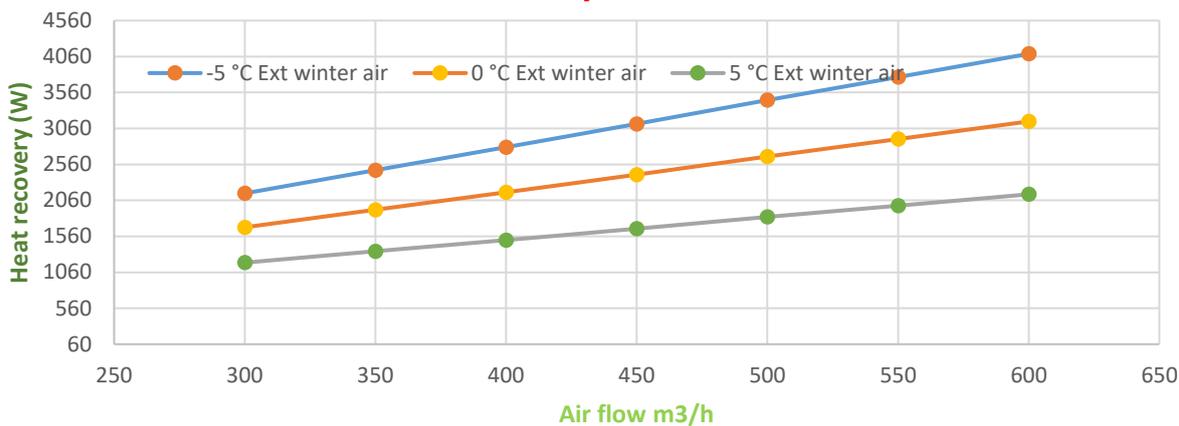


MAIN PERFORMANCES



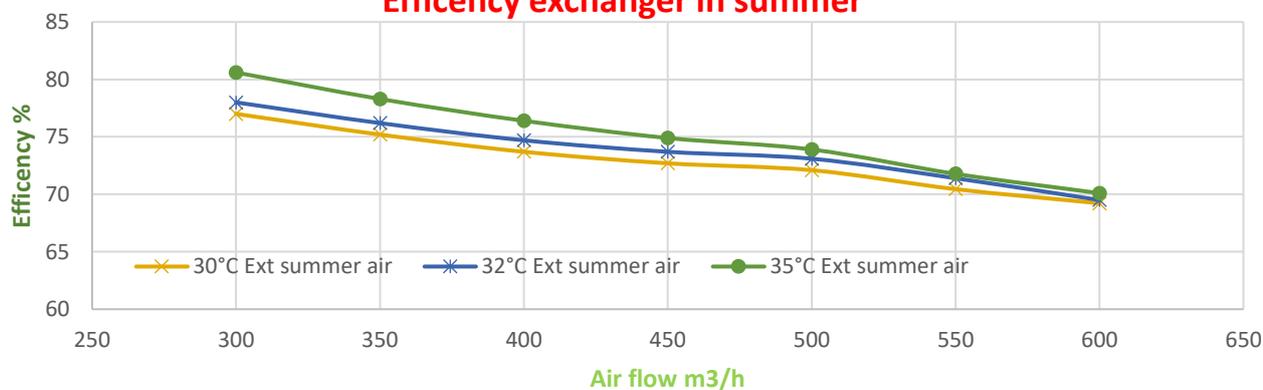


Heat recovery in winter

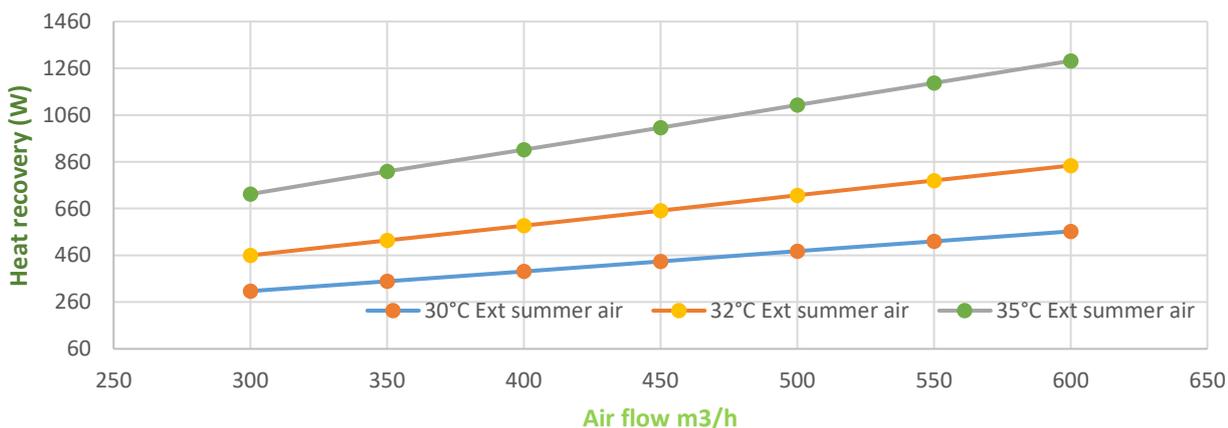


REFERENCE CONDITIONS: INTERNAL WINTER AIR 20°C R.H. 50% INTERNAL SUMMER AIR 26°C R.H. 50%

Efficiency exchanger in summer



Recovered power summer



FRESH 08

Structure: Self-supporting structure frame

Insulation: Thermal and acoustic insulation with panel in self-extinguishing polyurethane foam thk. 10 mm

Fans (2): Plug fan EC CRBB/3 250/084M 230 V 50/60 Hz 1 F 1,2 A 200 W 2650 rpm IP 54

Voltage rating: 230 V 50-60 Hz Max absorption: 2,4 A 400W

Heat exchanger: aluminum high efficiency crossflow heat exchanger

Filters according to DIN EN 779: Class G4 filters (ISO coarse 60%) at low pressure drop for recovery and renovation

Dimensions: 350mm x 320mm x 98mm

Speed: Speed rate from 10% to 100% with changing 1%

Discharge with air speed at set 85%: 800 m³/h con 150 Pa of external pressure

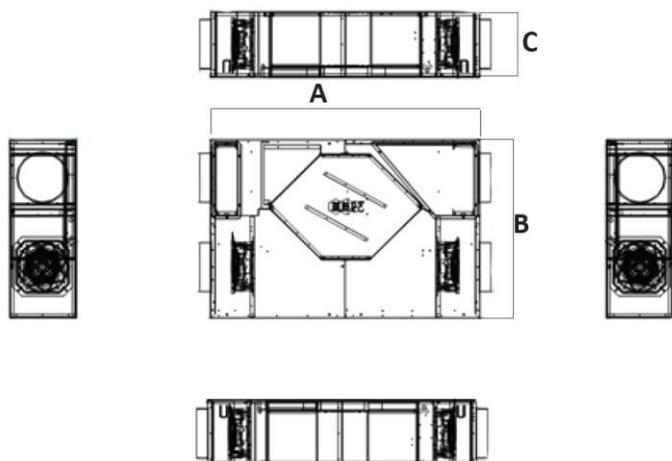
Operating conditions: Environmental temperature (internal) range from 0 °C to 45 °C

Nominal duct diameter: Ø 250 mm

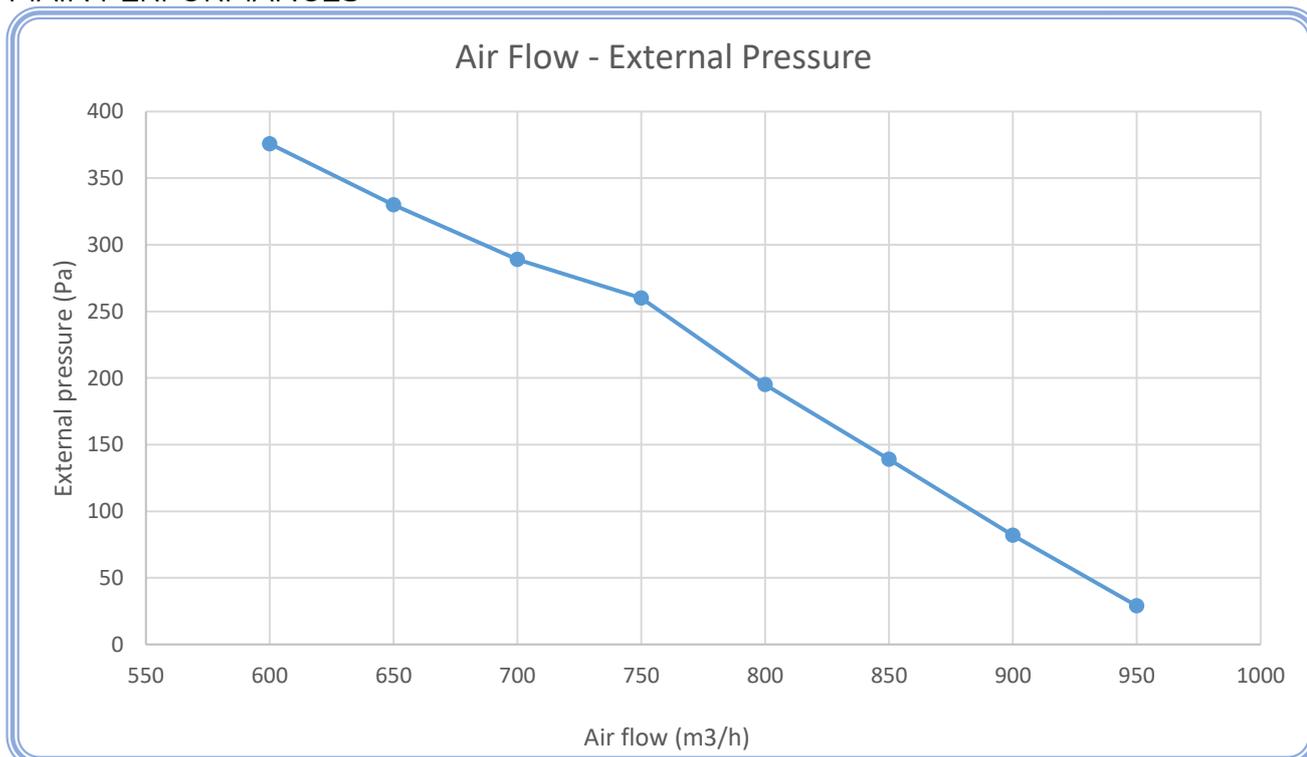
Dimensions without spigots and condense discharge pipe (l x d x h):

