WS 120 Trio QRV





Short description

Compact and quiet centralised ventilation unit with crosswise flow, exhaust air to the right, with effective heat and humidity recovery, EC fans with constant volumetric flow regulation, connection of a channel system, 40-120 m³/h, frost protection from integrated preheating register

Application examples

Apartments, Terraced houses, Doctor's practice, Hotels, Retirement home

Article number 0095.0662

Technical data

Model	Crosswise flow, exhaust air to the right, integrated preheating regis-			
	ter			
Air flow volume	40 m³/h - 120 m³/h			
Rotating speed	2.200 1/min			
SEC average	-38,03 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)	0,27 Wh/m³			
Power consumption in accordance with DIN EN 13141-7 (A7)	20 W			
Stand-by power consumption	< 1 W			
I _{max}	5 A			
Degree of protection	IP 00			
DIBT approval	Applied for			
Installation site	Wall / ceiling			
System type	Centralised			
Material	EPP plastic / galvanised sheet steel			
Housing material	Plastic EPP			
Heat exchanger material	Synthetic material			
Colour	black / traffic white (RAL 9016)			
Weight	25 kg			
Weight including packaging	28 kg			
Filter class	ISO ePM10 ≥ 50 % (M5) / ISO ePM1 ≥ 60 % (F7)			
Width	600 mm			
Height	210 mm			
Depth	1.000 mm			
Width with packaging	720 mm			
Height with packaging	300 mm			



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Depth with packaging	1.120 mm			
Airstream temperature at I _{Max}	-20 °C up to 50 °C			
Max. degree of heat provision in accordance with DIN EN 13141-7	84 %			
(A7)				
Heat exchanger construction type	Enthalpy cross-counterflow			
Humidity recovery with enthalpy heat exchanger in accordance with	69 %			
DIN EN 13141-7 (A2)				
Position – exhaust air	right			
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	Trio CO2 E, Trio CO2 I			
Air quality control (optional)	Trio VOC E, Trio VOC I			
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	30 dB (Spacing 1m, sound absorption 10 m²)			
Packing unit	1 piece			
Range	К			
GTIN (EAN)	4012799956624			

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))	11	24	23	26	32	24	13	11	38
L _{WA5} (dB(A))	11	23	29	27	29	21	12	9	42
L _{WA6} (dB(A))	9	22	32	21	32	27	11	9	40

 L_{WA2} = housing sound power level in dB.

 L_{WA5} = free inlet sound power level in dB.

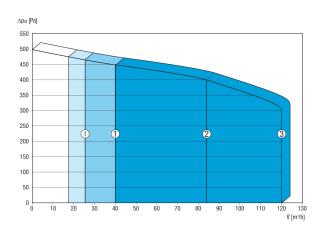
 L_{WA6} = free outlet sound power level in dB.

Operating point: Air volume 84 m³/h and external pressure 50 Pa

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Characteristic curve



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

- 1 = 40 m³/h, reduced ventilation (RV)
- 2 = 84 m³/h, nominal ventilation (NV)
- 3 = 120 m³/h, intensive ventilation (IV)
- $I = Interval \ or \ "humidity \ protection" \ operation" \ depending on \ RV$

Individual settings available:

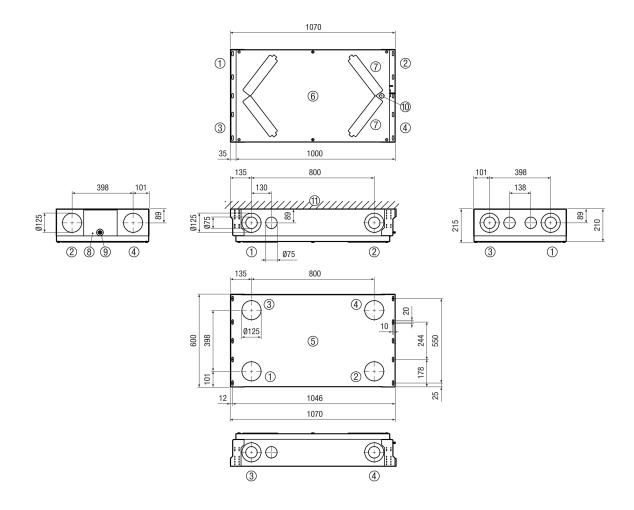
 $RV = 40 \text{ m}^3/\text{h} - 120 \text{ m}^3/\text{h}$

 $NV = 40 \text{ m}^3/\text{h} - 120 \text{ m}^3/\text{h}$

 $IV = 40 \text{ m}^3/\text{h} - 120 \text{ m}^3/\text{h}$

Essential condition: RV < NV < IV!

Dimensioned drawing [mm]



- ① Supply air
- ② Exhaust air
- ③ Outgoing air
- Outside air
- ⑤ View from above

PRODUCTDATA SHEET

WS 120 Trio QRV

MAICO

- 6 View from below
- ⑦ Filter covers
- ® Mains connection
- 10 USB
- 1 Ceiling / wall