

# WR 600



## Short description

Centralised ventilation unit with very effective heat recovery through cross-counter-flow exchanger, EC motors with constant volumetric flow regulation, interval mode, 150 - 620 m<sup>3</sup>/h, 4 x DN 250, including RLS 1 WR control unit, DIBT and passive energy house approval, KNX connection possible

## Application examples

Low-energy house, Passive energy house, Doctor's practice, Waiting room, Living room

Article number 0095.0080

## Technical data

Number of ventilation levels	4
Air flow volume	150 m <sup>3</sup> /h - 620 m <sup>3</sup> /h
Volumetric flow constant	Yes
Speed controllable	–
SEC average	-30,9 kWh/(m <sup>2</sup> *a)
Energy efficiency class	B
Type of voltage	Alternating current
Rated voltage	230 V
Frequency	50 Hz/60 Hz
SPI value in accordance with DIN EN 13141-7 (A7)	0,31 Wh/m <sup>3</sup>
Power consumption	56 W - 303 W (At 100 Pa counter pressure)
I <sub>max</sub>	3 A
Degree of protection	IP 00
DIBT approval	Yes
PHI certification	No
Installation site	Cellar / Storage tank / Jamb wall / Utility room / Heating room / Loft
Installation position	horizontal
System type	Centralised
Housing material	Sheet steel, powder coated
Heat exchanger material	Aluminium
Inner coating material	Synthetic material
Colour	pearl light grey
Weight	89 kg
Weight including packaging	106,5 kg
Filter class	G4 / F7
Connection diameter	250 mm
Connection diameter of condensation drain	3/4" hose connection
Width	1.115 mm
Height	1.200 mm

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Depth	505 mm
Width with packaging	1.160 mm
Height with packaging	1.390 mm
Depth with packaging	590 mm
Airstream temperature at I <sub>Max</sub>	50 °C
Max. degree of heat provision in accordance with DIN EN 13141-7 (A7)	89 %
Heat exchanger construction type	Cross-counterflow
Bypass	No
Frost protection	External
Enthalpy heat exchanger	No
Antifreeze circuit	Yes
Summer circuit	Exhaust air with RLS D1 WR
Filter monitoring	with time control
Humidity control	optional with HY 5, HY 5 I, HY 10 AP, HY 10 UP
CO <sub>2</sub> regulation (optional)	SKD
Air quality control (optional)	EAQ 10/2
KNX connection (optional)	to be supplied by the customer
MODBUS interface	No
Control unit included in scope of delivery.	RLS 1 WR
Control unit (optional)	RLS D1 WR
Wireless switch on/off (optional)	XE 1, XS 1
EnOcean wireless integration (optional)	No
Mobile control	No
Housing emission sound pressure level	43 dB(A) / 46 dB(A) / 50 dB(A) (Spacing 1m, sound absorption 10 m <sup>2</sup> )
Approval number	Z-51.3-234
Packing unit	1 piece
Range	K
GTIN (EAN)	4012799950806

## Sound power level in octave range

	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	Total
<b>L<sub>WA2</sub>, Step 1 (dB(A))</b>	31	37	37	39	38	35	27	17	45
<b>L<sub>WA5</sub>, Step 1 (dB(A))</b>	37	40	39	39	38	32	21	12	46
<b>L<sub>WA6</sub>, Step 1 (dB(A))</b>	38	39	40	40	43	37	23	19	48
<b>L<sub>WA2</sub>, Level 2 (dB(A))</b>	33	41	40	42	41	37	31	19	48
<b>L<sub>WA5</sub>, Level 2 (dB(A))</b>	38	43	44	42	42	35	25	16	49

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	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	Total
<b>L<sub>WA6</sub>, Level 2 (dB(A))</b>	38	42	43	42	46	40	26	20	51
<b>L<sub>WA2</sub>, Level 3 (dB(A))</b>	34	44	44	46	45	41	35	24	52
<b>L<sub>WA5</sub>, Level 3 (dB(A))</b>	38	45	45	43	45	39	29	21	51
<b>L<sub>WA6</sub>, Level 3 (dB(A))</b>	40	46	47	46	51	45	30	22	55

L<sub>WA2</sub>= housing sound power level in dB.

