

Operating Instructions

ExVENT 3025

Table of contents

1 Use 3

2 Explanation of symbols for warnings and signal words 3

3 Safety information 3

4 Technical Data 3

5 Installation..... 4

6 Connection..... 4

7 Commissioning..... 5

8 Troubleshooting 5

9 Service..... 5

10 Maintenance..... 6

11 Deinstallation 6

12 Disposal..... 6

13 EC declaration of conformity 6

14 Further information and service 7



Operating Instructions ExVENT 3025

1 Use

ExVENT 3025 electro motors are manufactured according to Directive 2014/34/EU and serve as drives for fans, pumps, gear units or other devices. ExVENT 3025 is approved for Ex zone 1 of equipment category G in temperature class T4.

EC type examination certificates PTB 10 ATEX 2023 with appendices and supplements in German and English, as well as IEC Scheme Certificate IECEX PTB 11.0016X.

See <http://www.intertec.info>

2 Explanation of symbols for warnings and signal words

The safety information warns the user about risks and provide information on how risks can be avoided.

Safety information can be found at the start of the chapter before the instructions which may lead to a hazardous situation. Additional safety information can be found at the beginning of this manual.

Safety instructions which must be adhered to are highlighted as follows:

DANGER

DANGER

This sign is warning about an extremely hazardous situation which, if not heeded, will lead to death or serious irreversible injury.

WARNING

WARNING

This sign is warning about a hazardous situation which, if not heeded, may lead to death or serious irreversible injury.

CAUTION

NOTICE

This sign is warning about a hazardous situation which, if not heeded, may lead to slight, reversible injury.

NOTICE

NOTE

It is essential to pay attention to this safety advice as you may otherwise incur material damage.

INFO

Important notes and useful additional information.

3 Safety information

CAUTION

Risk of injury

There is a risk of injury on rotating and/or hot components.

4 Technical Data

Rated voltage	max. 230 V AC
Permitted operating voltage	max. 250 V AC
Special voltages with corresponding power adjustment and component selection are possible	
Rated current (in compliance with VDE 0298)	max. 1 A
Rated output	25 W
Ambient temperature	- 60 to + 60
Max. permitted operating temperature at rated operation	- 40 to + 60
Insulation class	H
Temperature class	T4
Rated speed	3000 rpm
Installation position	optional
Connecting cable	Silicon cable, notch- and oil-resistant, 3 x 1.5 mm ² , Ø 8.4 mm
Connecting cable AM	Failure alarm opening at >112°C 250 V 1 A AC Silicon cable, notch- and oil-resistant, 5 x 1.0 mm ² , Ø 8.8 mm
Cable length	1 m / optional 3 m



Operating Instructions ExVENT 3025



Dimensions H x W x D	75 x 120 x 117 mm
ExVENT 3025 L 152 PA... ..	Fan blade Ø 152 mm
ExVENT 3025 L 175 PA... ..	Fan blade Ø 175 mm
ExVENT 3025	without fan blade

5 Installation

NOTICE

Risk of Damage

When removing from the packaging and during transport, the connection line must not be stressed or bent.

Any installation location can be chosen. The installation must be carried out on the bearing bracket. 2 mm thick spacers must be placed beneath the mounting flanges to prevent abrasion of the auxiliary fan.

The operating temperatures must be adhered to, otherwise the thermal fuse will be triggered.

The connection line must be permanently installed up to the inlet in the on-site junction box, taking the permissible bending radius = 5 x outer diameter into consideration.

The connection line must be connected in a housing that complies with the requirements of a recognized type of protection in accordance with EN 60079-0:2009 section 1 if the connection is made in a potentially explosive atmosphere.

The nameplate must always remain easily legible.

