PRODUCTDATA SHEET

WR 400

Short description

Centralised ventilation unit with very effective heat recovery through cross-counter-flow exchanger, EC motors with constant volumetric flow regulation, interval mode, 80 - 400 m³/h, 4 x DN 160, including RLS 1 WR control unit, DIBT and passive energy house approval, KNX connection possible

Application examples

Office, Waiting room, Single-family house, Passive energy house

Article number	0095.0079

Technical data

Number of ventilation levels	4
Air flow volume	100 m³/h - 400 m³/h
Volumetric flow constant	yes
Speed controllable	–
Type of voltage	Alternating current
Rated voltage	230 V
Frequency	50 Hz/60 Hz
Power consumption	37 W - 236 W (At 100 Pa counter pressure)
I_{max}	2,5 A
Degree of protection	IP 00
DIBT approval	yes
PHI certification	yes
Installation site	Cellar / Storage tank / Jamb wall / Utility room / Heating room
System type	Centralised
Housing material	Sheet steel, powder coated
Heat exchanger material	Aluminium
Inner coating material	Synthetic material
Colour	pearl light grey
Weight	46,5 kg
Weight including packaging	54,465 kg
Filter class	G4 / F7
Connection diameter	160 mm
Connection diameter of condensation drain	3/4" hose connection
Width	786 mm
Height	825 mm
Depth	500 mm
Width with packaging	810 mm
Height with packaging	960 mm
Depth with packaging	520 mm

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Degree of heat provision	90 %
Heat exchanger construction type	Cross-counterflow
Bypass	External
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_2 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	44 dB(A) / 45 dB(A) / 49 dB(A) (Spacing 1m, sound absorption 10 m²)
Approval number	Z-51.3-218
Packing unit	1 piece
Range	K
GTIN (EAN)	4012799950790

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}, Step 1 (dB(A))	26	36	38	39	41	36	26	11	46
L_{WA5}, Step 1 (dB(A))	28	38	34	37	42	36	28	14	46
L_{WA6}, Step 1 (dB(A))	26	39	34	43	44	38	29	14	48
L_{WA2}, Level 2 (dB(A))	25	37	39	40	43	39	28	14	47
L_{WA5}, Level 2 (dB(A))	27	39	35	38	43	38	29	16	47
L_{WA6}, Level 2 (dB(A))	26	41	35	45	45	40	32	17	50
L_{WA2}, Level 3 (dB(A))	28	40	42	44	46	44	33	21	51
L_{WA5}, Level 3 (dB(A))	31	41	40	42	47	43	35	22	50

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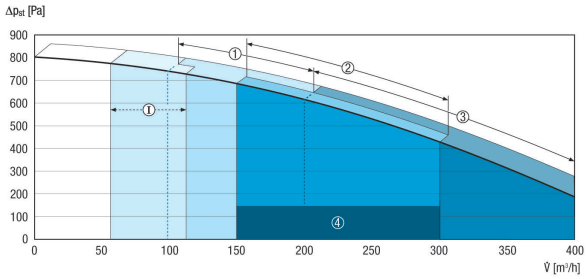
	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	Total
L_{WA6}, Level 3 (dB(A))	29	42	38	47	48	45	36	21	53

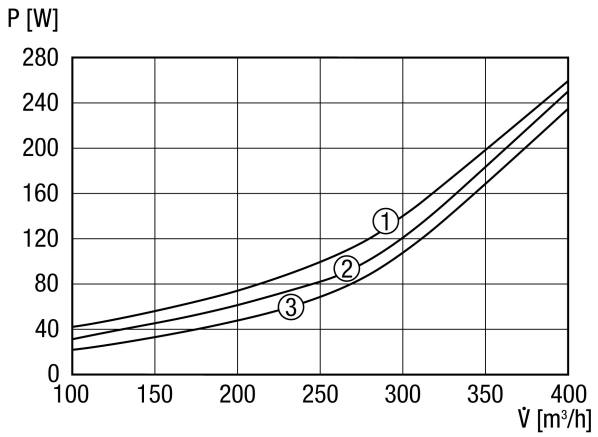
L_{WA2}= housing sound power level in dB.
L_{WA5}= free inlet sound power level in dB.
L_{WA6}= free outlet sound power level in dB.
L_{WA5}, L_{WA6} = sound power level emitted to the free surroundings. Measured at a subsequent operating point on the connections facing the room. L_{WA5} Exhaust air connections, L_{WA6} Supply air connections.
Operating point, level 1: Air volume 150 m³/h and external pressure 100 Pa
Operating point, level 2: Air volume 200 m³/h and external pressure 100 Pa
Operating point, level 3: Air volume 300 m³/h and external pressure 100 Pa

Characteristic curve WR 400



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

Characteristic curve for power - air volumes



① At 150 Pa counter pressure
② At 100 Pa counter pressure
③ At 50 Pa counter pressure

