



Certificate of Compliance

Certificate: 70116284 (LR 064969_0_00)

Master Contract: 167534

Project: 70116284

Date Issued: 2017-04-19

Issued to: Mine Safety Appliances Company North American Division
1000 Cranberry Woods Dr
Cranberry Township, Pennsylvania 16066-5296
USA

Attention: Warren Bennett

The products listed below are eligible to bear the CSA Mark shown



Issued by: *Rawn Murphy*
Rawn Murphy

PRODUCTS

4828-01 SIGNAL APPLIANCES-Combustible Gas Detection Instruments-For Hazardous Location

Class I, Division 1, Groups A, B, C & D T5

Ex db IIC T5 Gb

Class II, Division 1, Groups E, F & G; Division 2, Groups F & G; Class III, Divisions 1 & 2; T5

Ex tb IIIC T100°C Db

• ULTIMA® X5000 fixed combustible gas monitor, consisting of an ULTIMA® X5000 main transmitter or ULTIMA® X5000 Junction Box, constructed of either stainless steel or aluminum and either of the following sensor (4-20 mA) configurations:

1. Two DIGITAL SENSOR's installed either integral to the ULTIMA® X5000 main transmitter or one integral and one remote via the ULTIMA® X5000 Junction Box
2. Two ULTIMA® XIR Plus sensor's, one integral and one remote via the ULTIMA® X5000 Junction Box
3. One DIGITAL SENSOR and one ULTIMA® XIR Plus sensor installed either integral to the ULTIMA® X5000 main transmitter or remotely via the ULTIMA® X5000 Junction Box

Input Rated: 11 to 30 Vdc, 1.5A (15 W) max, Class 2 / SELV, Equipment Class II, Pollution Degree 2; with Output Relay Contacts rated 250 Vac, 30 Vdc, 5.0 A max. (dual 0-22 mA outputs); Operating ambient temperature of -40°C to +60°C; Enclosure Rating: Type 4X, IP66.



Certificate: 70116284
Project: 70116284

Master Contract: 167534
Date Issued: 2017-04-19

Modifier/Condition of Certification:

1. Configurations utilizing the DIGITAL SENSOR are restricted to an enclosure rating of Type 3X, IP65 [configurations 1 and 3].
2. Configurations utilizing the ULTIMA® XIR Plus are restricted to Class I, Division 1, Groups B, C and D; Class II, Division 1, Groups E, F and G; Class III; T4 and Ex db IIC T4 Gb classified locations [configurations 2 and 3].
3. Neither the DIGITAL SENSOR nor ULTIMA® XIR Plus sensor has approval for combustible gas detection performance in Class II, III/ Zone 21 [all configurations].

**Class I, Division 1, Groups A, B, C, D; T5
Ex db IIC T5 Gb**

**Class I, Division 2, Groups A, B, C, D; T4
Ex nA IIC T4 Gc**

**Class II, Division 1, Groups E, F & G; Division 2, Groups F & G; Class III, Divisions 1 & 2; T5
Ex tb IIIC T100°C Db**

- ULTIMA® X5000 Junction Box constructed of either stainless steel or aluminum and either of the following sensor (4-20 mA) configurations:

1. One DIGITAL SENSOR installed integral to the ULTIMA® X5000 Junction Box
2. One ULTIMA® XIR Plus sensor installed integral to the ULTIMA® X5000 Junction Box

Input Rated: 11 to 30 Vdc, 1.5A (15 W) max, Class 2 / SELV, Equipment Class II, Pollution Degree 2; Operating ambient temperature of -40°C to +60°C; Enclosure Rating: Type 4X, IP66.

Modifier/Condition of Certification:

1. Class I, Division 2, and Ex nA applies only to the ULTIMA® X5000 Junction Box enclosure which contains pluggable terminal blocks [all configurations].
2. Configurations utilizing the DIGITAL SENSOR are restricted to an enclosure rating of Type 3X, IP65 [configuration 1].
3. Configurations utilizing the ULTIMA® XIR Plus are restricted to Class I, Division 1, Groups B, C and D; Class II, Division 1, Groups E, F and G; Class III; T4 and Ex db IIC T4 Gb classified locations [configuration 2].
4. Neither the DIGITAL SENSOR nor ULTIMA® XIR Plus sensor has approval for combustible gas detection performance in Class II, III/ Zone 21 [both configurations].
5. Neither the DIGITAL SENSOR nor ULTIMA® XIR Plus sensor were evaluated for Class I, Division 2/ Ex nA types of protection. However, the Canadian Electrical Code permits the use of Class I, Division 1/ Zone 1 equipment in Class I, Division 2/ Zone 2 when the installation is per Division/Zone 1 wiring methods.

