



Certificate of Compliance

Certificate:	80107108	Master Contract:	302565
Project:	80280624	Date Issued:	2025-12-23
Issued to:	Endress+Hauser Yamanashi Co., Ltd 862-1 Mitsukunugi Sakaigawa-cho Fuefuki city, Yamanashi 406- 0846 Japan	Issued by:	<i>Ryan Yang</i> Ryan Yang
Attention: Yuuki MUTO			

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.



PRODUCTS

Class 2258 04 PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For Hazardous Locations
Class 2258 84 PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For Hazardous Locations - Certified to US Standards

IS Class I, Division 1/ Division 2, Groups A, B, C, D T*
Ex ia IIC T* Ga/Gb
Class I, Zone 0/ Zone 1 AEx ia IIC T* Ga/Gb

Temperature sensor



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Project: 80280624

Date Issued: 2025-12-23

Series Prothermo NMT81-CB followed by suffixes (as per Product Ordering Code from document 961005934_B) contains Average Temperature Probe and Converter. Input ratings $U=30V$, $I=4mA$ with entity parameters: $U_i (V_{max}) = 30V$, $I_i (I_{max}) = 300 mA$, $P_i = 1.0 W$, $C_i = 10 nF$, $L_i = 0 \mu H$. Enclosure Type 4X/6P, IP66/68. Intrinsically safe when connected in accordance with Installation/ Control Drawing No XA02755G-F/00/EN/06.25-00; T^* = see the Conditions of Acceptability.

IS Class I, Division 1/ Division 2, Groups C, D T^*

Ex ia IIB T^* Ga/Gb

Class I, Zone 0/ Zone 1 AEx ia IIB T^* Ga/Gb

Temperature and Bottom level measurement sensor

Series Prothermo NMT81-CJ with suffixes (as per Product Ordering Code from document 961005934_B) contains Average Temperature probe and Water Bottom Sensor and Converter. Input ratings $U=30V$, $I=4mA$ with entity parameters: $U_i (V_{max}) = 30V$, $I_i (I_{max}) = 300 mA$, $P_i = 1.0 W$, $C_i = 10 nF$, $L_i = 0 \mu H$. Enclosure Type 4X/6P, IP66/68. Intrinsically safe when connected in accordance with Installation/ Control Drawing No XA02755G-F/00/EN/06.25-00; T^* = see the Conditions of Acceptability.

Class I, Division 2, Groups A, B, C, and D T^*

Ex ia IIC T^* Gb

Class I, Zone 1 AEx ia IIC T^* Gb

Converter

Series Prothermo NMT81-CH with suffixes (as per Product Ordering Code from document 961005934_B) contains Converter (only). Input ratings $U=30V$, $I=4mA$ with input entity parameters: $U_i (V_{max}) = 30V$, $I_i (I_{max}) = 300 mA$, $P_i = 1.0 W$, $C_i = 10 nF$, $L_i = 0 \mu H$ and output entity parameters $U_o (V_{oc}) = 6.0 V$, $I_o (I_{sc}) = 32.4 mA$, $P_o = 48.7 mW$, $C_o (C_a) = 30 \mu F$ (for $L_o = 0$) and $L_o (L_a) = 7.5 mH$ (for $C_o = 0$). Enclosure Type 4X/6P, IP66/68. Intrinsically safe when connected in accordance with Installation Drawing/ Control No XA02755G-F/00/EN/06.25-00; T^* = see the Conditions of Acceptability.

APPLICABLE REQUIREMENTS

CAN/CSA C22.2 No. 61010-1-12, UPD1:2015, UPD2:2016, AMD1:2018 - Safety requirements for electrical equipment for measurement, control, and laboratory use — Part 1: General requirements

CAN/CSA C22.2 No. 60079-0:19 - Explosive atmospheres - Part 0: Equipment - General requirements

CAN/CSA-C22.2 No 60079-11:14 - Explosive Atmospheres - Part 11: Equipment protection by intrinsic safety 'i'

CAN/CSA C22.2 No. 60079-26:16 - Explosive Atmospheres - Part 26: Equipment with Equipment Protection Level (EPL) Ga

ANSI/UL 61010-1:2012 - Third Edition - Electrical Equipment For Measurement, Control, and Laboratory Use; Part 1: General Requirements

ANSI/UL 60079-0:2020 - Seventh Edition - Including revisions through July 19, 2024 - Explosive Atmospheres – Part 0: Equipment – General Requirements



