



Healthy living



MAICO

VENTILATOREN



The WR product family
Ventilation units with heat recovery

The perfect room experience

The MAICO WR product family

The perfect ventilation units for domestic areas and privately owned homes



A breath of fresh air for your own four walls

Create the perfect room climate throughout your home with WR 300, WR 400 and WR 600. Whether in your apartment or your house, the ventilation units with heat recovery provide constant fresh air. Used air is reliably discharged to the outside.

Say goodbye to bad odours from furniture, textiles and plastic parts thanks to the ventilation system.

There is no chance of smells and moisture from the kitchen, bathroom and WC collecting in your home.

Your home becomes a model of good health.

Amazing savings thanks to the WR product family

The heat of the exhaust air is transferred to the fresh air via heat recovery. No energy is wasted and more than 90 % of the generated heat is simply reused!

Furthermore, the power consumption of DC fans is minimal, resulting in further savings.



Passivhaus
Institut
Dr. Wolfgang Feist
Rheinstraße 44/46
D-64283 Darmstadt

WR 300 / WR 400 and WR 600 are certified
as components suitable for passive houses



Advantages which make a product successful



Pollen-free room air
thanks to the standard F7 filter



Standard, easy-to-use
operating unit RLS 1



TÜV SÜD (German Technical Inspection
Agency) confirms excellent heat insulation

Numerous advantages

Clean air with all-year-round guarantee

Energy savings: heat exchanger ensures a high level of heat recovery

Healthy living: constant supply of fresh, filtered air

Building fabric protection: prevention of mould growth due to permanent ventilation

Extremely silent: the arrangement of the fans ensures the heat exchanger functions as a sound absorber

Optimum hygiene: inner housing and condensate pan can be quickly and easily cleaned

Extremely handy: optionally, connect several operating units to control the ventilation from various rooms



- | | | |
|----------------|----------------------------|----------------------|
| ● Supply air | 1 Heat recovery unit | 6 expansion tank |
| ● Exhaust air | 2 sound absorber | 7 brine duct |
| ● Outside air | 3 air distributor | 8 flexible ducts |
| ● Outgoing air | 4 external grille | 9 supply air valve |
| | 5 brine air heat exchanger | 10 exhaust air valve |

Installation of WR 400 unit combined with the flexible duct system MAICOFlex and the brine earth heat exchanger EW.

Pollen in the air that we breathe – no thank you!



As standard with G4 and F7 filters

Pollen cannot enter the room air thanks to the standard F7 filter in the WR product family. This ensures that allergy sufferers can breathe freely and rely on a healthy room climate.

G4 filters protect the fans against dust particles, thus guaranteeing perfect operation.



Standard easy-to-use operating unit RLS 1 – with 4 ventilation levels for increased efficiency

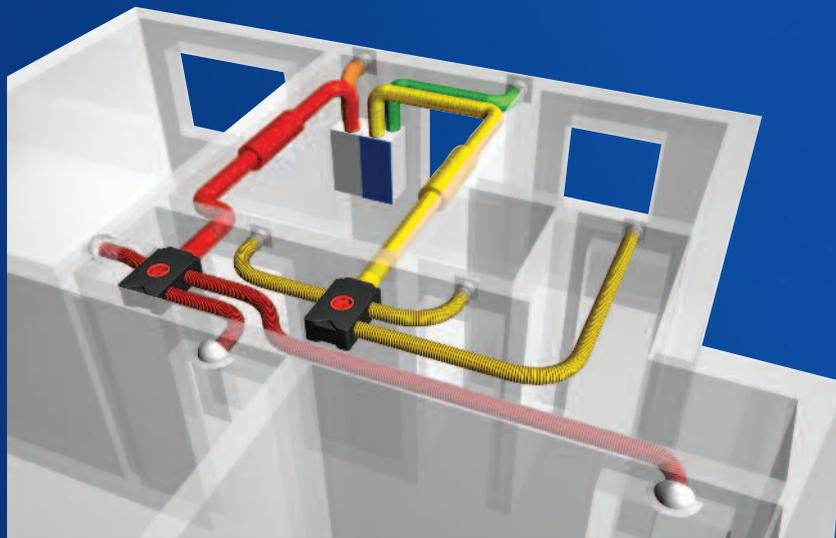
The WR 300, WR 400 and WR 600 units boast 4 settable ventilation levels:

- Intensive or party operation: highest ventilation level for greater efficiency
- Nominal ventilation: for every day use
- Reduced ventilation: for reduced night-time operation
- Interval/Holiday operation for moisture protection: minimum ventilation to prevent mould growth and to protect against very dry air during the winter months

Thanks to the 4 ventilation levels, the ventilation can be adjusted to various situations and according to individual demands. Wasting valuable energy is a thing of the past and your living area will always be supplied with sufficient fresh air!

