



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 EPS 22.0027X** Page 1 of 5 Certificate history:
Status: **Current** Issue No: 2 Issue 1 (2023-01-29)
Date of Issue: 2023-05-05 Issue 0 (2022-11-08)
Applicant: **Endress+Hauser Wetzer GmbH + Co. KG**
Obere Wank 1
87484 Nesselwang
Germany
Equipment: **Temperature transmitter iTEMP, type TMT86**
Optional accessory: Optional accessories include a display or field enclosure.
Type of Protection: **Intrinsic safety "i"**
Marking: Ex ia IIC T6...T4 Ga
Ex ia IIC T6...T4 Gb
Ex ia [ia Ga] IIC T6...T4 Gb

Approved for issue on behalf of the IECEX
Certification Body:

Position:

Signature:
(for printed version)

Date:
(for printed version)

Ulrich Felke

Head of Certification



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 www.iecex.com or use of this QR Code.



Certificate issued by:

Bureau Veritas Consumer Products Services Germany GmbH
Businesspark A96
86842 Türkheim
Germany





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

Manufacturing locations: **Endress+Hauser Wetzler GmbH + Co. KG** **Endress+Hauser Sicestherm S.r.L** **Endress+Hauser Wetzler (Suzhou) Co. Ltd.**
Obere Wank 1 Via Martin Luther King 7 Jiang-Tian-Li-lu No.31, 215021
87484 Nesselwang 20060 Pessano con Bornago (MI) Suzhou-SIP (P.R. China)
Germany Italy China

See following pages for more locations

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 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

IEC TS 60079-47:2021 Explosive atmospheres – Part 47: Equipment protection by 2-wire intrinsically safe Ethernet concept (2-WISE)
Edition:1.0

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:

[DE/EPS/ExTR22.0030/02](#)

Quality Assessment Report:

[DE/TUN/QAR06.0009/11](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The temperature transmitter iTEMP, type TMT86, is a two-wire transmitter with Ethernet interface. It has measuring input circuits for resistance thermometers (RTD) in 2-, 3- or 4-wire connection, thermocouples and voltage transmitters. The transmitter can optionally be equipped with a field housing or display.

Electrical data:

2-WISE power load

$U_i = 17.5$ V DC

$I_i = 380$ mA

C_i, L_i negligible

Respectively as a field device appropriate for connection to a field bus system according to the FISCO model.

$U_o = 3.71$ V DC

$I_o = 5.24$ mA

$P_o = 4.86$ mW

Ex ia IIC: $L_o = 50$ mH, $C_o = 4$ μ F

Ex ia IIB: $L_o = 100$ mH, $C_o = 24$ μ F

Ex ia IIA: $L_o = 100$ mH, $C_o = 64$ μ F

SPECIFIC CONDITIONS OF USE: YES as shown below:

In hazardous areas it is not permitted to use the CDI interface of TMT86 for configuration.

The head transmitter must be protected against electrostatic charge/discharge.

Ambient temperature range:

Type (order option)	Temperature class	Ambient temperature zone 1	Ambient temperature zone 0
TMT86-xxx1xxxx Head transmitter without display	T6	$-52\text{ }^{\circ}\text{C} \leq T_a \leq +55\text{ }^{\circ}\text{C}$	$-52\text{ }^{\circ}\text{C} \leq T_a \leq +40\text{ }^{\circ}\text{C}$
	T5	$-52\text{ }^{\circ}\text{C} \leq T_a \leq +70\text{ }^{\circ}\text{C}$	$-52\text{ }^{\circ}\text{C} \leq T_a \leq +60\text{ }^{\circ}\text{C}$
	T4	$-52\text{ }^{\circ}\text{C} \leq T_a \leq +85\text{ }^{\circ}\text{C}$	$-52\text{ }^{\circ}\text{C} \leq T_a \leq +60\text{ }^{\circ}\text{C}$
TMT86-xxx1xxxx Head transmitter with display (TID10)	T6	$-40\text{ }^{\circ}\text{C} \leq T_a \leq +55\text{ }^{\circ}\text{C}$	-
	T5	$-40\text{ }^{\circ}\text{C} \leq T_a \leq +70\text{ }^{\circ}\text{C}$	-
	T4	$-40\text{ }^{\circ}\text{C} \leq T_a \leq +85\text{ }^{\circ}\text{C}$	-
TMT86-xxx1xxxx Field housing without display	T6	$-52\text{ }^{\circ}\text{C} \leq T_a \leq +55\text{ }^{\circ}\text{C}$	-
	T5	$-52\text{ }^{\circ}\text{C} \leq T_a \leq +70\text{ }^{\circ}\text{C}$	-
	T4	$-52\text{ }^{\circ}\text{C} \leq T_a \leq +85\text{ }^{\circ}\text{C}$	-
TMT86-xxx1xxxx Field housing with display (TID10)	T6	$-40\text{ }^{\circ}\text{C} \leq T_a \leq +55\text{ }^{\circ}\text{C}$	-
	T5	$-40\text{ }^{\circ}\text{C} \leq T_a \leq +70\text{ }^{\circ}\text{C}$	-
	T4	$-40\text{ }^{\circ}\text{C} \leq T_a \leq +85\text{ }^{\circ}\text{C}$	-



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Added assessment according to IEC TS 60079-47.



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Additional manufacturing locations:

Endress+Hauser Wetzer USA INC
2413 Endress Place
Greenwood, IN 46143
United States of America

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