



(1) **EU-TYPE EXAMINATION CERTIFICATE**
(Translation)

(2) Component Intended for Use in Potentially Explosive Atmospheres
Directive 2014/34/EU

(3) EU-Type Examination Certificate Number:

PTB 15 ATEX 1059 U

Issue: 1

(4) Component: Electric band heater type PR-HEI-EX-HEAT-SSH

(5) Manufacturer: EPHY-MESS GmbH

(6) Address: Berta-Cramer-Ring 1, 65205 Wiesbaden-Delkenheim, Germany

(7) This component 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 component 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 23-12109.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018; EN 60079-7:2015+A1:2018

(10) The sign "U" placed behind the certificate number indicates that this certificate should not be confounded with certificates issued for equipment or protective systems. This partial certification may be used as a basis for certification of an equipment or protective systems.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified component in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.

(12) The marking of the component shall include the following:

 **II 2 G Ex eb IIC Gb**

Konformitätsbewertungsstelle, Sektor Explosionsschutz
On behalf of PTB

Braunschweig, December 21, 2023


Dr.-Ing. D. Markys
Direktor und Professor



(13)

SCHEDULE

(14) **EU-Type Examination Certificate Number PTB 15 ATEX 1059 U, Issue: 1**

(15) Description of Component

The electric band heater type PR-HEI-EX-HEAT-SSH is a resistance heating element with a protective braid and outer sheath made of silicone. It is suitable for preventing condensation and frost damage at standstill of electric motors, generators and transformers in a cold environment as well as for the keeping temperature constant in tanks, pipes or valves. The dimensions of the standstill heater are designed so small that it can be applied directly to the winding wires. After installation on the winding head, the heating elements can be included in the normal impregnation process and are thus also moisture protected. It is a fixed resistance heating element consisting of 4 parallel heating cables connected in series.

Nomenclature

PR	HEI	EX	HEAT	SSH
1	2	3	4	5

1	Product
2	Heat conductor
3	Ex-approval
4	Heater
5	SSH: Electric band heater basic

Technical details

Operating voltage	230 V
Rated current	max. 1 A
Heating capacity	8 W up to 200 W
Operating temperature*	-60 °C up to +180 °C
Insulation test	(1000+2U _n) +5% V AC
Dielectric strength	min 2.0 kV AC, 50 Hz / 1 Min

* Sum of max. ambient temperature, self-heating and external heat

(16) Test report PTB Ex 23-12109

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EU-Type Examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.

SCHEDULE TO EU-TYPE-EXAMINATION CERTIFICATE PTB 15 ATEX 1059 U, Issue: 1

(17) Notes for manufacture, installation and operation


1. When determining the operating temperature (max. +180°C), the max. permissible ambient temperature, self-heating and, if applicable, heat conduction (medium) must be taken into account.
2. The electric band heater PR-HEI-EX-HEAT-SSH shall only be switched on at ambient temperatures of <+10°C and after the motor has cooled down.
3. The electric band heater including the connecting cable shall be installed in motors at the factory in such a way that they are not subjected to any mechanical stress during installation and operation.
4. The supply line (connection cable) must be laid strain-relieved.

(18) Essential health and safety requirements

Met by compliance with the aforementioned standards.

Konformitätsbewertungsstelle, Sektor Explosionsschutz
On behalf of PTB:

Braunschweig, December 21, 2023


Dr.-Ing. D. Markus
Direktor und Professor

