



Certificate of Compliance

Certificate:	80223771	Master Contract:	166720
Project:	80223771	Date Issued:	2025-07-31
Issued to:	WIKA Alexander Wiegand SE & Co. KG Alexander-Wiegand-Str 30 Klingenberg, Bavaria 63911 Germany	Issued by:	<i>John Kusi Amoateng</i> John Kusi Amoateng

Attention: Thomas Sauer

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

CLASS 2258 04 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity – For Hazardous Locations

IS Class I, Division 1, Groups A, B, C, D; T6...T1

Ex ia IIC T6...T1 Ga

Ex ia IIC T6...T1 Ga/Gb

IS Class I, Division 2, Groups A, B, C, D; T6...T1,

Ex ia IIC T6...T1 Gb



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Intrinsically safe miniature resistance thermometers type TRU-W*-*

Rated Input: 4.4V dc, 1mA, 5mW max., Enclosure Type 4,

Intrinsically Safe when installed per drawing 14740217.

Input entity parameters at connection via M12-plug: U_i or $V_{max} = 7$ VDC, I_i or $I_{max} = 400$ mA, P_i or $P_{max} = 330$ mW, C_i or $C_a = 150$ nF, L_i or $L_a = 2.7$ μ H; Output entity parameter*: U_o or $V_{oc} = U_i$, I_o or $I_{sc} = 400$ mA.

*Short-time; from capacitor discharge time constant: $5 \cdot \tau < 10$ ms

Thermal parameters:

Maximum surface temperature/temperature class of the device depending on ambient temperature range at the case

Temperature class/ Maximum surface temperature	Ambient temperature range
T6	$-40^{\circ}\text{C} \leq T_a \leq +50^{\circ}\text{C}$
T5	$-40^{\circ}\text{C} \leq T_a \leq +75^{\circ}\text{C}$
T4...T1	$-40^{\circ}\text{C} \leq T_a \leq +105^{\circ}\text{C}$

Maximum surface temperature/temperature class at the sensor tip depending on process temperature range

Temperature class/ Maximum surface temperature	Process temperature range
T6	$-196^{\circ}\text{C} \leq T_a \leq +72.5^{\circ}\text{C}$
T5	$-196^{\circ}\text{C} \leq T_a \leq +87.5^{\circ}\text{C}$
T4	$-196^{\circ}\text{C} \leq T_a \leq +122.5^{\circ}\text{C}$
T3	$-196^{\circ}\text{C} \leq T_a \leq +187.5^{\circ}\text{C}$
T2	$-196^{\circ}\text{C} \leq T_a \leq +282.5^{\circ}\text{C}$
T1	$-196^{\circ}\text{C} \leq T_a \leq +432.5^{\circ}\text{C}$

A process temperature higher than the permissible ambient temperature at the case is only permissible if a reverse heat flow from the process to the case is excluded.

IS Class II, Division 1, Groups E, F, G; T*

IS Class III, T*

Ex ia IIC T* Da

Ex ia IIC T* Da/Db

IS Class II, Division 2, Groups F, G; T*,

IS Class III, T*

Ex ia IIC T* Db

Intrinsically safe miniature resistance thermometers type TRU-W*-*

Rated Input: 4.4V dc, 1mA, 5mW max., $-40^{\circ}\text{C} \leq T_a \leq +100^{\circ}\text{C}$, Enclosure Type 4,

Intrinsically Safe when installed per drawing 14740217.

Input entity parameters at connection via M12-plug: U_i or $V_{max} = 7$ VDC, I_i or $I_{max} = 250$ mA, P_i or $P_{max} = 330$ mW, C_i or $C_a = 150$ nF, L_i or $L_a = 2.7$ μ H; Output entity parameter*: U_o or $V_{oc} = U_i$, I_o or $I_{sc} = 400$ mA.



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*Short-time; from capacitor discharge time constant: $5\tau < 10$ ms

Thermal parameters:

Maximum surface temperature/temperature class of the device depending on ambient temperature range at the case

Temperature class/ Maximum surface temperature	Ambient temperature range
T135°C	$-40^{\circ}\text{C} \leq T_a \leq +100^{\circ}\text{C}$

Maximum surface temperature/temperature class at the sensor tip depending on process temperature range

Temperature class/ Maximum surface temperature	Process temperature range
T200 XXX °C	$-196^{\circ}\text{C} \leq T_a \leq +\text{XXX }^{\circ}\text{C} - 9\text{K}$

A process temperature higher than the permissible ambient temperature at the case is only permissible if a reverse heat flow from the process to the case is excluded.

