

AIR PUR EVO

horizontal static heat recovery unit with mechanical bypass

12500040 - 12500070 - 12500160
12500220 - 12500280 - 12500340



DESCRIPTION

Tecosystemi cross-flow static heat recovery units are used for the balanced ventilation of residential and commercial rooms (shops, restaurants, etc....) and all rooms where it is necessary to have an air exchange, while at the same time avoiding the dispersion of the indoor temperature.

The advantages of wall-mounted installation in case of overhauling of heating or air conditioning systems are evident: no intervention on the wall for the insertion of the pipes, therefore no debris and dust, no cost of plastering and painting of the walls, short installation times, therefore considerable cost savings and no inconvenience.

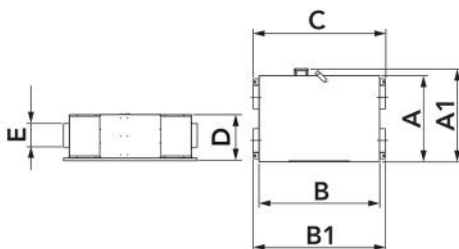
The principle of the recovery unit is to continuously introduce fresh and clean air taken from the outside and at the same time expel to the outside the stale air contained in the rooms together with smoke, odours, etc...

What makes this type of operation possible is the exchange pack inside the heat recovery unit. Thanks to the structure of the exchange pack, the air expelled outside transfers its heat to the incoming clean air without the two air flows coming into contact with each other.

Two filters inserted in the recovery unit in front of the intake openings ensure the entry of air purified of particles and dust.

TECHNICAL SPECIFICATIONS:

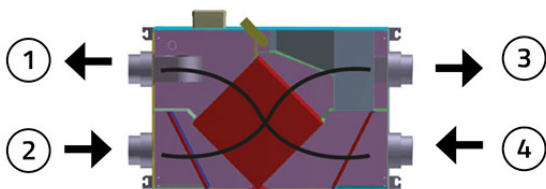
- Plastic heat exchanger pack
- Removable grade G4 filters
- Coupling for condensate drain
- Internal insulation
- Heating batter (on request)
- Anchor brackets
- Includes wall-mounted control panel with dirty filter alert
- Equipped with manual mechanical bypass activation



DIMENSIONS

CODE	MODEL	A [mm]	A1 [mm]	B [mm]	B1 [mm]	C [mm]	D [mm]	E [mm]
12500040	AIR PUR 300E EVO	650	720	950	1147	1006	280	150
12500070	AIR PUR 500E EVO	750	820	1100	1297	1156	320	200
12500160	AIR PUR 1000E EVO	930	1000	1300	1423	1421	490	250
12500220	AIR PUR 1700E EVO	1100	1170	1500	1623	1621	490	300
12500280	AIR PUR 2500E EVO	1300	1370	1600	1723	1721	540	350
12500340	AIR PUR 4000E EVO	1400	1470	1670	1793	1791	688	450

RENEWAL



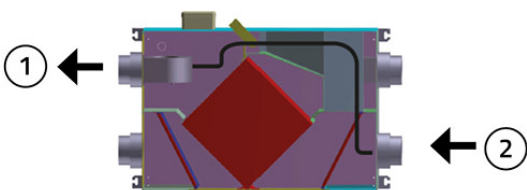
- [1] TREATED AIR DELIVERY
- [2] ROOMS AIR INTAKE
- [3] FOUL AIR EXPULSION
- [4] OUTDOOR AIR INTAKE

By operating the heat recovery unit, when the air quality falls below the comfort level, air coming from outside is introduced into the rooms.

To reduce the energy requirement necessary to bring the outdoor air temperature to the desired conditions, a cross-flow recovery unit is used which, using the energy of the foul air, is able to pre-treat and reduce the thermal difference of the renewal air.

The fan with low consumption and high prevalence expels the foul and energetically exhausted air through the outlet of the heat recovery unit.

FREE-COOLING



- [1] TREATED AIR DELIVERY
- [2] OUTDOOR AIR INTAKE

When the outside air conditions are good, i.e., when the summer temperature is cooler than the room temperature, the internal by-pass damper automatically operates and excludes the cross-flow heat recovery unit so as not to reduce the comfort characteristics of the outside air compared to the indoor air and reduce energy consumption for ventilation.

