



Certificate of Compliance

Certificate: 2518052

Master Contract: 160220

Project: 80024773

Date Issued: 2020-04-28

Issued To: Draeger Safety AG & Co. KGaA
Revalstrasse 1
Luebeck, Schleswig-Holstein, 23560
Germany

Attention: Thomas Treptow

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: *Konstantin Rybalko*
Konstantin Rybalko



PRODUCTS

CLASS 4828 01 - SIGNAL APPLIANCES - Combustible Gas Detection Instruments - For Hazardous Locations

Class I, Div. 1, Groups A, B, C and D;
Ex db IIC T6/T4 Gb

Model XTR 020* transmitter and Model XTR 030* transmitter, stationary, input rated 10 to 30 DC, 5W, output rated 4-20mA. For use with integral IDS0002 sensor or with remote junction box EAC 01** with integral IDS0002 sensor. Sensor may be used with splash guard P/N 68 10 796 and calibration adapter P/N68 10 859. Temperature code of T6 for -40°C to + 40°C and T4 for -40°C to + 65°C.

When * is 0 = 4-20mA

When * is 1 = 4-20mA with Relays rated 230Vac, 5A resistive, 30Vdc/5A



Certificate: 2518052
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Model XTR 040* transmitter and Model XTR 050* transmitter, stationary, input rated 10 to 30 DC, 5W, output rated 4-20mA. For use with integral IDS0002 sensor or with remote junction box EAC 01** with integral IDS0002 sensor. Sensor may be used with splash guard p/n 68 10 796 and calibration adapter p/n 68 10 859. Temperature code of T6 for -40°C to + 40°C and T4 for -40°C to + 65°C.

When * is 0 = 4-20mA

When * is 1 = 4-20mA with Relays rated 230Vac, 5A resistive, 30Vdc/5A

Model XTR 021* transmitter and Model XTR 031* transmitter, stationary, input rated 10 to 30 DC, 4W, output rated 4-20mA. For use with integral XDS 0200 sensor with splash guard P/N 68 12 510 or with remote junction box EAC 01** with integral XDS 0200 sensor with splash guard P/N 68 12 510. Temperature code of T6 for -40°C to + 40°C and T4 for -40°C to + 80°C.

When * is 0 = 4-20mA

When * is 1 = 4-20mA with Relay contacts rated 230Vac, 5A resistive, 30Vdc/5A

Model XTR 041* transmitter and Model XTR 051* transmitter, stationary, input rated 10 to 30 DC, 4W, output rated 4-20mA. For use with integral XDS 0200 sensor with splash guard P/N 68 12 510 or with remote junction box EAC 01** with integral XDS 0200 sensor with splash guard P/N 68 12 510. Temperature code of T6 for -40°C to + 40°C and T4 for -40°C to + 80°C.

When * is 0 = 4-20mA

When * is 1 = 4-20mA with Relays rated 230Vac, 5A resistive, 30Vdc/5A

Class I, Div. 1, Groups B, C and D;
Class II, Div. 1, Groups E, F and G;
Ex db IIC T6/T4 Gb;
Ex tb IIIC T80/130°C Db

Model ITR 021* transmitter and Model ITR 031* transmitter, stationary, input rated 10 to 30 DC, 9W, output rated 4-20mA. For use with integral IDS0101 sensor or with remote junction box EAC 01** with integral IDS0101 sensor. Sensor may be used with splash guard, flow cell and bump test adapter. Temperature code of T6 for -40°C to + 40°C and T4 for -40°C to + 80°C.

When * is 0 = 4-20mA

When * is 1 = 4-20mA with Relays rated 230Vac, 5A resistive, 30Vdc/5A



Certificate: 2518052
Project: 80024773

Master Contract: 160220
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Model ITR 022* transmitter and Model ITR 032* transmitter, stationary, input rated 10 to 30 DC, 9W, output rated 4-20mA. For use with integral IDS0102 sensor or with remote junction box EAC 01** with integral IDS0102 sensor. Sensor may be used with splash guard, flow cell and bump test adapter.
Temperature code of T6 for -40°C to + 40°C and T4 for -40°C to + 80°C.