4828-81 SIGNAL APPLIANCES-Combustible Gas Detection Instruments-For Hazardous Location -
Certified to U.S. Standards

Class I, Division 1, Groups A, B, C, D; T5

Class I, Zone 1, AEx db IIC T5 Gb

**Class II, Division 1, Groups E, F & G; Division 2, Groups F & G; Class III, Divisions 1 & 2; T5
Zone 21, AEx tb IIIC T100°C Db**



Certificate: 70116284

Project: 70116284

Master Contract: 167534

Date Issued: 2017-04-19

• ULTIMA® X5000 fixed combustible gas monitor, consisting of an ULTIMA® X5000 main transmitter or ULTIMA® X5000 Junction Box, constructed of either stainless steel or aluminum, with either of the following sensor (4-20 mA) configurations:

1. Two DIGITAL SENSOR's installed either integral to the ULTIMA® X5000 main transmitter or one integral and one remote via the ULTIMA® X5000 Junction Box
2. Two ULTIMA® XIR Plus sensor's, one integral and one remote via the ULTIMA® X5000 Junction Box
3. One DIGITAL SENSOR and one ULTIMA® XIR Plus sensor installed either integral to the ULTIMA® X5000 main transmitter or remotely via the ULTIMA® X5000 Junction Box

Input Rated: 11 to 30 Vdc, 1.5A (15 W) max, Class 2 / SELV, Equipment Class II, Pollution Degree 2; with Output Relay Contacts rated 250 Vac, 30 Vdc, 5.0 A max. (dual 0-22 mA outputs); Operating ambient temperature of -40°C to +60°C; Enclosure Rating: Type 4X, IP66.

Modifier/Condition of Certification:

1. Configurations utilizing the DIGITAL SENSOR are restricted to an enclosure rating of Type 3X, IP65 [configurations 1 and 3].
2. Configurations utilizing the ULTIMA® XIR Plus are restricted to Class I, Division 1, Groups A, B, C and D; Class II, Division 1, Groups E, F and G; Class III; T4 and Class I, Zone 1 AEx db IIC T4 Gb classified locations [configurations 2 and 3].
3. Neither the DIGITAL SENSOR nor ULTIMA® XIR Plus sensor has approval for combustible gas detection performance in Class II, III/ Zone 21 [all configurations].

Class I, Division 1, Groups A, B, C, D; T5

Class I, Zone 1, AEx db IIC T5 Gb

Class I, Division 2, Groups A, B, C, D; T4

Class I, Zone 2, AEx nA IIC T4 Gc

Class II, Division 1, Groups E, F & G; Division 2, Groups F & G; Class III, Divisions 1 & 2; T5

Zone 21, AEx tb IIC T100°C Db

• ULTIMA® X5000 Junction Box constructed of either stainless steel or aluminum, with either of the following sensor (4-20 mA) configurations:

1. One DIGITAL SENSOR installed integral to the ULTIMA® X5000 Junction Box
2. One ULTIMA® XIR Plus sensor installed integral to the ULTIMA® X5000 Junction Box

Input Rated: 11 to 30 Vdc, 1.5A (15 W) max, Class 2 / SELV, Equipment Class II, Pollution Degree 2; Operating ambient temperature of -40°C to +60°C; Enclosure Rating: Type 4X, IP66.

Modifier/Condition of Certification:

1. Class I, Division 2, and Ex nA applies only to the ULTIMA® X5000 Junction Box enclosure which contains pluggable terminal blocks [all configurations].
2. Configurations utilizing the DIGITAL SENSOR are restricted to an enclosure rating of Type 3X, IP65



Certificate: 70116284

Project: 70116284

Master Contract: 167534

Date Issued: 2017-04-19

[configuration 1].

3. Configurations utilizing the ULTIMA® XIR Plus are restricted to Class I, Division 1, Groups A, B, C and D; Class II, Division 1, Groups E, F and G; Class III; T4 and Class I, Zone 1 AEx db IIC T4 Gb classified locations [configuration 2].

