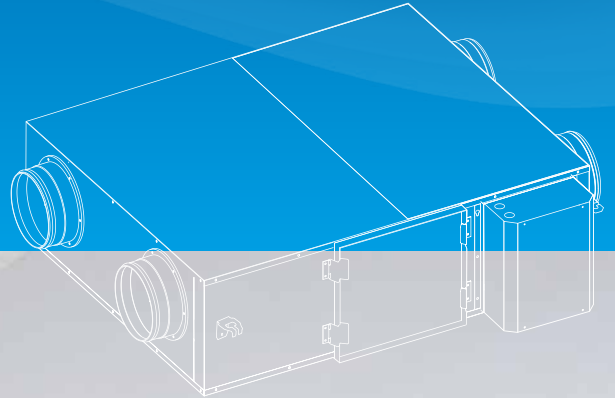


# WTU-EC-E

**Compact** heat recovery  
units for offices and  
shops



# WTU-EC-E

Flat heat recovery units  
for the utility industry



GOOD VENTILATION IN SCHOOLS AND OFFICES IS OF GREAT IMPORTANCE. OUR DECENTRALISED WTU-EC-E ENSURES A PLEASANT AND HEALTHY INDOOR CLIMATE IN EACH INDIVIDUAL ROOM OR OFFICE. WITH THE ADDITIONAL USE OF CO<sub>2</sub> CONTROL, THE VENTILATION SYSTEM ONLY CONSUMES ENERGY WHEN IT IS NEEDED. IN ADDITION, THE HEAT RECOVERY UNIT PREVENTS ENERGY LOSSES BY OPTIMALLY PREHEATING THE INCOMING, FRESH, CLEAN FILTERED AIR.

**The WTU-EC-E is equipped as standard with an automatically controlled bypass for optimal comfort.**

## Enthalpy exchanger

The WTU-EC-E is equipped with an enthalpy heat exchanger which, in addition to heat, also recovers moisture. This keeps both temperature and relative humidity at a pleasant level. The installation of a condensate drain is not necessary for this unit.

## Automatic bypass

For optimum comfort, the WTU-EC-E is equipped as standard with an automatic bypass. The bypass ensures that the building does not heat up further in summer by blowing in cool filtered air.

## Energy saving

The WTU-EC-E helps save energy. By applying the latest technologies, the energy consumption is very low. The EC motors with backward-curved blades are equipped with direct-current technology that achieves a very high efficiency.

efficiency, which ensures high energy savings and a long service life.

## WHAT MAKES THE WTU-EC-E SPECIAL?

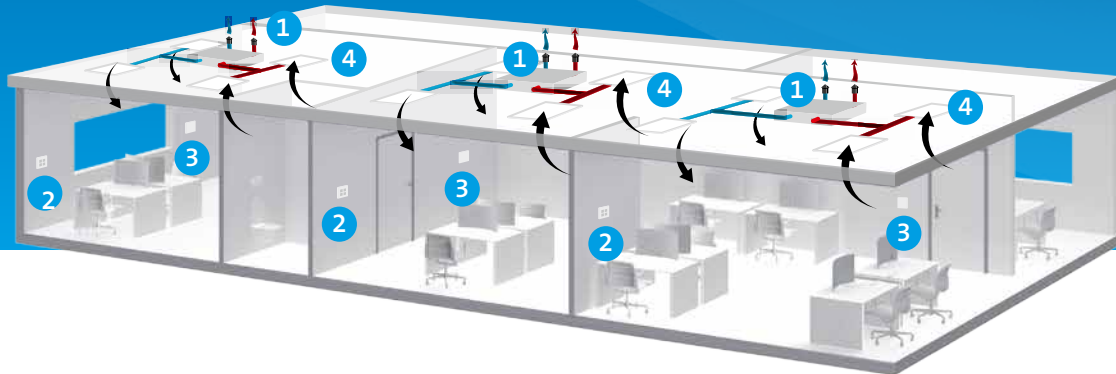
- According to ERP 2018
- Comfortable indoor climate with sufficient fresh, filtered and pre-heated air
- Particularly suitable for room ventilation
- High energy savings thanks to economical EC motors with backward-curved blades
- Low noise level because the motors are mounted in an aero- dynamically shaped EPS interior
- Automatic bypass regulation
- Easy to install above a suspended ceiling, thanks to the low mounting height
- Plug and play installation, complete with display and cord
- Easy maintenance thanks to service hatches
- Capacity ranging from 250 - 2,000 m<sup>3</sup>/h
- Filter indication

