



# 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 07.0054 issue No.:2

Status: **Current**

Date of Issue: **2013-08-23** Page 1 of 5

Certificate history:  
Issue No. 2 (2013-8-23)  
Issue No. 1 (2007-11-22)  
Issue No. 0 (2007-9-6)

Applicant: **INTERTEC-Hess GmbH**  
Raffinerrasse 8  
93333 Neustadt/Donau  
Germany

Electrical Apparatus: **Temperature switch type TA...**  
Optional accessory:

Type of Protection: **Flameproof Enclosures "d", Protection by enclosure "t"**

Marking: Ex db IIC T6  
Ex tb IIIC T85°C

Approved for issue on behalf of the IECEx  
Certification Body:

Dr.-Ing. U. Klausmeyer

Position:

Head of Section "Flame Transmission Processes"

Signature:  
(for printed version)

Date:

  
23 AUG. 2013

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.

Certificate issued by:

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





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Manufacturer: **INTERTEC-Hess GmbH**  
Raffineriestraße 8  
93333 Neustadt/Donau  
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:

<b>IEC 60079-0 : 2011</b> Edition: 6.0	Explosive atmospheres - Part 0: General requirements
<b>IEC 60079-1 : 2007-04</b> Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
<b>IEC 60079-31 : 2008</b> Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'

*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/ExTR07.0053/01](#)

Quality Assessment Report:  
[DE/PTB/QAR07.0005/02](#)



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## Schedule

### EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

#### Description of equipment

The thermostat, type TA ... , is used as a temperature switch, failure alarm or thermal link. It may be employed in areas in which a potentially explosive atmosphere as a mixture of gas and air or dust and air in an occasionally form.

#### Technical data

Rated voltage	max. 250 V	400 V
Admissible operating voltage	max. 275 V	400 V
Rated current	max. 10 A *	
Ambient temperatures	-60 ... +60 °C	
Max. operating temperature (for rated operation)	+ 180 °C **	
Temperature class	T6	

\*Provided the making and breaking capacities defined in the relevant regulations are met, rated values other than those specified are acceptable and will be defined by the manufacturer on the basis of the operating mode, utilisation category, etc.

\*\* Due consideration being given to the maximum ambient temperature, the self-heating rate and, if requested, the thermal conduction.

### CONDITIONS OF CERTIFICATION: NO

#### Notes for manufacturing and operation

1. Adequate measures shall be taken during production to safeguard equipotential bonding between the metal parts.
2. The connecting lead shall be installed to provide for permanent wiring and protection against mechanical damage.
3. If connection is made in the potentially explosive area, the connecting lead (open-ended line) shall be connected by means of an enclosure that meets the requirements of a type of protection specified in EN 60079-0.
4. Special conditions for some connecting cables have to be included in the manual instructions and have to be noticed by the installer.
5. The maximum admissible ambient temperature, the self-heating rate and, if required, the thermal conduction (medium) shall be considered in determining the operating temperature (max. 180°C).
6. If used in dust-ex-areas the concerning requirements of IEC 60079-14, of IEC 60079-17 and IEC 60079-19 have to be considered.

For the notes under 2 to 6 above, the user shall make reference to the operating manual



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## EQUIPMENT(continued):

### Nomenclature

TA	..	...	..
1	2	3	4

1: Name of the Thermostat, material **Aluminium**

2: **I** integratet Thermostat: cable on both ends  
**E** extern thermostat: cable on one end  
**ES** as above but additional thermal link  
**S** only thermal link

3: without number: for freeze protection

**XX** nominal setpoint in °C

for TAE: switching temperature of thermostat

for TAES: dito thermostat and temperature link

for TAS: dito only for temperature link

4: **B** option: body with mounting bracket

**XX** Type of used with temperature sensor only

**L** KLE in long version

Thread on the pressure screw of the KLE cable gland: M = bi-standard with outside thread 1/2" NPT, M20 = bi-standard with outside thread M20, F = bi-standard with inside thread, Tx = pressure screw with tube connector in different versions.



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## DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

1. Change of temperature ranges
  - ambient temperature -60 ... +60°C
  - service temperature -60 ... +180°C
2. Certification to the actual standards
3. Change of marking