4. Neither the DIGITAL SENSOR nor ULTIMA® XIR Plus sensor has approval for combustible gas detection performance in Class II, III/ Zone 21 [both configurations].

5. Neither the DIGITAL SENSOR nor ULTIMA® XIR Plus sensor were evaluated for Class I, Division 2/ Ex nA types of protection. However, the Canadian Electrical Code permits the use of Class I, Division 1/ Zone 1 equipment in Class I, Division 2/ Zone 2 when the installation is per Division/Zone 1 wiring methods.

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

Class I, Division 1, Groups A, B, C, D T5

Ex db IIC T5 Gb

Class II, Division 1, Groups E, F & G Division 2, Groups F & G; Class III, Divisions 1 & 2; T5

Ex tb IIIC T100°C Db

- ULTIMA® X5000 fixed toxic gas monitor, consisting of an ULTIMA® X5000 main transmitter or ULTIMA® X5000 Junction Box, constructed of either stainless steel or aluminum, with either of the following sensor (4-20 mA) configurations:

1. Two DIGITAL SENSOR's installed either integral to the ULTIMA® X5000 main transmitter or one integral and one remote via the ULTIMA® X5000 Junction Box

Input Rated: 11 to 30 Vdc, 1.5A (15 W) max, Class 2 / SELV, Equipment Class II, Pollution Degree 2; with Output Relay Contacts rated 250 Vac, 30 Vdc, 5.0 A max. (dual 0-22 mA outputs); Operating ambient temperature of -40°C to +60°C; Enclosure Rating: Type 4X, IP66.

Modifier/Condition of Certification:

1. The DIGITAL SENSOR enclosure rating is restricted to Type 3X, IP65.



Certificate: 70116284
Project: 70116284

Master Contract: 167534
Date Issued: 2017-04-19

Class I, Division 1, Groups A, B, C, D; T5

Ex db IIC T5 Gb

Class I, Division 2, Groups A, B, C, D; T4

Ex nA IIC T4 Gc

Class II, Division 1, Groups E, F & G; Division 2, Groups F & G; Class III, Divisions 1 & 2; T5

Ex tb IIIC T100°C Db

- ULTIMA® X5000 Junction Box constructed of either stainless steel or aluminum, with either of the following sensor (4-20 mA) configurations:

1. One DIGITAL SENSOR installed integral to the ULTIMA® X5000 Junction Box

Input Rated: 11 to 30 Vdc, 1.5A (15 W) max, Class 2 / SELV, Equipment Class II, Pollution Degree 2; Operating ambient temperature of -40°C to +60°C; Enclosure Rating: Type 4X, IP66.

Modifier/Condition of Certification:

1. Class I, Division 2, and Ex nA applies only to the ULTIMA® X5000 Junction Box enclosure which contains pluggable terminal blocks [all configurations].
2. The DIGITAL SENSOR enclosure rating is restricted to Type 3X, IP65.
3. The DIGITAL SENSOR was not evaluated for Class I, Division 2/ Ex nA types of protection. However, the Canadian Electrical Code permits the use of Class I, Division 1/ Zone 1 equipment in Class I, Division 2/ Zone 2.

4828-82 SIGNAL APPLIANCES – Toxic Gas Detection Instruments-For Hazardous Locations - Certified to U.S. Standards

Class I, Division 1, Groups A, B, C, D T5

Class I, Zone 1 AEx db IIC T5 Gb

Class II, Division 1, Groups E, F & G; Division 2, Groups F & G; Class III, Divisions 1 & 2; T5

Zone 21 AEx tb IIIC T100°C Db

- ULTIMA® X5000 fixed toxic gas monitor, consisting of an ULTIMA® X5000 main transmitter or ULTIMA® X5000 Junction Box, constructed of either stainless steel or aluminum, with either of the following sensor (4-20 mA) configurations:

1. Two DIGITAL SENSOR's installed either integral to the ULTIMA® X5000 main transmitter or one integral and one remote via the ULTIMA® X5000 Junction Box

Input Rated: 11 to 30 Vdc, 1.5A (15 W) max, Class 2 / SELV, Equipment Class II, Pollution Degree 2; with Output Relay Contacts rated 250 Vac, 30 Vdc, 5.0 A max. (dual 0-22 mA outputs); Operating ambient temperature of -40°C to +60°C; Enclosure Rating: Type 4X, IP66.



