



Certificate of Compliance

Certificate: 2072894 (LR 64969)

Master Contract: 167534

Project: 70043086

Date Issued: August 20, 2015

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

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.



Zahra Amini

Issued by: Zahra Amini

PRODUCTS

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

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 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

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



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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.

"NOTE: WIRELESS COMMUNICATION IS INTENDED FOR USE AS A SECONDARY REMOTE ALARM STATUS NOTIFICATION ONLY. PRIMARY ALARMING OF COMBUSTIBLE GAS HAZARDS IS PROVIDED LOCALLY BY DETECTOR".

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.

"NOTE: WIRELESS COMMUNICATION IS INTENDED FOR USE AS A SECONDARY REMOTE ALARM STATUS NOTIFICATION ONLY. PRIMARY ALARMING OF COMBUSTIBLE GAS HAZARDS IS PROVIDED LOCALLY BY DETECTOR".

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
- UL Std No.913, 6th Ed. - Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II and III, Division 1, Hazardous Locations
- ANSI/ISA-12.13.01-2000 - Performance Requirements for Combustible Gas Detectors

MARKINGS

Altair 5 and 5iR:

- CSA Mark, with C/US designator
- 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
- 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
- the symbol, Exia
- the designation, C22.2 No. 152
- hazardous locations designation
- temperature code rating:
- ambient temperature range: INTRINSIC SAFETY: $-40^{\circ}\text{C} \leq T_a \leq +50^{\circ}\text{C}$,
C22.2 NO. 152 PERFORMANCE: $-20^{\circ}\text{C} \leq T_a \leq +50^{\circ}\text{C}$
- the warning, SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY
- the warning, UNDERSTAND MAUAL BEFORE OPERATING



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- 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)