

Operating manual for extract air unit EBEL:VENT-EN9-A

Accessories for the Priocab EN91 and EN92 model range



EP.A.11286EN
Last updated: June 23

1. Information on safe use

The exhaust air unit type **EBEL-VENT-EN9-A** is used for the extraction of hazardous substances from hazardous / safety cabinets, chemical cabinets and acid and alkali cabinets (aggressive and/or explosive media with a dust content < 5g/m³). The permissible ambient temperature is from +10°C to +40°C. The unit vents the cabinet taking into account the prescribed air exchange and indicates the function via two lights: RED - malfunction / green - operation. In addition, the unit has potential-free outputs for these signals. The unit is only suitable for extraction from cabinets of model series **EN91 / EN92**, defined by EN 14470-1 and DIN 12925 Part 2.




PERSONAL INJURY AND MATERIAL DAMAGE

Improper use can cause impeller fractures, fatigue fractures and fires due to sparking, resulting in personal injury and material damage.

2. Indications of particular hazards

According to 2014/34/EU (ATEX), the unit complies with equipment group II, equipment category 3 and temperature class T4 and is intended exclusively for extraction from zone 2 or from a non-ex zone and installation in a non-ex area.

Labelling: **CE**  **II 3/-G Ex ec IIC T4 Gc**



Any other use or use beyond this is considered improper. The manufacturer / supplier is not liable for any resulting damage, the risk is borne solely by the user.

When used as intended, with the original accessories and in compliance with the installation and assembly instructions, as well as the instructions for safe commissioning, this unit poses no particular hazard to people or the environment.

3. Safe installation, commissioning, adjustment, assembly/disassembly, maintenance

The unit is delivered ready for operation and installation. Excluded are the control line and exhaust air duct, which are not included in delivery, as they must be adapted to the local conditions. Before connecting to the mains, the electrical connection data (voltage, frequency) and the system resistance must be checked and compared with the data of the unit.



The unit may only be installed, operated and maintained by trained, instructed and authorised persons.

- **Installation and commissioning:** The unit is plugged onto the cabinet with the supplied connector. The signal output and the exhaust air duct are connected. It must be ensured that the ingress of foreign bodies into the exhaust air monitoring system via the exhaust air duct is excluded. The


unit is connected to the mains by means of a mains plug and goes into operation immediately. The green light indicates normal operation.

- **Function check:** A function check should be carried out before connecting the exhaust air duct or if required - see chapter Malfunction. To do this, the unit is plugged in and connected to the mains. The unit goes into operation immediately after connection. Afterwards, the green lamp lights up permanently. The unit should malfunction by briefly covering the exhaust air socket - throttling the volume flow. Repeat this process several times. To be able to test the monitoring function even when the unit is installed, the test switch on the back of the unit is pressed.
- **Setting:** The extract air monitoring is set to the required volume flow at the factory and therefore requires no further settings.
- **Assembly/disassembly:** Repair work is carried out exclusively by qualified personnel.
- **Maintenance:** The unit is maintenance-free.

4. Malfunction / Troubleshooting

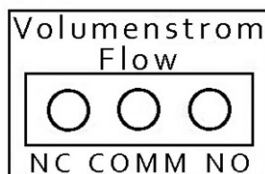
Malfunction	Cause	Troubleshooting
No function	Lack of voltage Unit faulty	Check mains Send in unit
Red light permanently on, or flashing, function check OK	System resistance too high	Change duct routing, reduce air velocity in the duct (increase cross-section)
Red light permanently on, function check not OK	Ventilator jammed, control circuit faulty	Send in unit