Certificate: 70116284

Project: 70116284

Master Contract: 167534

Date Issued: 2017-04-19

Modifier/Condition of Certification:

1. The DIGITAL SENSOR enclosure rating is restricted to Type 3X, IP65.

Class I, Division 1, Groups A, B, C, D; T5

Class I, Zone 1 AEx db IIC T5 Gb

Class I, Division 2, Groups A, B, C, D; T4

Class I, Zone 2 Ex nA IIC T4 Gc

Class II, Division 1, Groups E, F & G; Division 2, Groups F & G; Class III, Divisions 1 & 2; T5

Zone 21 Ex tb IIC T100°C Db

- ULTIMA® X5000 Junction Box constructed of either stainless steel or aluminum, with either of the following sensor (4-20 mA) configurations:

1. One DIGITAL SENSOR installed integral to the ULTIMA® X5000 Junction Box

Input Rated: 11 to 30 Vdc, 1.5A (15 W) max, Class 2 / SELV, Equipment Class II, Pollution Degree 2; Operating ambient temperature of -40°C to +60°C; Enclosure Rating: Type 4X, IP66.

Modifier/Condition of Certification:

1. Class I, Division 2, and Ex nA applies only to the ULTIMA® X5000 Junction Box enclosure which contains pluggable terminal blocks [all configurations].
2. The DIGITAL SENSOR enclosure rating is restricted to Type 3X, IP65.
3. The DIGITAL SENSOR was not evaluated for Class I, Division 2/ Class I, Zone 1 AEx nA types of protection. However, the National Electrical Code permits the use of Class I, Division 1/ Class I, Zone 1 equipment in Class I, Division 2/ Class I, Zone 2 when the installation is per Division/Zone 1 wiring methods.



Certificate: 70116284
Project: 70116284

Master Contract: 167534
Date Issued: 2017-04-19

APPLICABLE REQUIREMENTS

CAN/CSA C22.2 No. 0-10	General Requirements - Canadian Electrical Code, Part II
CAN/CSA C22.2 No. 94.1-15	Enclosures for Electrical Equipment, Non-Environmental Considerations
ANSI/UL 50 (Thirteenth Edition)	Enclosures for Electrical Equipment, Non-Environmental Considerations
CAN/CSA C22.2 No. 94.2-15	Enclosures for Electrical Equipment, Environmental Considerations
ANSI/UL 50E (Second Edition)	Enclosures for Electrical Equipment, Environmental Considerations
CAN/CSA C22.2 No. 60529:05 (r. 2015)	Degrees of Protection Provided By Enclosures (IP Code)
ANSI/IEC 60529-2004 (r. 2011)	Degrees of Protection Provided By Enclosures (IP Code)
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 (82.02.01) Third Edition	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory use — Part 1: General Requirements
FM Class 3810:2005	Approval Standard for Electrical Equipment for Measurement, Control and Laboratory Use
CAN/CSA C22.2 No. 30-1986	Explosion-Proof Enclosure for Use in Class I Hazardous Locations
FM Class 3600:2011	Approval Standard for Electrical Equipment for Use in Hazardous (Classified) Locations – General Requirements
FM Class 3615:2006	Approval Standard for Explosionproof Electrical Equipment General Requirements
CAN/CSA-C22.2 No. 60079-0:15	Explosive atmospheres — Part 0: Equipment — General requirements
ANSI/ISA-60079-0 (12.00.01)-2013	Explosive atmospheres — Part 0: Equipment — General requirements
CAN/CSA C22.2 No. 60079-1:16	Explosion atmospheres – Part 1: Equipment protection by flameproof enclosures “d”
ANSI/ISA 60079-1 (12.22.01) -2013	Explosion atmospheres – Part 1: Equipment protection by flameproof enclosures “d”
CAN/CSA C22.2 No. 25-1966	Enclosures for Use in Class H Groups E, F, and G Hazardous Locations
FM Class 3616:2011	Approval Standard for Dust-Ignition Electrical Equipment General Requirements
CAN/CSA C22.2 No. 60079-31:15	Explosion atmospheres – Part 31: Equipment dust ignition protection by enclosure “t”
ANSI/ISA 60079-31 (12.10.03)-2015	Explosion atmospheres – Part 31: Equipment dust ignition protection by enclosure “t”