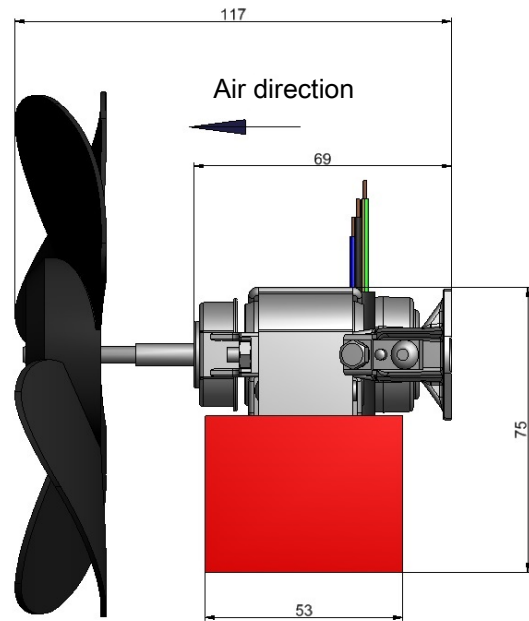


Illustration 2: ExVent 2D side view

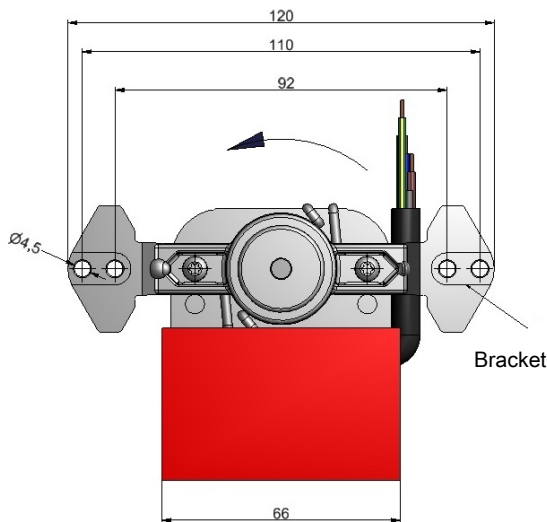


Illustration 1: ExVent 3025 2D front view

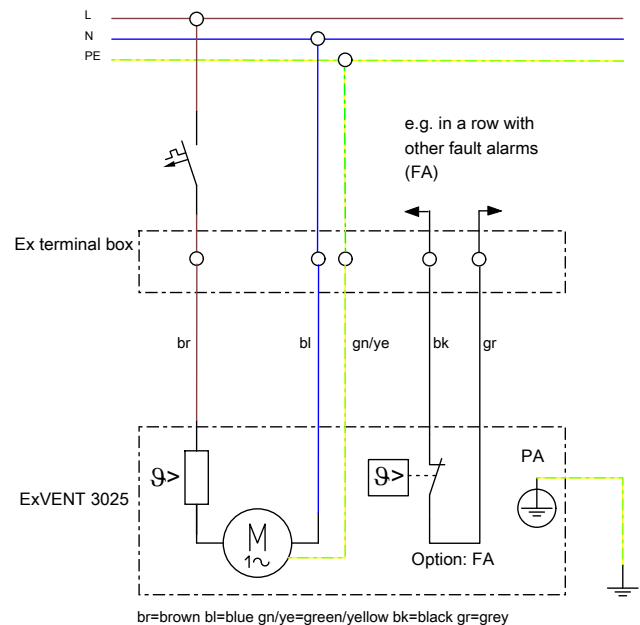


Illustration 3: ExVent 3025 circuit diagram

6 Connection

i INFO

The device may only be connected up and secured by a trained person, taking into account the "rated voltage" and "rated current" specified on the nameplate.



Operating Instructions ExVENT 3025



A fuse corresponding to its rated voltage (max. 3 x IB according to IEC 60127-2-1) or a motor protection switch with short-circuit and thermal instantaneous release (setting to rated current) must be upstream of each electric motor. In the case of very low rated currents of the electric motor, the fuse with the lowest current value according to the specified IEC-standard is sufficient. The fuse must be housed in the associated power supply unit or separately upstream. The fuse rated current must be the same as or greater than the specified maximum working voltage of the electric motor. The breaking capacity of the fuse link must be the same as or greater than the maximum short-circuit current expected at the place of installation (normally 1500 A). A connection box with a melting fuse can be used for example.

Additional equipotential bonding is required. The terminal block designated for this purpose has the ground sign.

7 Commissioning

If the electric motor was installed according to the guidelines specified under section Installation [▶Page 4] and section Connection [▶Page 4] and it is guaranteed that no foreign bodies can reach the rotating components, then the electric motor can be switched on.

A thermal safety fuse is integrated that disconnects the motor from the mains for reasons of explosion protection in the event of external heating or blockage. This also occurs if these installation instructions are not complied with.

We recommend a thermostat upstream at temperatures ranging from 40°C.