When * is 0 = 4-20mA

When * is 1 = 4-20mA with Relays rated 230Vac, 5A resistive, 30Vdc/5A

Model ITR 041* transmitter and Model ITR 051* transmitter, stationary, input rated 10 to 30 DC, 9W, output rated 4-20mA. For use with integral IDS0101 sensor or with remote junction box EAC 01** with integral IDS0101 sensor. Sensor may be used with splash guard, flow cell and bump test adapter.
Temperature code of T6 for -40°C to + 40°C and T4 for -40°C to + 80°C.

When * is 0 = 4-20mA

When * is 1 = 4-20mA with Relays rated 230Vac, 5A resistive, 30Vdc/5A

Model ITR 042* transmitter and Model ITR 052* transmitter, stationary, input rated 10 to 30 DC, 9W, output rated 4-20mA. For use with integral IDS0102 sensor or with remote junction box EAC 01** with integral IDS0102 sensor. Sensor may be used with splash guard, flow cell plate and bump test plate.
Temperature code of T6 for -40°C to + 40°C and T4 for -40°C to + 80°C.

When * is 0 = 4-20mA

When * is 1 = 4-20mA with Relays rated 230Vac, 5A resistive, 30Vdc/5A

Class I, Div. 1, Groups A, B, C and D;

Class II, Div. 1, Groups E, F and G;

Ex db IIC T6/T4 Gb;

Ex tb IIIC T80/130°C Db

Model RCU 02** and RCU 03** Remote Control Units, stationary, input rated 10 to 30 V dc, 9 W; output 4 - 20 mA with no integral sensor or with remote junction box EAC 01** with integral sensor.
Temperature code of T6 for -40°C to + 40°C and T4 for -40°C to + 80°C.

When ** is *0 = 4-20mA

When ** is *1 = 4-20mA with Relays rated 230Vac, 5A resistive, 30Vdc/5A



Certificate: 2518052
Project: 80024773

Master Contract: 160220
Date Issued: 2020-04-28

**CLASS 4828 81 - SIGNAL APPLIANCES - Combustible Gas Detection Instruments - For Hazardous Locations
- CERTIFIED TO U.S. REQUIREMENTS**

Class I, Div. 1, Groups A, B, C and D

Model XTR 021* transmitter and Model XTR 031* transmitter, stationary, input rated 10 to 30 DC, 4W, output rated 4-20mA. For use with integral XDS 0200 sensor with splash guard P/N 68 12 510 or with remote junction box EAC 01** with integral XDS 0200 sensor with splash guard P/N 68 12 510.
Temperature code of T6 for -40°C to + 40°C and T4 for -40°C to + 80°C.

When * is 0 = 4-20mA

When * is 1 = 4-20mA with Relay contacts rated 230Vac, 5A resistive, 30Vdc/5A

Model XTR 041* transmitter and Model XTR 051* transmitter, stationary, input rated 10 to 30 DC, 4W, output rated 4-20mA. For use with integral XDS 0200 sensor with splash guard P/N 68 12 510 or with remote junction box EAC 01** with integral XDS 0200 sensor with splash guard P/N 68 12 510.
Temperature code of T6 for -40°C to + 40°C and T4 for -40°C to + 80°C.

When * is 0 = 4-20mA

When * is 1 = 4-20mA with Relays rated 230Vac, 5A resistive, 30Vdc/5A

Class I, Div. 1, Groups B, C and D;

Class II, Div. 1, Groups E, F and G

Model ITR 021* transmitter and Model ITR 031* transmitter, stationary, input rated 10 to 30 DC, 9W, output rated 4-20mA. For use with integral IDS0101 sensor or with remote junction box EAC 01** with integral IDS0101 sensor. Sensor may be used with splash guard, flow cell and bump test adapter.
Temperature code of T6 for -40°C to + 40°C and T4 for -40°C to + 80°C.