1335(A) x 910(B) x 335(C) mm weight 76kg

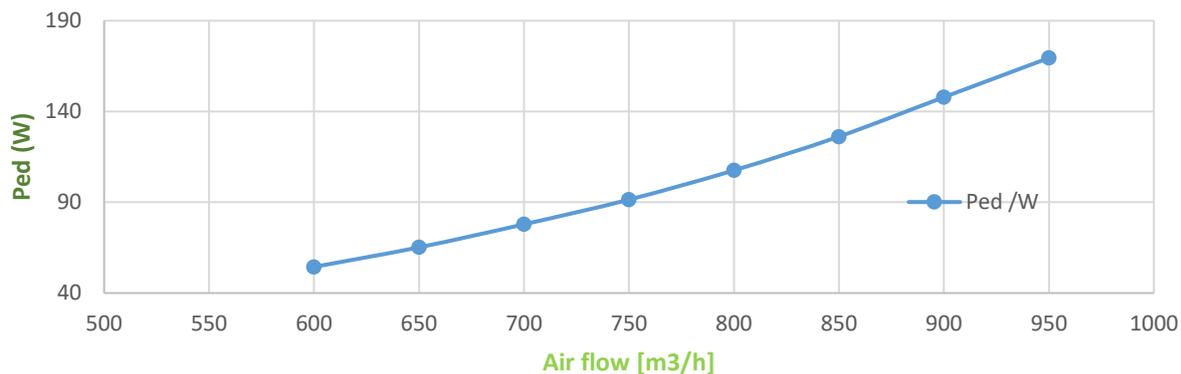
Noise in free field at a 3 mt (ducted unit) 51 dB (A)



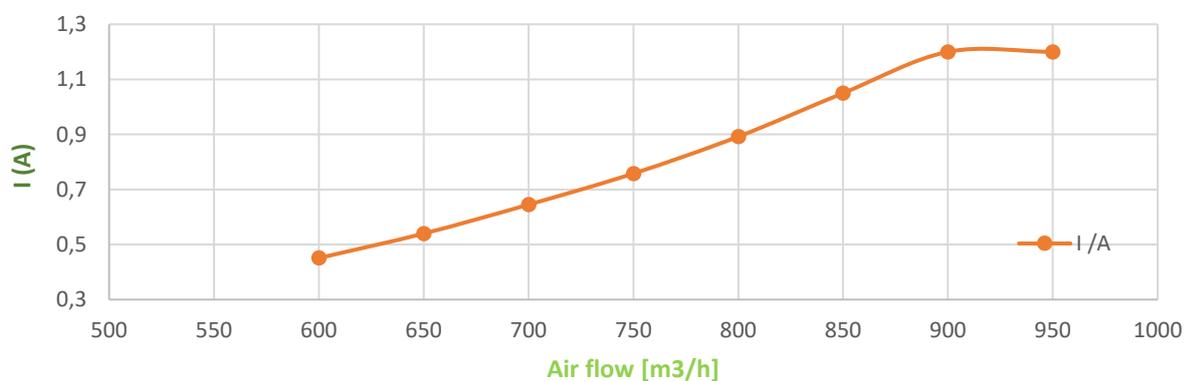
MAIN PERFORMANCES



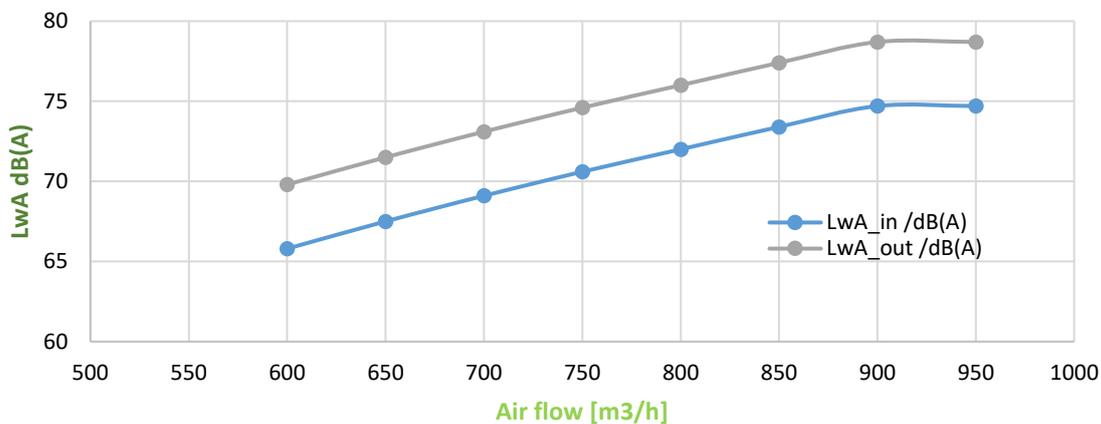
Power absorption each fan (W)

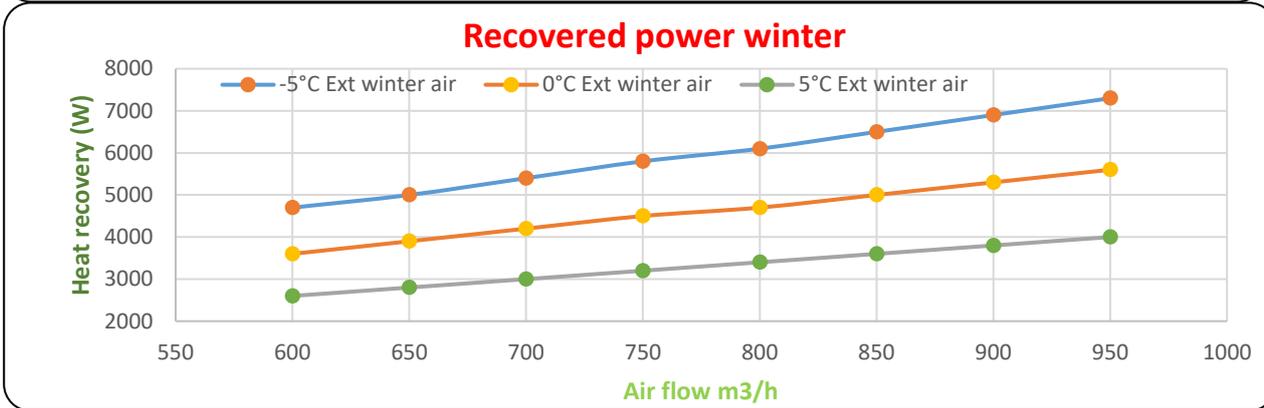
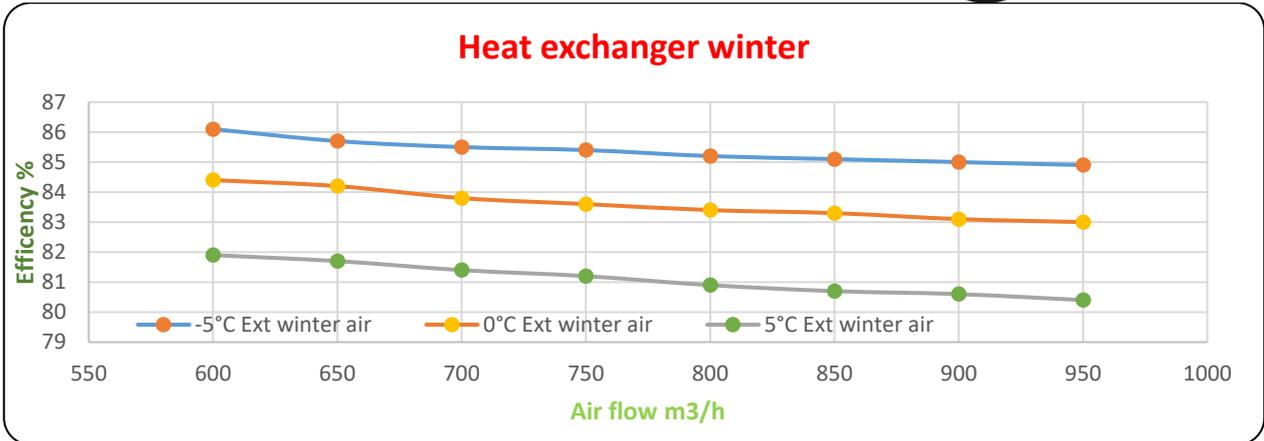


