Certificate of Compliance

Certificate:	70116284	**Master Contract:**	167534
Project:	80315603	**Date Issued:**	2026-11-17
Issued to:	**MSA - The Safety Company** **1000 Cranberry Woods Dr** **Cranberry Township,** **Pennsylvania 16066-5296** **United States** **Attention:** Larry Vlagea	**Issued by:**	*Himadri Raj* Himadri Raj

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.

C US

PRODUCTS

Class 4828 01 SIGNAL APPLIANCES - Combustible Gas Detection Instruments - For Hazardous Locations
Class 4828 81 SIGNAL APPLIANCES - Combustible Gas Detection Instruments - For Hazardous Locations - Certified to US Standards

Class I, Division 1, Groups A, B, C, & D T6
Ex db IIC T6 Gb
Class I, Zone 1 AEx db IIC T6 Gb

Class II, Division 1, Groups E, F, & G T6

Class II, Division 2, Groups F & G T6
Class III, Division 1, T6

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Certificate: 70116284 **Master Contract**: 167534

Project: 80315603 **Date Issued**: 2026-11-17

Ex tb IIIC T85°C Db
Zone 21 AEx tb IIIC T85°C Db

Type 4X Enclosure Rating

- ULTIMA® X5000 Transmitter (model A-X5000-*a*F*cdeffggh*), also referred to as the "X5000 Gas Monitor" controller. Rated 11-30 VDC, 4.0 A max. input provided by an SELV source. Output Alarm Relay Contacts are rated 250 VAC, 30 VDC, 5.0 A; -40°C ≤ Ta ≤ +60°C. The equipment enclosure has been separately tested against the requirements of IEC 60529 and meets IP66.

a is for Enclosure Material:

0 = Stainless Steel – ¾" NPT 1 = Aluminum – ¾" NPT	2 = Stainless Steel – M25

c is for Bluetooth:

0 = Yes	1 = No

d is for Output Communication:

1 = Analog/HART/Relays	3 = Analog/HART/Relays/ Modbus

e is 0 = Default place holder, not relevant to certification

ff is for Sensor 1 selection:
gg is for Sensor 2 selection:

ULTIMA® XIR Plus sensor	Digital Sensor
00 = No Sensor AA = IR Combustible 0 – 100% LEL – 5% Methane [#] AB = IR Combustible 0 – 100% LEL – 2.1 % Propane [#] AC = IR Combustible 0 – 100% LEL – 4.4 % Methane [#] AD = IR Combustible 0 – 100% LEL – 1.7% Propane [#] AK = IR Combustible 0 – 100% LEL – 2.5% Acetone [#] AS = IR Combustible 0 – 100% LEL – 1.2% Benzene [#] BY = IR Combustible 0 – 100% LEL – 3.3 Ethanol [#] CD = IR Combustible 0 – 100% LEL – 2.7% Ethylene [#] CF = IR Combustible 0 – 100% LEL – 3% Ethylene Oxide [#] CJ = IR Combustible 0 – 100% LEL – 1.1% Hexane [#] CP = IR Combustible 0 – 100% LEL – 2% Isopropanol [#] DJ = IR Combustible 0 – 100% LEL – 1.7% Methyl Methacrylate [#] FJ = IR Combustible 0 – 100% LEL – 3.1% Ethanol [#] FL = IR Combustible 0 – 100% LEL – 2.3% Ethylene [#] FM = IR Combustible 0 – 100% LEL – 2.6% Ethylene Oxide [#] FN = IR Combustible 0 – 100% LEL – 1 % Hexane [#] FP = IR Combustible 0 – 100% LEL – 1% Hexane [#] Any 2 letters – Toxic Gas Sensor	00 = No Sensor or Sensor Body (transmitter only) 01 = No Sensor (sensor body w/blank element) 02 = No Sensor (sensor body (No FRIT) w/blank element) Digital Sensor (With FRIT) model (combustible) 60 = Combustible, 0-100% LEL – 5% Methane [^] 61 = Combustible, 0-100% LEL – 2.1% Propane [^] 62 = Combustible, 0-100% LEL – 1.05% Heptane [^] 63 = Combustible, 0-100% LEL – 0.8% Nonane [^] 64 = Combustible, 0-100% LEL – 4.0% Hydrogen [^] 65 = Combustible, 0-100% LEL – 4.4 % Methane [^] 66 = Combustible, 0-100% LEL – 1.7% Propane [^] 67 = Combustible, 0-100% LEL – 0.85% Heptane [^] 68 = Combustible, 0-100% LEL – 0.7% Nonane [^] Digital Sensor (With FRIT) model (toxic) – Fine threads Any two digit number Digital Sensor (No-FRIT) model (toxic) – Coarse threads Any two digit number

Independently certified Ex Equipment Sensors or Ex Component Sensors are denoted by [^]
Combustible gas sensors certified for performance as part of this report are denoted by [#]
Toxic gas sensors have not been certified for performance.

h *is* for Tag:
0 = None

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T# = (# = 1, 2, or 3) Stainless Steel affixed tags

Conditions of Certification:

1. This fixed equipment is exclusively designed for field mounting in the vertical orientation with restrictions placed around the conduit entry locations permitted for connection of the Digital Sensor (With FRIT) and ULTIMA® XIR Plus sensor. The equipment is subject to the installation and orientation requirements defined in the product manual.
2. The Flameproof and Explosionproof joints shall not be repaired.
3. Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore, the equipment shall only be cleaned with a damp cloth.
4. The ULTIMA® X5000 combustible gas detection system consists of appropriate combinations of the ULTIMA® X5000 Transmitter, optional remote-mounted X5000 or JB5000 Junction Box, Digital Sensor (With FRIT) and ULTIMA® XIR Plus Sensor.
5. Combustible Gas Detection performance compliance does not imply that the equipment will detect gas during and after exposure to dust or fibers in suspension, in air conditions [i.e. Class II, Class III or Zone 21].
6. Only combustible gas Digital sensor (With FRIT) certified for Class I, Division 1/Class I, Zone 1 explosionproof/flame proof evaluated with the ULTIMA® X5000 Transmitter are acceptable.
7. Software version is 4.03.0026 – STM

Class 4828 01 SIGNAL APPLIANCES - Combustible Gas Detection Instruments - For Hazardous Locations
Class 4828 81 SIGNAL APPLIANCES - Combustible Gas Detection Instruments - For Hazardous Locations - Certified to US Standards

Class I, Division 1, Groups A, B, C, & D T6
Ex db IIC T6 Gb
Class I, Zone 1, AEx db IIC T6 Gb

Class I, Division 2, Groups A, B, C, & D T4
Ex nA IIC T4 Gc
Class I, Zone 2, AEx nA IIC T4 Gc

