

# **Certificate of Compliance**

Certificate: 2236405 Master Contract: 248490

**Project:** 80225112 **Date Issued:** 2025-01-30

Issued to: Schischek GmbH Explosionsschutz

Muhlsteig 45

Langenzenn, Bavaria 90579

Germany

Attention: Wen Liu

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:** Priscilla Daniel Priscilla Daniel

#### **PRODUCTS**

Class 2258 02 PROCESS CONTROL EQUIPMENT - For Hazardous Locations - Certified to US Standards

Class I, Division 1, Groups B, C, and D; Class II, Division 1, Groups E, F, and G; Class III; T4/T5/T6

Electrical Actuator Type ExMax-, and Type ExRun-, rated 24-240 VDC/VAC, 50/60 Hz, 90 W, 50 VA,  $-40^{\circ}\text{C} \le T_{amb} \le 40^{\circ}$  T6, or  $-40^{\circ}\text{C} \le T_{amb} \le 50^{\circ}$  T5, or  $-40^{\circ}\text{C} \le T_{amb} \le 60^{\circ}$  T4. Enclosure Type 4X.

Class I, Division 2, Groups A, B, C, and D, T6/T5/T4

Class I, Zone 2, AEx db ec IIC T6/ T5/ T4 Gc



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#### Ex db ec IIC T6/ T5/ T4 Gc

Electrical Actuator Type RedMax-, and Type RedRun-, rated 24-240 VDC/VAC, 50/60 Hz, 90 W, 50 VA , -40°C  $\leq$   $T_{amb} \leq$  40° T6, or -40°C  $\leq$   $T_{amb} \leq$  50° T5, or -40°C  $\leq$   $T_{amb} \leq$  60° T4. Enclosure Type 4X.

Class II, Division 1, Groups EFG, T80°C

Zone 21, AEx tb IIIC T80°C Db

Model ExPro-TT temperature sensor / probe, ExPro-TT.01.01

CLASS – 2258 03 PROCESS CONTROL EQUIPMENT – Intrinsically Safe and Non-Incendive Systems – For Hazardous Locations

CLASS – 2258 83 PROCESS CONTROL EQUIPMENT – Intrinsically Safe and Non-Incendive Systems – For Hazardous Locations – Certified to U.S. Standards

Class I, Zone 1, AEx db [ib] IIC T6/ T5/ T4 Gb

Ex db [ib] IIC T6/T5/T4 Gb

Electrical Actuator Type ExMax-, and Type ExRun-

Rated 24-240 VDC/VAC, 50/60 Hz,  $-40^{\circ}\text{C} \le T_{amb} \le 40^{\circ}$  T6, or  $-40^{\circ}\text{C} \le T_{amb} \le 50^{\circ}$  T5, or  $-40^{\circ}\text{C} \le T_{amb} \le 60^{\circ}$  T4. Flameproof, with associated intrinsically safe circuits when connected per Control Drawing XA.

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

#### Ex ia IIC T6 Gb



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#### Class I, Zone 1, AEx ia IIC T6 Gb

Model ExPro-TT temperature sensor / probe. Intrinsically safe when installed per control drawing XA.ExPro-TT.01.01-en. Entity parameters:  $U_i = 30 \text{ VDC}$ ,  $I_i = 25 \text{ mA}$ ,  $P_i = 60 \text{ mW}$ ,  $-40^{\circ}\text{C} \le T_{amb} \le 72^{\circ}$  T6.

#### Class I, Zone 2, AEx db ec [ic] IIC T6/ T5/ T4 Gc

Ex db ec [ic] IIC T6/ T5/ T4 Gc

Electrical Actuator Type RedMax-, and Type RedRun-, rated 24-240 VDC/VAC, 50/60 Hz, 90 W, 50 VA,  $-40^{\circ}\text{C} \le T_{amb} \le 40^{\circ}$  T6, or  $-40^{\circ}\text{C} \le T_{amb} \le 50^{\circ}$  T5, or  $-40^{\circ}\text{C} \le T_{amb} \le 60^{\circ}$  T4. Associated Intrinsically Safe circuits for Class I, Zone 2, Group IIC, IIB, and IIA; Enclosure Type 4X.

