

WS 320 KBR



Short description

Centralised, highly-efficient ventilation units with EC fans, constant volumetric flow regulation, including preheating register, bypass and cross-counterflow heat exchanger, supply and exhaust air on right, 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, KNX, Modbus, Loxone and EnOcean connection possible

Application examples

Low-energy house, Living room

Article number 0095.0264

Technical data

| | |
|----------------------------------------------------------|----------------------------------------------|
| Air flow volume | 80 m ³ /h - 320 m ³ /h |
| SEC average | -42,5 kWh/(m ² *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} | 11 A |
| Degree of protection | IP 40 |
| DIBT approval | yes |
| PHI certification | yes |
| SPI value | 0,18 Wh/m ³ |
| 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 | 79,19 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 |

WS 320 KBR

| | |
|----------------------------------------------------------------------|------------------------------------------------------------|
| 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 |
| Power of preheating register | 1,8 kW |
| Position – exhaust air | right |
| Bypass | yes |
| Frost protection | integrated |
| 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 m ²) |
| Packing unit | 1 piece |
| Range | K |
| GTIN (EAN) | 4012799952640 |

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

WS 320 KBR

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

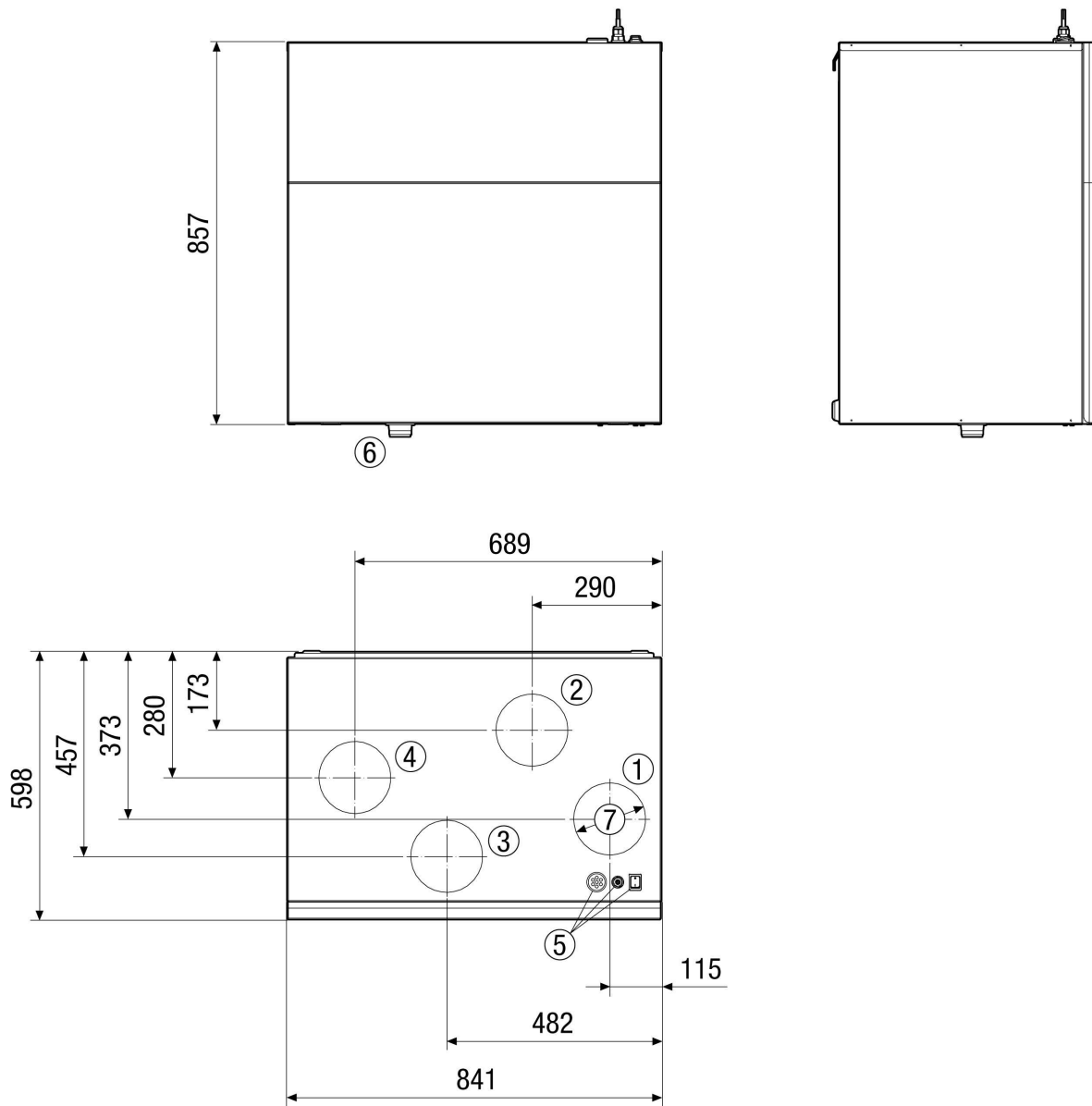
NV = 80 m³/h - 320 m³/h

IV = 80 m³/h - 320 m³/h

Essential condition: RV < NV < IV !

WS 320 KBR

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