When * is 0 = 4-20mA

When * is 1 = 4-20mA with Relays rated 230Vac, 5A resistive, 30Vdc/5A

Model ITR 022* transmitter and Model ITR 032* transmitter, stationary, input rated 10 to 30 DC, 9W, output rated 4-20mA. For use with integral IDS0102 sensor or with remote junction box EAC 01** with integral IDS0102 sensor. Sensor may be used with splash guard, flow cell and bump test adapter.
Temperature code of T6 for -40°C to + 40°C and T4 for -40°C to + 80°C.

When * is 0 = 4-20mA

When * is 1 = 4-20mA with Relays rated 230Vac, 5A resistive, 30Vdc/5A



Certificate: 2518052
Project: 80024773

Master Contract: 160220
Date Issued: 2020-04-28

Model ITR 041* transmitter and Model ITR 051* transmitter, stationary, input rated 10 to 30 DC, 9W, output rated 4-20mA. For use with integral IDS0101 sensor or with remote junction box EAC 01** with integral IDS0101 sensor. Sensor may be used with splash guard, flow cell and bump test adapter. Temperature code of T6 for -40°C to + 40°C and T4 for -40°C to + 80°C.

When * is 0 = 4-20mA

When * is 1 = 4-20mA with Relays rated 230Vac, 5A resistive, 30Vdc/5A

Model ITR 042* transmitter and Model ITR 052* transmitter, stationary, input rated 10 to 30 DC, 9W, output rated 4-20mA. For use with integral IDS0102 sensor or with remote junction box EAC 01** with integral IDS0102 sensor. Sensor may be used with splash guard, flow cell plate and bump test plate. Temperature code of T6 for -40°C to + 40°C and T4 for -40°C to + 80°C.

When * is 0 = 4-20mA

When * is 1 = 4-20mA with Relays rated 230Vac, 5A resistive, 30Vdc/5A

Class I, Div. 1, Groups A, B, C and D;
Class II, Div. 1, Groups E, F and G;

Model RCU 02** and RCU 03** Remote Control Units, stationary, input rated 10 to 30 V dc, 9 W; output 4 - 20 mA with no integral sensor or with remote junction box EAC 01** with integral sensor. Temperature code of T6 for -40°C to + 40°C and T4 for -40°C to + 80°C.

When ** is *0 = 4-20mA

When ** is *1 = 4-20mA with Relays rated 230Vac, 5A resistive, 30Vdc/5A

CLASS 4828 02 - SIGNAL APPLIANCES - Toxic Gas Detection Instruments - For Hazardous Locations

Class I, Div. 1, Groups A, B, C and D;
Class II, Div. 1, Groups E, F and G;
Ex db [ia] IIC T6/T4 Gb (for non-I.S. interfaces);
Ex db ia [ia] IIC T6/T4 Gb (for I.S. Fieldbuses);
Ex tb [ia] IIIC T135°C Db

Model ETR 020*, ETR 030*, ETR 040*, and ETR 050* transmitters, stationary, input rated 10 to 30 Vdc, 3W, output rated 4-20mA. Transmitter Galvanic Isolator provides intrinsically safe circuits for use with integral DraegerSensor or DraegerSensor XS with adaptor or with remote, adapter ERA00** (Class I&II, Groups A-G, Ex ia;-Ex ia IIC T6/T4 /Gb; Ex ia IIIC T135°C /Db) and remote sensor ERH 00** (Class I&II, Groups A-G, Ex ia; Ex ia IIC T6/T4 /Gb; Ex ia IIIC T135°C /Db) with integral DraegerSensor or DraegerSensor XS with adaptor.



Certificate: 2518052
Project: 80024773

Master Contract: 160220
Date Issued: 2020-04-28

Temperature code of T6 for -40°C to + 40°C and T4 for -40°C to + 80°C.

- When * is 0 = 4-20mA
- When * is 1 = 4-20mA with Relays rated 230VAC, 5A resistive, 30Vdc/5A
- When * is 2 = Modbus
- When * is A = Foundation Fieldbus (I.S.)
- When * is B = Foundation Fieldbus SIF (I.S.)
- When * is E = Profibus (I.S.)
- When * is F = ProfiSafe (I.S.)