Conditions of Acceptability:

1. A heat input (e.g. heat return from the process or radiant heat from the environment) which exceeds the permissible ambient temperature of the housing is not permissible and must be prevented either by suitable thermal insulation or by an appropriately long neck tube or by suitable on-site measures. The heat input must be determined by calculation or by measurement by the user.
2. In dust-explosive areas with conductive dust IIC/Group E, the intrinsically safe circuit is not safely separated from earth/potentially earthed metal parts. Along the intrinsically safe circuit, potential equalization must exist.
3. The wall thickness of the probe is greater than 0.2 mm, but less than 1 mm. The device may not be exposed to environmental conditions which may negatively affect the partition wall. A thermowell with a suitable minimum wall thickness can be used alternatively.

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

IS Class I, Division 1, Groups A, B, C, D; T6...T1

Class I, Zone 0, AEx ia IIC T6...T1 Ga

Class I, Zone 0/1, AEx ia IIC T6...T1 Ga/Gb

IS Class I, Division 2, Groups A, B, C, D; T6...T1,

Class I, Zone 1, AEx ia IIC T6...T1 Gb

Intrinsically safe miniature resistance thermometers type TRU-W*-*

Rated Input: 4.4V dc, 1mA, 5mW max., Enclosure Type 4,

Intrinsically Safe when installed per drawing 14740217.

Input entity parameters at connection via M12-plug: U_i or $V_{max} = 7$ VDC, I_i or $I_{max} = 400$ mA, P_i or $P_{max} = 330$ mW, C_i or $C_a = 150$ nF, L_i or $L_a = 2.7$ μ H; Output entity parameter*: U_o or $V_o = U_i$, I_o or $I_s = 400$ mA.

*Short-time; from capacitor discharge time constant: $5\tau < 10$ ms



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Thermal parameters:

Maximum surface temperature/temperature class of the device depending on ambient temperature range at the case

Temperature class/ Maximum surface temperature	Ambient temperature range
T6	$-40^{\circ}\text{C} \leq T_a \leq +50^{\circ}\text{C}$
T5	$-40^{\circ}\text{C} \leq T_a \leq +75^{\circ}\text{C}$
T4...T1	$-40^{\circ}\text{C} \leq T_a \leq +105^{\circ}\text{C}$

Maximum surface temperature/temperature class at the sensor tip depending on process temperature range

Temperature class/ Maximum surface temperature	Process temperature range
T6	$-196^{\circ}\text{C} \leq T_a \leq +72.5^{\circ}\text{C}$
T5	$-196^{\circ}\text{C} \leq T_a \leq +87.5^{\circ}\text{C}$
T4	$-196^{\circ}\text{C} \leq T_a \leq +122.5^{\circ}\text{C}$
T3	$-196^{\circ}\text{C} \leq T_a \leq +187.5^{\circ}\text{C}$
T2	$-196^{\circ}\text{C} \leq T_a \leq +282.5^{\circ}\text{C}$
T1	$-196^{\circ}\text{C} \leq T_a \leq +432.5^{\circ}\text{C}$

A process temperature higher than the permissible ambient temperature at the case is only permissible if a reverse heat flow from the process to the case is excluded.

IS Class II, Division 1, Groups E, F, G; T*

IS Class III, T*

Zone 20, AEx ia IIC T* Da

Zone 20/21, AEx ia IIC T* Da/Db

IS Class II, Division 2, Groups F, G; T*,

IS Class III, T*

Zone 21, AEx ia IIC T* Db

Intrinsically safe miniature resistance thermometers type TRU-W*-*

Rated Input: 4.4V dc, 1mA, 5mW max., $-40^{\circ}\text{C} \leq T_a \leq +100^{\circ}\text{C}$, Enclosure Type 4,

Intrinsically Safe when installed per drawing 14740217.

Input entity parameters at connection via M12-plug: U_i or $V_{max} = 7$ VDC, I_i or $I_{max} = 250$ mA, P_i or $P_{max} = 330$ mW, C_i or $C_a = 150$ nF, L_i or $L_a = 2.7$ μ H; Output entity parameter*: U_o or $V_{oc} = 7$ VDC, I_o or $I_{sc} = 400$ mA.

