



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 IBE 18.0031X

Issue No: 0

Certificate history:

[Issue No. 0 \(2019-03-08\)](#)

Status: **Current**

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Date of Issue: **2019-03-08**

Applicant: **Elmess Thermosystemtechnik GmbH & Co. KG**
Nordallee 1
29525 Uelzen
Germany

Equipment: **Temperature monitoring devices**

Optional accessory:

Type of Protection: **DST.60...-T. and IST.60...-T.**

Marking:

Ex db eb IIB T6 or T5 Gb or Ex db eb IIC T6 or T5 Gb

Ex db IIB T6 or T5 Gb or Ex db IIC T6 or T5 Gb

Ex tb IIIC T85 °C or T100 °C Db

Ex ib IIB T6 or T5 Gb or Ex ib IIC T6 or T5 Gb

Ex ib IIIC T85 °C or T100 °C Db

*Approved for issue on behalf of the IECEx
Certification Body:*

Dipl.-Ing. (FH) Alexander Henker

Position:

Head of Certification Body

*Signature:
(for printed version)*

Date:

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](#).

Certificate issued by:

IBExU Institut für Sicherheitstechnik GmbH
Certification Body
Fuchsmühlenweg 7
09599 Freiberg
Germany





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Manufacturer: **Elmess Thermosystemtechnik GmbH & Co. KG**
Nordallee 1
29525 Uelzen
Germany

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 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 : 2017 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2015 Edition:5.0	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/IBE/ExTR18.0010/00](#)

Quality Assessment Report:

[DE/EPS/QAR15.0011/03](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Temperature monitoring devices type DST.60...-T. and IST.60...-T. serve for limiting, monitoring or control of temperatures in hazardous areas of category 2G and 3G as well as 2D and 3D. The control box consists of a flameproof and dust-tight enclosure made of aluminium or stainless steel with operating elements. The electric connection is carried out either with an additional equipped terminal box (separately certified) or with a direct flameproof cable gland or bushing.

The Temperature monitoring device type IST.60...-T. can also be marketed in the same design with type of protection Ex ib.

The flameproof cable bushing in the Ex e terminal box consists of a threaded bush made of brass with encapsulated wire line and capillary tube sensor.

The Temperature monitoring devices can be designed as temperature limiters or safety temperature limiters or as temperature controllers or monitors. They are equipped with capillary tube temperature switches; the capillary tube sensor is led into the flameproof enclosure via a flameproof cable gland.

Technical data:

Control current circuit Ex d / Ex t

- Rated voltage: maximum 440 V AC; maximum 250 V DC
- Rated current: maximum 0.25 A DC and
 - Type DST.60..E... (+40 °C) maximum 16 A AC1
 - Type DST.60..E... (+60 °C) maximum 12 A AC1
 - all other types (+60 °C) maximum 16 A AC1

Control current circuit Ex i

- Rated voltage U_i : maximum 60 V AC/DC
- Rated current I_i : maximum 0.1 A AC/DC

Ambient temperature range

- Standard: -20 °C up to +40 °C
- Special design: -55 °C up to +60 °C
- Special design DST.60..D...: -60 °C up to +60 °C



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Connection

- Rated cross section terminals: maximum 4 mm²
- Cable: maximum 7 x 1.5 mm²
- Degree of protection: maximum IP66 according to IEC 60529

SPECIFIC CONDITIONS OF USE: YES as shown below:

- Repairs of the flameproof joints must be made in compliance with the constructive specifications provided by the manufacturer. Repairs must not be made on the basis of values specified in tables 2 and 3 of IEC 60079-1.
- The cable glands supplied by the manufacturer are suitable only for fixed installation, the operating company has to ensure an adequately strain relief.
- For type DST.60..E... the selection of cable glands and connecting cables depends on the minimum ambient temperature. The cable glands must be suitable and certified for this temperature range. Unused openings for cable entries have to be closed durably with suitable screw plugs, which are confirmed for the respective type of protection.
- The enclosure of the Temperature monitoring device has to be connected constructively in the equipotential bonding system according to IEC 60079-14, Paragraph 6.3.
- For type IST.60...-T., the interconnection and connection of intrinsically safe circuits must be tested separately.
- Temperature monitoring devices with single wires (type DST.60..Z...) must be installed in an additional enclosure, which meets the requirements of IEC 60079-0.
- Coated enclosures may not be operated in the near of high-charging processes.