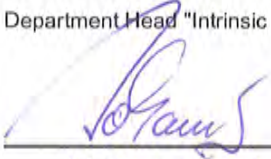




# IECEx Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

|                                                               |                                                                                                                                                                       |             |                      |
|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------------------|
| Certificate No.:                                              | IECEx PTB 11.0108X                                                                                                                                                    | issue No.:0 | Certificate history: |
| Status:                                                       | Current                                                                                                                                                               |             |                      |
| Date of Issue:                                                | 2011-12-19                                                                                                                                                            | Page 1 of 4 |                      |
| Applicant:                                                    | <b>ABB Automation Products GmbH</b><br>Borsigstraße 2<br>63755 Alzenau<br>Germany<br>Germany                                                                          |             |                      |
| Electrical Apparatus:                                         | Temperature measuring transducers, types TTH x00-H1P, TTH x00-H1F, TTF 300-H1 x.P, TTF 300-H1 x.F, TTF 350-H1 x.P, TTF 350-H1 x.F, TTR x00-H1P as well as TTR x00-H1F |             |                      |
| Optional accessory:                                           |                                                                                                                                                                       |             |                      |
| Type of Protection:                                           | Intrinsic Safety, FISCO                                                                                                                                               |             |                      |
| Marking:                                                      | Ex ia IIC T6 resp. Ex [ia] ib IIC T6 resp. Ex [iaD] ib IIC T6                                                                                                         |             |                      |
| Approved for issue on behalf of the IECEx Certification Body: | Dr.-Ing. U. Johannsmeyer                                                                                                                                              |             |                      |
| Position:                                                     | Department Head "Intrinsic Safety and Safety of Systems"                                                                                                              |             |                      |
| Signature:<br>(for printed version)                           |                                                                                    |             |                      |
| Date:                                                         | 2012-01-13                                                                                                                                                            |             |                      |

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:

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





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Manufacturer: **ABB Automation Products GmbH**  
Schillerstraße 72  
32425 Minden  
Germany  
**Germany**

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:

|                                            |                                                                               |
|--------------------------------------------|-------------------------------------------------------------------------------|
| <b>IEC 60079-0 : 2007-10</b><br>Edition: 5 | Explosive atmospheres - Part 0: Equipment - General requirements              |
| <b>IEC 60079-11 : 2006</b><br>Edition: 5   | Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "I" |
| <b>IEC 60079-27 : 2008</b><br>Edition: 2.0 | Explosive atmospheres - Part 27: Fieldbus intrinsically safe concept (FISCO)  |

*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/PTB/ExTR11.0108/00](#)

Quality Assessment Report:  
[DE/TUN/QAR06.0012/03](#)



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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

In connection with measuring sensors the temperature measuring transducers listed in the type code in the attachment serve for the detection, amplification and transmission of measurands in intrinsically safe circuits.

Supply and communication is provided by means of an intrinsically safe fieldbus (e.g. Fieldbus Foundation H1 or Profibus PA). Resistance thermometers, thermocouples or other sensors with defined quantities of resistance and direct voltage may be connected alternatively to the input as sensors.

This IECEx certificate includes the temperature measuring transducers according to the type code in the attachment.

### CONDITIONS OF CERTIFICATION: YES as shown below:

The connection facilities of the temperature measuring transducer, type TTH x00-H1P and type TTH x00-H1F shall be installed as such that a degree of protection of IP 20 according to IEC 60529:1989 is provided as a minimum.

Electrostatic charge of the plastic enclosure used for the temperature measuring transducers of types TTH x00-H1P, TTH x00-H1F, TTR x00-H1P as well as TTR x00-H1F shall be prevented and a warning label on the equipment shall point to this danger.



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**Additional information:**

**Annexe:** [IECEXPTB1101080.pdf](#)