Class I, Div. 1, Groups A, B, C and D;
Ex db [ia] IIC T6/T4 Gb (for non-I.S. interfaces);
Ex db ia [ia] IIC T6/T4 Gb (for I.S. Fieldbuses) :

Model ETR 022*, ETR 032*, ETR 042*, and ETR 052* transmitters, stationary, input rated 10 to 30 Vdc, 3W, output rated 4-20mA. Transmitter Galvanic Isolator provides intrinsically safe circuits for use with integral ultrasonic microphone type LD05.21-*** and remote with sensor adaptor ERA 00** and remote sensor ERH 00** with integral ultrasonic microphone type LD05.21-***.

Temperature code of T6 for -40°C to + 40°C and T4 for -40°C to + 80°C.

- When * is 0 = 4-20mA
- When * is 1 = 4-20mA with Relays rated 230VAC, 5A resistive, 30Vdc/5A
- When * is 2 = Modbus
- When * is A = Foundation Fieldbus (I.S.)
- When * is B = Foundation Fieldbus SIF (I.S.)
- When * is E = Profibus (I.S.)
- When * is F = ProfiSafe (I.S.)

Class I, Div. 1, Groups B, C and D;
Class II, Div. 1, Groups E, F and G;
Ex db IIC T6/T4 Gb (for non-I.S. interfaces);
Ex db ia IIC T6/T4 Gb (for I.S. Fieldbuses);
Ex tb IIIC T80/130°C Db:

Model ITR 025* transmitter and Model ITR 035* transmitter, stationary, input rated 10 to 30 DC, 9W, output rated 4-20mA. For use with integral IDS0105 (C02) sensor or with remote junction box EAC 01** with integral IDS0105 sensor. Sensor may be used with splash guard, flow cell and bump test adapter.

Temperature code of T6 for -40°C to + 40°C and T4 for -40°C to + 80°C.

- When * is 0 = 4-20mA



Certificate: 2518052
Project: 80024773

Master Contract: 160220
Date Issued: 2020-04-28

When * is 1 = 4-20mA with Relays rated 230Vac, 5A resistive, 30Vdc/5A

Model ITR 045* transmitter and Model ITR 055* transmitter, stationary, input rated 10 to 30 DC, 9W, output rated 4-20mA. For use with integral IDS0105 (C02) sensor or with remote junction box EAC 01** with integral IDS0105 sensor. Sensor may be used with splash guard, flow cell and bump test adapter. Temperature code of T6 for -40°C to + 40°C and T4 for -40°C to + 80°C.

When * is 0 = 4-20mA

When * is 1 = 4-20mA with Relays rated 230Vac, 5A resistive, 30Vdc/5A

When * is 2 = Modbus

When * is A = Foundation Fieldbus (I.S.)

When * is B = Foundation Fieldbus SIF (I.S.)

When * is E = Profibus (I.S.)

When * is F = ProfiSafe (I.S.)

Model RCU 02** and RCU 03** Remote Control Units, stationary, input rated 10 to 30 V dc, 9 W; output 4 - 20 mA with no integral sensor or with remote junction box EAC 01** with integral sensor. Temperature code of T6 for -40°C to + 40°C and T4 for -40°C to + 80°C.

When ** is *0 = 4-20mA

When ** is *1 = 4-20mA with Relays rated 230Vac, 5A resistive, 30Vdc/5A

When ** is *2 = Modbus

When ** is *A = Foundation Fieldbus (I.S.)

When ** is *B = Foundation Fieldbus SIF (I.S.)

When ** is *E = Profibus (I.S.)

When ** is *F = ProfiSafe (I.S.)

Conditions of certification:

1. Any components attached or installed by the end user must comply with the specifications of the product section, certified and suitable for the operating conditions.
2. For relationship between ambient temperatures and temperature classes refer to drawing SE20825
3. The circuits are limited to overvoltage category I/II/III as defined in IEC 60664 for FISCO field device operation.