*Short-time; from capacitor discharge time constant: $5 \cdot \tau < 10$ ms

Thermal parameters:

Maximum surface temperature/temperature class of the device depending on ambient temperature range at the case

Temperature class/ Maximum surface temperature	Ambient temperature range
T135°C	$-40^{\circ}\text{C} \leq T_a \leq +100^{\circ}\text{C}$

Maximum surface temperature/temperature class at the sensor tip depending on process temperature range



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Temperature class/ Maximum surface temperature	Process temperature range
T ₂₀₀ XXX °C	-196°C ≤ Ta ≤ +XXX °C - 9K

A process temperature higher than the permissible ambient temperature at the case is only permissible if a reverse heat flow from the process to the case is excluded.

Conditions of Acceptability:

1. A heat input (e.g. heat return from the process or radiant heat from the environment) which exceeds the permissible ambient temperature of the housing is not permissible and must be prevented either by suitable thermal insulation or by an appropriately long neck tube or by suitable on-site measures. The heat input must be determined by calculation or by measurement by the user.
2. In dust-explosive areas with conductive dust IIIC/Group E, the intrinsically safe circuit is not safely separated from earth/potentially earthed metal parts. Along the intrinsically safe circuit, potential equalization must exist.
3. The wall thickness of the probe is greater than 0.2 mm, but less than 1 mm. The device may not be exposed to environmental conditions which may negatively affect the partition wall. A thermowell with a suitable minimum wall thickness can be used alternatively.

APPLICABLE REQUIREMENTS

CSA C22.2 No. 94.2:20 - Third Edition - Enclosures for electrical equipment, environmental considerations

CSA C22.2 No. 61010-1-12,UPD1:2015, UPD2:2016, AMD1:2018, UPD3:2023 - Safety requirements for electrical equipment for measurement, control, and laboratory use — Part 1: General requirements - Third Edition; Update No. 1: July 2015; Update No. 2: April 2016; Update No. 3: June 2023

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

CAN/CSA C22.2 No. 60079-11:14 - Second Edition - Explosive atmospheres - Part 11: Equipment protection by intrinsic safety “i”

CSA C22.2 No. 60079-26:22 (Second Edition) - Explosive atmospheres — Part 26: Equipment with separation elements or combined levels of protection

ANSI/UL 50E, 3rd Edition - Enclosures for Electrical Equipment, Non-Environmental Considerations

UL 61010-1 3rd ed (Rev. Jun 6, 2023) - UL Standard for Safety Electrical Equipment For Measurement, Control, and Laboratory Use; Part 1: General Requirements

ANSI/UL 60079-0-2020 Seventh Edition - Electrical Apparatus for Explosive Gas Atmospheres - Part 0: General Requirements

ANSI/UL 60079-11-2018 (R2023) Sixth Edition - Explosive Atmospheres - Part 11: Equipment Protection by Intrinsic Safety 'i'

UL 913(Eighth Edition) - UL Standard for Safety Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division 1, Hazardous (Classified) Locations - Eighth Edition

ANSI/UL 60079-26 (Third Edition; Reprint with revisions through and including August 16, 2022) - UL Standard for Safety Explosive Atmospheres – Part 26: Equipment with Equipment Protection Level (EPL) Ga

Markings



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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 markings are laser printed directly on the stainless steel enclosure.

- Manufacturer's name: "WIKA Alexander Wiegand SE & Co. KG", or CSA Master Contract Number "166720", adjacent to the CSA Mark in lieu of manufacturer's name.
- Model designation: As specified in the PRODUCTS section, above.
- Electrical ratings: As specified in the PRODUCTS section, above.
- Ambient temperature rating: As specified in the PRODUCTS section, above.
- Manufacturing date, or serial number, traceable to year and month of manufacture.
- Enclosure ratings: As specified in the PRODUCTS section, above.
- The CSA Mark, as shown on the Certificate of Conformity.
- The designation "CSA 25CA80223771X"
- 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. The word "Class" may be abbreviated "CL", the word "Zone" may be abbreviated "ZN".
- Temperature code: As specified in the PRODUCTS section, above.
- The manufacturing location shall be identified if the equipment can be produced in more than one facility.
- "Install per drawing 14740217"



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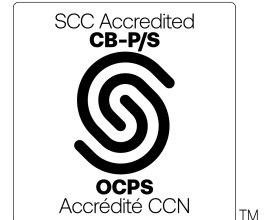
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Notes:

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
80223771	2025-07-31	Original cCSAus Certification for Miniature resistance thermometer, Type TRU-* based on IECEx TR DE/BVS/ExTR 23.0008/00.