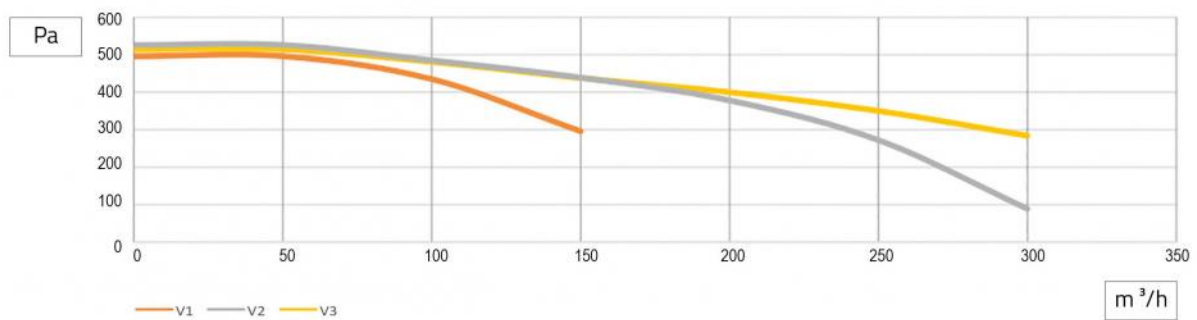
In winter, the logic is reversed and the conditions for which Free-Cooling is activated are an outside air temperature higher than the intake temperature of the stale air present in the various rooms.

In any case, if the external temperature deviates too much from the value desired in the environment, even if beneficial, the Free-Cooling mode is not activated, therefore the mitigating passage through the exchanger takes place always giving priority to comfort.

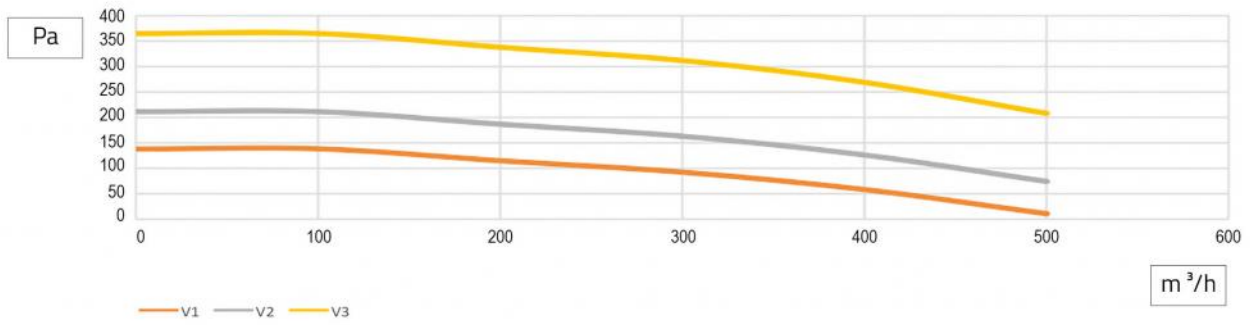
TECHNICAL DATA

MODEL	AIR FLOW RATE [m ³ /h]	HEAD [Pa]	EXCHANGE EFFICIENCY [%]	SOUND POWER LEVEL [DB(A)]	VOLTAGE [V]	FREQUENCY [Hz]	POWER CONSUMPTION [W]	WEIGHT [kg]
AIR PUR 300E EVO	300	320	75	40	230	50	200	50
AIR PUR 500E EVO	500	330	75	42	230	50	356	68
AIR PUR 1000E EVO	1000	330	74	62	230	50	600	129
AIR PUR 1700E EVO	1700	290	72	65	230	50	800	193
AIR PUR 2500E EVO	2500	360	70	62	230	50	1100	224
AIR PUR 4000E EVO	4000	700	70	79	400	3 ~ 50	3000	290