Certificate: 70116284

Project: 70116284

Master Contract: 167534

Date Issued: 2017-04-19

CSA C22.2 No. 152-M1984	Combustible gas detection instruments
CAN/CSA C22.2 No. 60079-29-1:12	Explosive atmospheres — Part 29-1: Gas detectors — Performance requirements of detectors for flammable gases
ANSI/ISA-60079-29-1 (12.13.01)-2013	Explosive atmospheres — Part 29-1: Gas detectors — Performance requirements of detectors for flammable gases
FM Class 6320:2014	Approval Standard for Combustible Gas Detectors

The following standards are applicable only to the ULTIMA® X5000 Junction Box

CAN/CSA C22.2 No. 213-2016	Nonincendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Division 1 and 2 Hazardous (Classified) Locations
CAN/CSA C22.2 No. 60079-15:12	Explosive Atmospheres – Part 15: Construction, Test and Marking of Type of Protection “n” Electrical Apparatus
ANSI/ISA 12.12.01-2015	Nonincendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Division 1 and 2 Hazardous (Classified) Locations
ANSI/ISA 60079-15 (12.12.02)-2012	Explosive Atmospheres – Part 15: Construction, Test and Marking of Type of Protection “n” Electrical Apparatus
FM Class 3611:2004	Approval Standard for Nonincendive Electrical Equipment for Use in Class I and II, Division 2, and Class III, Division 1 and 2, Hazardous (Classified) Locations



Certificate: 70116284
Project: 70116284

Master Contract: 167534
Date Issued: 2017-04-19





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 (CSA C22.2 No. 0-10, Clause 6.3).

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 shall appear on the enclosure of the apparatus -
 - Manufacturer's name, "MSA – The Safety Company", "MSA" 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 MMY 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 with adjacent indicators 'C' and 'US' 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.
 - "C22.2 No. 152", adjacent to the CSA Mark
 - "IEC 60079-29-1", adjacent to the CSA Mark (from CAN/CSA C22.2 No. 60079-29-1:12)
 - "ANSI/ISA-60079-29-1", adjacent to the CSA Mark
 - "17.70116284X", adjacent to the CSA Mark
 - The following warning in English shall also be translated into French –
 -  **WARNING: DO NOT OPERATE THIS EQUIPMENT WITHOUT FIRST READING AND UNDERSTANDING ALL INSTRUCTIONS, WARNINGS AND CAUTIONS IN INSTRUCTION/ OPERATOR'S MANUAL PART NUMBERS 10177361 & 10182779** (or technically equivalent text)



Certificate: 70116284

Project: 70116284

Master Contract: 167534

Date Issued: 2017-04-19


Nameplate adhesive label material approval information:

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 form of each entry for field wiring compartments.

- 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”
- SEALING REQUIREMENTS -
 - Aluminum and Stainless Steel X5000 Transmitter and ULTIMA® X5000 Junction Box:
“A SEAL SHALL BE INSTALLED WITHIN 2 in (50 mm) OF THE ENCLOSURE”
 - Stainless Steel X5000 ULTIMA® X5000 Junction Box
“SEAL NOT REQUIRED”.
- “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”



Certificate: 70116284

Project: 70116284

Master Contract: 167534

Date Issued: 2017-04-19

- “CAUTION: HIGH OFF-SCALE READING MAY INDICATE EXPLOSIVE CONCENTRATION”
- (Only for the X5000 Remote ULTIMA® X5000 Junction Box)
- “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”

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 °C for the X5000 ULTIMA® X5000 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 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.”



Certificate: 70116284

Project: 70116284

Master Contract: 167534

Date Issued: 2017-04-19

- Given that the DIGITAL SENSOR is not independently certified through this report, the label of the DIGITAL SENSOR shall contain verbiage linking it as a component for exclusive use with the ULTIMA® X5000 Fixed Combustible Gas Monitor and ULTIMA® X5000 Junction Box covered by this certification report.



Supplement to Certificate of Compliance

Certificate: 70116284 (LR 064969_0_00)

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
70116284	2017-04-19	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.