



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 14.0048X Issue No: 0 Certificate history:
Status: Current Page 1 of 3 Issue No. 0 (2014-12-15)
Date of Issue: 2014-12-15
Applicant: EPHY-MESS GmbH
Berta-Cramer-Ring 1
65205 Wiesbaden
Germany
Electrical Apparatus: Temperature sensor PR-SPA-EX-LTH
Optional accessory:
Type of Protection: Increased safety "e", Intrinsic safety "i", Protection by enclosure "t"
Marking:
Ex e IIC T6...T3 Gb or Ex eb IIC T6...T3
Ex ta IIIC T80 °C / T95 °C / 130 °C Db
Ex ia IIC T6...T3 Gb
Ex ia IIIC T80 °C / T95 °C / T130 °C Db
-60 °C / -55 °C ≤ T_a ≤ 100 °C

Approved for issue on behalf of the IECEx
Certification Body:


Prof. Dr. Tammo Redeker

Position:

Head of Certification Body

Signature:
(for printed version)

Date:


2014-12-15

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

Certificate issued by:

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



IECEX Certificate of Conformity

Certificate No: IECEX IBE 14.0048X

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Page 2 of 3

Manufacturer: EPHY-MESS GmbH
Berta-Cramer-Ring 1
65205 Wiesbaden
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 electrical 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 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
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 : 2006-07 Edition:4	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/ExTR14.0042/00](#)

Quality Assessment Report:

[DE/PTB/QAR10.0006/01](#)



IECEx Certificate of Conformity

Certificate No: IECEx IBE 14.0048X

Issue No: 0

Date of Issue: 2014-12-15

Page 3 of 3

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The temperature sensor is based on a passive resistance sensor or a thermocouple, built into a stainless steel protection pipe. The thin-film, glass or ceramic measuring resistor or the thermo-node is double insulated with shrinking tube and inserted in the protection pipe. These temperature sensors are designed for the installation into blind hole drillings in electrical motors (generators) or other electrical machinery or can be used as single temperature sensor.

Technical data:

ambient temperature: -60 °C / -55 °C up to +100 °C

max. process temperature range: -60 °C up to +180 °C

rated voltage: max. 10 V

rated current: max. 25 mA

nominal power: max. 25 mW

Several types are provided, which differ in form of connecting head and connection facilities. For detailed information see functional description.

CONDITIONS OF CERTIFICATION: YES as shown below:

The sensors shall be installed protected against mechanical load. Sharp bending as well as mechanical stress concentrated to small spots of the sensor shall be avoided.

If higher temperatures occur the cable entry, the cables shall be suitable for these temperatures

The requirements of respective type of protection must be guaranteed after the cable installation.

The supply unit shall provide a connector which corresponds to the method of connection of the thermometer (2-, 3- or 4-wire connection). It is to be considered that the electrical values are not exceeded.

The cable ends shall be connected to suitable terminals as fixed installation or outside of explosive atmosphere.