CERTIFICATE OF CONFORMITY



1. HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS

2. Certificate No:

FM20US0075X

3. Equipment:

(Type Reference and Name)

iTEMP type TMT182-abcde Temperature Head Transmitter

4. Name of Listing Company:

Endress+Hauser Wetzer GmbH + Co. KG

5. Address of Listing Company:

Obere Wank 1 D-87484 Nesselwang Germany

6. The examination and test results are recorded in confidential report number:

3012211 dated 2nd July 2002

7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

FM Class 3600:2018, FM Class 3610:2018, FM Class 3611:2018, FM Class 3810:2018, ANSI/UL 121201:2018, ANSI/ISA 60079-0:2009, ANSI/ISA 60079-11:2009, ANSI/ISA 61010-1:2012

- 8. If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.
- 9. This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.
- 10. Equipment Ratings:

 $T^* = T6 Ta = -40$ °C to +55°C, T5 Ta = -40°C to +70°C, T4 Ta = -40°C to +85°C

Certificate issued by:

 $J\ell E$. Marquedant

VP, Manager - Electrical Systems

Marquestro

13 July 2020

Date

To verify the availability of the Approved product, please refer to www.approvalguide.com

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmapprovals.com www.fmapprovals.com

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SCHEDULE

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11. The marking of the equipment shall include:

IS, Class I, Division 1, Groups A, B, C and D; T^* 14 06 00 111 or 14 06 00 131 Entity NI, Class I, Division 2, Groups A, B, C and D; T^* 14 06 00 111 or 14 06 00 131 NIFW Class I, Zone 0 AEx ia IIC, T^* 14 06 00 111 or 14 06 00 131 Entity $T^* = T6$, $Ta = -40^{\circ}C$ to $+55^{\circ}C$; T5, $Ta = -40^{\circ}C$ to $+70^{\circ}C$; T4, $T6 = -40^{\circ}C$ to $+85^{\circ}C$

12. Description of Equipment:

General The temperature head transmitter iTEMP type TMT182, is a 2-wire transmitter with analogue output. It has measuring input for resistance thermometers (RTD) in 2-, 3- or 4-wire connection, thermocouples and voltage transmitters. Setting up of the TMT182 is done using the HART® -Protocol.

Ratings -

Entity/ Non-Incendive Wiring Parameters:

	V_{max}	I_{max}	Pi	Ci	Li
Terminals	(V)	(mA)	(mW)	(μF)	(mH)
1 and 2	30	100	0.75	0	0
	V_{oc}	I _{sc}	Po	Ca	La
Terminals	(V)	(mA)	(mW)	(μF)	(mH)
For e = A or B:	6.0	2.5	3.75	40	100
3, 4, 5, and 6					
For e = C or D:	5.0	3.6	4.3	40	100
3, 4, 5, and 6		$\mathbf{I} \mathbf{M} \mathbf{I}$			

iTEMP type TMT182-abcde. Head Transmitters

a = Approval: C or I.

b = Connection Configuration: B, C, D, E or F. c = Sensor Configuration: not safety relevant

d = Configuration: not safety relevant e = Additional option: A, B, C, D, L, or K.

13. Specific Conditions of Use:

1) The equipment shall be installed in a tool secured enclosure in compliance with the mounting, spacing and segregation requirements of the ultimate application.

14. Test and Assessment Procedure and Conditions:

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

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15. Schedule Drawings

A copy of the technical documentation has been kept by FM Approvals.

16. **Certificate History**

Scrimenter History					
Details of the supplements to this certificate are described below:					
Date	Description				
2 nd July 2002	Original Issue.				
13 th July 2020	Supplement 5: Report Reference: – RR224069 dated 13 th July 2020. Description of the Change: Updated FM standards to the latest editions. Added ANSI/UL 121201 and ANSI/ISA 61010-1. Updated Certificate format with new unique certificate number. Added T5 and T6 T-Codes and associated temperature ranges to match approval and labels.				



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