

## TOTAL AIR 200 EVO PLUS

high-efficiency ceiling-mounted ductable static heat recovery unit with automatic mechanical by-pass

ACD200024 - ACD200026



### DESCRIPTION

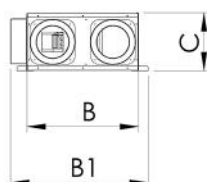
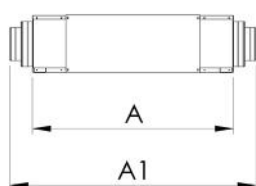
Tecosystemi "Total Air Evo Plus Wi" series heat recovery units, are used to save thermal energy through heat recovery and are a major component of domestic and commercial energy saving solutions.

The unit is developed to provide continuous air exchange through mechanical ventilation, to homes, offices, hotels, bars and other places.

It is also able to filter and preheat the fresh incoming air using the residual heat of the stale air that is extracted.

### TECHNICAL SPECIFICATIONS:

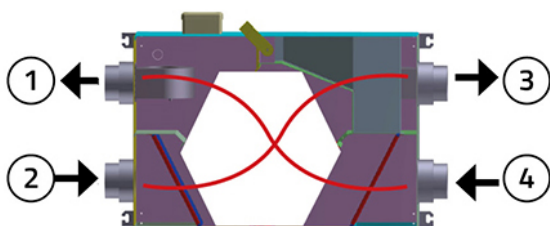
- For false ceiling installation
- Includes wall-mounted control panel with dirty filter alert
- Power supply 230V - 50Hz
- Removable grade G4 filters
- Ø 150 mm couplings
- High-efficiency polystyrene heat exchanger pack
- Removable delivery and intake filters
- Equipped with coupling for condensate drain
- Equipped with automatic bypass activation



## DIMENSIONS

CODE	A [mm]	A1 [mm]	B [mm]	B1 [mm]	C [mm]
ACD200024	850	1050	500	615	260
ACD200026	850	1050	500	615	260

## RENEWAL



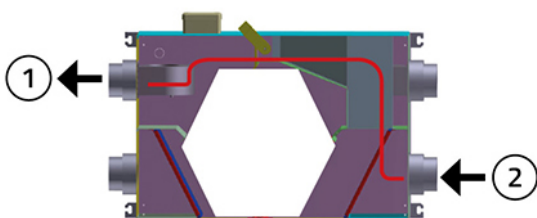
- [1] TREATED AIR DELIVERY
- [2] ROOMS AIR INTAKE
- [3] FOUL AIR EXPULSION
- [4] OUTDOOR AIR INTAKE

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

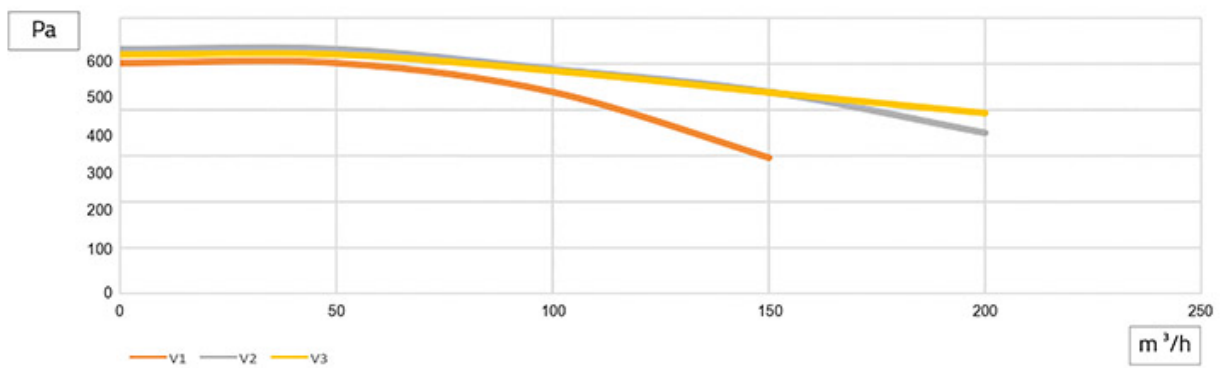
When the outside air conditions are good, i.e., when the summer temperature is cooler than the room temperature, the internal by-pass damper automatically operates and excludes the cross-flow heat recovery unit so as not to reduce the comfort characteristics of the outside air compared to the indoor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

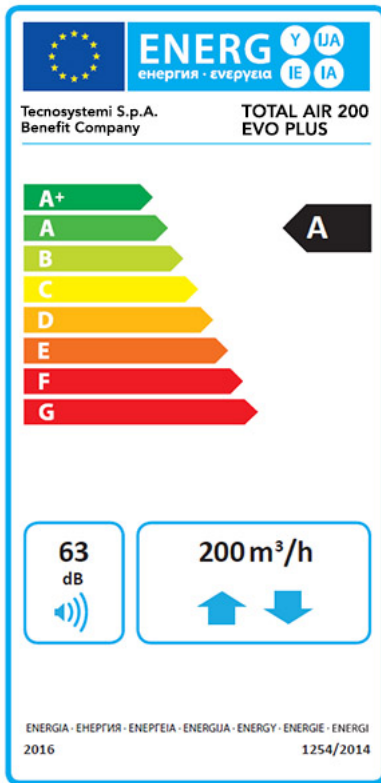
In any case, if the external temperature deviates too much from the value desired in the environment, even if beneficial, the Free-Cooling mode is not activated, therefore the mitigating passage through the exchanger takes place always giving priority to comfort.

