

Operating Instructions

Ventilator HT-ExVENT

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Operating Instructions Ventilator HT-ExVENT

1 Use

The HT-ExVENT fan is manufactured according to Directive 2014/34/EU and is used for the aeration and ventilation of housings. It consists of an encapsulated shaded pole motor ExVENT in a stainless steel housing, which is approved for Ex zone 1 of equipment category G in temperature class T4. Both sides of the housing are provided with a touch protection grid.

The ventilator bear EU Type Examination Certificate PTZ 18 ATEX 0050 X and the IECEx Certificate IECEx PTZ 18.0012X.

The motor used in the ventilator also bear EU Type Examination Certificate PTB 10 ATEX 2023 and the IECEx 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 10 A
Rated output	25 W
Protection class <i>IEC EN 60529</i>	IP20
Storage temperature	- 60 to + 60°C
Max. permitted operating ambient temperature	- 40 to + 55°C
Insulation class	H
Temperature class	T4
Motor	ExVENT 30xx L175 PA.
Rated speed	2500 rpm
Air delivery volume	300 cbm/h
Installation position	optional
Delivery direction O	blowing out
Delivery direction I	blowing in
Connecting cable	Silicon tube conductor, resistant to notching and oil, 3x 1.5 mm ² , Ø 8.4 mm
Housing material	Stainless steel

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Dimensions H x W x D	218 x 218 x 140 mm
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INFO

You will find the precise technical data for your instrument on the label.

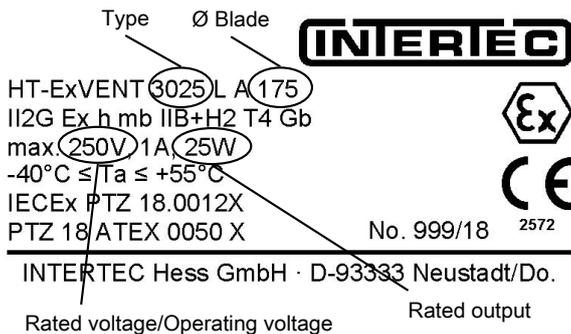


Illustration 1: Label Ventilator HT-ExVENT

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 for the fan. The cut-out is optionally made in the wall or door.

- Cut-out size 190 x 190 mm
- Smooth the edges of the mounting cut-out
- The HT-ExVENT is placed on the inside of the cut-out
- The clamping lugs can be perceptibly and audibly clicked into place in all four corners by exerting slight pressure
- Seal the cut-out circumferentially with silicon from the inside of the housing

NOTICE

Risk of Damage

The protection class IP20 can only be guaranteed if the installation position is correct and the seal is not damaged.

The operating temperatures must be adhered to, otherwise the thermal safety 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 section 1 if the connection is made in a potentially explosive atmosphere.

The nameplate must always remain easily legible.