Class II, Division 1, Groups E, F, & G T6

Class II, Division 2, Groups F&G T6
Class III, Division 1, T6

Ex tb IIIC T85°C Db
Zone 21, AEx tb IIIC T85°C Db

Type 4X Enclosure Rating

- ULTIMA® X5000 Transmitter (model A-X5000-*abc**0**effggh* - where model string character ***d*** must equal "0"), also referred to as the "X5000 Gas Monitor" controller. Rated 11-30 VDC, 4.0 A max. input provided by an SELV source; -40°C ≤ Ta ≤ +60°C. The equipment enclosure has been separately tested against the requirements of IEC 60529 and meets IP66.

a is for Enclosure Material:

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0 = Stainless Steel – ¾" NPT 1 = Aluminum – ¾" NPT	2 = Stainless Steel – M25

c is for Bluetooth:

0 = Yes	1 = No

d is for Output Communication:

0 = Analog/HART (No Relays allowed)	

e is 0 = Default place holder, not relevant to certification

ff is for Sensor 1 selection:
gg is for Sensor 2 selection:

ULTIMA® XIR Plus sensor	Digital Sensor
00 = No Sensor AA = IR Combustible 0 – 100% LEL – 5% Methane [#] AB = IR Combustible 0 – 100% LEL – 2.1 % Propane [#] AC = IR Combustible 0 – 100% LEL – 4.4 % Methane [#] AD = IR Combustible 0 – 100% LEL – 1.7% Propane [#] AK = IR Combustible 0 – 100% LEL – 2.5% Acetone [#] AS = IR Combustible 0 – 100% LEL – 1.2% Benzene [#] BY = IR Combustible 0 – 100% LEL – 3.3 Ethanol [#] CD = IR Combustible 0 – 100% LEL – 2.7% Ethylene [#] CF = IR Combustible 0 – 100% LEL – 3% Ethylene Oxide [#] CJ = IR Combustible 0 – 100% LEL – 1.1% Hexane [#] CP = IR Combustible 0 – 100% LEL – 2% Isopropanol [#] DJ = IR Combustible 0 – 100% LEL – 1.7% Methyl Methacrylate [#] FJ = IR Combustible 0 – 100% LEL – 3.1% Ethanol [#] FL = IR Combustible 0 – 100% LEL – 2.3% Ethylene [#] FM = IR Combustible 0 – 100% LEL – 2.6% Ethylene Oxide [#] FN = IR Combustible 0 – 100% LEL – 1 % Hexane [#] FP = IR Combustible 0 – 100% LEL – 1% Hexane [#] Any 2 letters – Toxic Gas Sensor	00 = No Sensor or Sensor Body (transmitter only) 01 = No Sensor (sensor body w/blank element) 02 = No Sensor (sensor body (No FRIT) w/blank element) Digital Sensor (With FRIT) model (combustible) 60 = Combustible, 0-100% LEL – 5% Methane [^] 61 = Combustible, 0-100% LEL – 2.1% Propane [^] 62 = Combustible, 0-100% LEL – 1.05% Heptane [^] 63 = Combustible, 0-100% LEL – 0.8% Nonane [^] 64 = Combustible, 0-100% LEL – 4.0% Hydrogen [^] 65 = Combustible, 0-100% LEL – 4.4 % Methane [^] 66 = Combustible, 0-100% LEL – 1.7% Propane [^] 67 = Combustible, 0-100% LEL – 0.85% Heptane [^] 68 = Combustible, 0-100% LEL – 0.7% Nonane [^] Digital Sensor (With FRIT) model (toxic) – Fine threads Any two digit number Digital Sensor (No-FRIT) model (toxic) – Coarse threads Any two digit number

Independently certified Ex Equipment Sensors or Ex Component Sensors are denoted by [^]
Combustible gas sensors certified for performance as part of this report are denoted by [#]
Toxic gas sensors have not been certified for performance.

h *is* for Tag:
0 = None
T# = (# = 1, 2, or 3) Stainless Steel affixed tags

Conditions of Certification:

1. This fixed equipment is exclusively designed for field mounting in the vertical orientation with restrictions placed around the conduit entry locations permitted for connection of the Digital Sensor (With FRIT) and ULTIMA® XIR Plus sensor. The equipment is subject to the installation and orientation requirements defined in the product manual.
2. The Flameproof and Explosionproof joints shall not be repaired.
3. Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore, the equipment shall only be cleaned with a damp cloth.

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4. The ULTIMA® X5000 combustible gas detection system consists of appropriate combinations of: the ULTIMA® X5000 Transmitter, optional remote-mounted X5000 or JB5000 Junction Box, Digital Sensor (With FRIT) and ULTIMA® XIR Plus Sensor.
5. Combustible Gas Detection performance compliance does not imply that the equipment will detect gas during and after exposure to dust or fibers in suspension, in air conditions [i.e. Class II, Class III or Zone 21].
6. Only combustible gas Digital sensor (With FRIT) certified for Class I, Division 1/Class I, Zone 1 explosionproof/flame proof and evaluated with the ULTIMA® X5000 Transmitter are acceptable for this Combustible Gas Detection approval.
7. Software version is 4.03.0026 – STM

Class 4828 01 SIGNAL APPLIANCES - Combustible Gas Detection Instruments - For Hazardous Locations
Class 4828 81 SIGNAL APPLIANCES - Combustible Gas Detection Instruments - For Hazardous Locations - Certified to US Standards

Class I, Division 1, Groups A, B, C, & D T6
Ex db IIC T6 Gb
Class I, Zone 1, AEx db IIC T6 Gb

Class I, Division 2, Groups A, B, C, & D T6
Ex nA IIC T6 Gc
Class I, Zone 2, AEx nA IIC T6 Gc

Class II, Division 1, Groups E, F & G T6

Class II, Division 2, Groups F & G T6
Class III, Division 1, T6

Ex tb IIIC T85°C Db
Zone 21, AEx tb IIIC T85°C Db

Type 4X Enclosure Rating

- ULTIMA® X5000 Junction Box (10179509, 10179511, 10179513) [for use as a remotely mounted pass-through when connected to an approved fixed combustible gas detection control unit (transmitter)]; Rated 11-30 VDC, 1.0 A max. input provided by an SELV source; -40°C ≤ Ta ≤ +60°C. The equipment enclosure has been separately tested against the requirements of IEC 60529 and meets IP66.

10179509 = ULTIMA® X5000 Junction Box, Stainless Steel, ¾" NPT
10179511 = ULTIMA® X5000 Junction Box, Stainless Steel, M25
10179513 = ULTIMA® X5000 Junction Box, Aluminum, ¾" NPT

Conditions of Certification:

1. The Junction Box shall only receive power from equipment powered by an SELV source equal to or less than the input rating of the Junction Box.
2. This fixed equipment is exclusively designed for field mounting in the vertical orientation with restrictions placed around the conduit entry locations permitted for the connection of input power and sensors such as the Digital Sensor (With FRIT) and ULTIMA® XIR Plus sensor. The equipment is subject to the installation and orientation requirements defined in the product manual.