1 WTU decentralised

2 CO<sub>2</sub> wall sensor

3 Display WTU

4 Ceiling diffuser



## Regulation

**The WTU-EC-E is supplied with a Regin controller and a digital control panel with cable. The control panel is equipped with the following functions:**

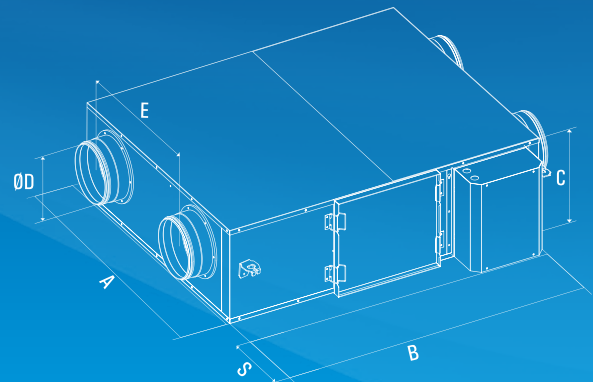
- MOD bus/ Exoline over TCP/IP (for full control from BMS system)
- Output for 0-10V, on/off heating or cooling
- Multilingual menu structure (including Dutch)
- Alarm output/input
- Fully automatic control
- Engine speeds adjustable on the display
- Integrated defrost function
- Extensive CO<sub>2</sub> control options, e.g. also on the basis of a weekly timer
- Readout and control via laptop with Corrigo E-tool Ventilion (download free of charge from [orcon.nl](http://orcon.nl))
- Filter indication

## DIMENSION

Device dimensions						
	A	B	C	ØD	E	S
WTU-250-EC-E	750	907	296	Ø160	404	700
WTU-600-EC-E	922	1130	344	Ø200	499	700
WTU-800-EC-E	1014	1214	410	Ø250	589	760
WTU-1000-EC-E	1294	1606	410	Ø300	720	760
WTU-1500-EC-E	1128	1807	552	Ø355	623	800
WTU-2000-EC-E	1428	1807	552	Ø355	921	800

\* All dimensions are in millimetres.

\*\* The space needed for maintenance is specified as size "S" in the table



## TECHNICAL DATA

Type	WTU-250-EC-E	WTU-600-EC-E	WTU-800-EC-E	WTU-1000-EC-E	WTU-1500-EC-E	WTU-2000-EC-E
<b>Air flow (m³/h)</b>	250	600	800	1000	1500	2000
<b>Nominal Voltage</b>	230 V / 1~/ 50 Hz					
<b>Max. Air flow rate (m³/h)</b>	375	754	921	1425	2230	2474
<b>Nominal air flow (m³/h)</b>	200	430	800	1000	1300	2000
<b>External pressure build-up (Pa)</b>	100	100	100	100	100	100
<b>Electrical ingoing power (W)</b>	44	99	244	256	351	647
<b>Max. power (W)</b>	90	228	288	354	790	880
<b>Max. sound pressure level (dB(A))**</b>	38	41	45	43	41	51
<b>Net weight of device (kg)</b>	34	46	51	79	97	106
<b>Filter</b>	G3 class synthetic filter according to EN 779 (F7 class optional)					

\* A separate electric pre-heater is needed when the outside air is colder than -7 degrees Celsius.

\*\* Measured at a distance of 1.5 metres from the casing of the unit @ 250 Hz sound band.

## ACCESSORIES



FFR filterbox



CBRF preheater



CBA reheater



CO<sub>2</sub> channel sensor



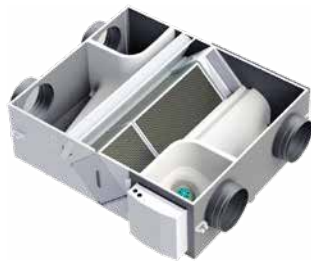
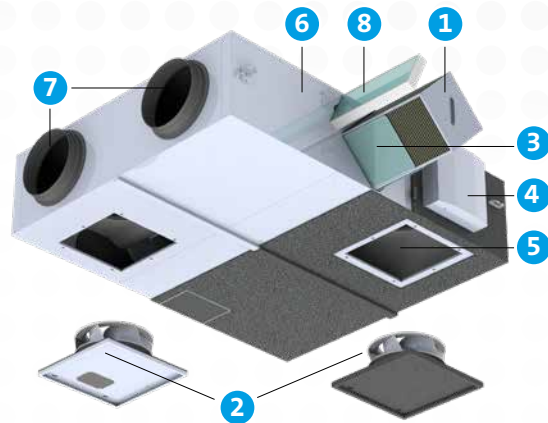
CO<sub>2</sub> wall sensor