Certificate: 2518052
Project: 80024773

Master Contract: 160220
Date Issued: 2020-04-28

**CLASS 4828 82 - SIGNAL APPLIANCES - Toxic Gas Detection Instruments - For Hazardous Locations -
CERTIFIED TO U.S. REQUIREMENTS**

**Class I, Div. 1, Groups A, B, C and D;
Class II, Div. 1, Groups E, F and G**

Model ETR 020*, ETR030*, ETR040*, and ETR 050* transmitters, stationary, input rated 10 to 30 Vdc, 3W, output rated 4-20mA. Transmitter Galvanic Isolator provides intrinsically safe circuits for use with integral DraegerSensor or DraegerSensor XS with adaptor or with remote, adapter ERA00** (Class I&II, Groups A-G, Ex ia) and remote sensor ERH 00** (Class I&II, Groups A-G, Ex ia) with integral DraegerSensor or DraegerSensor XS with adaptor.

Temperature code of T6 for -40°C to + 40°C and T4 for -40°C to + 80°C.

- When * is 0 = 4-20mA
- When * is 1 = 4-20mA with Relays rated 230VAC, 5A resistive, 30Vdc/5A
- When * is 2 = Modbus
- When * is A = Foundation Fieldbus (I.S.)
- When * is B = Foundation Fieldbus SIF (I.S.)
- When * is E = Profibus (I.S.)
- When * is F = ProfiSafe (I.S.)

Class I, Div. 1, Groups A, B, C and D;

Model ETR 022*, ETR 032*, ETR 042*, and ETR 052* transmitters, stationary, input rated 10 to 30 Vdc, 3W, output rated 4-20mA. Transmitter Galvanic Isolator provides intrinsically safe circuits for use with integral ultrasonic microphone type LD05.21-*** and remote with sensor adaptor ERA 00** and remote sensor ERH 00** with integral ultrasonic microphone type LD05.21-***.

Temperature code of T6 for -40°C to + 40°C and T4 for -40°C to + 80°C.

- When * is 0 = 4-20mA
- When * is 1 = 4-20mA with Relays rated 230VAC, 5A resistive, 30Vdc/5A
- When * is 2 = Modbus
- When * is A = Foundation Fieldbus (I.S.)
- When * is B = Foundation Fieldbus SIF (I.S.)
- When * is E = Profibus (I.S.)
- When * is F = ProfiSafe (I.S.)



Certificate: 2518052
Project: 80024773

Master Contract: 160220
Date Issued: 2020-04-28

**Class I, Div. 1, Groups B, C and D;
Class II, Div. 1, Groups E, F and G**

Model ITR 025* transmitter and Model ITR 035* transmitter, stationary, input rated 10 to 30 DC, 9W, output rated 4-20mA. For use with integral IDS0105 (C02) sensor or with remote junction box EAC 01** with integral IDS0105 sensor. Sensor may be used with splash guard, flow cell and bump test adapter.
Temperature code of T6 for -40°C to + 40°C and T4 for -40°C to + 80°C.

When * is 0 = 4-20mA

When * is 1 = 4-20mA with Relays rated 230Vac, 5A resistive, 30Vdc/5A

Model ITR 045* transmitter and Model ITR 055* transmitter, stationary, input rated 10 to 30 DC, 9W, output rated 4-20mA. For use with integral IDS0105 (C02) sensor or with remote junction box EAC 01** with integral IDS0105 sensor. Sensor may be used with splash guard, flow cell and bump test adapter.
Temperature code of T6 for -40°C to + 40°C and T4 for -40°C to + 80°C.

When * is 0 = 4-20mA

When * is 1 = 4-20mA with Relays rated 230Vac, 5A resistive, 30Vdc/5A

When * is 2 = Modbus

When * is A = Foundation Fieldbus (I.S.)

When * is B = Foundation Fieldbus SIF (I.S.)

When * is E = Profibus (I.S.)

When * is F = ProfiSafe (I.S.)