Current adsorption each fan (A)

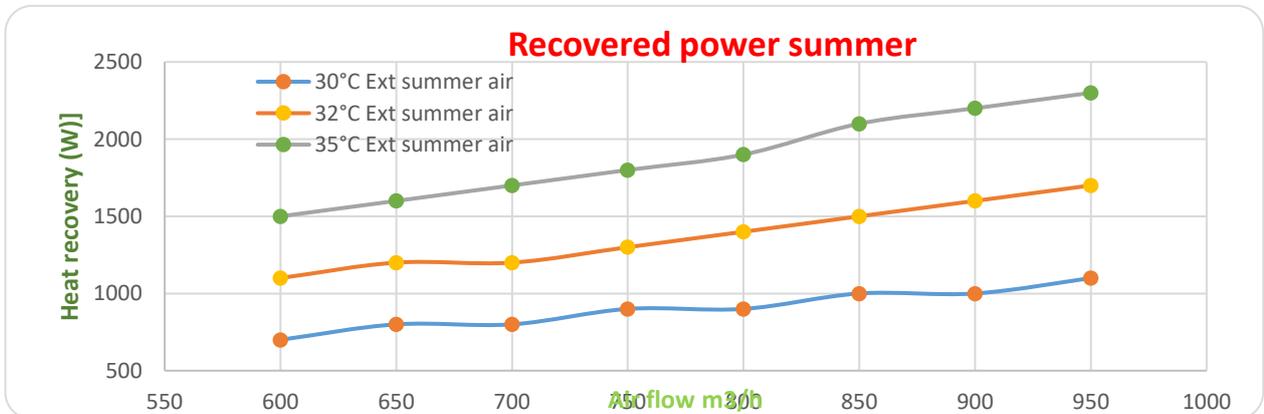
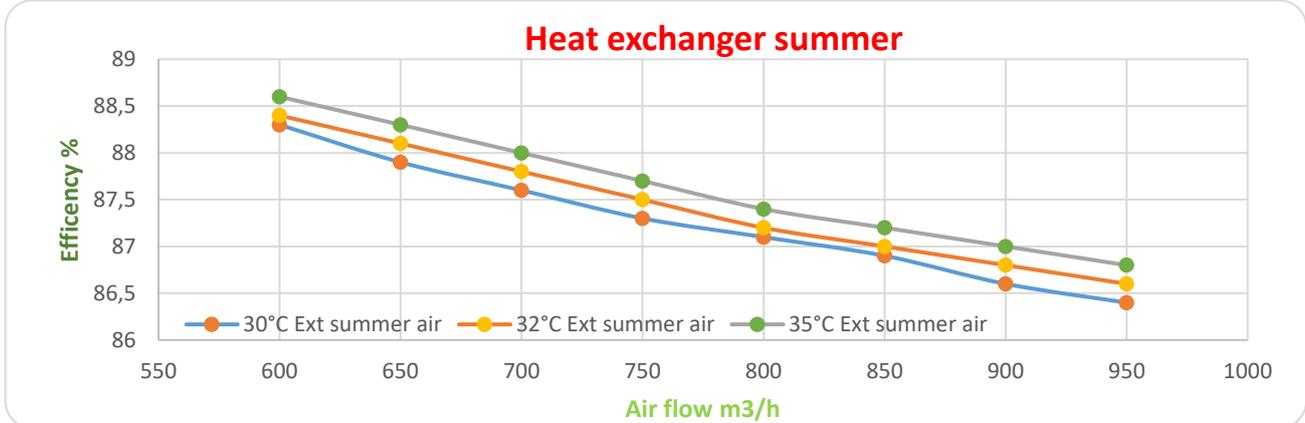


Sound power level dB(A)





REFERENCE CONDITIONS: INTERNAL WINTER AIR 20°C R.H. 50% INTERNAL SUMMER AIR 26°C R.H. 50%



FRESH 12

Structure: Self- supporting structure frame

Insulation: Thermal and acoustic insulation with panel in self-extinguishing polyurethane foam thk. 10 mm

Fans (2): Plug fan GR25-115666 230 V 50/60 Hz 1 F 3.7 A 850 W 3700 rpm IP 54

Voltage rating: 230 V 50-60 Hz Max absorption: 7.4 A 1700W

Heat exchanger: aluminum high efficiency crossflow heat exchanger

Filters according to DIN EN 779: Class G4 filters (ISO coarse 60%) with low pressure drop for recovery and renovation

Dimensions: 400mm x 390mm x 98mm

Speed: Speed rate from 10% to 100% with changing 1%

Discharge with air speed at 85%: 1200 m³/h con 150 Pa of external pressure

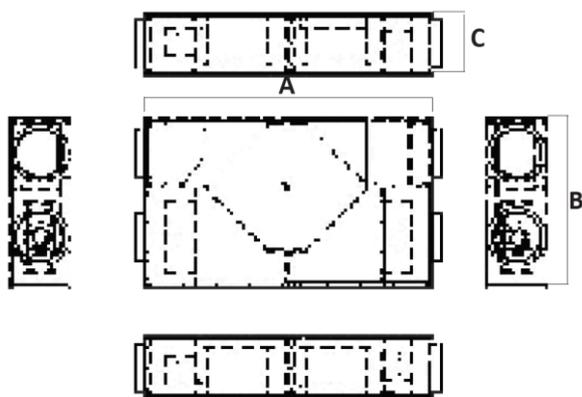
Operating conditions: Environmental temperature (internal) range from 0 °C to 45 °C

Nominal duct diameter: Ø 315 mm

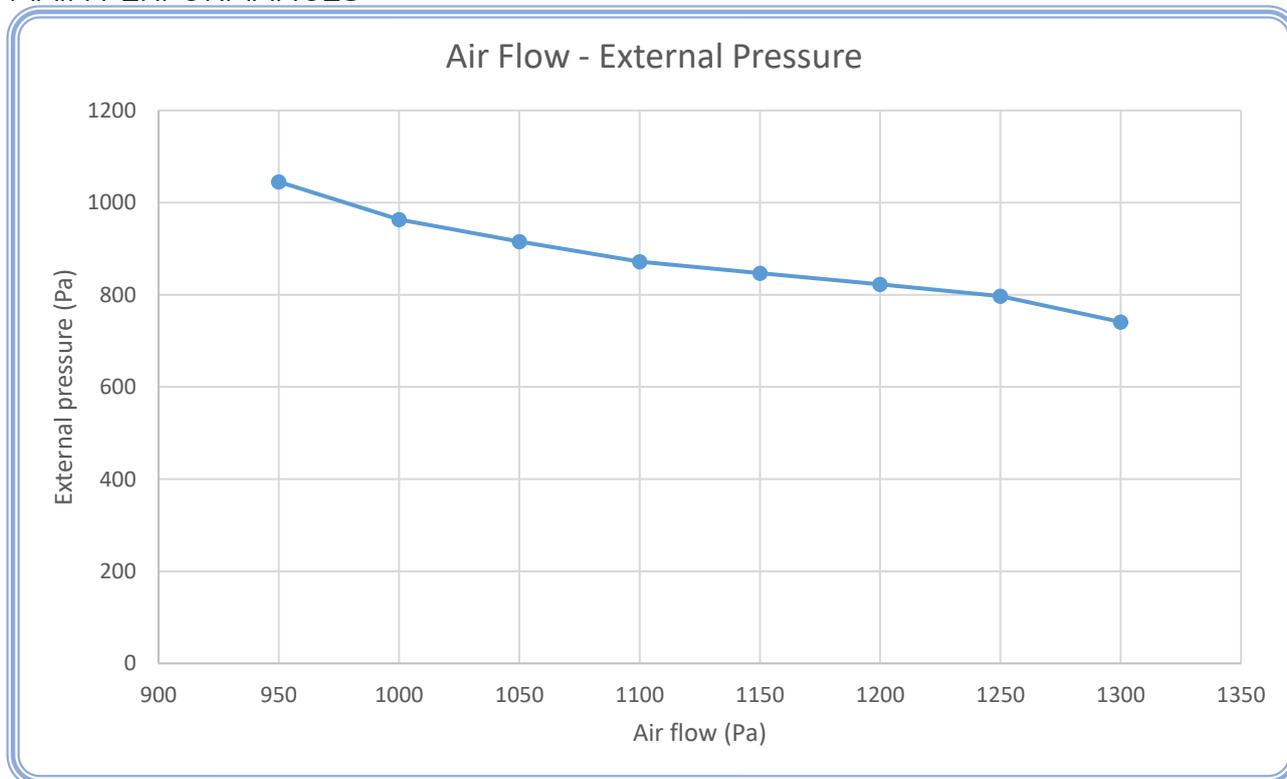
Dimensions without spigots and condense discharge pipe (l x d x h):