L<sub>WA5</sub>= free inlet sound power level in dB.

L<sub>WA6</sub>= free outlet sound power level in dB.

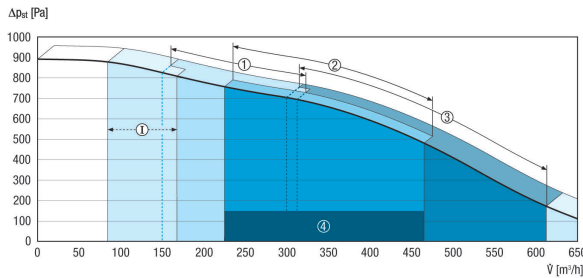
L<sub>WA5</sub>, L<sub>WA6</sub> = sound power level emitted to the free surroundings. Measured at a subsequent operating point on the connections facing the room. L<sub>WA5</sub> Exhaust air connections, L<sub>WA6</sub> Supply air connections.

Operating point, level 1: Air volume 230 m<sup>3</sup>/h and external pressure 100 Pa

Operating point, level 2: Air volume 345 m<sup>3</sup>/h and external pressure 100 Pa

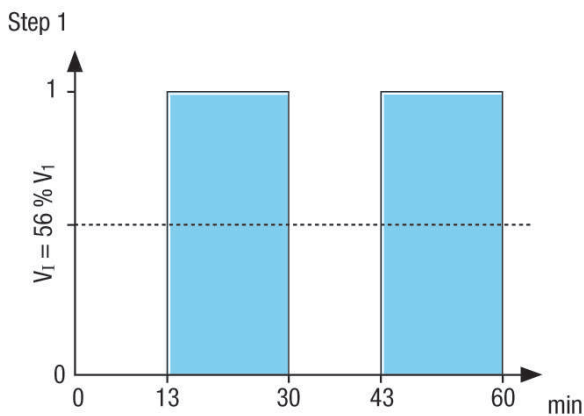
Operating point, level 3: Air volume 460 m<sup>3</sup>/h and external pressure 100 Pa

## Characteristic curve



- I - Interval operation
- ① Reduced ventilation
- ② Nominal ventilation
- ③ Intensive / Party operation
- ④ Recommended setting range

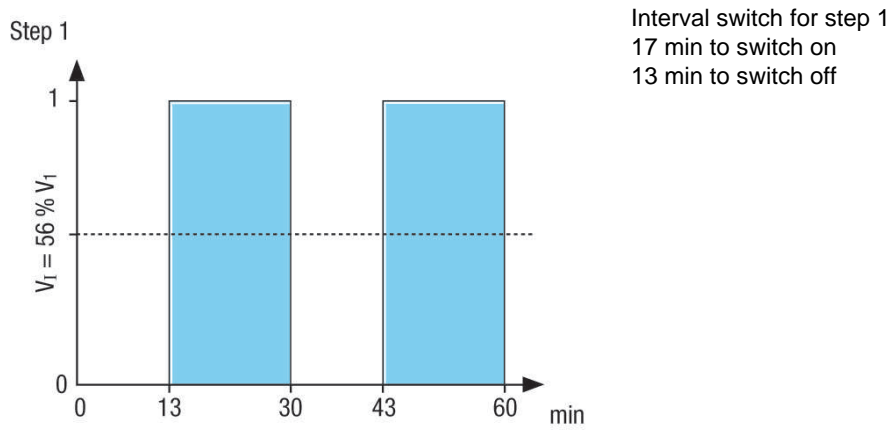
## Characteristic curve Ventilation for humidity protection