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3. The Flameproof and Explosionproof joints shall not be repaired.
4. It is recognized that other equipment (i.e. Sensor and/or Transmitter) will be present in the final installation, thus the final Temperature Code rating will be limited by the Sensor and/or Transmitter due to higher code rating.
5. Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore, the equipment shall only be cleaned with a damp cloth.
6. In Combustible Gas Detection performance applications, the Junction Box can be used to construct the ULTIMA®X5000 Gas Monitor fixed combustible gas detection system; remotely mounted, receiving power from a suitably approved transmitter/ control unit (ULTIMA® X5000 Transmitter) while providing protection for the connections to other portions of the system.

Class 4828 01 SIGNAL APPLIANCES - Combustible Gas Detection Instruments - For Hazardous Locations
Class 4828 81 SIGNAL APPLIANCES - Combustible Gas Detection Instruments - For Hazardous Locations - Certified to US Standards

Class I, Division 1, Groups A, B, C, & D T6
Ex db IIC T6 Gb
Class I, Zone 1, AEx db IIC T6 Gb

Class I, Division 2, Groups A, B, C, & D T6
Ex nA IIC T6 Gc
Class I, Zone 2, AEx nA IIC T6 Gc

Class II, Division 1, Groups E, F & G T6

Class II, Division 2, Groups F & G T6
Class III, Division 1, T6

Ex tb IIIC T85°C Db
Zone 21, AEx tb IIIC T85°C Db

Type 4X Enclosure Rating

- JB5000 Junction Box (10213879, 10213893) [for use as a remotely mounted pass-through when connected to an approved fixed combustible gas detection control unit (transmitter)]. Rated 11-30 VDC, 1.0 A max. input provided by an SELV source; -55°C ≤ Ta ≤ +75°C. The equipment enclosure has been separately tested against the requirements of IEC 60529 and meets IP66.

10213879 = JB5000 Junction Box, Stainless Steel, ¾" NPT
10213893 = JB5000 Junction Box, Stainless Steel, M25

Conditions of Certification:

1. The Junction Box shall only receive power from equipment powered by an SELV source equal to or less than the input rating of the Junction Box.
2. This fixed equipment is exclusively designed for field mounting in the vertical orientation with restrictions placed around the conduit entry locations permitted for the connection of input power and sensors such as the Digital Sensor (With FRIT) and ULTIMA® XIR Plus sensor. The equipment is subject to the installation and orientation requirements defined in the product manual.
3. The Flameproof and Explosionproof joints shall not be repaired.

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4. It is recognized that other equipment (i.e. Sensor and/or Transmitter) will be present in the final installation, thus the final Temperature Code rating will be limited by the Sensor and/or Transmitter due to higher code rating.
5. Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore, the equipment shall only be cleaned with a damp cloth.
6. In Combustible Gas Detection performance applications, the Junction Box can be used to construct the ULTIMA®X5000 Gas Monitor fixed combustible gas detection system; remotely mounted, receiving power from a suitably approved transmitter/ control unit (ULTIMA® X5000 Transmitter) while providing protection for the connections to other portions of the system.

Class 4828 01 SIGNAL APPLIANCES - Combustible Gas Detection Instruments - For Hazardous Locations
Class 4828 81 SIGNAL APPLIANCES - Combustible Gas Detection Instruments - For Hazardous Locations - Certified to US Standards

Class I, Division 1, Groups B, C, & D T6
Class I, Division 1, Groups A, B, C, & D T6
Ex db IIC T6 Gb
Class I, Zone 1, AEx db IIC T6 Gb

Class I, Division 2, Groups A, B, C, & D T6

Ex nA IIC T6 Gc
Class I, Zone 2, AEx nA IIC T6 Gc

Class II, Division 1, Groups E, F & G T6
Class III, Division 1, T6

Type 4X Enclosure Rating

- ULTIMA® XIR Plus sensor (A-5K-SENS-*aa-b-c-d-e*) [for use as a remote detector head (sensor) when connected to an approved fixed combustible gas detection control unit]. Rated 7-30 VDC, 800 mA max. input provided by an SELV source powered transmitter to which connection is made; digital communication output; -40°C ≤ Ta ≤ +60°C. The equipment enclosure has been separately tested against the requirements of IEC 60529 and meets IP66.

aa is for Combustible Gas Type (performance):

AA	= IR 0 – 100% LEL – 5% Methane	CJ	= IR 0 – 100% LEL – 1.1% Hexane
AB	= IR 0 – 100% LEL – 2.1 % Propane	CP	= IR 0 – 100% LEL – 2% Isopropanol
AC	= IR 0 – 100% LEL – 4.4% Methane	DJ	= IR 0 – 100% LEL – 1.7% Methyl Methacrylate
AD	= IR 0 – 100% LEL – 1.7% Propane	FJ	= IR 0 – 100% LEL – 3.1% Ethanol
AK	= IR 0 – 100% LEL – 2.5% Acetone	FL	= IR 0 – 100% LEL – 2.3% Ethylene
AS	= IR 0 – 100% LEL – 1.2% Benzene	FM	= IR 0 – 100% LEL – 2.6% Ethylene Oxide
BY	= IR 0 – 100% LEL – 3.3% Ethanol	FN	= IR 0 – 100% LEL – 1 % Hexane
CD	= IR 0 – 100% LEL – 2.7% Ethylene	FP	= IR 0 – 100% LEL – 1% Hexane
CF	= IR 0 – 100% LEL – 3% Ethylene Oxide		

b is 0 = Stainless Steel

c is F = CSA North American

d is for Sensor Body:

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1 = ¾" NPT	2 = M25

e is 0 = Not relevant to certification

Conditions of Certification:

1. The ULTIMA® XIR Plus sensor is assessed for Explosion-proof construction as stand-alone equipment to be used as a component of a combustible gas detection system where combustible performance testing shall be conducted in the end product.
2. The non-incendive ULTIMA® XIR Plus sensor shall only be powered by the ULTIMA® X5000 transmitter in order to satisfy the Division 2 and Ex nA classifications.
3. The flameproof joints shall not be repaired.
4. Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore, the equipment shall only be cleaned with a damp cloth.
5. The ULTIMA® XIR Plus sensor is provided with a ¾" NPT thread and shall only be connected to a suitably certified enclosure. The installation to the certified enclosure shall be with five fully engaged threads, tightened wrench-tight.
6. The ULTIMA® XIR Plus sensor shall be connected directly to a suitably certified junction box or instrument for the hazardous area of installation and thereby provide Ex protection for the flying lead connections.
7. Cable-glands, blanking elements, adapters, when used within the final assembly, shall be certified and suitable for the type of protection of the enclosure. These shall maintain the protection concept and the degree of protection IP66.
8. In Combustible Gas Detection performance applications, the ULTIMA® XIR Plus sensor can be used to construct the ULTIMA®X5000 Gas Monitor fixed combustible gas detection system; mounted onto either the ULTIMA® X5000 Transmitter or ULTIMA® X5000 or JB5000 Junction Box enclosures and receive power and control from the transmitter.
9. The XIR Plus Sensor enclosure with Sensor Guard (opaque cover) or enclosure must fully contain the optical radiation and comply with a suitable type of protection as required by the involved EPL, complying with one of the following conditions:

a. An enclosure for which protection regarding ingress of an explosive dust atmosphere is provided, such as dust protection "t" enclosures" (IEC 60079-31), or

b. An enclosure that provides a minimum ingress protection of IP 6X and where no internal absorbers are to be expected and complying with "Tests of enclosures" in IEC 60079-0.