Your complete ventilation system – from a single source

Whether new building or renovation project, simply combine – the WR units – with the flexible duct system MAICOFlex. It guarantees optimum air distribution and enables quick assembly thanks to the simple click system. Additionally, the WR units can be ideally complemented with a brine earth heat exchanger for new building projects. This allows you to conveniently preheat the outside air during the winter. In the summer on the other hand, the outside air is cooled before reaching the heat exchanger.



Perfect down to the last detail

- Connection for CO₂ sensor available: in this case, the ventilation system is controlled via the CO₂ content of the air
- Simple adjustment of the units via potentiometer
- Constant volumetric flow control
- Passive house certification
- Meets the specifications of DIN 4719
- Simple replacement of components for required service tasks
- High-performance cross-counter flow heat exchanger made of aluminium
- KNX/EIB bus-compatible

Schematic drawing WR 300 / WR 400

Connection socket

- 160 mm diameter
- Durable, with rubber lip-seal
- Up to four sound absorbers with 50 mm silencing pack can be installed

Inner housing

- Material: EPP
- Flexible and robust
- Easy to clean

Heat exchanger

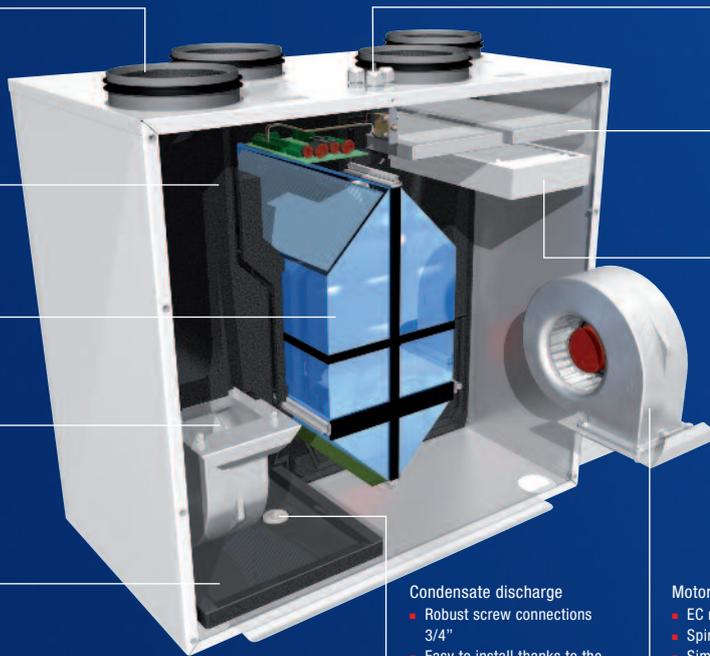
- High level of heat recovery
- Material: aluminium

Configuration of the fans

- In the outside and outgoing air
- Perfect with regard to hygiene due to the pressure ratio
- Reduced sound emission: heat exchanger also acts as an integrated sound absorber

Separate condensate pan

- Easy to clean
- Robust plastic



CO₂ sensor

- Direct connection possible

G4 filter

- 2 x G4 as standard
- Horizontal position: dirt remains in the filter
- Simple replacement

F7 filter

- Standard
- Suitable for allergy sufferers
- Protection against pollen in the room air

Condensate discharge

- Robust screw connections 3/4"
- Easy to install thanks to the integrated unit feet

Motors

- EC motors
- Spiral housing made of die-cast aluminium
- Simple replacement: extracting the motor and loosening the cables