**Class I, Div. 1, Groups A, B, C and D;
Class II, Div. 1, Groups E, F and G;**

Model RCU 02** and RCU 03** Remote Control Units, stationary, input rated 10 to 30 V dc, 9 W; output 4 - 20 mA with no integral sensor or with remote junction box EAC 01** with integral sensor.
Temperature code of T6 for -40°C to + 40°C and T4 for -40°C to + 80°C.

When ** is *0 = 4-20mA

When ** is *1 = 4-20mA with Relays rated 230Vac, 5A resistive, 30Vdc/5A

When ** is *2 = Modbus

When ** is *A = Foundation Fieldbus (I.S.)

When ** is *B = Foundation Fieldbus SIF (I.S.)

When ** is *E = Profibus (I.S.)

When ** is *F = ProfiSafe (I.S.)



Certificate: 2518052
Project: 80024773

Master Contract: 160220
Date Issued: 2020-04-28

Conditions of certification:

1. Any components attached or installed by the end user must comply with the specifications of the product section, certified and suitable for the operating conditions.
2. For relationship between ambient temperatures and temperature classes refer to drawing SE20825
3. The circuits are limited to overvoltage category I/II/III as defined in IEC 60664 for FISCO field device operation.



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Project: 80024773

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APPLICABLE REQUIREMENTS

C22.2 No. 25-1966	Enclosures for Use in Class II, Groups E, F and G Hazardous Locations
CSA Std. C22.2 No. 30-M1986	Explosion-Proof Enclosures for Use in Class I Hazardous Locations
UL50E, First Edition	Enclosures for Electrical Equipment, Environmental considerations
CSA C22.2 No. 94.2-07	Enclosures for Electrical Equipment, Environmental considerations
UL 1203 (4 th Ed.)	Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations
CAN/CSA-C22.2 No.157-92	Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations
UL 913 (7 th Ed.)	Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II and III, Division 1, Hazardous Locations
CAN/CSA-C22.2 No. 0-M91	General Requirements – Canadian Electrical Code, Part II
CAN/CSA-C22.2 No. 60079-0 Ed. 7	Electrical apparatus for explosive gas atmospheres - Part 0: General Requirements
CAN/CSA-C22.2 No. 60079-1 Ed. 7	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosures "d"
CAN/CSA-60079-11 Ed. 6	Electrical apparatus for explosive gas atmospheres - Part 11: Intrinsic Safety "i"
CAN/CSA 60079-31 Ed. 2	Equipment dust ignition protection by enclosure "t"
CSA Std. C22.2 No.152-M1984	Combustible Gas Detection Instruments - For Hazardous Locations
ANSI/ISA 12.13.01-2000	Performance Requirements For Combustible gas Detectors
CAN/CSA-C22.2 No. 61010-1-12	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use, Part 1: General Requirements
ANSI/ISA-61010-1 3 rd Edition	Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use - Part 1: General Requirements - Third Edition



Supplement to Certificate of Compliance

Certificate: 2518052

Master Contract: 160220

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
80024773	2020-04-28	Update to CSA report 2518052 for addition of alternate ultrasonic sensor for the toxic version of Model ETR.
70161117	2017-11-02	Update to CSA report 2518052 to include minor construction changes.
70073328	2017-02-15	Update to report 2518052 for addition of alternate main assemblies for models ETR 04/05** and ITR 045/055* with alternate communication protocols and corresponding firmware update based on PTB IECEx assessment, addition of models RCU 02** and RCU 03** and minor components changes for existing modules.
70028704	2016-05-26	This project update report 2518052 to revise some PCB layout drawings, Manuals, and cover the ordinary location standard update from CSA C22.2 No 142-M1987 to CSA C22.2 No. 61010-1-12 for all models.
70011352	2015-03-27	Review of Test Data for changes from IECEx and UL reports for acceptance for CUS certification for Divisions and Zones. Modifications of ETR 02/3** transmitters from explosion proof to intrinsically safe, torque requirements on enclosure, NPT specification, and alternative 4 electrode EC sensor.
2518052	2013-04-17	Original certification