



# (1) EU-TYPE EXAMINATION CERTIFICATE

(Translation)

- (2) Equipment or Protective Systems Intended for Use in Potentially Explosive Atmospheres **Directive 2014/34/EU**
- (3) EU-Type Examination Certificate Number:

#### PTB 03 ATEX 1139 X

Issue: 1

(4) Product:

Heater HC\* type 27-2\*6\*-\*\*\*/\*\*\*\*/\*\*\*\*

(5) Manufacturer:

**BARTEC GmbH** 

(6) Address:

Max-Eyth-Straße 16, 97980 Bad Mergentheim, Germany

- (7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 17 of the Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential Test Report PTB Ex 21-11110.

- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with: EN IEC 60079-0:2018, EN 60079-1:2014, EN 60079-31:2014
- (10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.
- (11) This EU-Type Examination Certificate relates only to the design and construction of the specified product in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- (12) The marking of the product shall include the following:

EX II 2 G Ex db IIC T6...T3 Gb

EX II 2 D Ex tb IIIC T85°C...T200°C Db

Konformitätsbewertungsstelle, Sektor Explosionsschutz On behalf of PTB:

Braunschweig, October 12, 2021

Dr.-Ing. D. Markus
Direktor und Professo

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(13)

## SCHEDULE

# (14) EU-Type Examination Certificate Number PTB 03 ATEX 1139 X, Issue: 1

#### (15) Description of Product

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.

The temperature class is determined by a routine test by the manufacturer.

#### **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		
Temperature classes	T6, T5, T4, T3		
Ingress protection	IP66, IP68 (1 bar, 30 min)		
Impact energy	Heater: 20 J Cable gland: 10 J		
Overpressure	Heater: 16.20 bar (1620 kPa)		





# SCHEDULE TO EU-TYPE EXAMINATION CERTIFICATE PTB 03 ATEX 1139 X, Issue: 1

#### Nomenclature

27	2*6	*	*	*	******
Α	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

 $3 = 155 \text{ mm (L) } 105 \times 30 \times 30 \text{ mm (L } \times \text{W} \times \text{H)}$ 

 $4 = 155 \text{ mm (L) } 220 \times 40 \times 40 \text{ mm (L x W x H)}$ 

 $5 = 225 \text{ mm (L)} 155 \times 50 \times 50 \text{ mm (L x W x H)}$ 

 $6 = 225 \text{ mm (L) } 255 \times 50 \times 50 \text{ mm (L x W x H)}$ 

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

#### Modifications

Update to the current standards EN IEC 60079-0:2018, EN 60079-1:2014 and EN 60079-31:2014.

(16) <u>Test Report</u> PTB Ex 21-11110



# SCHEDULE TO EU-TYPE EXAMINATION CERTIFICATE PTB 03 ATEX 1139 X, Issue: 1

### (17) Specific conditions of use

- 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 EN IEC 60079-0, section 1.
- 3. Installation shall be made with due regard to the maximum permissible temperatures of neighbouring components.

## (18) Essential health and safety requirements

Met by compliance with the aforementioned standards.

According to Article 41 of Directive 2014/34/EU, EC-type examination certificates which have been issued according to Directive 94/9/EC prior to the date of coming into force of Directive 2014/34/EU (April 20, 2016) may be considered as if they were issued already in compliance with Directive 2014/34/EU. By permission of the European Commission supplements to such EC-type examination certificates and new issues of such certificates may continue to hold the original certificate number issued before April 20, 2016.

Konformitätsbewertungsstelle, Sektor Explosionsschutz On behalf of PTB:

Braunschweig, October 12, 2021

Dr.-Ing. D. Markus Direktor und Profess