

# WS 300 Flat BL



## Short description

Centralised, highly-efficient ventilation units with EC fans, constant volumetric flow regulation, including bypass and two enthalpy cross-counterflow exchangers, supply and exhaust air on left (in ceiling installation position, view of electronic compartment), volumetric flow 80 - 300 m³/h, connection diameter 4 x DN 160, 4 x SVR 160 plug connectors or 90° B90-160 elbow needed to connect folded spiral-seams ducts (order as accessories), including RLS 1 WR control unit, including integrated web server and MAICO app (air@home) for mobile unit control, live reports via web tool, DIBT approval, KNX/Modbus and EnOcean connection possible

Article number 0095.0143

## Application examples

Low-energy house, Living room

## Technical data

Model	Bypass model, left
Air flow volume	80 m³/h - 300 m³/h
SEC average	-39,47 kWh/(m²·a)
Energy efficiency class	A
Type of voltage	Alternating current
Rated voltage	230 V
Frequency	50 Hz/60 Hz
SPI value in accordance with DIN EN 13141-7 (A7)	0,18 Wh/m³
Power consumption in accordance with DIN EN 13141-7 (A7)	39 W
Stand-by power consumption	< 1 W
I <sub>max</sub>	1,5 A
Degree of protection	IP 00
DIBT approval	yes
PHI certification	No
Installation site	Wall / ceiling
System type	Centralised
Housing material	Plastic EPP/sheet steel
Heat exchanger material	Synthetic material
Inner coating material	Plastic EPP
Colour	black / traffic white
Weight	42 kg
Weight including packaging	46,63 kg
Filter class	ISO Coarse 80 % (G4) / ISO ePM1 60 % (F7)
Connection diameter	160 mm
Width	700 mm
Height	300 mm
Depth	1.500 mm
Width with packaging	750 mm
Height with packaging	305 mm

# WS 300 Flat BL

Depth with packaging	1.530 mm
Airstream temperature at $I_{Max}$	-20 °C up to 50 °C
Max. degree of heat provision in accordance with DIN EN 13141-7 (A7)	91 %
Heat exchanger construction type	Enthalpy cross-counterflow
Humidity recovery with enthalpy heat exchanger in accordance with DIN EN 13141-7 (A2)	82 %
Position – exhaust air	left
Bypass	yes
Frost protection	No
Enthalpy heat exchanger	yes
Antifreeze circuit	yes
Summer circuit	ECO exhaust air / ECO supply air
Filter monitoring	time-controlled (controlled by differential pressure as option)
Humidity control	integrated
CO <sub>2</sub> regulation	SKD
Air quality control (optional)	EAQ 10/3
KNX connection (optional)	K-SM
MODBUS interface	integrated
Control unit included in scope of delivery.	RLS 1 WR, App
Control unit (optional)	RLS T2 WS, RLS G1 WS
EnOcean wireless integration (optional)	E-SM
Mobile control	yes
Housing emission sound pressure level	37 dB(A) (Spacing 1m, sound absorption 10 m <sup>2</sup> )
Packing unit	1 piece
Range	K
GTIN (EAN)	4012799951438

## 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> (dB(A))</b>	–	33	41	41	41	35	26	14	46,5
<b>L<sub>WA5</sub> (dB(A))</b>	44	41	41	35	35	21	16	–	47,5
<b>L<sub>WA6</sub> (dB(A))</b>	47	50	51	53	54	50	47	38	59,4

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

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

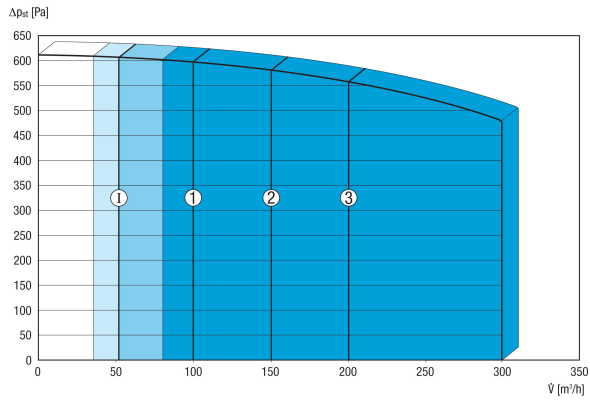
L<sub>WA6</sub>= free outlet sound power level in dB.

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: Reference volumetric flow 210 m<sup>3</sup>/h and external pressure 50 Pa

# WS 300 Flat BL

## Characteristic curve



The figures shown indicate the pre-set ventilation levels ("factory settings").