MODEL	TOTAL AIR 200 EVO PLUS WI
Power supply [V]	230
Frequency [Hz]	50
Maximum motor power [W]	200
Motor current [A]	1,94
Maximum flow rate [m <sup>3</sup> /h]	200
Sound level 3 m [dB(A)]	38
Body material	Electro-galvanised-plated sheet
Insulation	Closed-cell polyethylene 3 mm
Filter: supply/return	G4
Duct diameter [mm]	150 / 200
Efficiency	92%
Type of heat recovery unit	Cross-flow

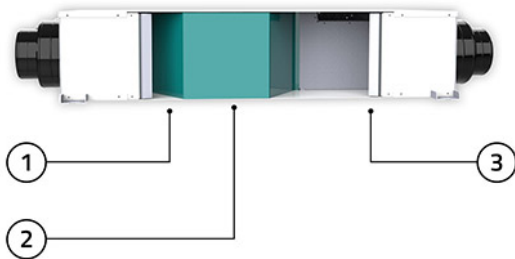
## PERFORMANCE GRAPHS



## ENERGY RATING



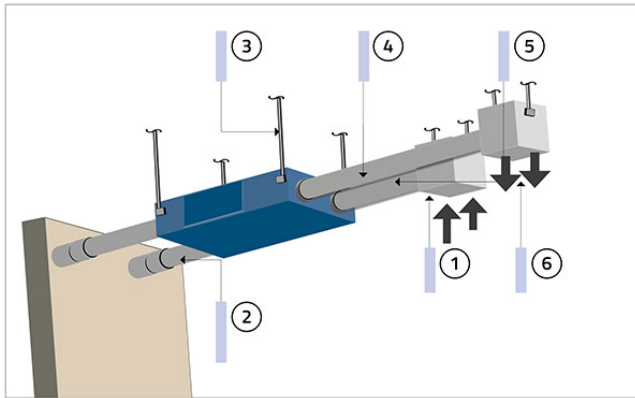
## FILTERS AND EXCHANGER PACK MAINTENANCE



Maintenance is accessed by removing a side inspection plate, a space of 800 mm must be left to allow access to the maintenance personnel.

- [1] Lateral extraction filter
- [2] Lateral extraction filter pack
- [3] Lateral extraction filter

## HEAT RECOVERY UNIT INSTALLATION DIAGRAM



- [1] Air intake
- [2] Intake duct from the outside
- [3] Fastenings of the machine to the ceiling
- [4] Delivery air passage duct
- [5] Recovery air passage duct
- [6] Air delivery

## CONTROL PANEL

The Total Air 200P Evo Plus Wi ceiling-mounted high efficiency heat recovery unit has a wall-mounted control panel with the following functions:



- [1] Operating modes
- [2] Main field
- [3] Manual/automatic fan speed
- [4] Fan speed indication
- [5] Temperature measurement unit
- [6] Function locked
- [7] Set Point
- [8] Time slots active
- [9] Current time slots
- [10] Day of the week
- [10] Dirty filter alarm
- [12] Secondary field

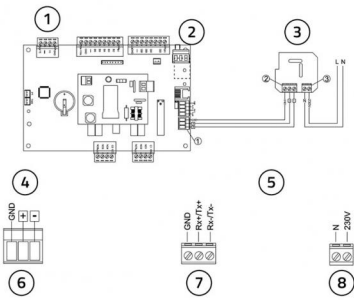
## ELECTRICAL CONNECTIONS

The connection required by the heat recovery unit is essentially the power supply connection.

The power is nothing more than the power supply 230V-50Hz-1Ph.

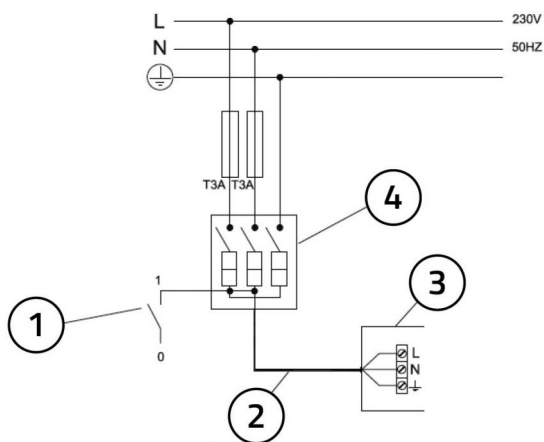
On the power supply line it is good to provide upstream both a disconnector and a differential circuit breaker switch.

## CONNECTION OF THE CONTROL PANEL



- [1] Power board on unit
- [2] Wall-mounted control board
- [3] Power board
- [4] Wall-mounted control
- [5] Detail of the connection board to the display
- [6] Detail of clamp for the connection to the board
- [7] Detail of clamp for the connection to the network

## CONNECTION OF THE HEAT RECOVERY UNIT



- [1] Ignition switch
- [2] Power cable 3x1.5 mm<sup>2</sup>
- [3] Electrical connection box for heat recovery unit
- [4] IMQ approved 250V main switch

## ITEMS

CODE	DESCRIPTION
ACD200024	"TOTAL AIR 200P EVO PLUS" HIGH EFFICIENCY CEILING HEAT RECOVERY UNIT
ACD200026	"TOTAL AIR 200Y EVO PLUS" HIGH EFFICIENCY CEILING HEAT RECOVERY UNIT