Class 4828 02 SIGNAL APPLIANCES - Toxic Gas Detection Instruments - For Hazardous Locations
Class 4828 82 SIGNAL APPLIANCES - Toxic Gas Detection Instruments - For Hazardous Locations - Certified to US Standards

Class I, Division 1, Groups A, B, C, & D T6
Ex db IIC T6 Gb
Class I, Zone 1, AEx db IIC T6 Gb

Class II, Division 1, Groups E, F, & G T6

Class II, Division 2, Groups F & G T6
Class III, Division 1, T6

Ex tb IIIC T85°C Db
Zone 21, AEx tb IIIC T85°C Db

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Type 4X Enclosure Rating

- ULTIMA® X5000 Transmitter (model A-X5000-*a***F***cdeffggh*), also referred to as the "X5000 Gas Monitor" controller. Rated 11-30 VDC, 4.0 A max. input provided by an SELV source. Output Alarm Relay Contacts are rated 250 VAC, 30 VDC, 5.0 A; -40°C ≤ Ta ≤ +60°C. The equipment enclosure has been separately tested against the requirements of IEC 60529 and meets IP66.

a is for Enclosure Material:

0 = Stainless Steel – ¾" NPT 1 = Aluminum – ¾" NPT	2 = Stainless Steel – M25

c is for Bluetooth:

0 = Yes	1 = No

d is for Output Communication:

1 = Analog/HART/Relays	3 = Analog/HART/Relays/ Modbus

e is 0 = Default place holder, not relevant to certification

ff is for Sensor 1 selection:
gg is for Sensor 2 selection:

ULTIMA® XIR Plus sensor	Digital Sensor
• = No Sensor Any two letters – Toxic Gas or Combustible Gas Sensor (Not performance assessed)	00 = No Sensor or Sensor Body (transmitter only) 01 = No Sensor (sensor body w/blank element) 02 = No Sensor (sensor body (No FRIT) w/blank element) Any two digits – Toxic Gas or Combustible Gas Sensor (Not performance assessed) [^]

Independently certified Ex Equipment Sensors or Ex Component Sensors (Not performance assessed) are denoted by [^]

h *is* for Tag:
0 = None
T# = (# = 1, 2, or 3) Stainless Steel affixed tags

Conditions of Certification:

1. This fixed equipment is exclusively designed for field mounting in the vertical orientation with restrictions placed around the conduit entry locations permitted for connection of the Digital Sensor (With FRIT) and ULTIMA® XIR Plus sensor. The equipment is subject to the installation and orientation requirements defined in the product manual.
2. The Flameproof and Explosionproof joints shall not be repaired.
3. Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore, the equipment shall only be cleaned with a damp cloth.
4. Software version is 4.03.0026 – STM

Class 4828 02 SIGNAL APPLIANCES - Toxic Gas Detection Instruments - For Hazardous Locations
Class 4828 82 SIGNAL APPLIANCES - Toxic Gas Detection Instruments - For Hazardous Locations - Certified to US Standards

Class I, Division 1, Groups A, B, C, & D T6

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Ex db IIC T6 Gb
Class I, Zone 1, AEx db IIC T6 Gb

Class I, Division 2, Groups A, B, C, & D T4
Ex nA IIC T4 Gc
Class I, Zone 2, AEx nA IIC T4 Gc

Class II, Division 1, Groups E, F, & G T6

Class II, Division 2, Groups F & G T6
Class III, Division 1, T6

Ex tb IIIC T85°C Db
Zone 21, AEx tb IIIC T85°C Db

Type 4X Enclosure Rating

- ULTIMA® X5000 Transmitter (model A-X5000-*abc**0**effggh* - where model string character ***d*** must equal "0"), also referred to as the "X5000 Gas Monitor" controller. Rated 11-30 VDC, 4.0 A max. input provided by an SELV source. Without Alarm Relay Contacts; -40°C ≤ Ta ≤ +60°C. The equipment enclosure has been separately tested against the requirements of IEC 60529 and meets IP66.

a is for Enclosure Material:

0 = Stainless Steel – ¾" NPT 1 = Aluminum – ¾" NPT	2 = Stainless Steel – M25

c is for Bluetooth:

0 = Yes	1 = No

d is for Output Communication:

0 = Analog/HART (No Relays allowed)	

e is 0 = Default place holder, not relevant to certification

ff is for Sensor 1 selection:
gg is for Sensor 2 selection:

ULTIMA® XIR Plus sensor	Digital Sensor
• = No Sensor Any two letters – Toxic Gas or Combustible Gas Sensor (Not performance assessed)	00 = No Sensor or Sensor Body (transmitter only) 01 = No Sensor (sensor body w/blank element) 02 = No Sensor (sensor body (No FRIT) w/blank element) Any two digits – Toxic Gas or Combustible Gas Sensor (Not performance assessed) [^]

Independently certified Ex Equipment Sensors or Ex Component Sensors (Not performance assessed) are denoted by [^]

h *is* for Tag:
0 = None
T# = (# = 1, 2, or 3) Stainless Steel affixed tags

Conditions of Certification:

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1. This fixed equipment is exclusively designed for field mounting in the vertical orientation with restrictions placed around the conduit entry locations permitted for connection of the Digital Sensor and ULTIMA® XIR Plus sensor. The equipment is subject to the installation and orientation requirements defined in the product manual.
2. The Flameproof and Explosionproof joints shall not be repaired.
3. Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore, the equipment shall only be cleaned with a damp cloth.
4. Software version is 4.03.0026 – STM

Class 4828 02 SIGNAL APPLIANCES - Toxic Gas Detection Instruments - For Hazardous Locations
Class 4828 82 SIGNAL APPLIANCES - Toxic Gas Detection Instruments - For Hazardous Locations - Certified to US Standards

Class I, Division 1, Groups A, B, C, & D T6
Ex db IIC T6 Gb
Class I, Zone 1, AEx db IIC T6 Gb

Class I, Division 2, Groups A, B, C, & D T6
Ex nA IIC T6 Gc
Class I, Zone 2, AEx nA IIC T6 Gc

Class II, Division 1, Groups E, F & G T6

Class II, Division 2, Groups F & G T6
Class III, Division 1, T6

Ex tb IIIC T85°C Db
Zone 21, AEx tb IIIC T85°C Db

Type 4X Enclosure Rating

- ULTIMA® X5000 Junction Box (10179509, 10179511, 10179513); Rated 11-30 VDC, 1.0 A max. input provided by an SELV source; -40°C ≤ Ta ≤ +60°C. The equipment enclosure has been separately tested against the requirements of IEC 60529 and meets IP66.

