# IECEx Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION
## IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

| | | | |
|---|---|---|---|
| Certificate No.: | **IECEx DEK 12.0018X** | Page 1 of 4 | Certificate history: |
| Status: | **Current** | Issue No: 1 | Issue 0 (2012-09-28) |
| Date of Issue: | 2021-10-20 | | |
| Applicant: | **Endress+Hauser Wetzer GmbH+Co. KG**<br>Obere Wank 1<br>87484 Nesselwang<br>**Germany** | | |
| Equipment: | **Resistance-Thermometer Omnigrad, Types TR10, TR11, TR12 and TR13 and Thermocouple-Thermometer Omnigrad, Types TC10, TC12 and TC13** | | |
| Optional accessory: | | | |
| Type of Protection: | **ta/tb** | | |
| Marking: | Ex ta/tb IIIC T85 °C...T450 °C Da/Db | | |

Approved for issue on behalf of the IECEx Certification Body: **L.G. van Schie**

Position: **Certification Manager**

Signature: (for printed version)

Date: 2021-10-20

1. This certificate and schedule may only be reproduced in full.
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3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Certificate issued by:

**DEKRA Certification B.V.**
**Meander 1051**
**6825 MJ Arnhem**
**Netherlands**

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Certificate No.: **IECEx DEK 12.0018X**

Date of issue: 2021-10-20

Issue No: 1

Manufacturer:
**Endress+Hauser Wetzer GmbH+Co. KG**
Obere Wank 1
87484 Nesselwang
**Germany**

Additional manufacturing locations:

**Endress+Hauser Wetzer (Suzhou) Co. Ltd.**
Jiang-Tian-Li-lu No.31, 215021
Suzhou-SIP (P.R. China)
**China**

**Endress+Hauser Wetzer USA Inc.**
2350 Endress Place
Greenwood, IN 46143
**United States of America**

**Endress+Hauser Wetzer (India) Pvt. Ltd.**
M-171/173, MIDC, Waluj, Aurangabad - 431 136
**India**

**Endress+Hauser Sicestherm S.r.l.**
Via Martin Luther King 7/9
I-20060 Pessano con Bornago (MI)
**Italy**

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 equipment 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 60079-0:2017** Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

**IEC 60079-31:2013** Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

This Certificate **does not** indicate compliance with 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:

NL/DEK/ExTR12.0017/01

Quality Assessment Report:

DE/TUN/QAR06.0009/09

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**EQUIPMENT:**
Equipment and systems covered by this Certificate are as follows:

The Resistance-Thermometer Omnigrad, Types TR10, TR11, TR12, TR13 and Thermocouple-Thermometer Omnigrad, Types TC10, TC12, TC13 consists of a certified enclosure type TA30A or TA30D, containing terminals or a transmitter (type TMT...) and a direct connected temperature sensor in a thermowell. The enclosure can be provided with a blind or windowed cover.

For more information, electrical data and thermal data see Annex 1 to Report No. NL/DEK/ExTR12.0017/01.

**SPECIFIC CONDITIONS OF USE: YES as shown below:**
For temperature code and ambient temperature range see Annex 1 to Report No. NL/DEK/ExTR12.0017/01.

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**DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**
- Assessed per IEC 60079-0 Ed. 7 and IEC 60079-31 Ed. 2

- minor editorial changes in documentation

**Annex:**

225621800-Annex1 to ExTR12.0017.01.pdf

## Description and thermal data

The Resistance-Thermometer Omnigrad, Types TR10, TR11, TR12, TR13 and Thermocouple-Thermometer Omnigrad, Types TC10, TC12, TC13 consists of a certified enclosure type TA30A or TA30D, containing terminals or a transmitter (type TMT...) and a direct connected temperature sensor in a thermowell. The enclosure can be provided with a blind or windowed cover.

The ambient and process temperature range, depending on transmitter version and temperature code, is listed in the following table:

| Assembled head transmitter | Temperature code | Ambient temperature range | Process temperature range |
|---|---|---|---|
| TMT18x and TMT8x (with or without display module) | T85 °C | -40 °C to +65 °C | -50 °C to +70 °C |
| | T100 °C | -40 °C to +80 °C | -50 °C to +80 °C |
| | T135 °C | -40 °C to +85 °C | -50 °C to +120 °C |
| Without transmitter | T85 °C | -50 °C to +70 °C | -50 °C to +70 °C |
| | T100 °C | -50 °C to +80 °C | -50 °C to +80 °C |
| | T135 °C | -50 °C to +120 °C | -50 °C to +120 °C |
| | T200 °C | -50 °C to +120 °C | -50 °C to +185 °C |
| | T300 °C | -50 °C to +120 °C | -50 °C to +285 °C |
| | T450 °C | -50 °C to +120 °C | -50 °C to +435 °C |

The enclosure provides a degree of protection IP66/IP67 in accordance with EN/IEC 60529.

## Electrical data

Supply and output circuit: max. 42 Vdc, 23 mA (TMT82)
max. 35 Vdc, 23 mA (TMT180/TMT181/TMT182/TMT84/TMT85)
Sensor: max. 10 Vdc, 1 mA