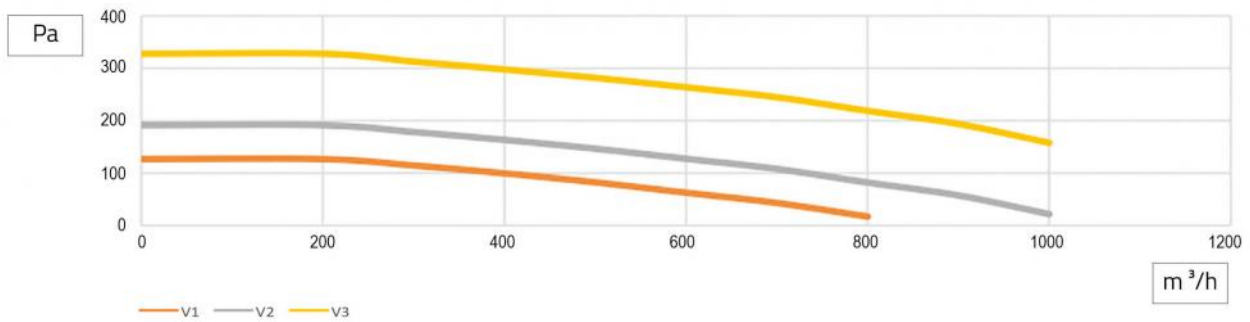
PERFORMANCE GRAPHS "AIR PUR EVO 300 m³/h"



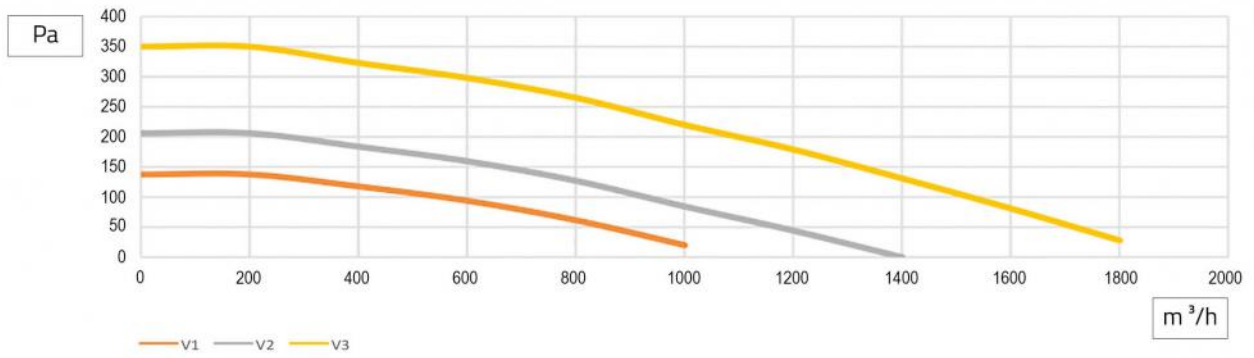
PERFORMANCE GRAPHS "AIR PUR EVO 500 m³/h"



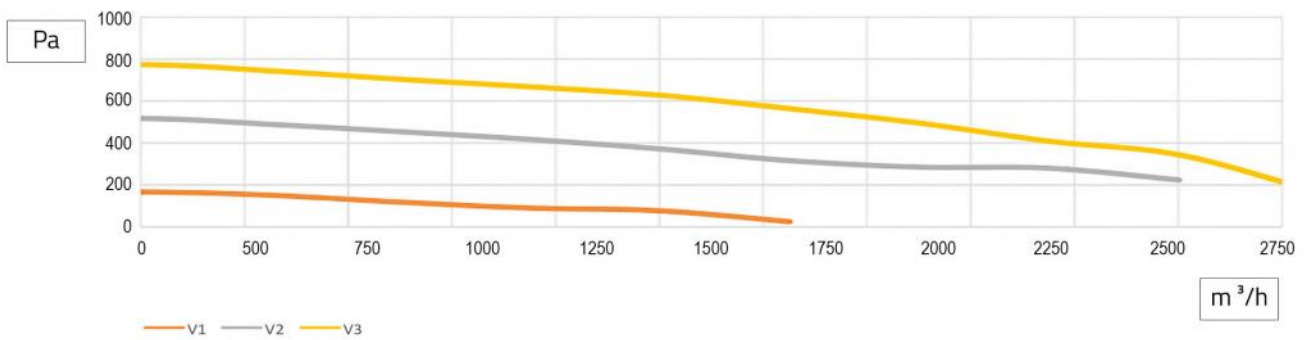
PERFORMANCE GRAPHS "AIR PUR EVO 1000 m³/h"