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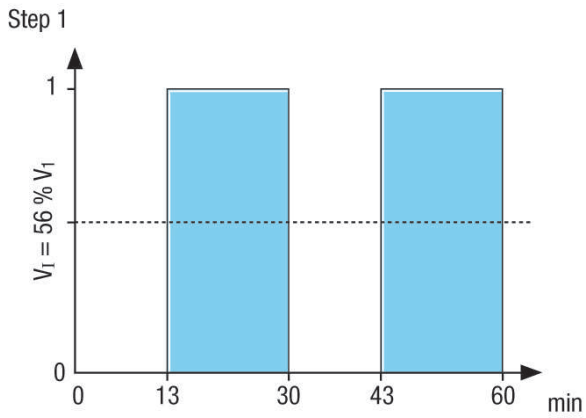
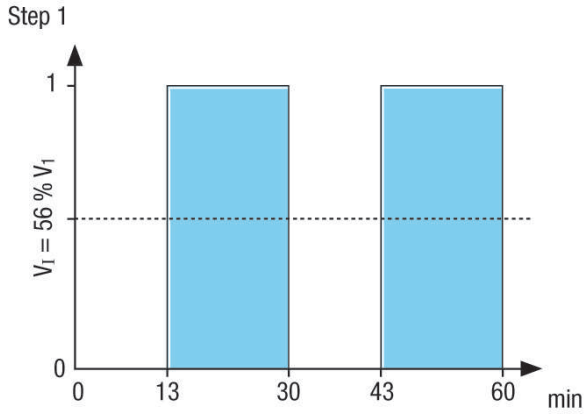
Characteristic curve Ventilation for humidity protection



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

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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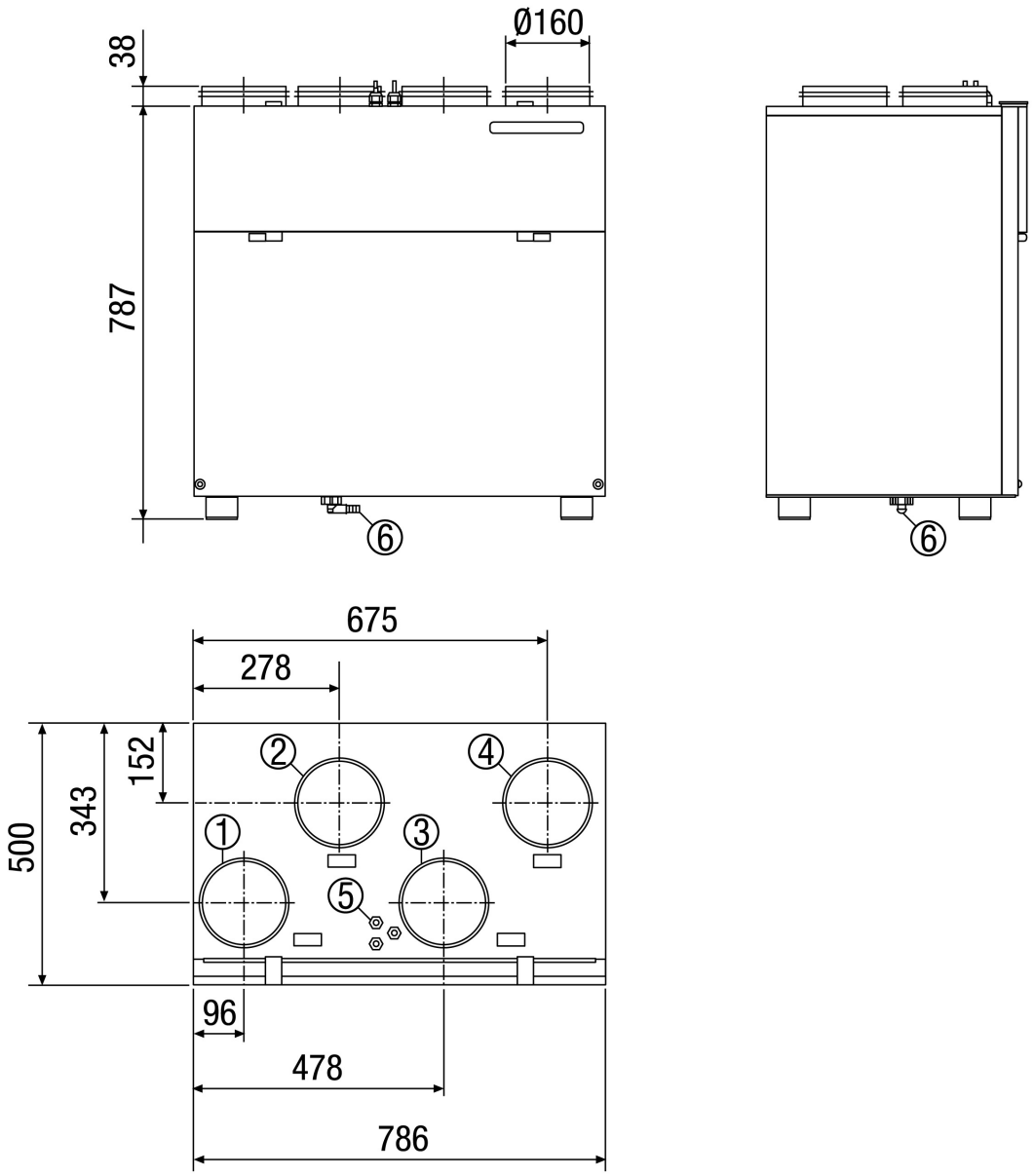
Dimensioned drawing [mm]



① DN 160 outgoing air
② DN 160 supply air
③ DN 160 exhaust air
④ DN 160 outside air
⑤ Electrical connection
⑥ Condensation connection