



# 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](http://www.iecex.com)

Certificate No.: **IECEX PTB 14.0020X** Page 1 of 4 **Certificate history:**  
Status: **Current** Issue No: 1 **Issue 0 (2014-05-26)**  
Date of Issue: **2021-10-12**  
Applicant: **BARTEC GmbH**  
**Max-Eyth-Straße 16**  
**97980 Bad Mergentheim**  
**Germany**  
Equipment: **Heater HC\* type 27-2\*6\*.-\*\*\*\*/\*\*\*\*/\*\*\*\***  
Optional accessory:  
Type of Protection: **Flameproof enclosure "d", Protection by enclosure "t"**  
Marking: **Ex db IIC T6...T3 Gb**  
**Ex tb III C T85°C...T200°C Db**

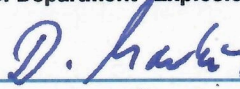
Approved for issue on behalf of the IECEx  
Certification Body:

**Dr.-Ing. Detlev Markus**

Position:

**Head of Department "Explosion Protection in Energy Technology"**

Signature:  
(for printed version)

  
\_\_\_\_\_  
**12.10.21**

Date:

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2. This certificate is not transferable and remains the property of the issuing body.
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Certificate issued by:

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





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Page 2 of 4

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Issue No: 1

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"  
Edition:7.0

**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/ExTR14.0022/01](#)

Quality Assessment Report:

[DE/TUN/QAR06.0017/13](#)



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Certificate No.: **IECEX PTB 14.0020X**

Page 3 of 4

Date of issue: 2021-10-12

Issue No: 1

## EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The heater HC\* type 27-2\*6\*-\*\*\*\*/\*\*\*\*/\*\*\*\* in the type of protection Flameproof Enclosure "db" and Protection by Enclosure "tb" is used for heating switch and control housings by convection and for direct heating of e.g. valves.

The heater consists of the body made of metal, alternatively with fins, the cartridge, optional a thermostat used as an alarm device, the - separately certified - cable gland and the connection lead.

The heaters can optionally be provided with an - separately certified - external thermostat type 27-6B11-24\*\*/\*\*\*\*\* or 27-6B11-54\*\*/\*\*\*\*\*; which is integrated into the connection lead.

## Technical data

Rated voltage	max. 250 V AC
Admissible operating voltage	max. 275 V AC
Rated current	max. 10 A
Rated power	max. 700 W
Ambient temperature range	-60 °C to +60 °C
Service temperature range	-60 °C to +180 °C
Ingress protection	IP66, IP68 (1 bar, 30 min)
Impact energy	Heater: 20 J Cable gland: 10 J
Overpressure	1620 kPa (16,2 bar)

Nomenclature see Annex

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

1. The connecting lead shall be installed to provide for permanent wiring and adequate protection against mechanical damage.
2. If connection is made in the potentially explosive area, the connecting lead shall be connected by means of an enclosure that meets the requirements of a type of protection specified in IEC 60079-0, section 1.
3. Installation shall be made with due regard to the maximum permissible temperatures of neighbouring components.



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Certificate No.: **IECEX PTB 14.0020X**

Page 4 of 4

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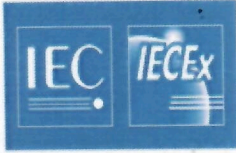
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**DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**

Update to the current standards IEC 60079-0:2017, IEC 60079-1:2014 and IEC 60079-31:2013.

**Annex:**

[COCA\\_PT14.0020X\\_I1.pdf](#)



Applicant: BARTEC GmbH  
Max-Eyth-Straße 16  
97980 Bad Mergentheim  
Germany

Electrical Apparatus: Heater HC\* type 27-2\*6\* -\*\*\*\*/\*\*\*\*/\*\*\*\*

### Nomenclature

27	2*6	*	*	*	*****
A	B-D	E	F	G	H-R

A) 27 = Heater

B-D) 206 = Ripped heater HCS  
216 = Ripped heater HCM  
226 = Ripped heater HCL

#### E) Version

1 = Heater **with** thermostat type 27-6B11-24\*\*/\*\*\*\*\*, temperature class T3  
2 = Heater **without** thermostat, temperature class T3  
3 = Heater **with** thermostat type 27-6B11-24\*\*/\*\*\*\*\*, temperature class T4  
4 = Heater **without** thermostat, temperature class T4  
A = Heater **with** thermostat type 27-6B11-54\*\*/\*\*\*\*\*, temperature class T3  
B = Heater **with** thermostat type 27-6B11-54\*\*/\*\*\*\*\*, temperature class T4

#### F) Dimension

3 = 155 mm (L) 105 x 30 x 30 mm (L x W x H)  
4 = 155 mm (L) 220 x 40 x 40 mm (L x W x H)  
5 = 225 mm (L) 155 x 50 x 50 mm (L x W x H)  
6 = 225 mm (L) 255 x 50 x 50 mm (L x W x H)

#### G) Rated voltage

6 = 120 V  
7 = 230 V  
8 = 250 V

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