8 Troubleshooting

DANGER

Risk of fatal injury from electric current!

If contact is made with live components, there is the risk of fatal injury.

For this reason, switch off the voltage supply, secure against being switched on again and check that no more voltage is present.

INFO

Repairs may only be carried out by the manufacturer (INTERTEC-Hess) in all cases.

Do not disassemble the device! Opening the units will render the warranty invalid.

Fault:	Remedial action:
Connection	
Connection line not connected properly	Check connection
Mains voltage has a different frequency than 230-250 V AC 50 Hz	Check mains voltage and frequency
Fan used for cooling: Power supply is interrupted by external thermostat	Room air is cooler than the temperature set on the thermostat
Connecting cable is damaged	The connecting cable must be protected mechanically
Fan blade	
Foreign bodies in the fan blade	Remove foreign bodies – make sure that the fan can move freely
Blocked fan blade overheats the motor – thermal safety fuse is triggered	Device must be replaced
Auxiliary fan blocked	Use spacers to create space
Temperature	
Temperature of suction medium is greater than +60°C – thermal safety fuse is triggered	The temperature of the pumped medium must always be less than +60°C Device must be replaced
Fault alarm is triggered	Cause: Motor blocked Device must be replaced

9 Service



Operating Instructions ExVENT 3025

To preserve the operational capability and to prevent unplanned downtimes of the device, please observe the following measures:

- **Bearing/drive shaft:**
Both must be kept free of contamination, visual inspection at 3-month intervals, or at even shorter intervals if necessary
- **Filter mat:**
When used as a filter fan, carry out regular inspections for contamination, replace if necessary
- **Corrosion:**
Highly aggressive media must be avoided
- **Pump clean air:**
If the air is very dusty, you must use a filter upstream

10 Maintenance

Depending on the degree of contamination of the environment the auxiliary fan of ExVENT 3025 must be cleaned at regular intervals to avoid overheating.

i INFO

Repairs may only be carried out by the manufacturer (INTERTEC-Hess) in all cases.

Do not disassemble the device! Opening the units will render the warranty invalid.

11 Deinstallation

Disassembly may only be carried out by a trained person.

⚠ DANGER

Risk of fatal injury from electric current!

If contact is made with live components, there is the risk of fatal injury.

For this reason, switch off the voltage supply, secure against being switched on again and check that no more voltage is present.

Disconnect connection line from the clamps and from the connection socket, disconnect device from bracket and remove it.

12 Disposal

Disassemble the components of the product, taking the applicable local labour protection and environmental regulations into consideration and make sure that the components are recycled:

- Scrap metal
- Send plastic elements to recycling
- Sort other components according to their material properties and dispose of them.

NOTICE

Environmental damage may be caused if disposed of incorrectly!

Electrical scrap and electronics components are subject to hazardous waste treatment and must only be disposed of by certified specialists!

The local community authorities or specialist waste disposal companies can provide information on environmentally friendly disposal.

13 EC declaration of conformity

The manufacturer, INTERTEC-Hess GmbH, Raffineriestrasse 8, 93333 Neustadt/Donau, Germany, hereby declares in sole responsibility that the product

Product / Type designation:

ExVENT3025

complies with the provisions of the following directives **2014/34/EU (ATEX)**, **2006/95/EC (LVD)**, **2004/108/EC (EMC)**, **2011/65/EU (RoHS)**, **2012/19/EU (WEEE)** complies with the following standards or standardized documents:

EN 60079-0:2012

EN 60079-18:2009

Designation:

CE0102

II 2 G Ex mb IIC T4

PTB 10 ATEX 2023

Neustadt, 13th June 2017



Operating Instructions ExVENT 3025



A handwritten signature in blue ink, which appears to read 'M. Hess'.

Dipl.-Ing. Martin Hess, Managing Director

14 Further information and service

If the information contained in this instruction manual should not be sufficient in any way, then INTERTEC would be glad to be at your disposal to provide further information and service.

Please contact your INTERTEC contact person or directly contact

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Warranty

The legally defined warranties and warranty periods of 24 months are applicable to our scope of supply and services.

You will find more detailed information in the manufacturer warranty from INTERTEC for heating systems and accessories.



These instructions do not claim to take all designs, options or changes into consideration, even in association with installation, operation or maintenance. INTERTEC does not accept responsibility for providing information about changes made retrospectively.