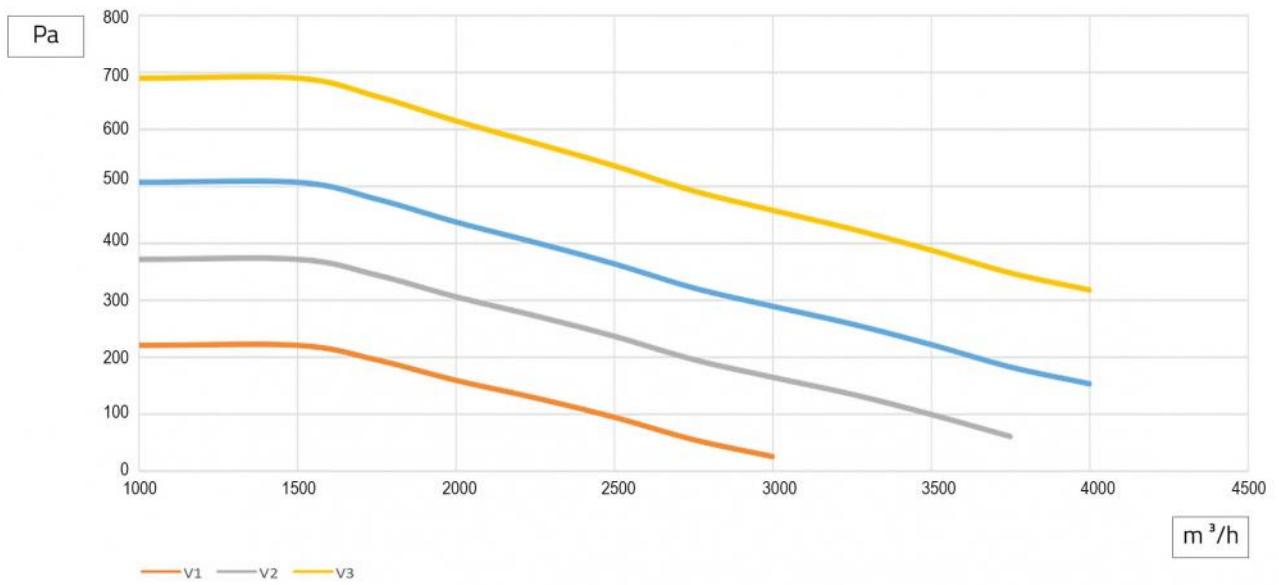
PERFORMANCE GRAPHS "AIR PUR EVO 1700 m³/h"



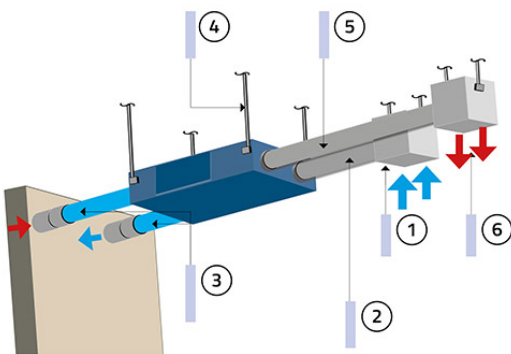
PERFORMANCE GRAPHS "AIR PUR EVO 2500 m³/h"