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ANSI/UL 60079-11-2018 - Standard for Safety for Explosive Atmospheres - Part 11: Equipment Protection by Intrinsic Safety i

UL 60079-26:2017 - Third Edition - UL Standard for Safety Explosive Atmospheres – Part 26: Equipment with Equipment Protection Level (EPL) Ga

Conditions Of Acceptability

- For ordinary locations to be supplied by a Class 2 or Limited Energy Source in accordance with CSA 61010-1-12/UL 61010-1.
- The apparatus is not capable of withstanding the 500V insulation test required by Clause 6.3.13 of CSA C22.2 60079-11/UL 60079-11. This must be taken into account when installing the equipment.
- Potential electrostatic charging Hazard – see Safety Instructions.
- The following ambient temperatures and process temperatures shall be observed:

Temperature sensor (NMT81-CB)

Temperature Specification	T-Class	T ambient	T Process
Standard	T6	$-40^{\circ}\text{C} \leq T_a \leq 60^{\circ}\text{C}$	$-40^{\circ}\text{C} \leq T_p \leq 100^{\circ}\text{C}$
	T4	$-40^{\circ}\text{C} \leq T_a \leq 70^{\circ}\text{C}$	$-40^{\circ}\text{C} \leq T_p \leq 100^{\circ}\text{C}$
High Temp	T4	$-40^{\circ}\text{C} \leq T_a \leq 70^{\circ}\text{C}$	$-55^{\circ}\text{C} \leq T_p \leq 125^{\circ}\text{C}$
	T3	$-40^{\circ}\text{C} \leq T_a \leq 70^{\circ}\text{C}$	$-55^{\circ}\text{C} \leq T_p \leq 190^{\circ}\text{C}$
	T2	$-40^{\circ}\text{C} \leq T_a \leq 70^{\circ}\text{C}$	$-55^{\circ}\text{C} \leq T_p \leq 235^{\circ}\text{C}$
Low Temp	T6	$-40^{\circ}\text{C} \leq T_a \leq 60^{\circ}\text{C}$	$-196^{\circ}\text{C} \leq T_p \leq 100^{\circ}\text{C}$
	T4	$-40^{\circ}\text{C} \leq T_a \leq 70^{\circ}\text{C}$	$-196^{\circ}\text{C} \leq T_p \leq 100^{\circ}\text{C}$

Temperature and Bottom level measurement sensor (NMT81-CJ)

Temperature Specification	T-Class	T ambient	T Process
Standard	T6	$-40^{\circ}\text{C} \leq T_a \leq 60^{\circ}\text{C}$	$-40^{\circ}\text{C} \leq T_p \leq 70^{\circ}\text{C}$
	T4	$-40^{\circ}\text{C} \leq T_a \leq 70^{\circ}\text{C}$	$-40^{\circ}\text{C} \leq T_p \leq 75^{\circ}\text{C}$

Converter (NMT81-CH)

Temperature Specification	T-Class	T ambient	T Process
Standard	T6	$-40^{\circ}\text{C} \leq T_a \leq 60^{\circ}\text{C}$	*T process varies depending on the specification of the sensor.

-Where the product incorporates certified parts or safety critical components, the manufacturer of the product defined on this certificate shall continually monitor these parts/components for any modifications introduced by the manufacturer(s) of these constituent parts. If the manufacturer of any constituent part introduces any changes which affect the compliance of the certified product that is the subject of this certificate, the manufacturer is required to have this certificate updated.



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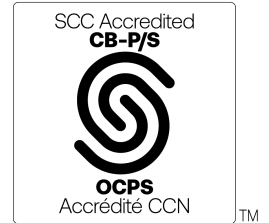
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Notes:

Products certified under Class(es) C225804, C225884 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

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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
80280624	2025-12-23	Update report 80107108 to make editorial corrections on drawings and revise enclosure environmental ratings.
80178182	2024-06-13	Evaluation for update to CSA report 80107108 to include changes conducted under IECEx Certificate IECEx CML 20.0170X, ExTR RefNo. GB/CML/ExTR22.0204/00.
80128768	2022-06-07	Update to Report 80107108 to make minor correction to the control drawing and nameplate drawing, model NMT81
80107108	2022-04-13	Original cCSAus Certification of model Prothermo NT181 Temperature Transmitter based on acceptance of the IECEx CML 20.0170X certification