1850(A) x 1100(B) x 405(C) mm weight 115kg

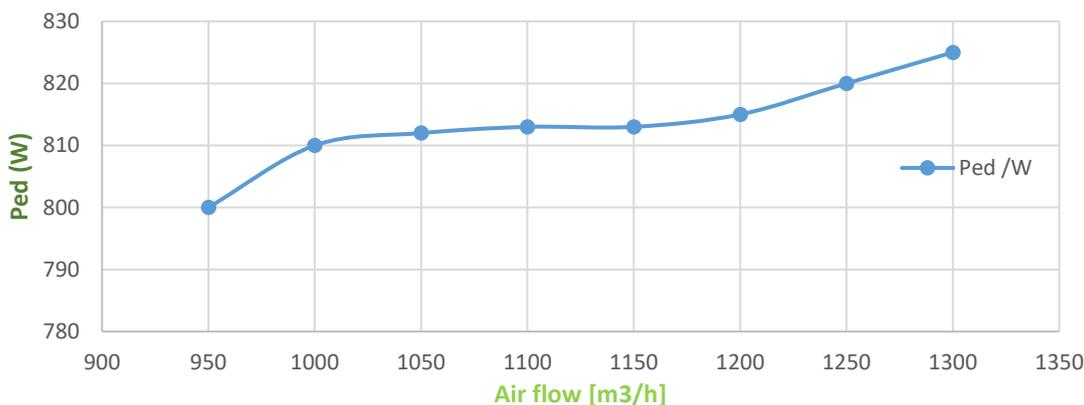
Noise in open field at a 3 mt (ducted unit) 53 dB (A)



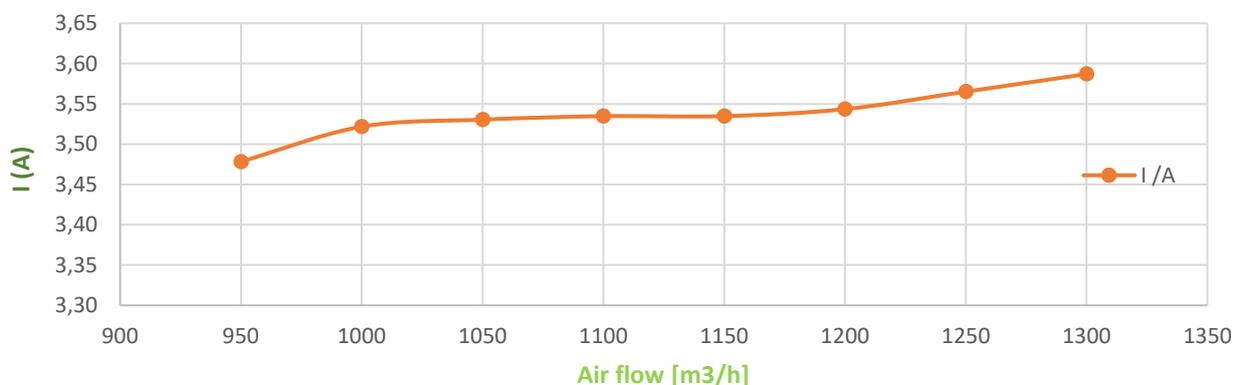
MAIN PERFORMANCES



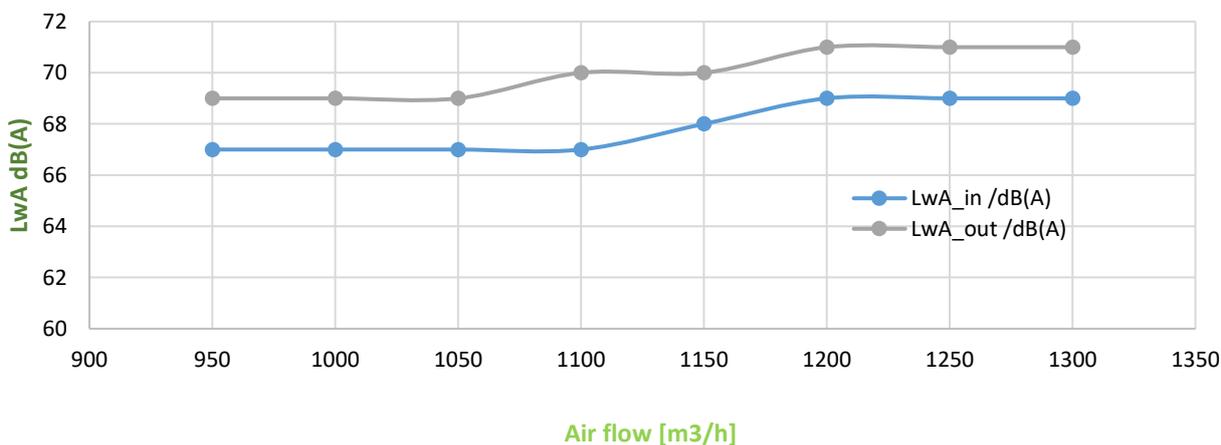
Power absorption each fan (W)



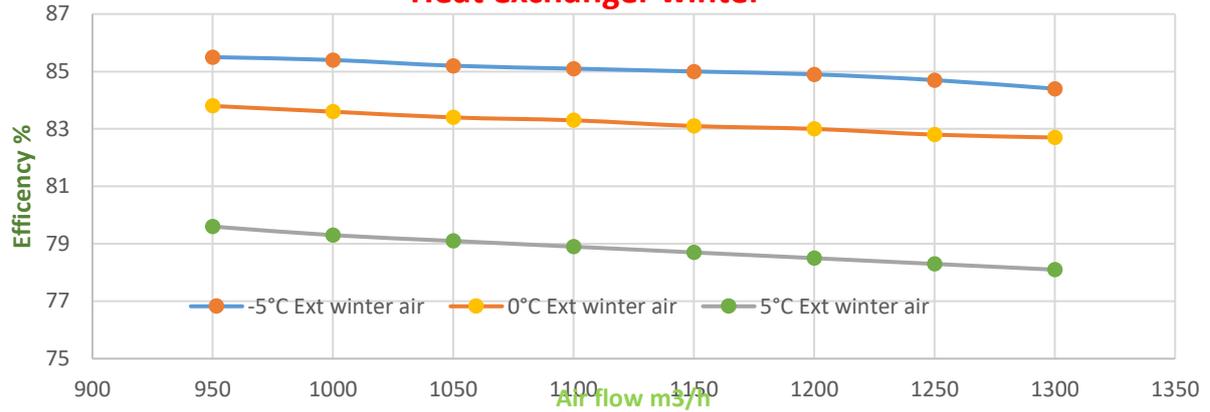
Current adsorption each fan (A)



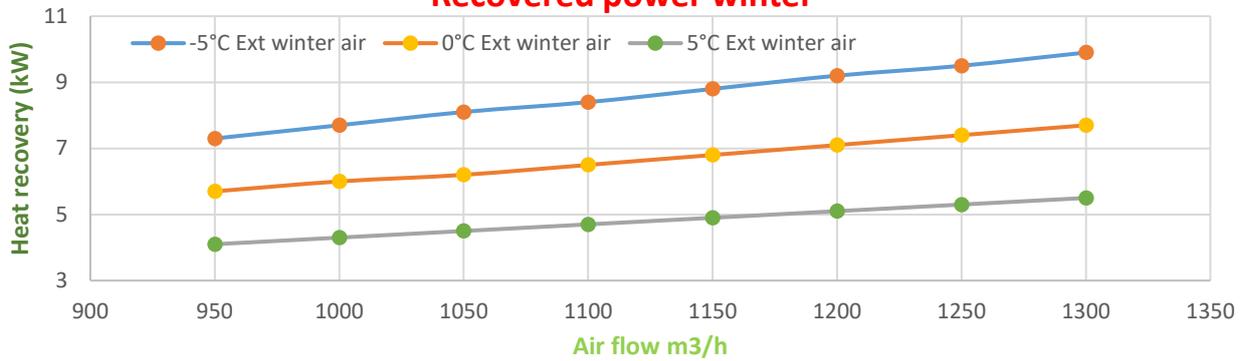
Sound power level dB(A)