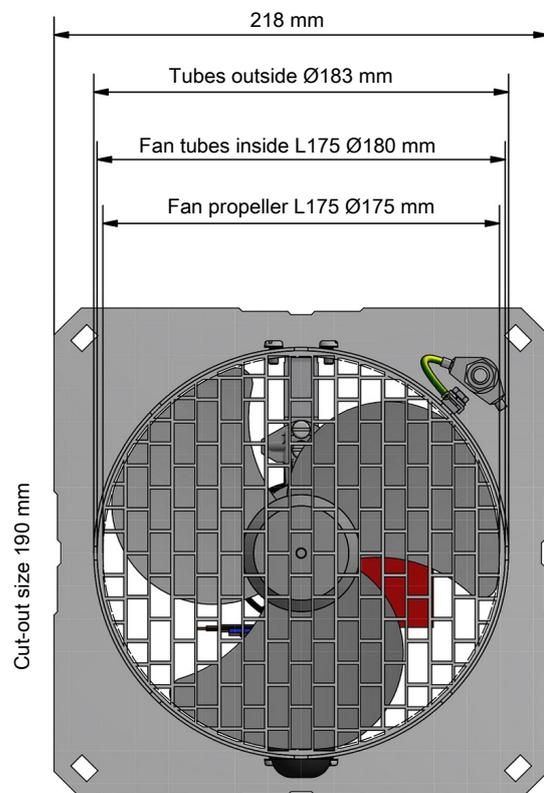


Illustration 2: HT-ExVENT front view blowing in

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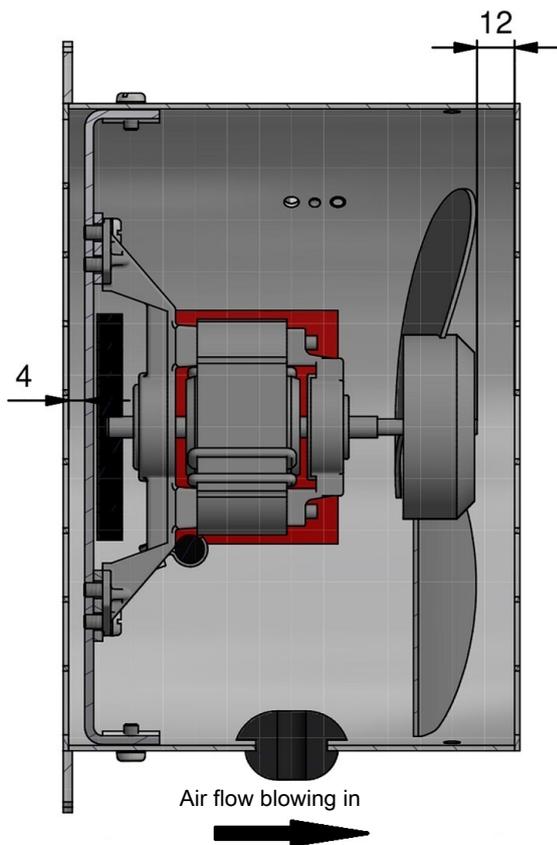


Illustration 3: HT-ExVENT side view blowing in

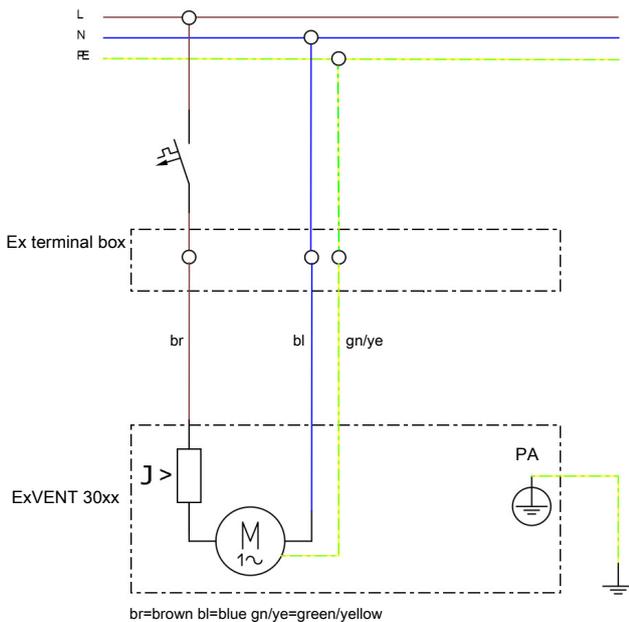


Illustration 4: ExVENT 30xx circuit diagram

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.

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 and section Connection [▶Page 5] 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



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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 Directions for use

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
- **Corrosion:**
Highly aggressive media must be avoided
- **Distance between rotating elements:**
The distance of the rotating elements in the axial and radial direction must not be less than 2 mm from the fan housing.

10 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.

11 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!



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

12 EU 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:

HT-ExVENT

complies with the provisions of the following directives 2014/34/EU (ATEX), 2014/30/EU (EMC), 2011/65/EU (RoHS), 2012/19/EU (WEEE) complies with the following standards, harmonized standards, where appropriate and/or standardized documents:

EN 60079-0:2012+A11:2013

EN 60079-18: 2015

EN ISO 80079-36:2016

EN ISO 80079-37:2016

EN 14986:2017

Harmonized Standard (RoHS):

DIN EN 50581:2012

Designation:

CE 2572

II 2 G Ex h mb IIB+H2 T4 Gb

PTZ 18 ATEX 0050 X

Neustadt, November 8th, 2018

Dipl.-Ing. Martin Hess, Managing Director

13 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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Germany

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Website: www.intertec.info

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.