10179509 = ULTIMA® X5000 Junction Box, Stainless Steel, ¾" NPT
10179511 = ULTIMA® X5000 Junction Box, Stainless Steel, M25
10179513 = ULTIMA® X5000 Junction Box, Aluminum, ¾" NPT

Conditions of Certification:

1. The Junction Box shall only receive power from equipment powered by an SELV source equal to or less than the input rating of the Junction Box.
2. This fixed equipment is exclusively designed for field mounting in the vertical orientation with restrictions placed around the conduit entry locations permitted for the connection of input power and sensors such as the Digital Sensor and ULTIMA® XIR Plus sensor. The equipment is subject to the installation and orientation requirements defined in the product manual.

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3. The Flameproof and Explosionproof joints shall not be repaired.
4. It is recognized that other equipment (i.e. Sensor and/or Transmitter) will be present in the final installation, thus the final Temperature Code rating will be limited by the Sensor and/or Transmitter due to higher code rating.
5. Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore, the equipment shall only be cleaned with a damp cloth.

Class 4828 02 SIGNAL APPLIANCES - Toxic Gas Detection Instruments - For Hazardous Locations
Class 4828 82 SIGNAL APPLIANCES - Toxic Gas Detection Instruments - For Hazardous Locations - Certified to US Standards

Class I, Division 1, Groups A, B, C, & D T6
Ex db IIC T6 Gb
Class I, Zone 1, AEx db IIC T6 Gb

Class I, Division 2, Groups A, B, C, & D T6
Ex nA IIC T6 Gc
Class I, Zone 2, AEx nA IIC T6 Gc

Class II, Division 1, Groups E, F & G T6

Class II, Division 2, Groups F & G T6
Class III, Division 1, T6

Ex tb IIIC T85°C Db
Zone 21, AEx tb IIIC T85°C Db

Type 4X Enclosure Rating

- JB5000 Junction Box (10213879, 10213893); Rated 11-30 VDC, 1.0 A max. input provided by an SELV source; -55°C ≤ Ta ≤ +75°C. The equipment enclosure has been separately tested against the requirements of IEC 60529 and meets IP66.

10213879 = JB5000 Junction Box, Stainless Steel, ¾" NPT
10213893 = JB5000 Junction Box, Stainless Steel, M25

Conditions of Certification:

1. The Junction Box shall only receive power from equipment powered by an SELV source equal to or less than the input rating of the Junction Box.
2. This fixed equipment is exclusively designed for field mounting in the vertical orientation with restrictions placed around the conduit entry locations permitted for the connection of input power and sensors such as the Digital Sensor and ULTIMA® XIR Plus sensor. The equipment is subject to the installation and orientation requirements defined in the product manual.
3. The Flameproof and Explosionproof joints shall not be repaired.
4. It is recognized that other equipment (i.e. Sensor and/or Transmitter) will be present in the final installation, thus the final Temperature Code rating will be limited by the Sensor and/or Transmitter due to higher code rating.
5. Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an

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ignition-capable level of electrostatic charge. Therefore, the equipment shall only be cleaned with a damp cloth.

Class 4828 02 SIGNAL APPLIANCES - Toxic Gas Detection Instruments - For Hazardous Locations
Class 4828 82 SIGNAL APPLIANCES - Toxic Gas Detection Instruments - For Hazardous Locations - Certified to US Standards

Class I, Division 1, Groups B, C, & D T6
Class I, Division 1, Groups A, B, C, & D T6
Ex db IIC T6 Gb
Class I, Zone 1, AEx db IIC T6 Gb

Class I, Division 2, Groups A, B, C, & D T6

Ex nA IIC T6 Gc
Class I, Zone 2, AEx nA IIC T6 Gc

Class II, Division 1, Groups E, F & G T6
Class III, Division 1, T6

Type 4X Enclosure Rating

- ULTIMA® XIR Plus sensor (A-5K-SENS-*aa-b-c-d-e*); Rated 7-30 VDC, 800 mA max. input provided by an SELV source powered transmitter to which connection is made; digital communication output; -40°C ≤ Ta ≤ +60°C. The equipment enclosure has been separately tested against the requirements of IEC 60529 and meets IP66.

aa is for Toxic Gas Type (Not Performance Assessed):
any two letters

b is 0 = Stainless Steel

c is F = CSA North American

d is for Sensor Body:

1 = ¾" NPT	2 = M25

e is 0 = Not relevant to certification

Conditions of Certification:

1. The ULTIMA® XIR Plus sensor is assessed for Explosion-proof construction as stand-alone equipment.
2. The non-incendive ULTIMA® XIR Plus sensor shall only be powered by the ULTIMA® X5000 transmitter in order to satisfy the Division 2 and Ex nA classifications.
3. The flameproof joints shall not be repaired.
4. Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore, the equipment shall only be cleaned with a damp cloth.
5. The ULTIMA® XIR Plus sensor is provided with a ¾" NPT thread and shall only be connected to a suitably certified enclosure. The installation to the certified enclosure shall be with five fully engaged threads, tightened wrench-tight.

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6. Cable-glands, blanking elements, adapters, when used within the final assembly, shall be certified and suitable for the type of protection of the enclosure. These shall maintain the protection concept and the degree of protection IP66.
7. The XIR Plus Sensor enclosure with Sensor Guard (opaque cover) or enclosure must fully contain the optical radiation and comply with a suitable type of protection as required by the involved EPL, complying with one of the following conditions:

a. An enclosure for which protection regarding ingress of an explosive dust atmosphere is provided, such as dust protection "t" enclosures" (IEC 60079-31), or
b. An enclosure that provides a minimum ingress protection of IP 6X and where no internal absorbers are to be expected and complying with “Tests of enclosures” in IEC 60079-0.