High-performance technology

Innovative and efficient

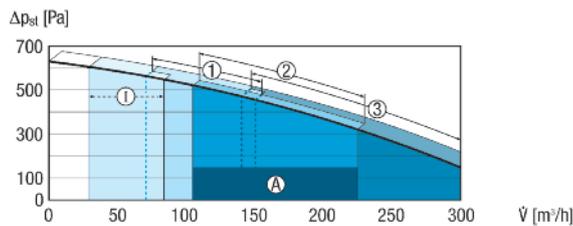
Technical data

*Reduced ventilation
Without condensate

Type	WR 300	WR 400	WR 600
Article number	0095.0078	0095.0079	0095.0080
Degree of heat provision*	> 90 %	> 90 %	> 90 %
Rated voltage	230 V	230 V	230 V
Power consumption at 50 Pa:			
80 m ³ /h / 160 m ³ /h / 250 m ³ /h / 600 m ³ /h	22 / 38 / 77 / - W	18 / 36 / 77 / - W	- / 37 / 54 / 247 W
Connection diameter	160 mm	160 mm	250 mm
Air volume	40 – 300 m ³ /h	40 – 400 m ³ /h	150 – 620 m ³ /h
Airstream temperature	50 °C	50 °C	50 °C
Filter class	G4 / F7	G4 / F7	G4 / F7
Weight	50 kg	50 kg	87 kg
Sound power level:			
L _{WA2} = housing sound pressure level	45 dB(A)	47 dB(A)	48 dB(A)
L _{WA5} = free inlet sound pressure level*	44 dB(A)	47 dB(A)	49 dB(A)
L _{WA6} = free outlet sound pressure level*	47 dB(A)	50 dB(A)	50 dB(A)

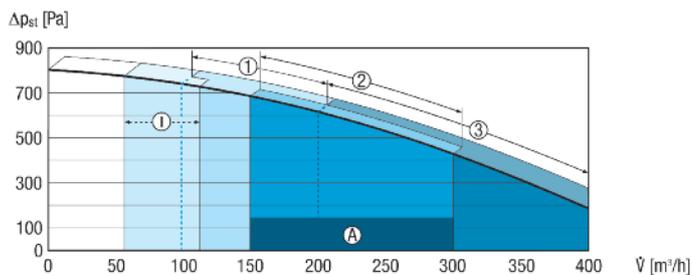
*L_{WA5}/L_{WA6} = sound power emitted to the free environment, measured at 50 Pa. Measurements at the connections facing the room (supply and exhaust air)

WR 300



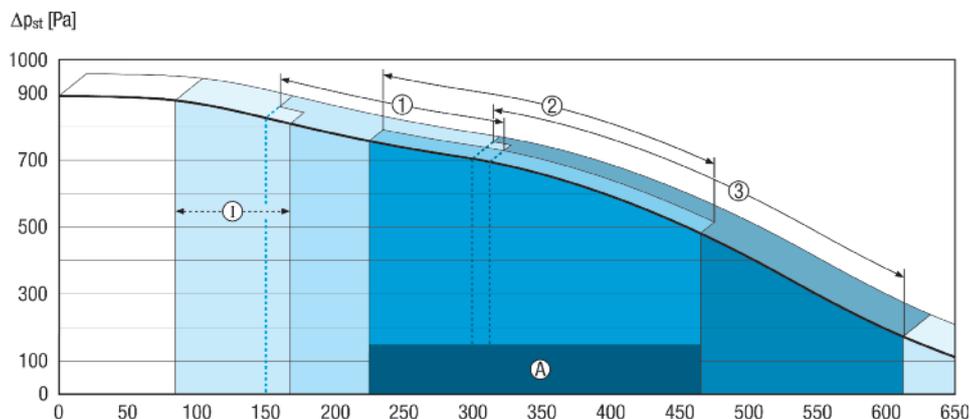
- Ⓐ Recommended range
- ① Interval/Holiday operation for moisture protection
- ① Reduced ventilation
- ② Nominal ventilation
- ② Intensive/Party operation

WR 400



- Ⓐ Recommended range
- ① Interval/Holiday operation for moisture protection
- ① Reduced ventilation
- ② Nominal ventilation
- ② Intensive/Party operation

