



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx BVS 15.0031X issue No.:0 Certificate history:

Status: **Current**

Date of Issue: **2015-03-30** Page 1 of 4

Applicant: **Bartec Varnost d.o.o.**
Cesta 9. avgusta 59
SL-1410 Zagorje ob Savi
Slovenia

Electrical Apparatus: **Flameproof electric motors type 4 KTCR *** ** */***
Optional accessory:

Type of Protection: **Equipment protection by flameproof enclosures "d", Equipment protection by increased safety "e"**

Marking: Ex db I Mb resp. Ex db e I Mb

Approved for issue on behalf of the IECEx Certification Body: G. Schumann

Position: Deputy Head of Certification Body

Signature:
(for printed version)

Date: 2015-03-30

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

DEKRA EXAM GmbH
Dinnendahlstrasse 9
44809 Bochum
Germany

 **DEKRA**
DEKRA EXAM GmbH



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Manufacturer: **Bartec Varnost d.o.o.**
Cesta 9. avgusta 59
SL-1410 Zagorje ob Savi
Slovenia

Additional Manufacturing location
(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2014-06 Edition: 7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

[DE/BVS/ExTR15.0027/00](#)

Quality Assessment Report:

[SI/SIQ/QAR11.0003/02](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Subject and type

Flameproof electric motors type 4 KTCR *** ** */*

Type designation to 4 KTCR *1)*1)*1) *2)*2) *3)*3)

- 1): Frame size
- | | |
|-----|--------|
| 71 | 71 mm |
| 80 | 80 mm |
| 90 | 90 mm |
| 100 | 100 mm |
| 112 | 112 mm |
| 132 | 132 mm |
| 160 | 160 mm |
| 180 | 180 mm |
| 200 | 200 mm |
| 225 | 225 mm |

2): Length of stator assembly

3): Quantity of poles

CONDITIONS OF CERTIFICATION: YES as shown below:

The lengths of the flameproof joints are in parts longer and the gaps of the flameproof joints are in parts smaller than the values of table 2 of IEC 60079-1:2014. For information of the dimensions of the flameproof joints contact the manufacturer.

Fasteners with a minimum yield stress of 640 N/mm² must be used for the closing of the flameproof enclosure.

Motors which have to be equipped with a direct temperature control must be monitored by a separately certified trigger unit.

If the electrical machine will be cooled by forced ventilation, it has to be assured that the electrical machine can only run if the ventilation is running.



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EQUIPMENT(continued):

Description

The enclosure of the flameproof electric motor is made of cast iron and has a mounting place for terminal boxes.

The shaft will be fixed with ball bearings.

A terminal compartment in type of protection Flameproof Enclosure "d" or Increased Safety "e" or a direct cable entry is used for electrical connection of the motor. For electric power input into the motor compartment, separately certified cable glands or conductor bushings are used.

The cooling of the motor is realised by an external fan that is made of steel. The fan can be driven by the electrical machine itself or by a separately certified forced ventilation motor.

Optionally a space heater can be mounted inside the stator housing.

For direct temperature monitoring the winding of the motor is equipped with temperature sensors (thermistors according DIN 44081 respectively DIN 44082). The sensors are connected in series. Insulated bimetal switches can be mounted inside the windings as well.

Optionally the temperature at the bearings could be monitored separately certified resistance thermometers (Pt100).

The sensors or the thermometers will be connected to a trigger unit which is certified for this purpose.

Parameters

See Annex