



# Certificate of Compliance

**Certificate:** 2008234 (LR 64969)

**Master Contract:** 167534

**Project:** 2536585

**Date Issued:** June 28, 2012

**Issued to:** Mine Safety Appliances Company  
North American Division  
1000 Cranberry Woods Dr  
Cranberry Township, PA 16066-5296  
USA  
Attention: Stephen Kancel

*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.*



*Richard Dibler*

**Issued by:** Richard Dibler

## **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 4828 01

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

Combustible gas detector, Model Altair 4, portable, battery operated, intrinsically safe when used with one self contained 3.7 V rechargeable Lithium-ion battery. Temperature Code T4. Tamb. -20 Deg. C to +50 Deg. C. May be used with MSA Universal Pump Probe portable, battery operated, intrinsically safe when used with two 1.5V size AA Alkaline batteries, Models Duracell MN1500 or Energizer E91 or Varta 4006. Temperature Code T4. Tamb. -20 Deg. C to +50 Deg. C.

Combustible gas detector, Model Altair 4X, portable, battery operated, intrinsically safe when used with one self contained 3.7 V rechargeable Lithium-ion battery. Temperature Code T4. Intrinsic Safety Tamb. -40 Deg. C to +54 Deg. C. Performance (C22.2 No. 152) Tamb. -20 Deg. C to +54 Deg. C. May be used with MSA Universal Pump Probe portable, battery operated, intrinsically safe when used with two 1.5V size AA Alkaline



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batteries, Models Duracell MN1500 or Energizer E91 or Varta 4006. Temperature Code T4. Tamb. –20 Deg. C to +50 Deg. C. CLASS 4828 01

CLASS 4828 81

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

Combustible gas detector, Model Altair 4X, portable, battery operated, intrinsically safe when used with one self contained 3.7 V rechargeable Lithium-ion battery. Temperature Code T4. Intrinsic Safety Tamb. –40 Deg. C to +54 Deg. C. Performance (C22.2 No. 152) Tamb. –20 Deg. C to +54 Deg. C.

#### **APPLICABLE REQUIREMENTS**

|                            |   |
|----------------------------|---|
| 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   |
| CSA Std C22.2 No.152-M1984 | Combustible Gas Detection Instruments   |
| ANSI/ISA-12.13.01-2003     | Performance Requirements for Combustible Gas Detectors.   |
| UL913 5th edition          | Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II and III, Division 1, Hazardous Locations |

#### **MARKINGS**

Altair 4 and Altair 4X label material :

Appear on CSA Accepted adhesive nameplate material by:

1. 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 4 and Altair 4X Label Wording:

- CSA Monogram or cCSAus Monogram (Altair 4X only);
- Submitter Identification;
- Model Number;



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- Serial Number, Date Code or Month and Year of Manufacture;
- Hazardous locations designation;
- The words “ Intrinsicly Safe ”;
- The symbol “Exia”;
- Ambient Temperature;
- Temperature Code;
- Warning: Substitution of components may impair intrinsic safety;
- The words “C22.2 No. 152”;
- Warning: understand manual before operating;

Universal Pump Probe label material:

Appear on CSA Accepted adhesive nameplate material by:

1. Butler Technologies - 3M 467 Polycarbonate.
2. Label Graphics Type - dull silver polyester (computer printable).

Universal Pump Probe Label Wording:

- CSA Monogram ;
- Submitter Identification;
- Model Number;
- Serial Number, Date Code or Month and Year of Manufacture;
- Hazardous locations designation;
- The words “ Intrinsicly Safe ”;
- The symbol “Exia”;
- Ambient Temperature;
- Temperature Code;
- Warning: Substitution of components may impair intrinsic safety;



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- The words "C22.2 No. 152";
- Wording re: Do not change or charge batteries in a hazardous location;
- Warning re: Read and Understand Manual;
- Wording re: use only with MSA Models Solaris, Solaris FIRE, Solaris LX, Solaris LX FIRE, Altair 4 and Altair 4X.

*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".*