



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 DEK 12.0018** issue No.:0 Certificate history:

Status: **Current**

Date of Issue: **2012-09-28** Page 1 of 3

Applicant: **Endress+Hauser Wetzler GmbH+Co. KG**
Obere Wank 1
87484 Nesselwang
Germany

Electrical Apparatus: **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 to T450 °C Da/Db**

*Approved for issue on behalf of the IECEx
Certification Body:*

C.G. van Es

Position:

Certification Manager

*Signature:
(for printed version)*

Date:

2012-09-28

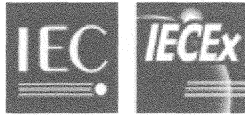
1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

DEKRA Certification B.V.
Utrechtseweg 310
6812 AR Arnhem
The Netherlands

All testing, inspection, auditing and certification activities of the former KEMA Quality are an integral part of the DEKRA Certification Group.





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

Manufacturing location(s):
Endress+Hauser Wetzer GmbH+Co. KG
Obere Wank 1
87484 Nesselwang
Germany
Endress+Hauser Sigestherm S.r.l.
Via Martin Luther King 7
20060 Pessano Con Borgano
(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 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 : 2007-10 Explosive atmospheres - Part 0: Equipment - General requirements
Edition: 5

IEC 60079-31 : 2008 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'
Edition: 1

*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

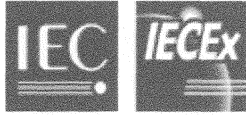
Test Report:

NL/DEK/ExTR12.0017/00

Quality Assessment Report:

DE/TUN/QAR06.0009/03

IT/CES/QAR10.0001/02



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Resistance-Thermometer Omnigrad, Types TR10, TR11, TR12 and TR13 and Thermocouple-Thermometer Omnigrad, Types TC10, TC12 and 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.

See Attachment 1 for details.

CONDITIONS OF CERTIFICATION: NO

Attachment 1 to: IECEx DEK 12.0018 - NL/DEK/ExTR12.0017/00

Applicant's name: Endress+Hauser Wetzler

Test item: Thermometer, Omnigrad Type Tx1x

Description

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	T85 °C	-40 °C to +65 °C	-50 °C to +70 °C
(with or without display module)	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 60529.

Electrical data

Supply and output circuit: max. 42 Vdc, 23 mA (TMT82)

max. 35 Vdc, 23 mA (TMT180/TMT181/TMT182/TMT84/TMT85)

Sensor current: max. 1 mA