Interval switch for step 1  
 17 min to switch on  
 13 min to switch off

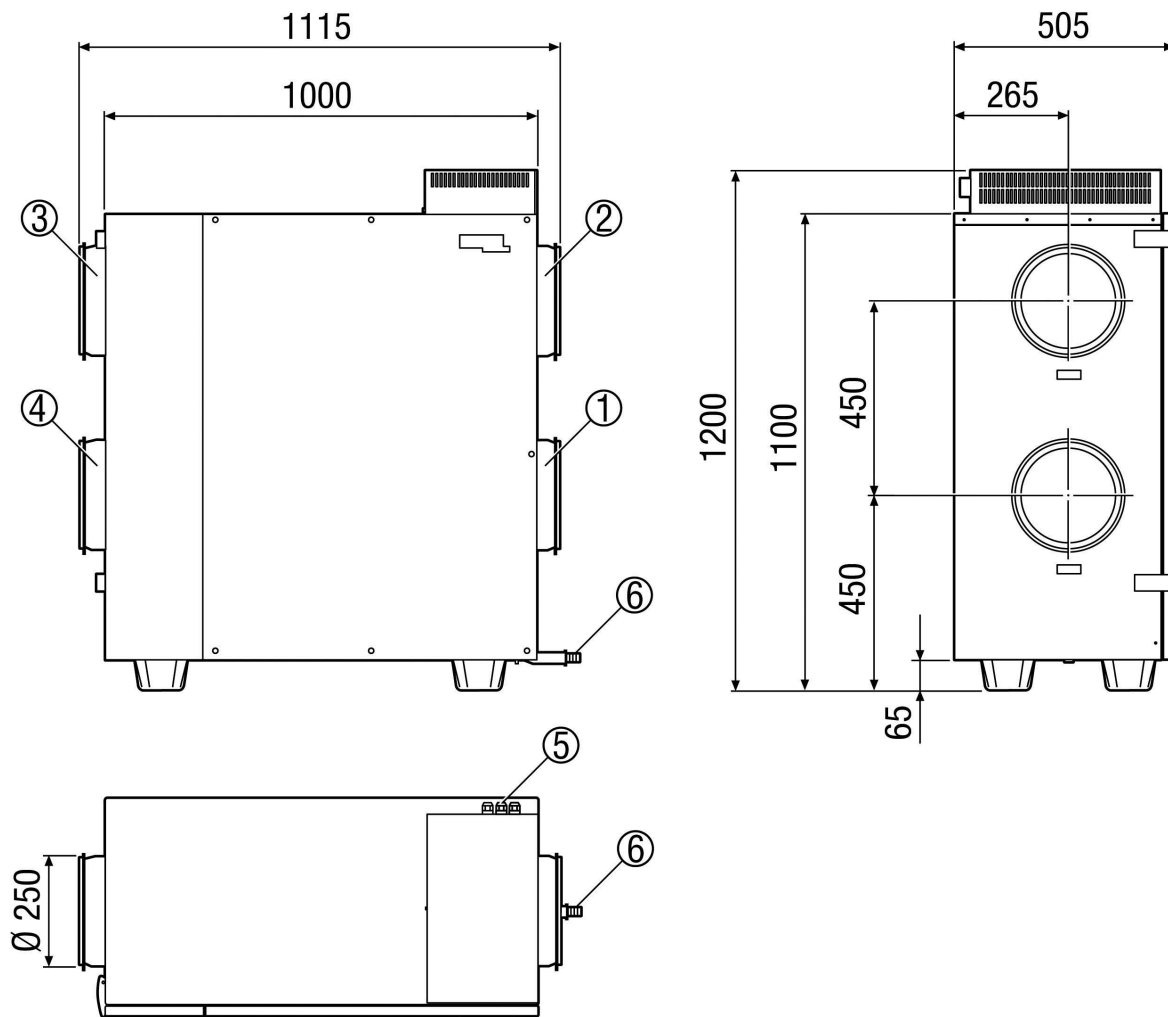
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## Characteristic curve Ventilation for humidity protection



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Dimensioned drawing [mm]



- ① DN 250 outgoing air
- ② DN 250 supply air
- ③ DN 250 exhaust air
- ④ DN 250 outside air
- ⑤ Electrical connection
- ⑥ Condensation drain (3/4" hose connection)