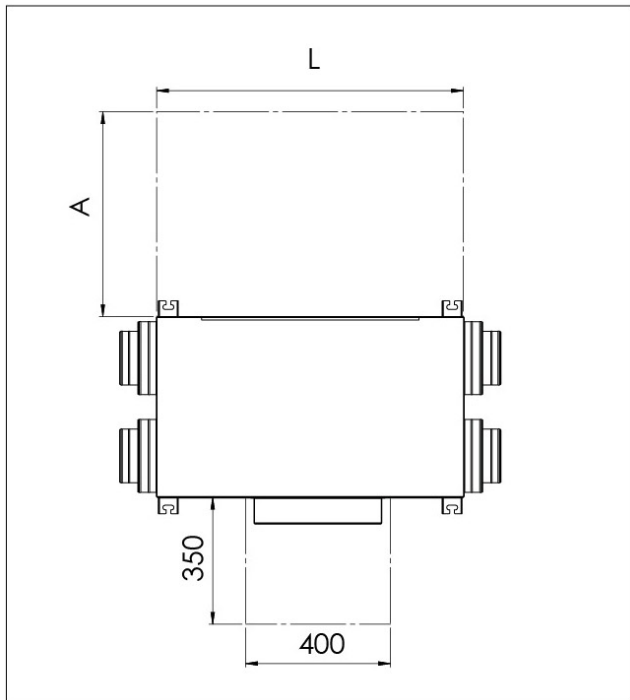
PERFORMANCE GRAPHS "AIR PUR EVO 4000 m³/h"



HEAT RECOVERY UNIT INSTALLATION DIAGRAM



- [1] Air intake
- [2] Recovery air passage duct
- [3] Insulating material placed on the expulsion duct at the outside
- [4] Fastenings of the machine to the ceiling
- [5] Delivery air passage duct
- [6] Air delivery

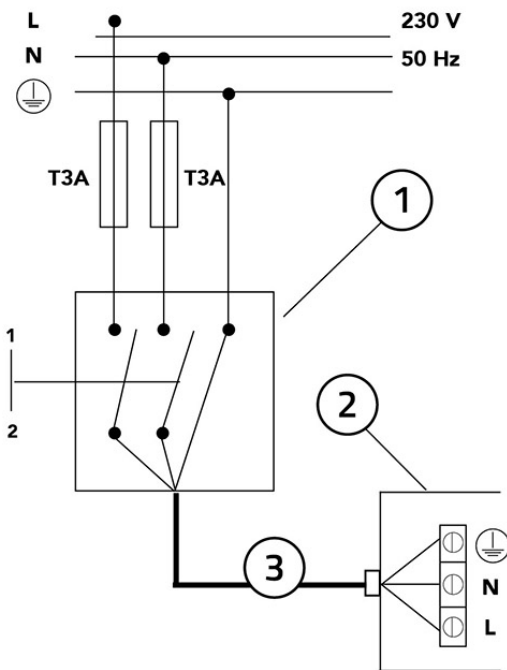


To make routine maintenance easier, provide a minimum access area as per the following table

[L] length of the heat recovery unit

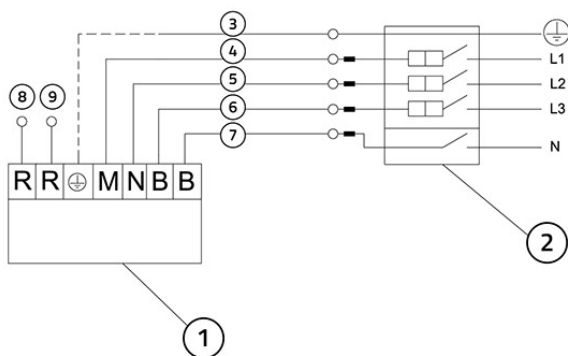
CODE	A [mm]
12500040	750
12500070	850
12500160	1050
12500220	1250
12500280	1450
12500340	1600

CONNECTION VALID FOR RECOVERY UNITS POWERED AT 230V – 50Hz



- [1] Omnipolar thermal magnetic protection switch
- [2] Electrical connection box
- [3] Power cable

CONNECTION VALID FOR HEAT RECOVERY UNITS POWERED AT 400 VAC - 50 HZ



- [1] Electrical connection box for heat recovery unit
- [2] IMQ approved main switch
- [3] Yellow/Green
- [4] Brown
- [5] Black
- [6] Blue
- [7] White
- [8] Red - Thermal circuit breaker
- [9] Red - Thermal circuit breaker

ITEMS

CODE	DESCRIPTION
12500040	STATIC HEAT RECOVERY UNIT "AIR PUR 300E EVO "
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