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Article number

0095.0234

Short description

Centralised, highly-efficient ventilation units with EC fans and constant volumetric flow regulation, including preheating register and enthalpy cross-counterflow exchanger, supply and exhaust air on left, air volume 80 - 470 m³/h, connection diameter 4 x DN 160, 4 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 MAI-CO app (air@home) for mobile unit control, live reports via web tool, DIBT approval and passive house certificate, KNX and EnOcean connection possible

Application examples

Low-energy house, Living room

Technical data

Air flow volume	80 m³/h - 470 m³/h				
SEC average	-36,3 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)	85 W				
Stand-by power consumption	< 1 W				
I _{max}	11,5 A				
Degree of protection	IP 40				
DIBT approval	yes				
PHI certification	yes				
SPI value	0,28 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	73 kg				
Weight including packaging	79 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				

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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	93 %			
(A7)				
Heat exchanger construction type	Enthalpy cross-counterflow			
Humidity recovery with enthalpy heat exchanger in accordance with	60 %			
DIN EN 13141-7 (A2)				
Power of preheating register	1,8 kW			
Position – exhaust air	left			
Bypass	No			
Frost protection	integrated			
Enthalpy heat exchanger	yes			
Antifreeze circuit	yes			
Summer circuit	ECO exhaust air / ECO supply air			
Filter monitoring	with time control			
Humidity control	integrated			
CO ₂ 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	42 dB(A) (Spacing 1m, sound absorption 10 m ²)			
Packing unit	1 piece			
Range	К			
GTIN (EAN)	4012799952343			

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))	30	38	43	46	46	38	27	20	50
L _{WA5} (dB(A))	43	44	41	41	45	37	28	14	50
L _{WA6} (dB(A))	50	55	56	55	55	41	36	35	62

 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.

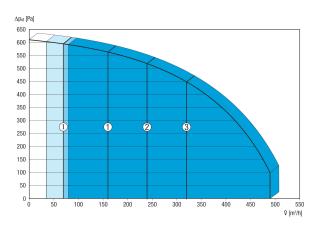
 L_{WA5} , L_{WA6} = sound power level emitted to the free surroundings. Measured at a subsequent operating point on the connections facing the room. L_{WA5} Exhaust air connections, L_{WA6} Supply air connections.

Operating point: Reference volumetric flow 340 m³/h and external pressure 50 Pa

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Characteristic curve





The figures shown indicate the preset ventilation levels ("factory settings").

 $1 = 160 \text{ m}^3/\text{h}$, reduced ventilation (RV)

 $2 = 240 \text{ m}^3/\text{h}$, nominal ventilation (NV)

 $3 = 320 \text{ m}^3/\text{h}$, intensive ventilation (IV)

I = Interval or "humidity protection operation" depending

on RV

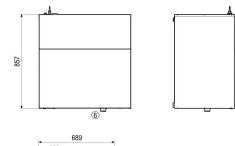
Individual settings available:

 $RV = 80 \text{ m}^3/\text{h} - 470 \text{ m}^3/\text{h}$

 $NV = 80 \text{ m}^3/\text{h} - 470 \text{ m}^3/\text{h}$ $IV = 80 \text{ m}^3/\text{h} - 470 \text{ m}^3/\text{h}$

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
- [®] Condensation drain
- ⑦ for DN 160 plug connector

