

# **IECEx Certificate** of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification System for Explosive Atmospheres**

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

**Certificate No.:** 

**IECEX PTB 14.0016X** 

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Certificate history:

Status:

Current

Issue No: 1

Issue 0 (2014-02-25)

Date of Issue:

2021-10-11

Applicant:

**BARTEC GmbH** 

Max-Evth-Straße 16 97980 Bad Mergentheim

Germany

Equipment:

Temperature switch KTE-d type 27-6B\*1-5\*\*\*/\*\*\*\*/\*\*\*\*

Optional accessory:

Type of Protection:

Flameproof Eclosures "d", Protection by enclosure "t"

Marking:

Ex db IIC T6...T3 Gb

Ex tb IIIC T85°C...T200°C Db

Approved for issue on behalf of the IECEx Certification Body:

Position:

Signature: (for printed version)

Date:

Dr.-ing. Detlev Markus

Head of Department "Explosion Protection in Energy Technology"

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 www.iecex.com or use of this QR Code.

Certificate issued by:

Physikalisch-Technische Bundesanstalt (PTB) **Bundesallee 100** 38116 Braunschweig Germany





# **IECEx Certificate** of Conformity

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Date of issue:

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Manufacturer:

**BARTEC GmbH** Max-Eyth-Straße 16 97980 Bad Mergentheim

Germany

Additional manufacturing locations:

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 equipment 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

Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0

IEC 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

Edition:2

This Certificate does not indicate compliance with 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/PTB/ExTR14.0018/01

**Quality Assessment Report:** 

DE/TUN/QAR06.0017/13



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#### **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The KTE-d type 27-6B\* is an explosion-proof thermostat, designed as temperature switch, failure alarm, thermal link or contact (High/Low). When connected to an electric heater, it can regulate the temperature in a housing to the pre-set, nominal set-point. The KTE-d type 27-6B as an alarm switches on when the temperature is above the set point and switches off below the set point. The thermostat can be used in areas where explosive gas/air or dust/air mixtures can occasionally be expected. Typical areas of application are frost protection, condensation protection and temperature maintenance.

#### Technical data

Rated voltage	max. 250 V / 400 V
Permitted operating voltage	max. 275 V / 400 V
Rated current	max. 10 A
Rated power output	max. 700 W
Ambient temperature	-60 °C to +60 °C
Max. permitted operating temperature*	-60 °C to +180 °C

<sup>\*</sup> Due consideration being given to the maximum ambient temperature, the self-heating rate and, if required, the thermal conduction.

Provided the marking and breaking capacities defined in the relevant regulations are met, rated values other than those specified are acceptable and will be defined by the manufacturer on the basis of the operating mode, utilisation category, etc.

## Notes for manufacturing and operation

- 1. The connecting lead shall be installed to provide for permanent wiring and protection against mechanical damage.
- If connection is made in the potentially explosive area, the connection lead (open-ended line) shall be connected by means of an enclosure that meets the requirements of a type of protection specified in IEC 60079-0.
- 3. The maximum admissible ambient temperature, the self-heating rate and, if required, the thermal conduction (medium) shall be considered in determining the operating temperature (max. 180 °C).

Nomenclature: see Annex

## SPECIFIC CONDITIONS OF USE: YES as shown below:

- 1. Regarding connection cable: The operating instructions shall inform the user of any special conditions for installation and operation, and the user shall comply with these conditions.
- 2. For use in the explosive dust atmosphere, the relevant requirements of IEC 60079-14, IEC 60079-17 and IEC 60079-19 shall be complied with.



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**DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**Update to the current standards

Annex:

COCA\_PTB14.0016X\_I1.pdf



# Attachment to Certificate IECEx PTB 14.0016X Issue 1



Applicant:

**BARTEC GmbH** 

Max-Eyth-Straße 16

97980 Bad Mergentheim

Germany

**Electrical Apparatus:** 

Cable thermostat Type KTE-d type 27-6B\*1-5\*\*\*/\*\*\*\*

## **Nomenclature**

27	-	6	В	*	1	-	5	*	*	*	1	*	*	*	*	1	*	*	*	*
Α		В	C	D	E	E	F	G	Н	1		J	K	L	М		N	0	Р	R

A-C) Heaters and whose parts

27-6B = Cable thermostat, temperature fuse, -probe

D) Function

1 = Bimetal thermostat

4 = temperature fuse

7 = Bimetal thermostat with temperature fuse

8 = temperature fuse with PT-100 probe

E) Design

. 1 = Explosion protection

F) Box

5 = Aluminium box

G) Connection

2 = Single-sided cable sleeve(with mounting plate)

4 = Double-sided cable sleeve

J) Temperature set point

A-Z e.g. D = 20 °C

K) Release temperature of the temperature fuse

A-Z e.g. D = 93 °C

H - I

L - R) Number or letter for characteristics without influence on the explosion protection