



Operating Instructions for ExVENT 3025



1 Application

Electric motors ExVent 3025 are manufactured according to Directive 94/9EG (ATEX 100a) and serve as impulse for fans, pumps, gear mechanisms or other tools. The ExVent 3025 is approved for use in Ex-zone 1 for explosion group G and temperature class T4.

EC Type Examination Certificate PTB 10 ATEX 2023 with Schedule and Supplements in German and English as well as IEC Scheme Certificate IECEx PTB 11.0016X please see www.intertec.info

2 Technical Data

Rated voltage	Max. 230 V AC
Permissible operating voltage	Max. 250 V AC
Special voltages are possible if the output power is adapted accordingly and the suitable components selected.	
Rated current (according to VDE 0298)	Max. 1 A
Ambient temperature	-60 to +60°C
Max. permissible operating temperature range at normal rating	-60 to +60°C
Installation position	any

3 Installation

Take care not to bend or exert any load on the connection cable during unpacking and transport.

You can choose any installation position. The mounting can be carried out at the bearing bracket. Insert 2 mm thick washers at the mounting flanges to avoid any sliding contact of the auxiliary fan.

Make sure to comply with the permissible operating temperature range, otherwise the thermal fuse will be activated.

The connection cable must be firmly installed to the opening into the customer-supplied junction box considering the permissible bending radius (= 5 times the outside cable diameter).

The connection cable shall be connected inside of an enclosure which complies with the requirements of an acknowledged type of protection according to EN 60079-0:2009 section 1, if the connection is intended inside the hazardous area.

4 Connection

The electric motor must only be connected and secured by technical expert personnel in accordance with the label specifications "rated voltage" and "rated current":

If operating voltage = rated voltage, the electric motor will generate the specified nominal output, with an allowance to voltage fluctuations of up to 10 %.

A fuse corresponding to motor's rated current (max. 3 x IB according IEC 60127-2-1) or a motor protecting switch with short-circuit- or thermal instantaneous tripping (adjusted to rated current) shall be connected in series to each electric motor. For very low rated motor

currents, the fuse with the lowest current rating according to the above referenced IEC standard will be sufficient.

The fuse may be accommodated in the corresponding power supply unit or it shall be connected in series separately. The rated voltage of the fuse shall be the same as or higher than the maximum operating voltage specified for the electric motor. The breaking capacity of the fuse link shall be the same as or higher than the maximum short-circuit current expected to occur at the place of installation (usually 1500 A).

A ground terminal is provided for the purpose of ensuring potential equalization. The terminal is marked as such.

In a TT or TN system, a residual current operated protective device (RCD) must be used whose rated response fault current does not exceed 100 mA. Residual current devices with a rated response fault current of 30 mA are to be preferred.

In an IT system, an insulation monitor must be used that switches off the power supply as soon as the insulation resistance falls to 50 ohms per volt of the rated voltage or lower (see EN 60079-14:2008; section 7.4).

5 Initial Operation

The electric motor can be switched on as soon as it is properly installed in accordance with the installation instructions specified point 3 and point 4, ensuring foreign substances do not attain to turning components.

A temperature fuse is integrated which isolates the electric motor with external heating or blockage from the mains due to Ex-protection reasons. This also happens if the above installation and operating instructions are not followed.

6 Maintenance

Repair work must only be carried out by the manufacturer.

The auxiliary fan of ExVent 3025 must be cleaned in regular intervals, depends on the pollution degree of the ambience, to avoid an overheating.

Performance and safety tests can be conducted at intervals to be determined by the operator in compliance with current regulations.

7 Safety Instructions

Hot and/or rotating components involve a certain risk of injury.