1 = 100 m³/h, reduced ventilation (RV)

2 = 150 m³/h, nominal ventilation (NV)

3 = 200 m³/h, intensive ventilation (IV)

I = Interval or "humidity protection operation" depending on RV

Individual settings available:

RV = 80 m³/h - 300 m³/h

NV = 80 m³/h - 300 m³/h

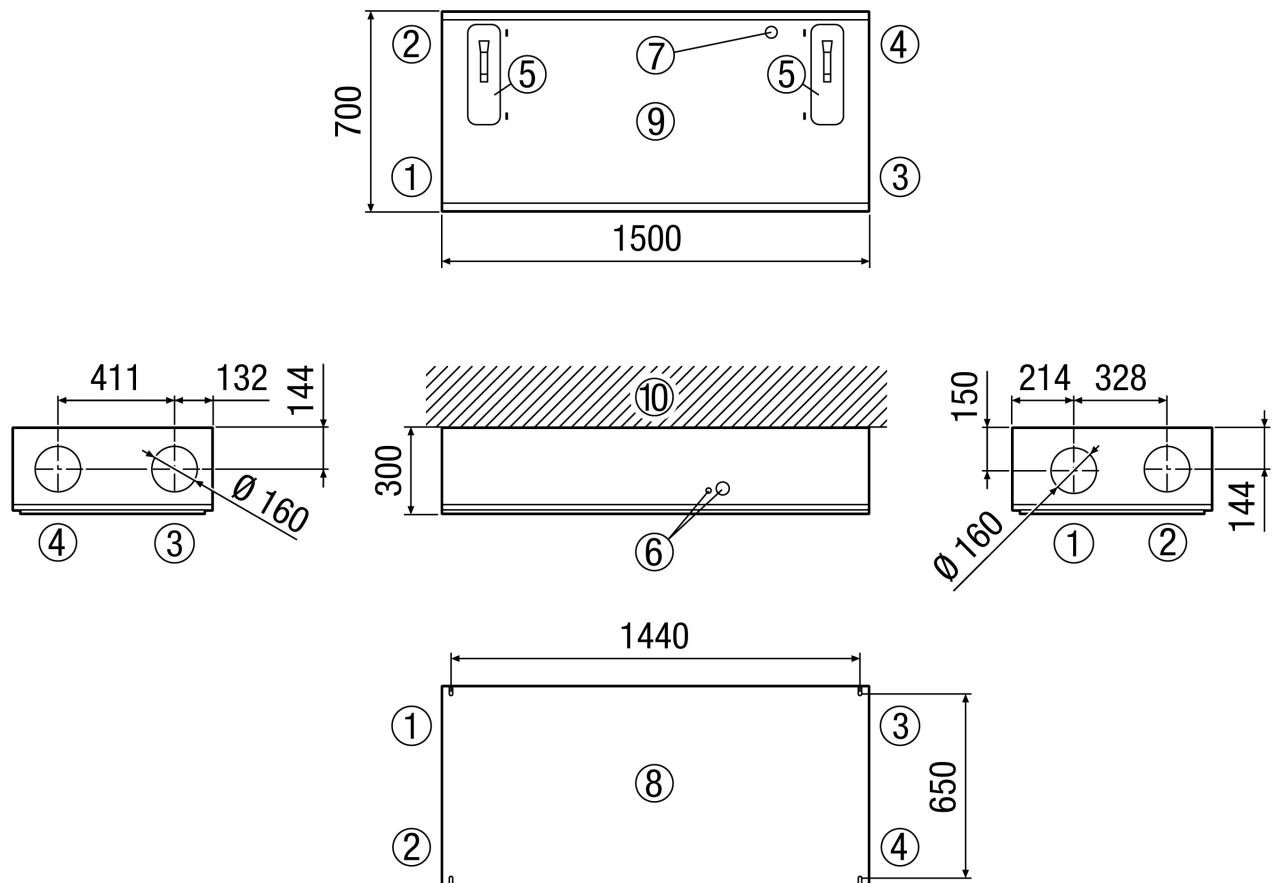
IV = 80 m³/h - 300 m³/h

Essential condition:  $RV < NV < IV$  !

# WS 300 Flat BL

Dimensioned drawing [mm]

Linksversion



- ① Supply air
- ② Exhaust air
- ③ Outgoing air
- ④ Outside air
- ⑤ Filter cover
- ⑥ Electric connections
- ⑦ USB connection
- ⑧ View from above
- ⑨ View from below
- ⑩ Ceiling / wall