APPLICABLE REQUIREMENTS

Standards Used	Description
CAN/CSA C22.2 No. 94.1-15+Upd.1 (Second Edition)(R2020)	Enclosures for electrical equipment, non-environmental considerations - Second Edition; Update No. 1: October 2020
UL 50:2015 - Thirteenth Edition	UL Standard for Safety Enclosures for Electrical Equipment, Non-Environmental Considerations - Thirteeth Edition
CSA C22.2 No. 94.2:15 - Second Edition	Enclosures for electrical equipment, environmental considerations
UL 50E:2015 - Second Edition	UL Standard for Safety Enclosures for Electrical Equipment, Environmental Considerations
UL 61010-1, 3rd Edition (May 11, 2012)	UL Standard for Safety Electrical Equipment For Measurement, Control, and Laboratory Use; Part 1: General Requirements
FM 3810:2018	Electrical Equipment for Measurement, Control and Laboratory Use
CSA C22.2 NO. 30-M1986	Explosion-Proof Enclosures for Class I Hazardous Locations - Third Edition
FM 3600:2018	Electrical Equipment for Use in Hazardous (Classified) Locations - General Requirements
FM 3615 : 2018	Explosionproof Electrical Equipment – General Requirements
ANSI/UL 60079-0-2019 Seventh Edition	UL Standard for Safety Explosive atmospheres – Part 0: Equipment – General requirements
ANSI/ISA 60079-1 (12.22.01) - 2009 - Sixth Edition	Explosive Atmospheres - Part 1: Equipment Protection by Flameproof Enclosures “d”
CSA C22.2 No. 25-1966(R2014)	Enclosures for Use in Class II Groups E, F, and G Hazardous Locations - Incorporating General Instruction No. 1: 9/1966
FM 3616:2011	Dust-Ignitionproof Electrical Equipment General Requirements

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ANSI/ISA 60079-31 (12.10.03) - 2015 - First Edition	Explosive Atmospheres – Part 31: Equipment Dust Ignition Protection by Enclosure “t”
CSA C22.2 No. 152-M1984 (Second Edition) (R2016)	Combustible gas detection instruments - Second Edition; General Instruction No. 1: November 1984; General Instruction No. 2: September 1985; General Instruction No. 3: January 1988
ANSI/ISA 60079-29-1 (12.13.01) - 2013	Explosive Atmospheres – Part 29-1: Gas detectors – Performance requirements of detectors for flammable gases
FM 6310/6320	Combustible Gas Detectors
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
CAN/CSA-C22.2 No. 61010-1-12 - Third Edition - Up to and including Update 2: April 2016	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
ANSI/UL 121201:2017 - Ninth Edition - Including Revisions Through April 1, 2021	UL Standard for Safety Nonincendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations
CAN/CSA C22.2 No. 60079-15:12 - First Edition	Electrical apparatus for explosive gas atmospheres — Part 15: Construction, test and marking of type of protection 'n' electrical apparatus.
CSA C22.2 No. 60079-1:16 - Third Edition	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
CSA C22.2 No. 60079-31:15 - Second Edition	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
ANSI/ISA-60079-15(12.12.02)-2012	Explosive atmospheres - Part 15: Equipment protection by tyoe of protection "n" (Edition 4)
FM 3611:2018	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. 60079-29-1:17 - Second Edition	Explosive atmospheres - Part 29-1: Gas detectors - Performance requirements of detectors for flammable gases

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

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without either indicator for Canada only.

The following common marking requirements shall appear on the enclosures of the ULTIMA® X5000 transmitter, ULTIMA® X5000 Junction Box, JB5000 Junction Box and ULTIMA® XIR Plus sensor -

- Manufacturer's name, "MSA-The Safety Company", "MSA" logo or CSA Master Contract Number "167534" in lieu of Manufacturer's name, adjacent to the CSA Mark.
- Model number: as specified in the PRODUCTS section.
- Electrical ratings: as specified in the PRODUCTS section.
- Ambient temperature rating: as specified in the PRODUCTS section, above (may be abbreviated).
- Enclosure ratings: as specified in the PRODUCTS section, above (may be abbreviated).
- Manufacturing date in MMYY format, or serial number, traceable to month of manufacture.
- If applicable, an indication of the manufacturing location, if the equipment is manufactured at multiple locations.
- ISO 60417, Symbol 5019 ⏚ adjacent to the equipment ground (protective conductor) terminal. Note: May be cast into the enclosure body or separately marked.
- ISO 3864 Symbol B.3.1 ⚠ or ISO 7000 symbol 0434 ⚠ (triangle with exclamation point), or alternatively a marking to warn the installer in order to consult the installation instructions before determining the temperature rating of the cable to be connected to the terminals.

  Note: May be provided beside terminals or in a location visible before and during connection.
- The CSA Mark, as shown on page 1 of the Certificate of Conformity.
- Hazardous Location designation: as specified in the PRODUCTS section, above.
- Temperature Code: as specified in the PRODUCTS section, above.
- "17.70116284X", adjacent to the CSA Mark
- The following cautions and warnings shall be in English and in French -
  - "⚠WARNING – DO NOT OPERATE THIS EQUIPMENT WITHOUT FIRST READING AND UNDERSTANDIN ALL INSTRUCTIONS, WARNINGS AND
  - CAUTIONS IN INSTRUCTION MANUALS P/N 10177361 & 10182779" (or technically equivalent text)"
  - "WARNING – DO NOT OPEN WHEN ENERGIZED OR WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT"
  - "WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS IN THE MANUAL"

- The following additional markings shall appear on the enclosure of the ULTIMA® X5000 Transmitter -
  - "C22.2 No. 152", adjacent to the CSA Mark
  - "60079-29-1", adjacent to the CSA Mark (per CAN/CSA C22.2 No. 60079-29-1:17)
  - "ANSI/ISA 60079-29-1", adjacent to the CSA Mark (per FM 6310/6320 & ANSI/ISA 60079-29-1)

Nameplate adhesive label material approval information:

- The following marking label material is used -

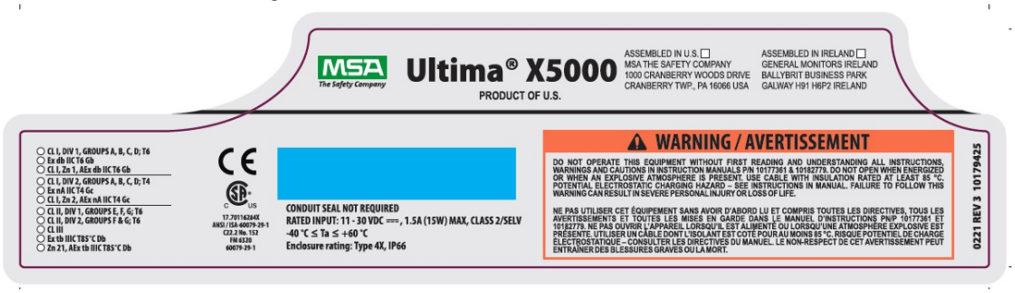
The following markings are provided on an adhesive-type nameplate, CSA Certified under class 7921-06 and UL Recognized under Category Code PGDQ2. Nameplate is Type A - Heavy Duty, Pressure sensitive "300" with clear polyester lamination (3 to 4 mil) overall, manufactured by Nelson Name Plate Co., and consists of Autotex Steel label material and 3M 9472LE 300 series adhesive material. The nameplate is affixed to the side circumference of the unpainted cylindrical aluminum or stainless steel enclosure, and is suitable for indoor or outdoor use on such metals. Additional labels or casted markings are located adjacent to enclosure entries, in order to identify the thread

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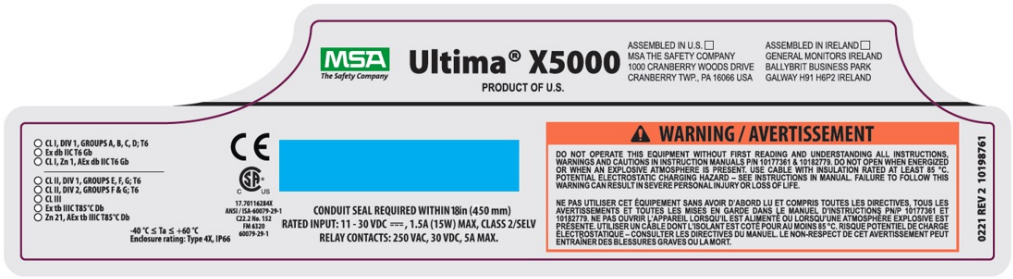
form of each entry for field wiring compartments.