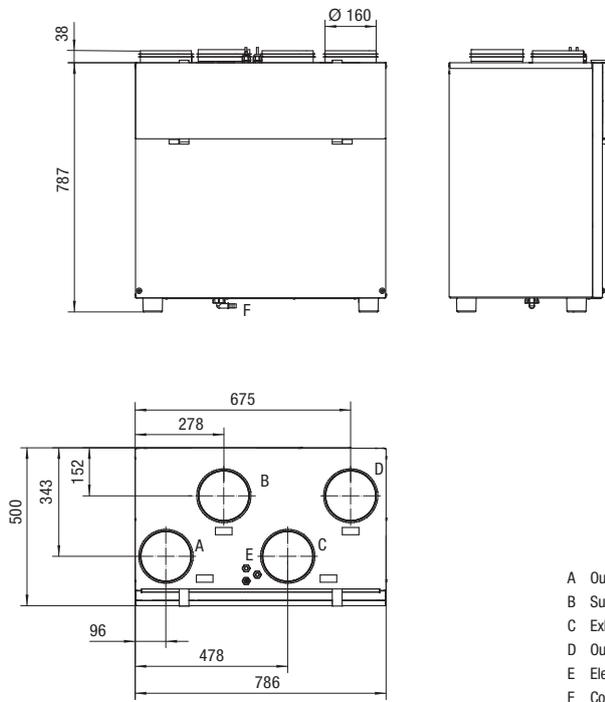
WR 600



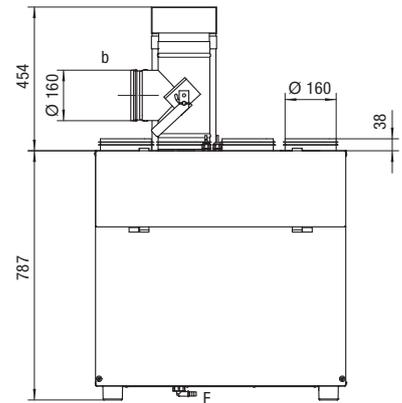
- Ⓐ Recommended range
- ① Interval/Holiday operation for moisture protection
- ① Reduced ventilation
- ② Nominal ventilation
- ② Intensive/Party operation

Sophisticated technology down to the last detail

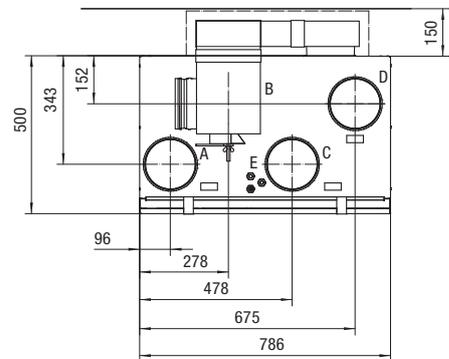
Dimensional drawing WR 300 / WR 400
without bypass



with bypass

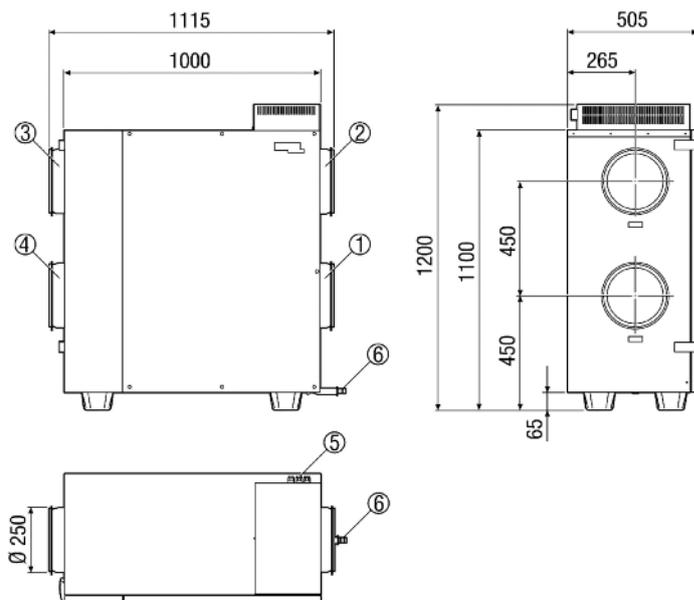


Space required for bypass
with insulation facing the wall



- A Outgoing air
- B Supply air
- C Exhaust air
- D Outside air
- E Electrical connection
- F Condensate connection

Dimensional drawing WR 600





MAICO

VENTILATOREN

Maico Elektroapparate-Fabrik GmbH
Steinbeisstrasse 20 · 78056 Villingen-Schwenningen · Germany
Phone +49 77 20 69 43 59 · sales@maico.de
www.maico-fans.com

