

Certificate of Compliance

Certificate: 2072894 Master Contract: 167534

Project: 70013697 Date Issued: December 4, 2014

Issued to: Mine Safety Appliances Company

North American Division 1000 Cranberry Woods Dr

Cranberry Township, PA 16066-5296

USA

Attention: Warren Bennett

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.



David Malloy

Issued by: David Malloy

PRODUCTS

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

Hazardous Locations

CLASS 4828 81 - SIGNAL APPLIANCES-Combustible Gas Detection Instruments - For

Hazardous Location-Certified to U.S. Standards

Class I, Groups A, B, C and D:

Combustible gas detector, Model Altair 5, portable, battery operated, intrinsically safe when used with rechargeable Lithium-Ion battery pack p/n 10090521 (temperature code T4) or alkaline battery pack p/n 10083507 with 3 Duracell MN1500 cells (temperature code T4) or 3 Energizer E91 cells (temperature code T3); Ambient temperature range –20 Deg. C to +50 Deg. C.

Combustible gas detector, Model Altair 5iR, portable, battery operated, intrinsically safe when used with rechargeable Lithium-Ion battery pack p/n 10088522; temperature code T4; Ambient temperature range -20 Deg. C to +50 Deg. C.



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

Class I, Groups A, B, C and D:

Combustible gas detector, Model Altair 5X, portable, battery operated, intrinsically safe when used with rechargeable Lithium-Ion battery pack p/n 10114835 (temperature code T4) or alkaline battery pack p/n 10114837 with 3 Duracell MN1500 cells (temperature code T4) or 3 Energizer E91 cells (temperature code T3); Intrinsic Safety Tamb. –40 Deg. C to +50 Deg. C. Performance (C22.2 No. 152) Tamb. –20 Deg. C to +50 Deg. C.

Combustible gas detector, Model Altair 5XiR, portable, battery operated, intrinsically safe when used with rechargeable Lithium-Ion battery pack p/n 10114839 or 10114840; temperature code T4; Intrinsic Safety Tamb. –40 Deg. C to +50 Deg. C. Performance (C22.2 No. 152) Tamb. –20 Deg. C to +50 Deg. C.

APPLICABLE REQUIREMENTS

CSA Std C22.2 No.152-M1984

CAN/CSA-C22.2 No. 0-M91 - General Requirements – Canadian Electrical Code, Part II

CAN/CSA-C22.2 No.157-92 - Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations

CSA Std C22.2 No.30-M1986 - Explosion-Proof Enclosures for Use in Class I Hazardous

Locations

UL Std No.913, 6th Ed. - Intrinsically Safe Apparatus and Associated Apparatus for Use in

Combustible Gas Detection Instruments

Class I, II and III, Division 1, Hazardous Locations

ANSI/ISA-12.13.01-2000 - Performance Requirements for Combustible Gas Detectors

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.



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The following markings appear on the Certified devices. Main marking nameplate is CSA Accepted adhesive nameplate material by Zebra Technologies 3 mil thick imprintable gloss white polyester Z – Ultimate 3000T with pressure sensitive 3000 adhesive using 5100 ribbon on a Zebra printer.

Altair 5 and 5iR:

- CSA Mark, with C/US designator
- Manufacturers identification
- Model designation
- serial number or date code
- the words, INTRINSICALLY SAFE
- the symbol, Exia
- the designation, C22.2 No. 152
- hazardous locations designation
- temperature code rating
- ambient temperature range
- the warning, SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY
- the warning, UNDERSTAND MAUAL BEFORE OPERATING
- the statement (for Altair 5), USE ONLY Li-Ion PACK p/n 10090521 OR ALKALINE PACK P/N 10083507 WITH DURACELL MN1500 OR ENERGIZER E91
- the statement (for Altair 5iR), USE ONLY Li-Ion PACK p/n 10088522

Altair 5X and 5XiR:

- CSA Mark
- Manufacturers identification
- Model designation
- serial number or date code
- the words, INTRINSICALLY SAFE



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- the symbol, Exia

- the designation, C22.2 No. 152

- hazardous locations designation

- temperature code rating:

- ambient temperature range: INTRINSIC SAFETY: $-40^{\circ}\text{C} \le \text{Ta} \le +50^{\circ}\text{C}$,

C22.2 NO. 152 PERFORMANCE: $-20^{\circ}\text{C} \le \text{Ta} \le +50^{\circ}\text{C}$

- the warning, SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY
- the warning, UNDERSTAND MAUAL BEFORE OPERATING
- the statement (for Altair 5X), USE ONLY Li-Ion PACK p/n 10114835 (T4) OR ALKALINE PACK P/N 10114837 WITH DURACELL MN1500 (T4) OR ENERGIZER E91(T3).
- the statement (for Altair 5XiR), USE ONLY Li-Ion PACK p/n 10114839 or 10114840 (T4)

Note - Jurisdictions in Canada may require these markings to also be provided in French language. It is the responsibility of the manufacturer to provide bilingual marking, where applicable, in accordance with the requirements of the Provincial Regulatory Authorities. It is the responsibility of the manufacturer to determine this requirement and have bilingual wording added to the "Markings".