Intrinsically Safe Field Wiring Entity Parameters for Sensor circuit:

| Wire (plug) for external sensor linear characteristic | $V_{oc} = U_0 \le 10.6 \text{ VDC}$ |        |         |         |
|---|-------------------------------------|--------|---------|---------|
|   | $I_{SC} = I_0 \le 25 \text{ mA}$    |        |         |         |
|   | $P_0 \le 60 \text{ mW}$             |        |         |         |
|   |                                     | Groups |         |         |
|   |                                     | IIC    | IIB     | IIA     |
|   | $C_a = C_0 \le$                     | 200 nF | 1000 nF | 2000 nF |
|   | $L_a = L_0 \le$                     | 1 mH   | 5 mH    | 10 mH   |



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#### APPLICABLE REQUIREMENTS

CSA C22.2 No. 25:17 - Fourth Edition - Enclosures for use in Class II, Division 1, Groups E, F, and G hazardous locations

CSA C22.2 No. 30-M1986 - Explosion-Proof Enclosures for Use in Class I Hazardous Locations - General Instruction No 1-2

CSA C22.2 No. 94.2:15 - Second Edition - Enclosures for electrical equipment, environmental considerations

CSA C22.2 No. 213-17 - Third Edition - Nonincendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified Locations)

CSA C22.2 No. 61010-1-04 - Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 1: General Requirements

CSA C22.2 No. 61010-1-12 - Safety requirements for electrical equipment for measurement, control, and laboratory use — Part 1: General requirements

CAN/CSA C22.2 No. 60079-0:07 - First Edition - Electrical apparatus for explosive gas atmospheres - Part 0: General requirements

CAN/CSA C22.2 No. 60079-1:16 - Explosive atmospheres - Part 1: Equipment protection by flameproof enclosure "d"

CSA C22.2 No. 60079-7:16 - Second Edition - Explosive atmospheres — Part 7: Equipment protection by increased safety "e"

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

CAN/CSA C22.2 No. 60079-31:12 - First Edition - Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure

ANSI/UL 61010-1 3rd Edition (2012), AMD1:2018 - Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 1: General Requirements

UL 50E:2015 - Second Edition - UL Standard for Safety Enclosures for Electrical Equipment, Environmental Considerations

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

ANSI/UL 60079-7-2017 Fifth Edition - Explosive Atmospheres - Part 7: Equipment Protection by Increased Safety 'e'

ANSI/UL 60079-11-2018 Sixth Edition - Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

ANSI/ISA 60079-31 (12.10.03) - 2013 - First Edition - Explosive Atmospheres - Part 31: Equipment Dust Ignition Protection by Enclosure "t"

ANSI/UL 60079-0 (Fifth Edition; Reprint with Revisions Through and Including December 08, 2009) - UL Standard for Safety Explosive atmospheres – Part 0: Equipment – General requirements

ANSI/UL 60079-1-2020 Seventh Edition - Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures 'd'

ANSI/UL 1203-2015 Fifth Edition - Fifth Edition Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations



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Notes:

Products certified under Class(es) C225802, C225882 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). <a href="https://www.scc.ca">www.scc.ca</a>



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## Supplement to Certificate of Compliance

Certificate: 2236405 Master Contract: 248490

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  |
|----------|------------|--|
| 80225112 | 2025-01-30 | Scope: Update to Report 2236405 for Electrical Actuator Type Ex Max, ExRun, ExPlus, RedMax, RedRun and RedPlus to address (FC# 248510) FIR dated May 16, 2024. Standard upgrade from CSA C22.2 No. 25-1966 (Reaffirmed 2009) to CSA C22.2 No. 25-17 as per CSA Notice Hazardous Locations Products No. 35.                     |
| 80038443 | 2021-08-17 | Update to Report 2236405 to include change of the intrinsically safe values from 22mA to 25mA, and elimination of unnecessary temperature class T5 and T4 along with associated drawing updates (ExPro-TT). Updates to standards and markings, and updates to 21 drawings (in addition to updates to 4 drawings for ExPro-TT). |
| 80028783 | 2020-04-13 | Update to Report 2236405 to change the housing material for the d- enclosure, and evaluate all changes to new version 9.6 of the PCB.  |
| 70170985 | 2018-02-23 | Update to Report 2236405 to add alternate fuse F1 (50 mA) protecting the intrinsically-safe circuit.   |
| 70142119 | 2017-09-13 | Update to Report 2236405 to cover changes to non-intrinsically safe circuits and intrinsically safe circuits on control board and operating control board.   |
| 70105985 | 2017-02-24 | Update to Report 2236405 as in Report 2672226, to add Class numbers 4418 05 and 4418 85 as well as Category Codes QCRV2 and QCRV8 to the Cable Gland section.  |
| 70058495 | 2016-01-29 | Update to Report 2236405 to include updated drawings in order to align ATEX models/drawings with North American models/drawings.   |
| 2716313  | 2014-07-22 | Update to Report 2236405 to add ExPro-TT sensor.   |
| 2344516  | 2011-03-25 | Update to Report 2236405 to include cCSAus Class I, Division 1 Groups B, C and D; Class II, Division 1, Groups E, F and G; Class III.  |



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2236405 2010-05-28

Original Certification of Electrical Actuator Type RedMax-.., Type RedRun-.., Type RedPlus-.., Type ExMax-.., Type ExRun-.. and Type ExPlus-..