Heat exchanger winter

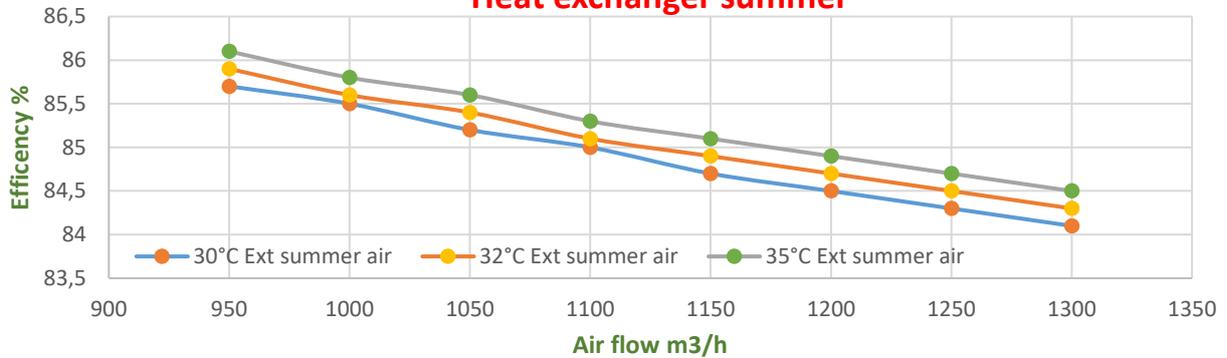


Recovered power winter

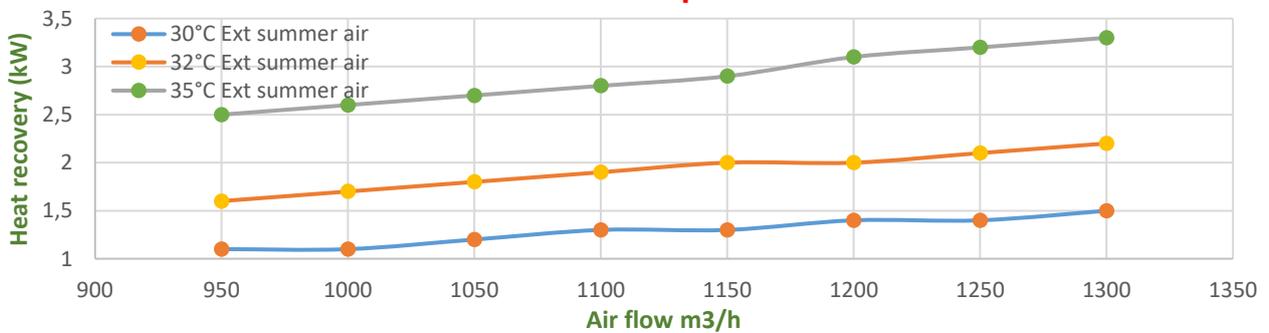


REFERENCE CONDITIONS: INTERNAL WINTER AIR 20°C R.H. 50% INTERNAL SUMMER AIR 26°C R.H. 50%

Heat exchanger summer



Recovered power summer



FRESH 150H

Structure: Self- supporting structure frame

Insulation: Thermal and acoustic insulation with panel in self-extinguishing polyurethane foam thk. 10 mm

Fans (2): Plug fan EC GR25-115666 230 V 50/60 Hz 1 F 3.7 A 850 W 3700 rpm IP 54

Voltage rating: 230 V 50-60 Hz Max absorption: 7.4 A 1700W

Heat exchanger: aluminum high efficiency crossflow heat exchanger

Filters according to DIN EN 779: Class G4 filters (ISO coarse 60%) at low pressure drop for recovery and renovation

Dimensions: 400mm x 390mm x 98mm

Speed: Speed rate from 10% to 100% with changing 1%

Discharge with air speed at set 85%: 1500 m³/h con 150 Pa of external pressure

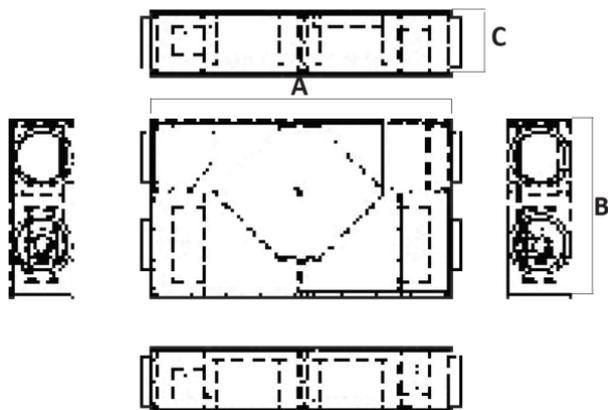
Operating conditions: Environmental temperature (internal) range from 0 °C to 45 °C

Nominal duct diameter: Ø 315 mm

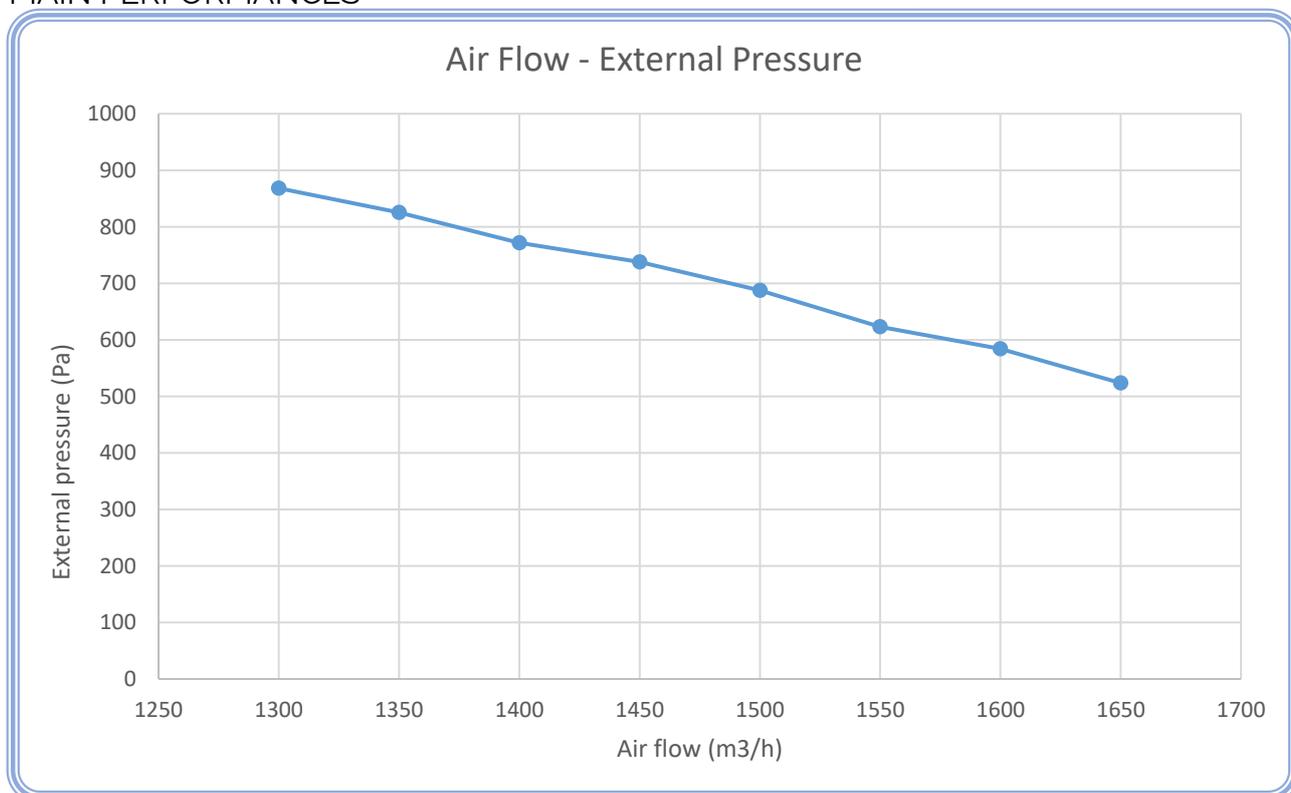
Dimensions without spigots and condense discharge pipe (l x d x h):

1850 (A) x 1100(B) x 405(C) mm weight 115kg

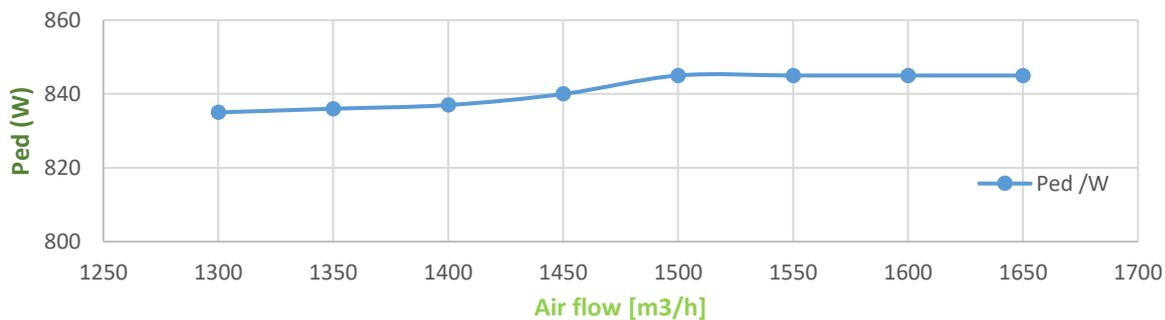
Noise in free field at a 3 mt (ducted unit) 54 dB (A)