- Representative marking labels follow –

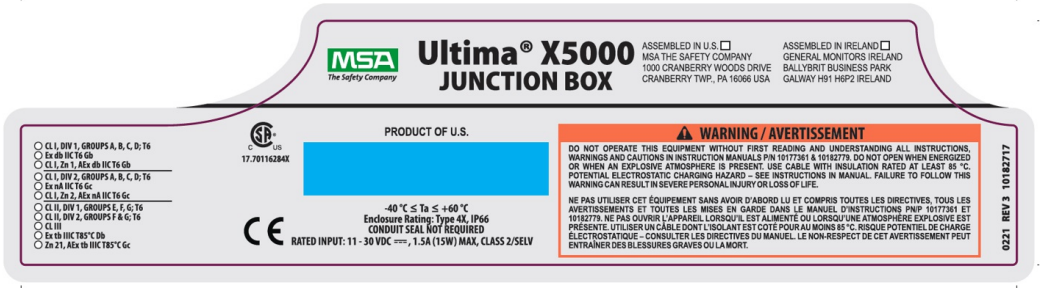
X5000 without relays



X5000 with relays

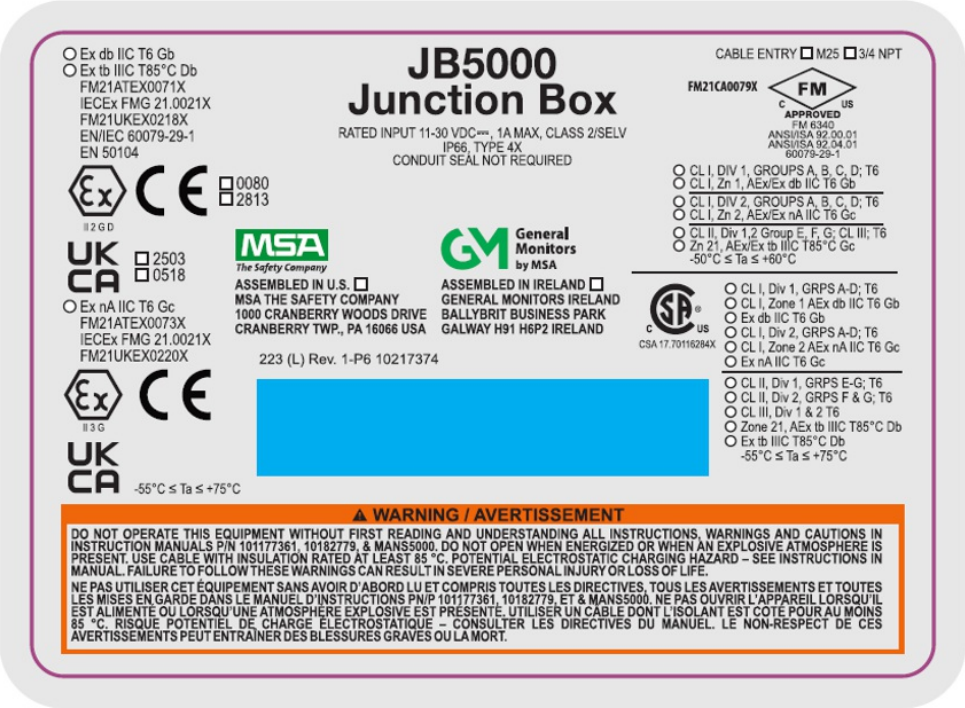


ULTIMA® X5000 Junction Box label

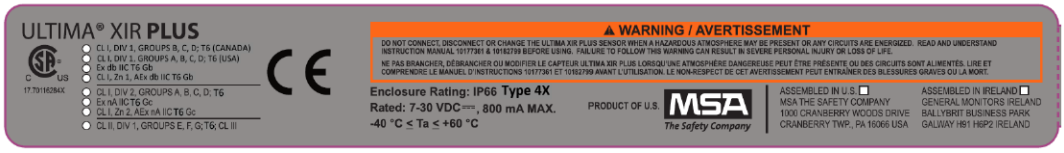


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JB5000 Junction Box



Canada & USA



- The following markings shall appear in the INSTRUCTION/ OPERATOR'S MANUAL accompanying each apparatus:

The following cautions and warnings, or technically equivalent text, in English shall also be translated into French (multiple warnings may be combined into one equivalent warning.) -

(For ALL models)

- "⚠ READ AND UNDERSTAND ALL INSTRUCTIONS, WARNINGS AND CAUTIONS PRIOR TO INSTALLATION OF ANY COMPONENTS OF THIS SYSTEM" (This literature shall accompany each apparatus)
- "CAUTION – OPEN CIRCUIT BEFORE REMOVING COVER"
- THE FOLLOWING EQUIPMENT SHALL HAVE A SEAL INSTALLED WITHIN 2 in (50 mm) OF THE ENCLOSURE:
  - Aluminum X5000 Transmitter with and without relay contacts
- Aluminum X5000 Junction BoxTHE FOLLOWING EQUIPMENT SHALL HAVE A SEAL INSTALLED WITHIN 18 in (450 mm) OF THE ENCLOSURE
  - Stainless Steel X5000 Transmitter with relay option
- THE FOLLOWING EQUIPMENT DO NOT REQUIRE A SEAL:
  - Stainless Steel X5000 Transmitter without relay contacts
  - Stainless Steel X5000 Junction Box

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- Stainless Steel JB5000 Junction Box
- "WARNING – DO NOT SEPARATE WHEN ENERGIZED" (*Note*: May be adjacent to the internal pluggable connectors)
- "WARNING – DO NOT OPEN WHEN ENERGIZED OR WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT
- "WARNING – LIVE PARTS BEHIND COVER, OPEN CIRCUIT BEFORE REMOVING COVER – DO NOT CONTACT"
- "WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS IN THE MANUAL"
- "WARNING – NO INGRESS PROTECTIONS CLAIMS ARE MADE FOR COMBUSTIBLE GAS DETECTION PERFORMANCE"
- "CAUTION: THIS AREA MUST BE FREE OF FLAMMABLE GASES DURING CALIBRATION"
- "WARNING – FOR SAFETY REASONS THIS EQUIPMENT MUST BE OPERATED AND SERVICED BY QUALIFIED PERSONNEL ONLY. DO NOT OPERATE THIS EQUIPMENT UNTIL AFTER THE INSTRUCTION MANUAL IS READ AND UNDERSTOOD FOR PROPER INSTALLATION AND OPERATION"
- "CAUTION: HIGH OFF-SCALE READING MAY INDICATE EXPLOSIVE CONCENTRATION" (not applicable to junction box without display)
- "USE CABLE WITH INSULATION RATED AT LEAST 85°C"