Grids

## EQUIPMENT CONSTRUCTION

- 1 Heat exchanger
- 2 Exhaust and supply air fan with EC technology
- 3 Exhaust and supply filters
- 4 Regin controller
- 5 EPS interior
- 6 Housing
- 7 Channel connections
- 8 Optional pollen filter (F7)



### Housing

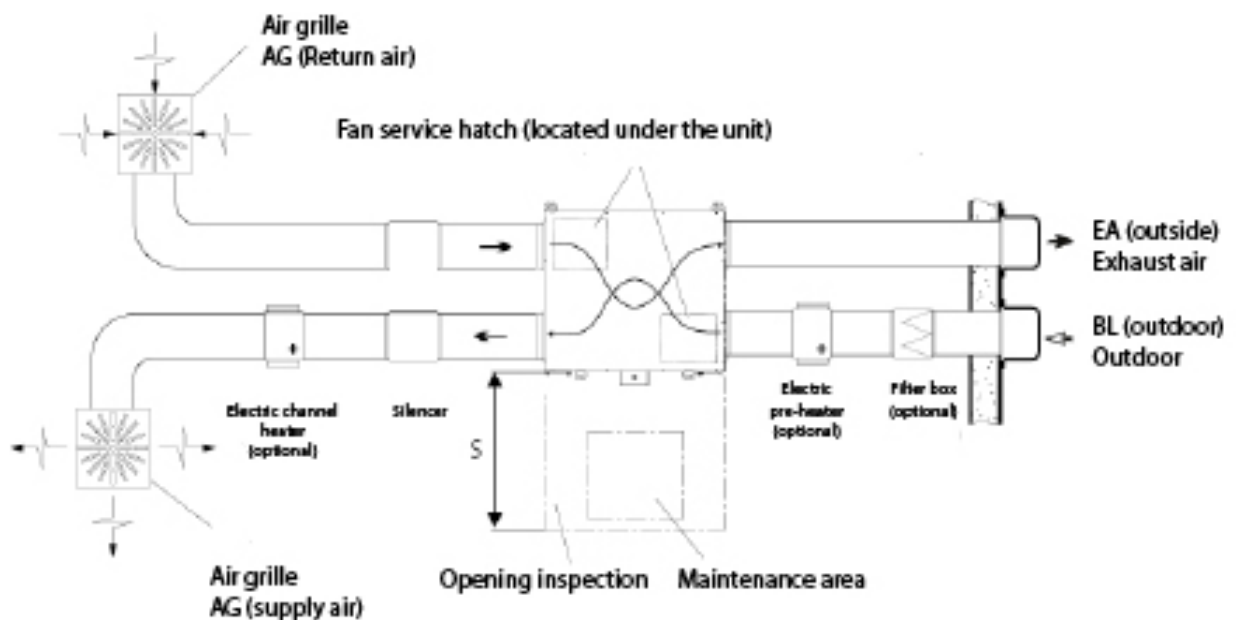
- Sheet metal 200 gr/m2 galvanised material
- Interior is 40 kg/m2 EPS, aerodynamically shaped



### EPS parts

By using aerodynamically shaped EPS pieces, the air is optimally guided along the exchanger. This ensures that the motors can work as efficiently as possible, so that the energy consumption and noise level are as low as possible.

## TOP VIEW



# Want to know more about an exceptional indoor climate?

Our goal is to provide everyone with the most comfortable and healthy indoor climate possible. An environment in which people feel comfortable and function optimally. With this vision in mind, we have developed into the leading supplier of ventilation systems for residential and commercial construction.



## Orcon Academy

Being a leader in products also means being a leader in knowledge. Orcon closely follows technological developments and legislation and incorporates these in various training courses. Visit our website for more information or to register for a training course.



## Green Igloo

Green Igloo' is the green label of Orcon and its sister company Thercon. Green Igloo' stands for an efficient ventilation system and a sustainable heating system in a well insulated low-energy house, school or office. You can read more about Green Igloo at

[www.greenigloo.nl](http://www.greenigloo.nl) Het office of Orcon and Thercon in Veenendaal is a perfect example of a modern and energy efficient office building, fully air-conditioned according to the Green Igloo label. Follow the energy consumption of our building closely with the Energy Monitor at [www.greenigloo.nl/energiemonitor](http://www.greenigloo.nl/energiemonitor).



## Corporate Social Responsibility

An exceptional indoor climate also means attention to the outdoor climate. We therefore feel responsible for people and the environment. For example, we use recyclable materials as much as possible in the development of our products and we employ people from sheltered employment in our production process.