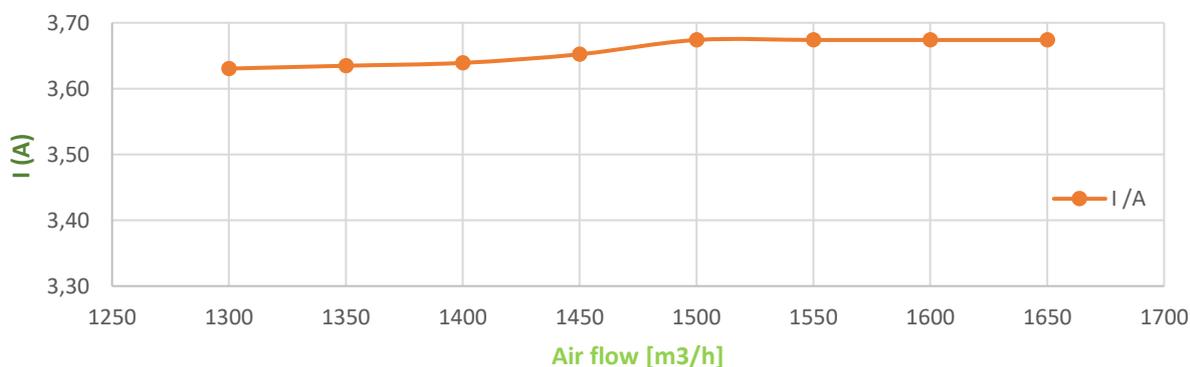
MAIN PERFORMANCES



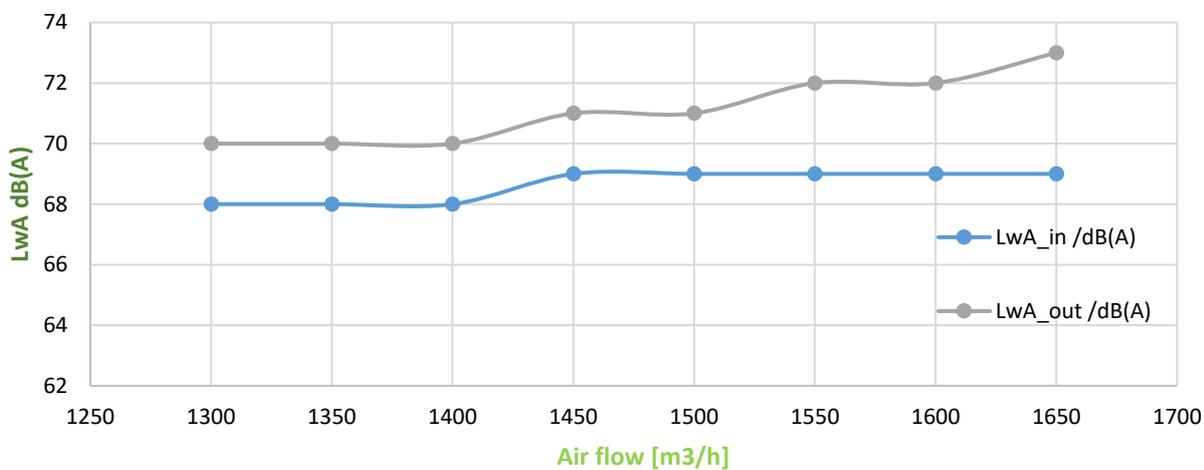
Power absorption each fan (W)



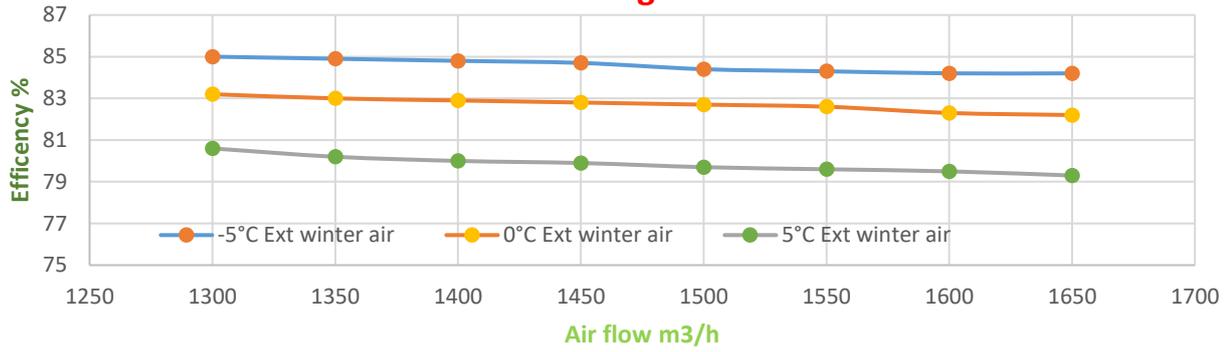
Current adsorption each fan (A)



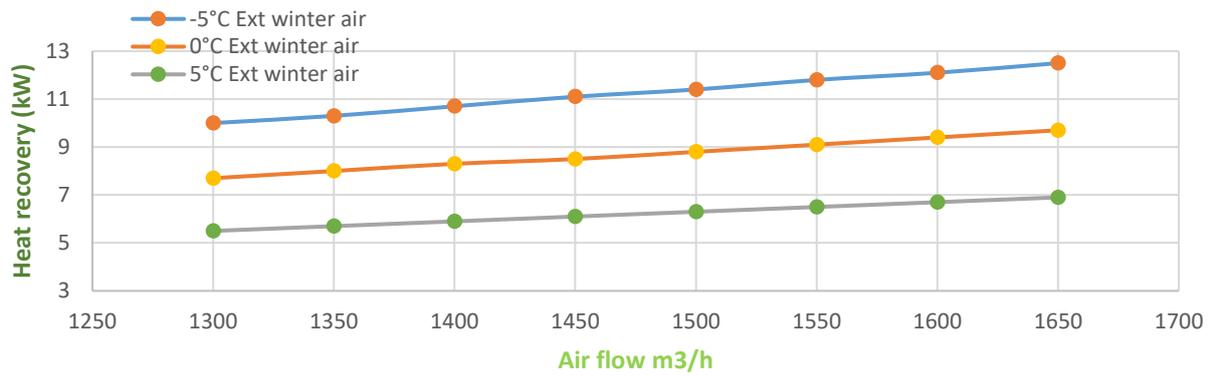
Sound power level dB(A)



Heat exchanger winter

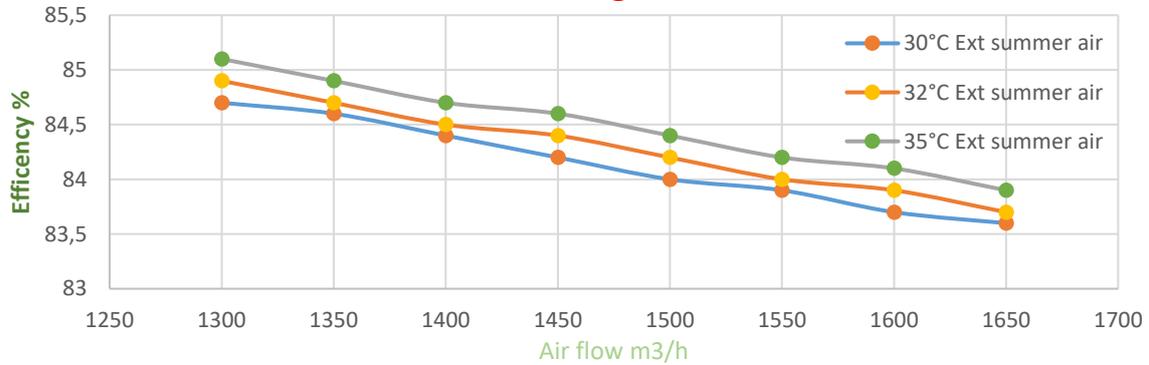


Recovered power winter

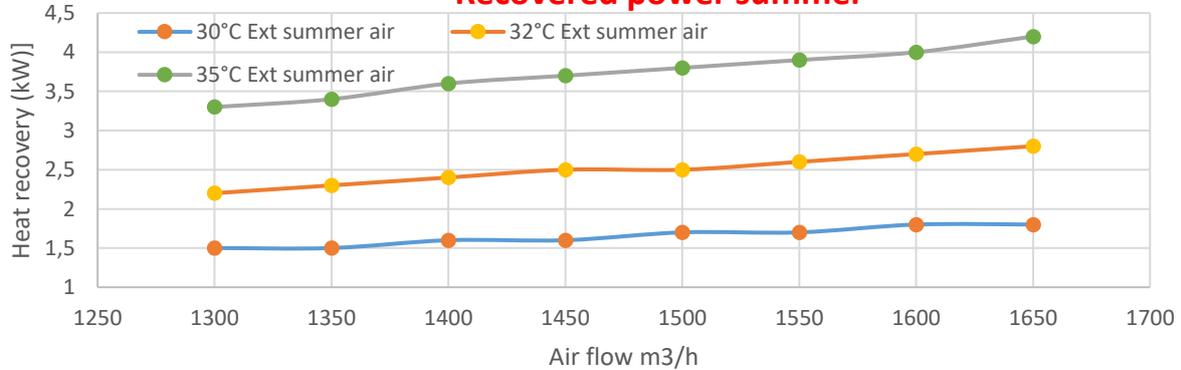


REFERENCE CONDITIONS: INTERNAL WINTER AIR 20°C R.H. 50% INTERNAL SUMMER AIR 26°C R.H. 50%

Heat exchanger summer



Recovered power summer



FRESH 20

Structure: Self- supporting structure frame

Insulation: Thermal and acoustic insulation with panel in self-extinguishing polyurethane foam thk. 10 mm

Fans (2): Plug fan EC GR25 115666 230 V 50/60 Hz 1 F 3.7 A 850 W 3700 rpm IP 54

Voltage rating: 230 V 50-60 Hz Max absorption: 7.4 A 1700W

Heat exchanger: aluminum high efficiency crossflow heat exchanger

Filters according to DIN EN 779: Class G4 filters (ISO coarse 60%) with low pressure drop for recovery and renovation

Dimensions: 400mm x 390mm x 98mm

Speed: Speed rate from 10% to 100% with changing 1%

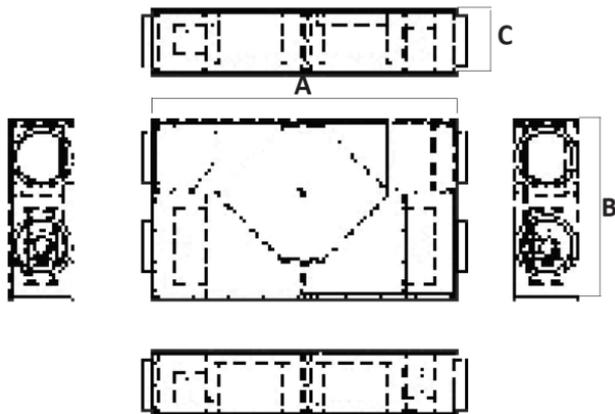
Discharge with air speed at set 85%: 2000 m³/h con 150 Pa of external pressure

