PRODUCTDATA SHEET

WR 310

Short description

Centralised, highly-efficient ventilation units with EC fans, constant volumetric flow regulation and cross-counterflow heat exchanger, supply and exhaust air on left, air volume 80 - 320 m³/h, connection diameter 4 x DN 160, 4 SVR 160 plug connectors needed to connect folded spiral-seams ducts, including RLS 1 WR control panel, including integrated web server and MAICO APP for mobile unit control, web tool, DIBT approval, passive house certificate, KNX, Modbus, Loxone and EnOcean connection possible

Application examples

Low-energy house, Living room

Article number	0095.0220

Technical data

Air flow volume	80 m³/h - 320 m³/h
SEC average	-42,5 kWh/(m²*a)
Energy efficiency class	A+
Type of voltage	Alternating current
Rated voltage	230 V
Frequency	50 Hz/60 Hz
Power consumption in accordance with DIN EN 13141-7 (A7)	37 W
Stand-by power consumption	< 1 W
I_{max}	1,5 A
Degree of protection	IP 40
DIBT approval	yes
PHI certification	yes
SPI value	0,18 Wh/m³
Installation site	floor / wall
System type	Centralised
Housing material	Galvanised sheet steel, powder coated
Heat exchanger material	Synthetic material
Inner coating material	Plastic EPP
Colour	Traffic white (RAL 9016)
Weight	67 kg
Weight including packaging	77 kg
Filter class	ISO Coarse 85 % (G4) / ISO ePM1 80 % (F7)
Connection diameter	160 mm
Connection diameter of condensation drain	1 1/2" (screen valve)
Width	841 mm
Height	857 mm
Depth	598 mm
Width with packaging	900 mm
Height with packaging	1.120 mm

WR 310

Depth with packaging	650 mm
Airstream temperature at I_{Max}	-20 °C up to 40 °C
Max. degree of heat provision in accordance with DIN EN 13141-7 (A7)	96 %
Heat exchanger construction type	Cross-counterflow
Position – exhaust air	left
Bypass	No
Frost protection	No
Enthalpy heat exchanger	No
Antifreeze circuit	yes
Summer circuit	ECO exhaust air / ECO supply air
Filter monitoring	with time control
Humidity control	integrated
CO_2 regulation (optional)	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	36 dB(A) (Spacing 1m, sound absorption 10 m²)
Packing unit	1 piece
Range	K
GTIN (EAN)	4012799952206

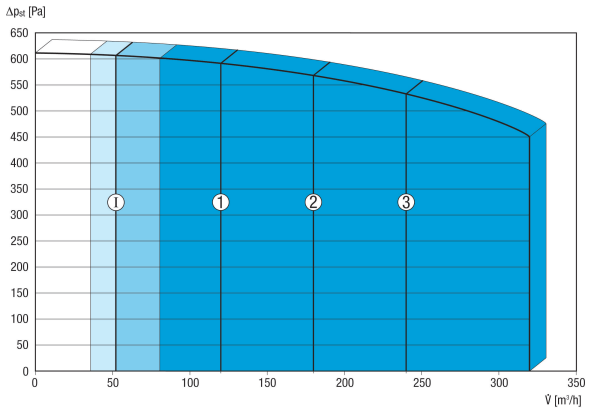
Sound power level in octave range

	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	Total
L_{WA2} (dB(A))	19	29	39	40	38	30	20	20	44
L_{WA5} (dB(A))	35	35	34	33	37	28	15	15	42
L_{WA6} (dB(A))	40	44	46	45	46	29	19	16	52

L_{WA2}= housing sound power level in dB.
L_{WA5}= free inlet sound power level in dB.
L_{WA6}= free outlet sound power level in dB.
L_{WA5}, L_{WA6} = sound power level emitted to the free surroundings. Measured at a subsequent operating point on the connections facing the room. L_{WA5} Exhaust air connections, L_{WA6} Supply air connections.
Operating point: Reference volumetric flow 210 m³/h and external pressure 50 Pa

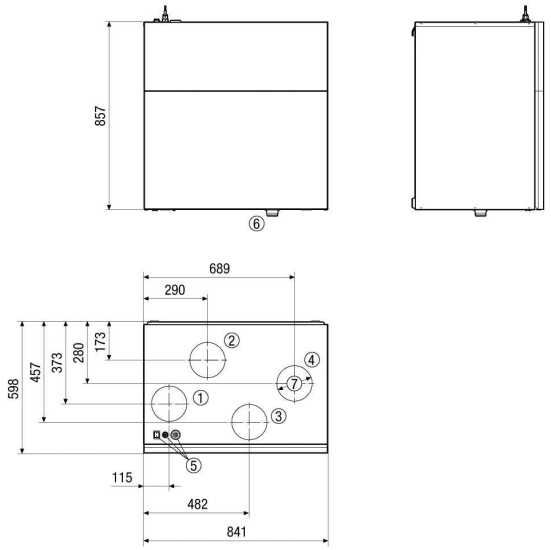
WR 310

Characteristic curve



The figures shown indicate the preset ventilation levels ("factory settings").
1 = 120 m³/h, reduced ventilation (RV)
2 = 180 m³/h, nominal ventilation (NV)
3 = 240 m³/h, intensive ventilation (IV)
I = Interval or "humidity protection operation" depending on RV
Individual settings available:
RV = 80 m³/h - 320 m³/h
NV = 80 m³/h - 320 m³/h
IV = 80 m³/h - 320 m³/h
Essential condition: RV < NV < IV !

Dimensioned drawing [mm]



① DN 160 supply air
② DN 160 exhaust air
③ DN 160 outside air
④ DN 160 outgoing air
⑤ Unit switches / electric connections
⑥ Condensation drain
⑦ for DN 160 plug connector