5. Properties:

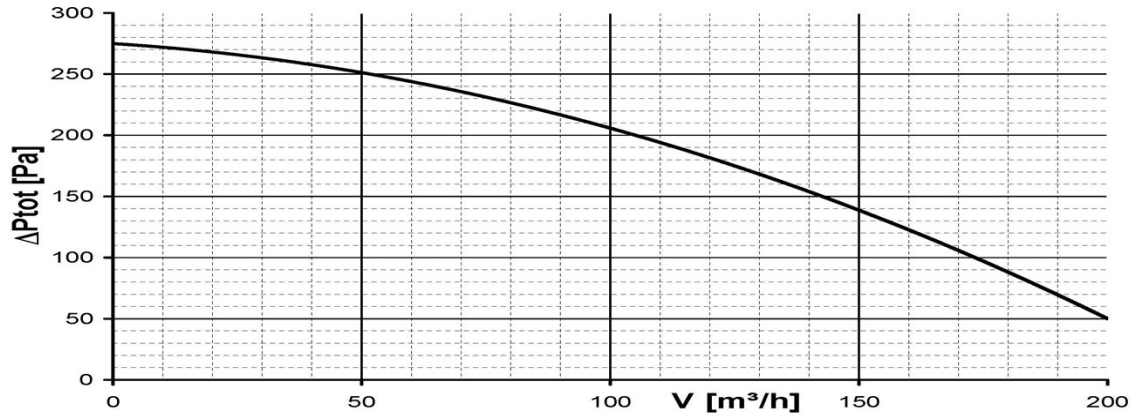
Type	:	EBEL-VENT-EN9-A
Ventilator	:	RCRv75/2m
Ventilator enclosure material:	:	Acid- and alkali-resistant plastic
Impeller material	:	Acid- and alkali-resistant plastic
Volume flow	:	50 – 200 m ³ /h
Total pressure	:	250 - 50 Pa
Speed	:	2400 – 2800 1/min
Sound pressure level* Lp2A	:	35 dB(A)
LED display	:	RED/Malfunction – GREEN/Operation
Switching frequency	:	min. 1,000,000
Signal output	:	Potential-free via DIN socket
Contact power	:	max. 230V / 8A
Voltage	:	230 V +5/-10%
Power consumption	:	max. 0.45 A
Frequency	:	50 Hz
Motor protection	:	PTO 90°C
Protection class	:	CE  II 3/-G Ex ec IIC T4 Gc PTB 21 ATEX D137
Weight	:	8kg

* at 3m distance according to DIN 45635 with air lines connected on suction and pressure side

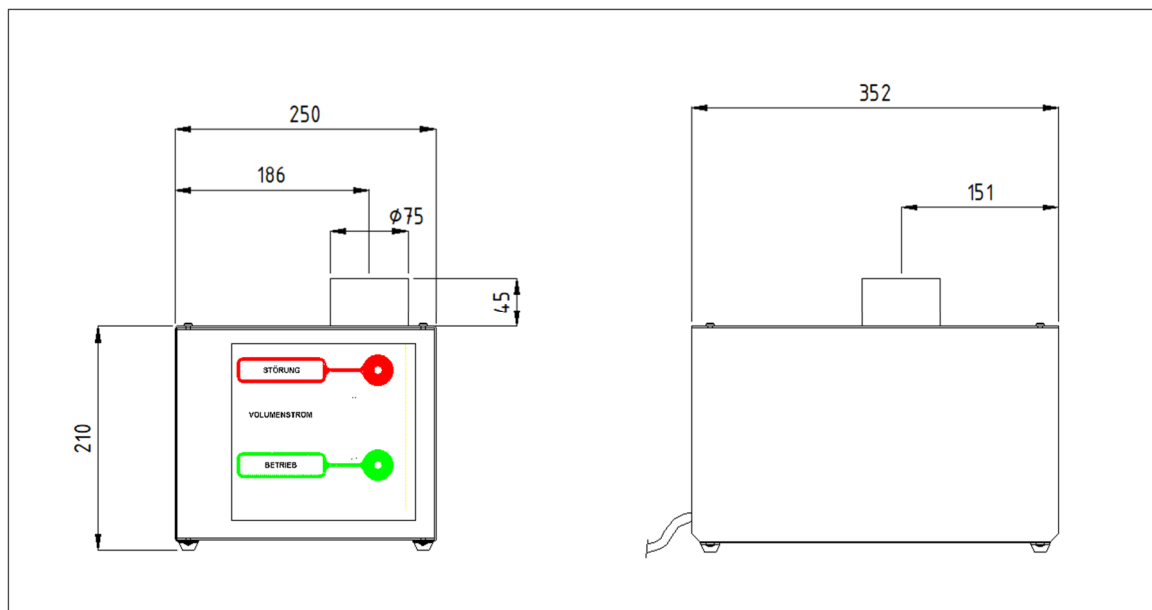
Signal output assignment Max. 230V / 8A



6. Characteristic curve:



7. Dimension sheet:



8. Accessories included:

1. Operating manual
2. Plug for potential-free contacts
3. Connection hose with adapter for EN91 / EN92

9. Assembly instructions for Priocab EN91 and EN92 type cabinets:

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1. Insert the adapter for EN91 at the free end of the connection piece and fasten it with the supplied hose clamp.
2. Insert the adapter as prepared before into the unit and into the exhaust air connection piece of the cabinet and fix it to the cabinet connection piece with the supplied hose clamp. Align unit

10. Special notes

When connecting to an on-site exhaust air device, the function of the EBEL:VENT-EN9-A may be impaired. A pipe length of approx. 1.0 is recommended. A guarantee of trouble-free operation cannot be given.

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