Operating conditions: Environmental temperature (internal) range from 0 °C to 45 °C

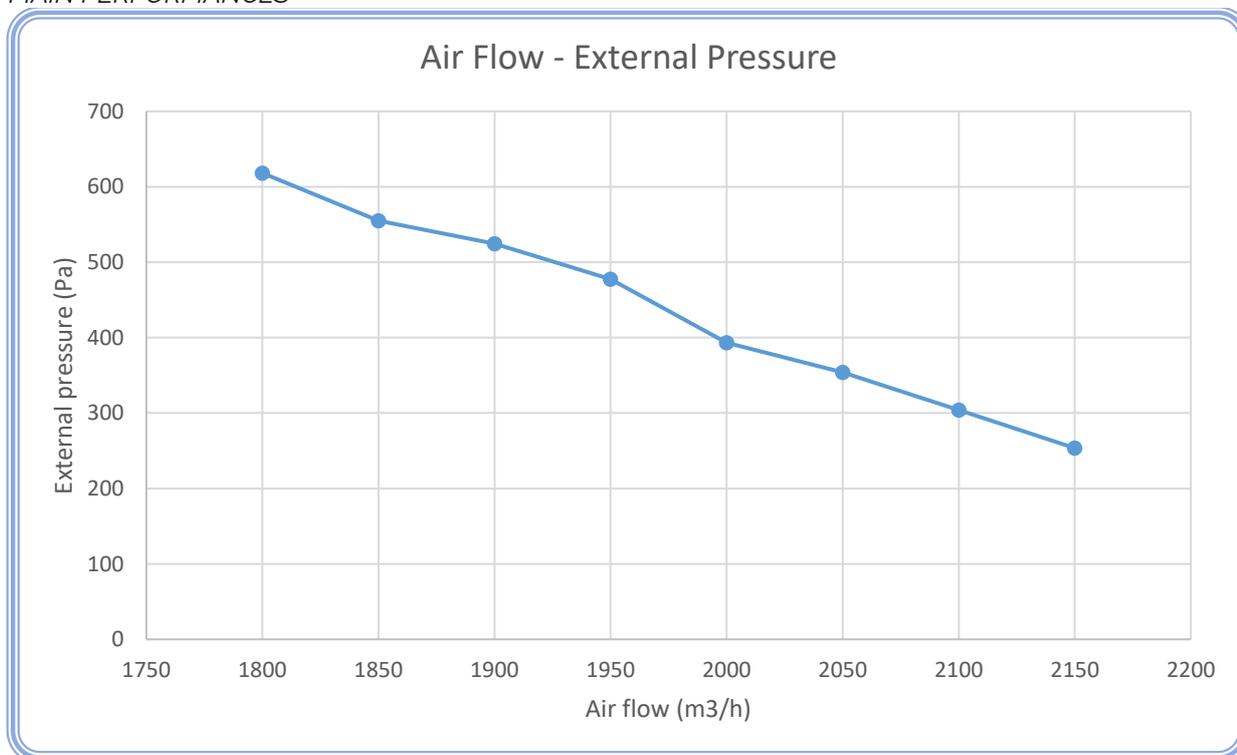
Nominal duct diameter: Ø 355 mm

Dimensions without spigots and condense discharge (l x d x h): 1850 (A) x 1100 (B) x 505 (C) mm weight 175kg

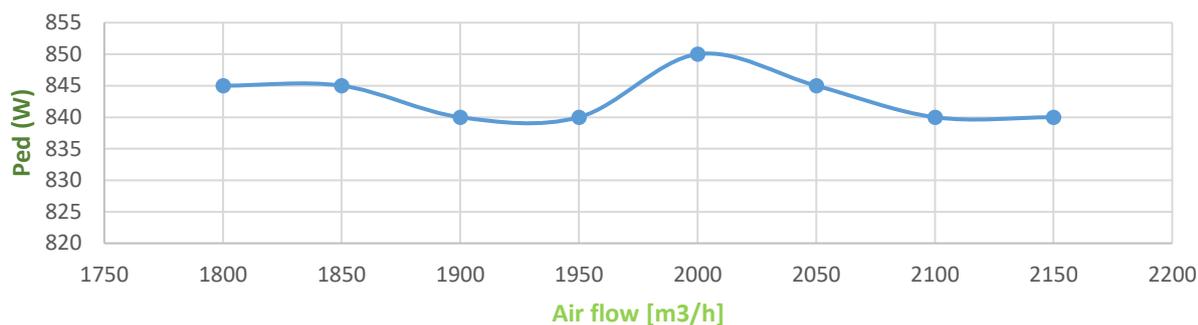
Noise in open field at a 3 mt (ducted unit) 55 dB (A)



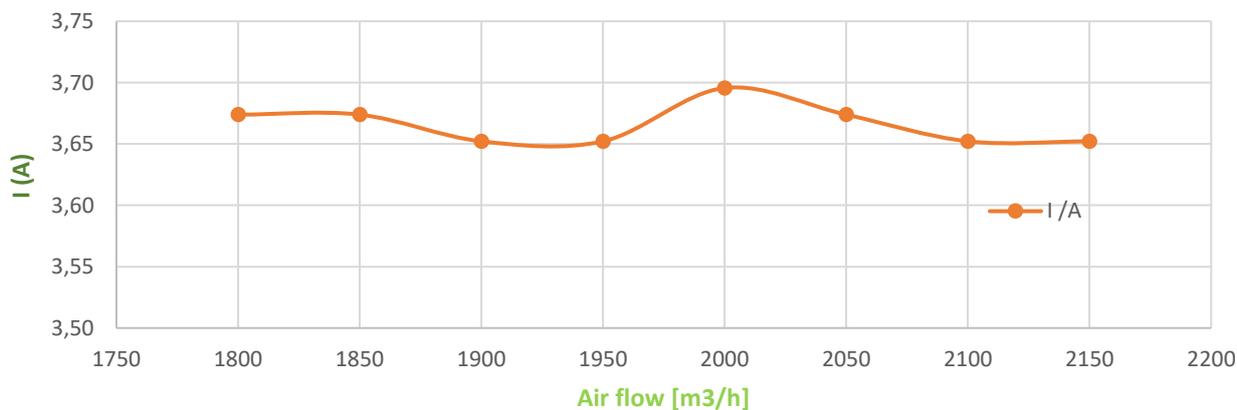
MAIN PERFORMANCES



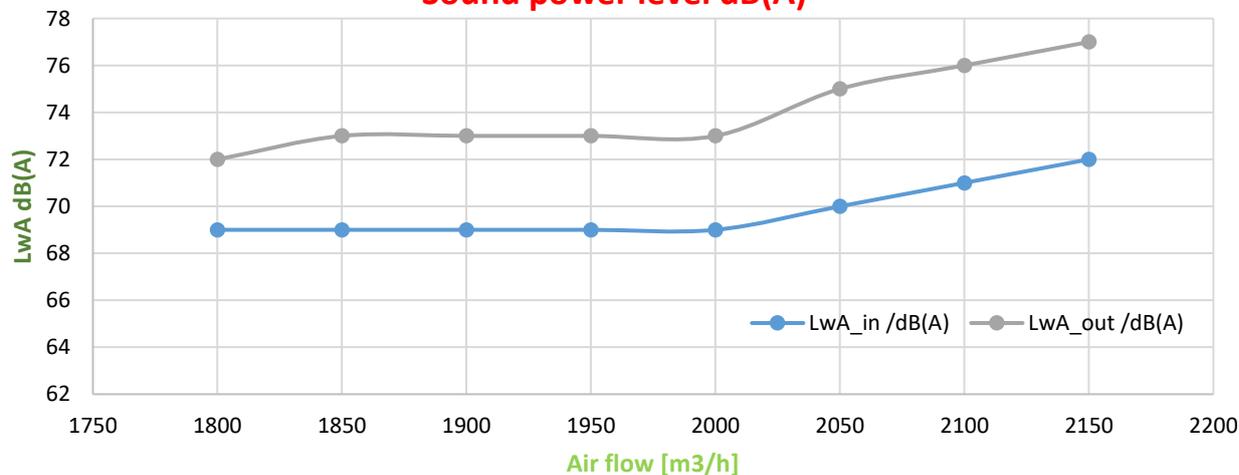
Power absorption each fan (W)



