



**MAXI**  
CENTRALIZED VENTILATION WITH HEAT RECOVERY

Product Overview



[www.orcaenergy.eu](http://www.orcaenergy.eu)

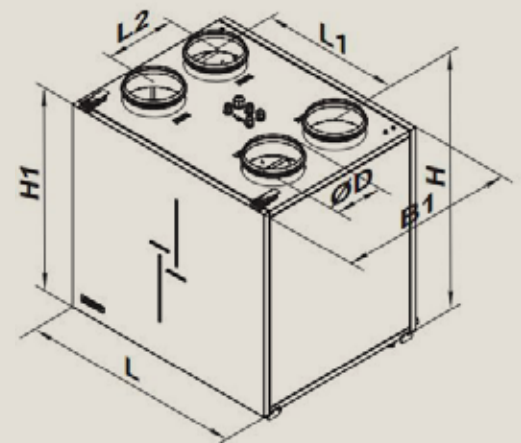
## MAXI



Device for heat recovery MAXI is designed to provide permanent controlled air exchange by means of mechanical ventilation in houses, offices, hotels, cafes, meeting halls and other mechanically ventilated premises. Reduce the heating costs and say goodbye to mould.



	MAXI		
type	160 EC V	350 EC VB	550 EC VB
Voltage [V 1 Hz]	1- 220-240   50-60		
Max. fan power [W]	51	166	333
Max. unit current [A]	0,4	1,3	2,3
Max. air capacity (m3/h)	180	415	700
RPM	3770	3200	3230
Sound pressure level at 3m [dBA]	24	28	28
Transported air temperature [°C]	-25 up to +60		
Casing material	polymer coated steel		
Insulation	20 mm mineral wool	40 mm mineral wool	40 mm mineral wool
Extract filter	G4		
Supply filter	G4(F7*)		
Connected air duct diameter D [mm]	Ø 125	Ø 160	Ø 200
Weight [kg]	34	61	70
Heat recovery efficiency, %	88 up to 98	85 up to 98	81 up to 97
Heat exchanger type	counter-flow		
SEC Class	A+		
Heat exchanger material	polystyrene		
B1	330	592	722
H	650	758	758
H1	550	675	675
L	600	775	825
L1	388	426	493
L2	143	230	284



## MAIN ADVANTAGES

- **LCD control panel**
- **high efficiency**
- **always fresh and clean air (no mixing between extract and exhaust air)**
- **works up to -15 °C**
- **different outdoor covers**
- **self regulation and functioning**
- **automatic antifreeze protection**
- **possibility of adding various sensors (CO sensor, air humidity sensor) surcharge required**
- **air damper for air flow cutoff is automatically regulated from recuperation unit**



## FILTER

Supply and exhaust airflows are purified through panel filters with filtering class G4. A replaceable filter with filtering class F7 for supply air is optionally available.

## FANS

High efficient electronically commutated motors with external rotor and impeller with backward curved blades. Such motors are the most state of the art energy saving solution. EC motors are featured with high performance and total speed controllable range. High efficiency reaching 90% is the premium advantage of the electronically commutated motors.

## HEAT EXCHANGER

Counter-flow polystyrene heat exchangers with high heat recovery efficiency. The drain pan under the heat exchanger block ensures condensate removal. In case of freezing danger determined by the temperature sensor the electric pre-heater is automatically turned on. The heat exchanger is easily removed for cleaning.

## CONTROL AND AUTOMATION

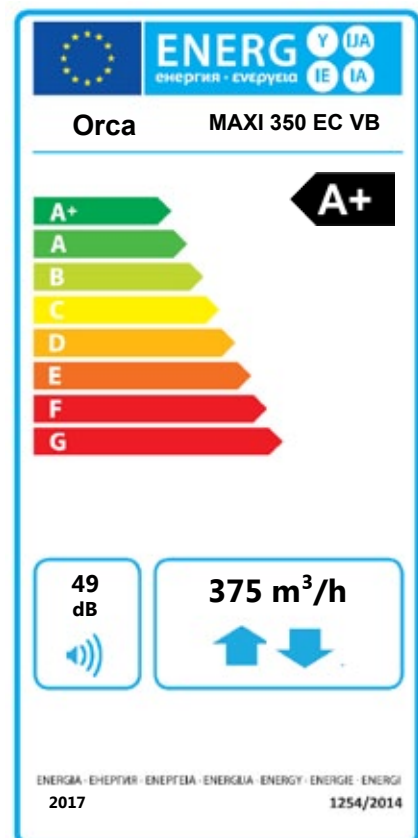
The unit includes integrated automation. The heat exchanger freezing protection operates as follows: In case of freezing danger determined

by the temperature sensor the electric preheater is automatically turned on. If the electric heater is not used, than the defrost logic is as follows: the supply fan is turned off to let extract air warm up the heat exchanger. After freezing danger is no longer imminent, the unit reverts to the standard operation mode. Delivery set includes a multifunctional LCD touch control panel and a 10m long signal cable.

