

Certificate of Compliance

Certificate:	80107564	Master Contract:	200600
Project:	80107564	Date Issued:	July 15, 2022
Issued To:	Endress+Hauser Wetzer GmbH Co. KG Obere Wank 1 Nesselwang, Bavaria, 87484 Germany Attention: Michael Pfanzelt		

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.

Issued by: Marius Manastireanu



PRODUCTS

CLASS - C225802 - PROCESS CONTROL EQUIPMENT For Hazardous Locations CLASS - C225882 - PROCESS CONTROL EQUIPMENT For Hazardous Locations - Certified to US Standards

Ex ec IIC Gc Class I, Zone 2, AEx ec IIC Gc Class I, Division 2, Groups A, B, C, D;

• <u>COMPONENT</u>: iTEMP Temperature Transmitter Head. Model TMT31 and identical F2058HRTD of different color. Rated 10...36 Vdc, 23 mA. Suitable for Division 2 or Zone 2 when installed per control drawing **10000012751**.

Models TMT31-aabcdeffgghh, and F2058HRTD-aabcdeffNNhh Where:



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aa = Approval: CN (CSA C/US Ex ec IIC Gc), 8N (ATEX II3G Ex ec IIC Gc + CSA C/US Ex ec IIC Gc)

- b = Output signal: A (4-20mA)
- c = Housing shape: 1 (Form B head transmitter, DIN EN 50446)
- d = Electrical connections: A (screw terminals) or B (spring terminals)
- e = Sensor input: 1 (Measuring input RTD)
- ff = Device Model: A1 (1)
- gg = Sensor Connection: B1 (RTD/Ohm 2-wire), B2 (RTD/Ohm 3-wire) or B3 (RTD/Ohm 4-wire).
- hh = Sensor type: Two alphanumeric characters representing different software versions to adapt different sensor

Schedule of Limitations:

- 1. Due to the risk of discharge, the non-metallic parts of the equipment and of all non-metallic accessories have to be protected from electrostatic charging during installation and operation (e.g. only wipe with a damp cloth and do not expose to high voltage fields).
- 2. The device may only be powered by a power supply unit with a limited energy electric circuit in accordance with CSA/UL/EN/IEC 61010-1:2010 chapter 6.3.1/6.3.2 and 9.4 or Class 2 according to CSA 223/UL 1310
- 3. For use in the type of protection increased safety Ex ec, and for Zone 2 (EPL Gc), and Class I, Division 2 applications, the transmitter TMT31/F2058HRTD shall be installed completely inside an additional enclosure, providing a degree of protection of not less than IP54 according to CSA/UL 60079-0 and CSA/UL 60079-7. The ambient temperature within the end use enclosure shall not exceed the limits of the permissible ambient temperature range. Clearances, creepage distances, and separations as defined in CSA/UL 60079-7 must be considered for the installation.
- 4. If the head transmitter TMT31/F2058HRTD, in type of protection increased safe and for use in Zone 2 (EPL Gc) and Class I, Division 2 applications, is mounted in an optional field housing the field housing must be equipped with suitable cable glands, certified according to CSA/UL 60079-0 and CSA/UL 60079-7, providing a degree of ingress protection of not less than IP54.
- 5. This component has not been evaluated for process pressure and process temperature, or any other source of heating or cooling.
- 6. Wire end ferrules must be used with spring terminals and when using flexible cables with a cable cross section of $\leq 0.3 \text{ mm}^2$
- 7. The end user shall ensure appropriate earthing of any metallic field housing (optional) and any metallic accessories if used.



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8. The maximum temperature rise recorded was +42°K. These components do not have any surface that achieves a temperature greater than 135°C/100°C/85°C with a 5K safety factor when operated under full load conditions at an ambient of range of 85°C/50°C/35°C respectively.

iTEMP TMT31 and F2058HRTD Ambient temperature range	TCode guidance
$-40 \ ^{\circ}C \le Ta \le +85 \ ^{\circ}C$	135°C
$-40 \ ^{\circ}C \le Ta \le +50 \ ^{\circ}C$	100°C
$-40~^{\circ}C \le Ta \le +35~^{\circ}C$	85°C

9. The factory programming 4-pins, covered pins, (CDI-Connection) are not used during normal operations.

APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 61010-1-12	Safety Requirements for Electrical Equipment for Measurement,
	Control, and Laboratory Use, Part 1: General Requirements
ANSI/UL 61010-1 (3rd Edition)	Safety Requirements for Electrical Equipment for Measurement,
	Control, and Laboratory Use, Part 1: General Requirements
ANSI/UL 121201-2021 Ninth	Nonincendive Electrical Equipment for Use in Class I and II, Division
Edition	2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations
CAN/CSA C22.2 NO. 213-17	Nonincendive Electrical Equipment for Use in Class I and II, Division
(R2021)	2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations
CAN/CSA C22.2 No. 60070.0.10	Explosive atmospheres — Part 0: Equipment — General
CAIN/CSA-C22.2 INO. 00079-0.19	Requirements
CAN/CSA C22.2 No. 60070.7.16	Explosive atmospheres — Part 7: Equipment protection by increased
CAN/CSA-C22.2 No. 00079-7:10	safety "e"
ANSI/11 60070 0.2010	Explosive atmospheres — Part 0: Equipment — General
ANSI/UL 00079-0:2019	Requirements
ANSI/11 60070 7:2017 (D2021)	Explosive atmospheres — Part 7: Equipment protection by increased
AINSI/UL 000/9-7:2017 (K2021)	safety "e"



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MARKINGS

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.

The following are minimum marking to be found on the component:

- Manufacturer's name: " Endress + Hauser Wetzer GmbH Co. KG ", or CSA Master Contract Number
- "200600", adjacent to the CSA Mark in lieu of manufacturer's name.
- The CSA Mark, with or without the "C" and "US" indicators, as shown on the Certificate of Compliance
- Model Designation, as specified in the PRODUCTS section, above.
- Electrical Ratings, as specified in the PRODUCTS section, above.
- Ambient temperature range, as specified in the PRODUCTS section, above...
- Serial Number, Date Code or Month and Year of Manufacture.
- Hazardous Location designation: As specified in the PRODUCTS section, above. The word "Class" may be abbreviated "CL", the word "Division" may be abbreviated "DIV", and the word "Groups" may be abbreviated "GRP" or "GP".
- Method of Protection markings (Ex -- markings): As specified in the PRODUCTS section, above.
- Temperature code: As specified in the PRODUCTS section, above.
- Certificate Number: CSA22CA80107564
- Install per control drawing 10000012751

The markings as shown in drawing 10000012457 are applied.

Method of Marking:

Laser etched onto enclosure; or

The material of the label type TOP-SCRIPT 101 720 (manufacturer Eltex) and the label type 3105 2008 (Manufacturer WOELCO) is accepted in the CSA Letter of Attestation 2089254.

Notes:



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Products certified under Class C225802, C225882 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca





Supplement to Certificate of Compliance

Certificate: 80107564

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The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

Product Certification History

Project	Date	Description
80107564		Original cCSAus certification of iTEMP Temperature Transmitter Head Type TMT31 Series and F2058HRTD for installation in Class I, Division 2 and Class I, Zone 2, Group IIC increased safety "ec" protected. Ordinary Location assessment was conducted with CSA under project 80082275.