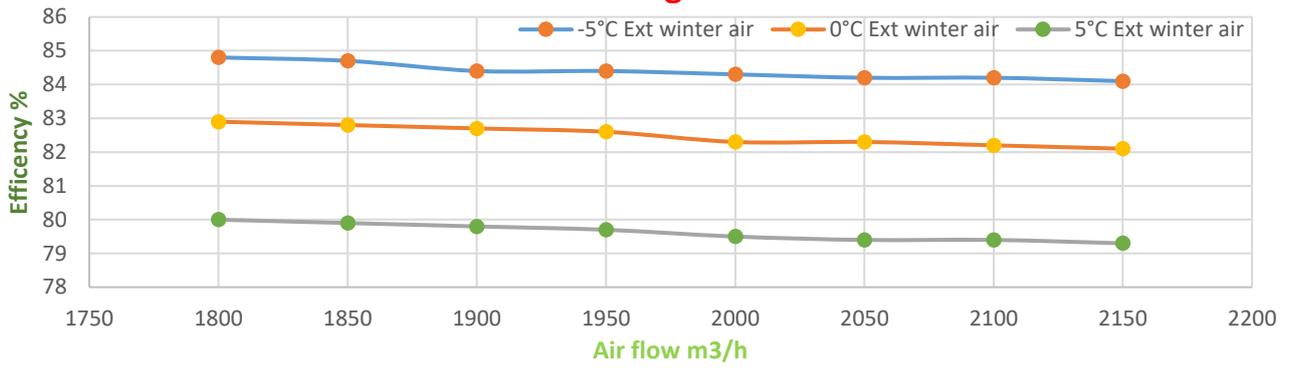
Current adsorption each fan (A)



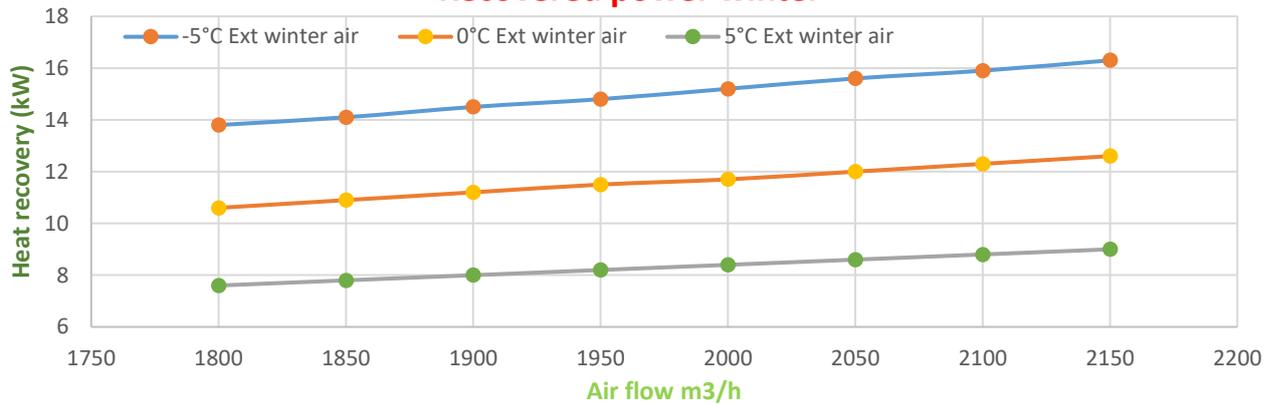
Sound power level dB(A)



Heat exchanger winter

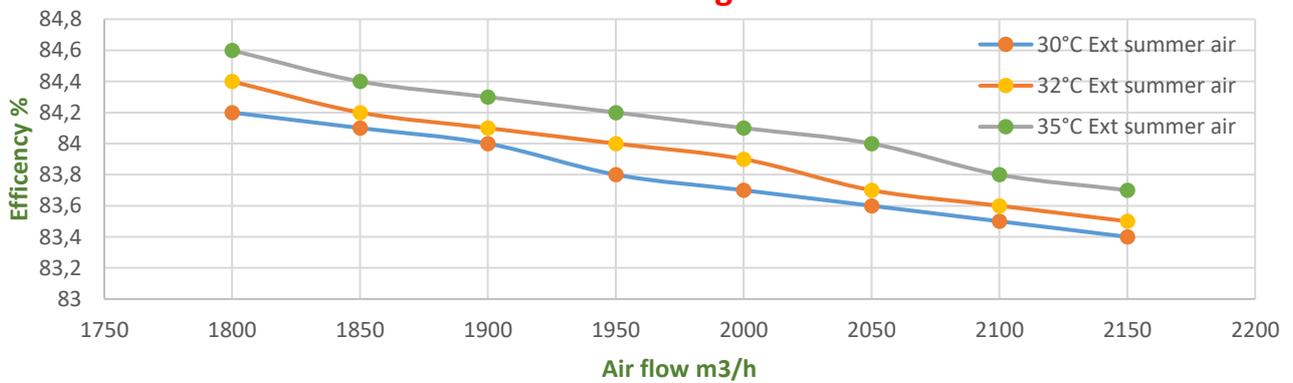


Recovered power winter

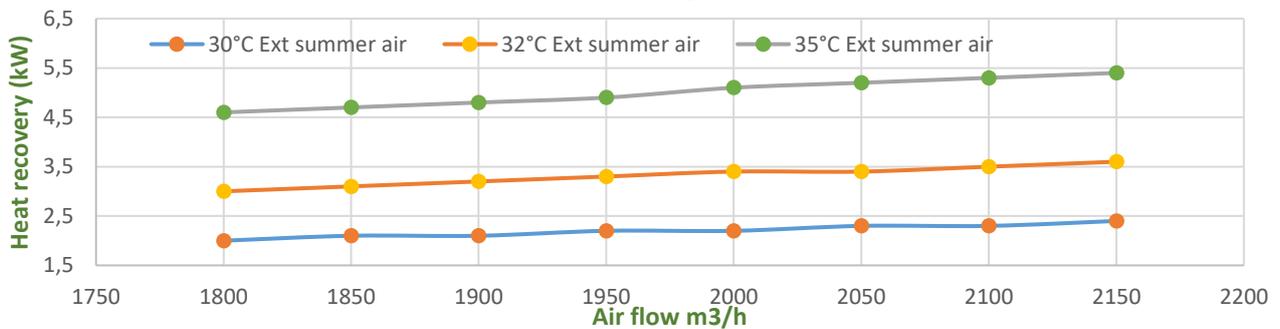


REFERENCE CONDITIONS: INTERNAL WINTER AIR 20°C R.H. 50% INTERNAL SUMMER AIR 26°C R.H. 50%

Heat exchanger summer



Recovered power summer



THE STANDARD UNIT IS SUPPLIED WITH:

Additional temperature probe	
Simplified display (EV3K11XOCT)	
DIN rail electronic regulator with RS485 and RTC (EVD934BMgMF VMC) complete with connection kit (CJAV38)	
Servomotor 230V for the ON / OFF by-pass damper	

OPTIONALS

ALTERNATIVE TO THE SIMPLIFIED DISPLAY: Advanced remote control display
(EVJD900N2VW)


CO2 AND TEMPERATURE ROOM DETECTOR

With automatic calibration

Technical data

Power supply 24 V AC $\pm 10\%$, 50...60 Hz / 15...35 V DC

Operative range, CO2 0...2000 ppm

Operative range, temperature 0...50 °C

Max Power adsorbed < 2,5 W

Nominal power adsorbed < 0.5 Wh

Transformer capacity/power $\geq 5VA$

Precision, CO2 < $\pm (50 \text{ ppm} + 2\% \text{ of the measured value}) (25\text{ }^\circ\text{C})$

Wall mounting version

Dimension 100 x 85 x 30,5 mm

Protection IP30

Output

CO2 : 0...10 V DC referred to 0...2000 ppm

Temperature 0...10 V DC referred to 0...50 °C or resistive output

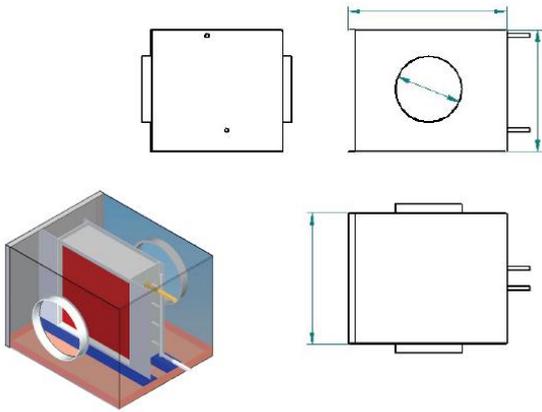
Unit code: TCO2A NTC10 01



TCO2A

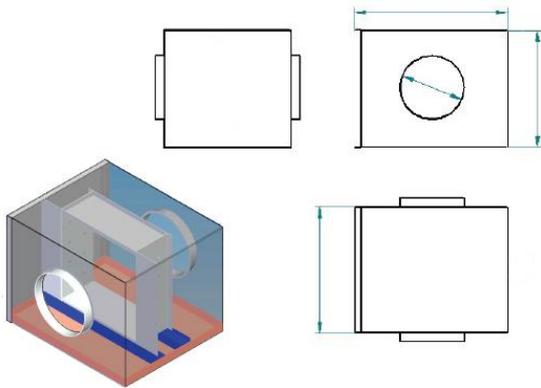
Supplementary accessories:

Pre/post -- heating/cooling water coil



DIMENSION		BA Co80	BA C 150	BA C 200
Length	[mm]	450	550	550
Width	[mm]	400	400	400
High	[mm]	335	405	405
Diameter	[mm]	250	315	355
Weight	Kg	5	6	9

Electric heating coil



DIMENSION		BA ELo80	BA EL150	BA EL200
Power Capacity	KW	2	6	8
Length	[mm]	450	550	550
Width	[mm]	400	400	400
High	[mm]	335	405	405
Diameter	[mm]	250	315	355
Weight	Kg	5	6	9
Power supply	V/f/Hz	230/1/50	230/1/50	230/1/50