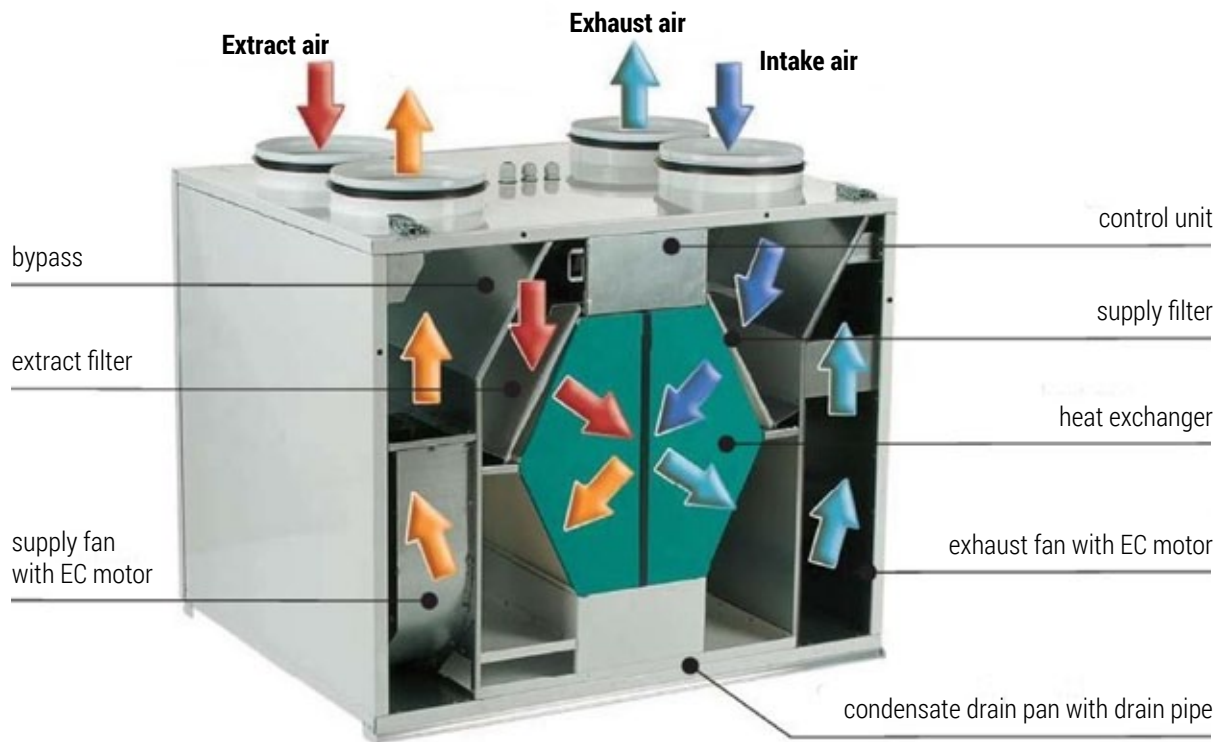
## USB

The MAXI160 EC V, MAXI350 EC VB and MAXI 550 EC VB units can be connected to the PC by means of USB cable. Special software gives following possibilities:

- Software update of the unit;
- Adjusting of the Off, Low, Medium or High speed modes from 0 to 100 % for supply and exhaust fans separately;
- Adjustment of the humidity level and the speed activated by optional humidity sensor;
- Adjustment of the speed activated by the optional external relay;
- Adjustment of the temperature of activation of freezing protection;
- Adjustment of filter maintenance timer;
- Monitoring of the maintenance timer, humidity level, external relay and bypass;
- Error code indication.



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## DESCRIPTION

The air-handling units are the fully featured ventilation units with heat recovery for airfiltration, fresh air supply and stale air extract. The heat contained in the extract air is recuperated in the high-efficient counterflow heat exchanger to warm up supply air.

## CONTROL PANEL

The MAXI160 EC V, MAXI 350 EC VB and MAXI 550 EC VB units are equipped with touchscreen LCD control panel with following functions:

- Turning the unit on or off;
- Low-medium-high speed selection and adjustment from 0 up to 100% for supply and exhaust fans separately;
- Manual or automatic opening and closing of the bypass for summer ventilation;
- Timer;
- Week scheduled;
- Actuating external air dampers;
- Indication, adjustment and maintaining set room or supply air temperature;
- Control according to the optional duct humidity sensor feedback or according to the humidity sensor built-in the control panel;
- Filter dogging control by motor hours;
- Ventilation system shutdown at signal from the fire alarm system.



Your seller