(Only for the X5000 Remote ULTIMA® X5000 and JB5000 Junction Boxes)

- "WARNING – WIRING TO OR FROM THIS DEVICE, WHICH ENTERS OR LEAVES THE SYSTEM ENCLOSURE, MUST UTILIZE WIRING METHODS SUITABLE FOR CLASS I, DIVISION 2 / ZONE 2 HAZARDOUS LOCATIONS, AS APPROPRIATE FOR THE INSTALLATION"
- "WARNING – EXPLOSION HAZARD. DO NOT CONNECT OR DISCONNECT WHEN ENERGIZED"
- "USE FOR COMBUSTIBLE GAS DETECTION SHALL BE EVALUATED AS A COMPONENT WITHIN A SUITABLY CERTIFIED SYSTEM"

The following information shall appear in the INSTRUCTION/ OPERATOR'S MANUAL or in a data sheet which shall be supplied with each unit:

- Manufacturer's contact information including name and address.
- Electrical ratings: As specified in the PRODUCTS section above.
- Physical specifications including weight and sizes.
- Description of the intended use
- Electrical and environmental specifications: permanently connected, Equipment Class II, Pollution Degree 2, continuous operation, maximum altitude of 2000 m.
- Explanation of CAUTION, WARNING markings and symbols used.
- Instructions for installation, identification of terminal connections, protective earthing, operation, operating controls, sensor interconnection, cleaning, maintenance and service.
- Instruction to use certified or listed wire leads at the terminal block connections, suitable for temperatures in excess of the following:
  - 81.9°C for the X5000 Transmitter.
  - 60.0°C for the X5000 ULTIMA® X5000 Junction Box.
  - 76.5°C for the JB5000 Junction Box.
- Instruction to use service personnel authorized by the manufacturer
- Specific commissioning instructions and, if necessary for safety, warnings against hazards which could arise during installation or commissioning of the equipment.
- A statement that the safety of any system incorporating the equipment is the responsibility of the assembler of the system.
- A statement that if the equipment is used in a manner not specified by the manufacturer, the protection

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provided by the equipment may be impaired

- Guidance on how to determine that the equipment is functioning correctly when used in applications where a hazard could be caused by an incorrect reading when measuring, indicating or detecting harmful or corrosive substances, or hazardous live electrical quantities.
- "As part of this Approval, it was verified that optional communication functions of this gas detection instrument while operating at the maximum transaction rate do not adversely affect the gas detection operation and functions of the instrument. This Approval, however, does not include or imply Approval of the communications protocol or functions provided by the software of this instrument or of the communications apparatus or software connected to this instrument."

The operating manuals or related documents must state that, to claim 60079-29-1 compliance, the user interface password must be enabled, and have non-default value. The operating manuals must also state that physical access control must be implemented to prevent unauthorized parameter update via Modbus, HART or DCS.

Conditions Of Acceptability

Refer Product section for Condition of Acceptability of each product

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Certificate: 70116284 **Master Contract**: 167534

Project: 80315603 **Date Issued**: 2026-11-17

Notes:

Products certified under Class(es) C482801, C482802, C482881, C482882 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca

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Supplement to Certificate of Compliance

Certificate: 70116284 **Master Contract:** 167534

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
80315603	2026-11-17	Update Report 70116284 to resolve revised descriptive drawings noted in FC# 167535, FIR dated July 16, 2026
80289287	2026-03-31	Update to CSA report 70116284 for Model X5000 SW to add HART communication.
80257245	2025-07-15	Update report for X5000 Transmitter minor construction changes.
80230761	2025-05-15	Update report for addition of alternate proximity sensor and update to firmware revision 4.02.0018 for the transmitter.
80185904	2024-09-13	Update to report 70116284 for the X5000 Gas Monitor to add ST microprocessor option and a firmware update to allow use of XIR Plus Point XIR Detector.
80139313	2022-09-28	Update to report 70116284 due to replacement of obsolete components, addition of alternate controllers and minor editorial updates in the X5000 Gas Monitor.
80061856	2022-04-18	X5000 transmitter add Isolated Modbus and wireless HART communication options and update firmware update to 1.04.3092. XIR Plus sensor T-code changed to T6, added Type 4X and firmware to 3.2. Assess system to 2018 edition of FM 3810, FM 3600, FM 3615, FM 6310/6320, and FM 3611. Insulation temperature warning moved to user instructions. Update descriptive document list, markings, and factory test parameters.
80033111	2020-06-18	Update report 70116284 to add the JB5000 Junction Box enclosure and electronics to the Ultima X5000 assembly configuration for gas detection performance in hazardous locations. The JB5000 enclosure and electronics was evaluated at CSA under project 80027765 to be include as a new configuration option within this certification. Addition of JB5000 junction box drawings and revision of several drawings. Update to the latest edition of CSA C22. No. 60079-0, edition 7 and UL 60079-0, edition 7. Removal of "Division 2" and "Ex db nA" classifications from X5000 transmitter listing with relays Option 1. Option 0 of X5000 Transmitter (no relays) will continue to have Division 2 and Ex nA classifications. Changes to several temperature codes.

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70199266	2019-06-14	Update Report 70116284 to include revised drawings and instruction manual. This project updates cosmetic changes and features to the X5000 firmware, added other combustible gases for the Digital Sensor (With FRIT) and XIR Plus sensor. Alternate pre-amp board (Diffusion Supervision) added for CO and H2S toxic Digital sensor version with FRIT with additional model codes for these sensors were introduced.
70209710	2019-02-26	Updated report 70116284 to include the revised nameplate approval drawing, the revised product instruction manual and the addendum to the manual.
70171765	2018-11-07	Reformatted report 70116284 to better align with the IECEx-ATEX report and added Zone 2 and Division 2 approval for the existing XP/ Ex db ULTIMA® X5000 Transmitter and ULTIMA® XIR Plus Sensor.
70136274	2017-08-21	Update Report 70116284 to reflect X5000 firmware revision.
70116284	2017-04-20	Original certification of the ULTIMA® X5000 fixed combustible/ toxic gas monitor making use of Protection Type “Ex d” Flame-proof and Class I, Division 1 Explosion-proof to cover the intended use in potentially explosive gas atmospheres for fixed combustible gas detection performance.

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