



# Certificate of Compliance

**Certificate:** 70013111

**Master Contract:** 167534

**Project:** 70015718

**Date Issued:** December 19, 2014

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

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



**Issued by:** *Rawn Murphy*  
Rawn Murphy

## **PRODUCTS**

CLASS - C225883 - PROCESS CONTROL EQUIPMENT-Intrinsically Safe and Non-Incendive-Systems-For Hazardous Locations-Certified to U.S. Standards

**Class I, Division 1, Groups C,D T1**

**Class II, Groups E,F,G T3B**

Model G1-SCBA Self-Contained Breathing Apparatus accessories; Consists of the Speaker Module, the Mask-Mounted Regulator (MMR) module, the Battery Module, Control Module and the Power Module; Intrinsically Safe when powered by battery pack model number 7-2813-1; Ambient operating range:  $-20^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}$ .

## **Notes:**

1. Battery pack model number 7-2813-1 shall only be assembled as defined in the Critical Components section of the report.
2. The individual accessories are not permitted in the hazardous area as stand-alone entities; only the complete set of accessories installed in the finished goods harness assembly shall be accepted in the hazardous area.



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## **APPLICABLE REQUIREMENTS**

UL Standard 508 (Seventeenth Edition)	Industrial Control Equipment
UL Standard 913 (Fifth Edition)	Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division I Hazardous (Classified) Locations
UL Standard 913 (Sixth Edition)	Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division I Hazardous (Classified) Locations

## **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 itemized marking requirements for the accessories shall appear on the following two permanent adhesive label materials:

	1	2
Size	1.7" x 4.678" (W x H)	58 mm x 27 mm (W x H)
Material	.010 Lexan Polycarbonate (SABIC FR65) 2 Mil Acrylic Adhesive (3M LSE 300)	.010 Lexan Polycarbonate (SABIC FR65) 2 Mil Acrylic Adhesive (3M LSE 300)
Ink	Black; White	Black; White; Orange Prints PMS #165
Printing	Reverse Printed	Reverse Printed
Features	Integrated Pull Tab in Die Line	6 mm Pull Tab
Comments	Die Line indicated by PMS 242 Purple and does not print	Die Line indicated by PMS 242 Purple and does not print

- The following words shall appear on the adhesive nameplate on the body of the Power Module enclosure:
  - Manufacturer's name, "MSA 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.



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- Manufacturing date in MMY format, or serial number, traceable to month and year of manufacture.
- 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.
- "Exia"

The following cautions and warnings in English (may also be provided in French):

- "INTRINSICALLY SAFE"
- "⚠ WARNING: UNDERSTAND MANUAL BEFORE OPERATING" may be combined with "WARNING – TO PREVENT IGNITION OF FLAMMABLE OR COMBUSTIBLE ATMOSPHERES, READ, UNDERSTAND AND ADHERE TO THE LIVE MAINTENANCE PROCEDURES CONTAINED IN THE MANUAL" (This literature shall accompany each apparatus)
- "⚠ WARNING – EXPLOSION HAZARD – SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY" (Equivalent wording is acceptable).
- "⚠ WARNING – USE ONLY BATTERY PACK MODEL NUMBER 7-2813-1" (Equivalent wording is acceptable).
- "⚠ WARNING: CHANGE AND/OR RECHARGE BATTERIES ONLY IN A NONHAZARDOUS LOCATION" (Equivalent wording is acceptable).

- The following shall appear on the Battery Pack:

- Either engraved into the housing or printed onto the permanent adhesive nameplate label -
  - Battery Pack Model number and Manufacturer's name, "MSA Company" or "MSA".
  - Manufacturing date in MMY format, or serial number, traceable to month of manufacture.

The following cautions and warnings in English (may also be provided in French):

- "⚠ WARNING: DO NOT MIX OLD/NEW OR DIFFERENT TYPE BATTERIES" (Equivalent wording is acceptable).
- "⚠ WARNING: CHANGE AND/OR RECHARGE BATTERIES ONLY IN A NONHAZARDOUS LOCATION" (Equivalent wording is acceptable).
- "⚠ WARNING: THIS BATTERY PACK IS EXCLUSIVELY DESIGNED FOR INSTALLATION AS THE POWER SUPPLY FOR THE Model G1-SCBA POWER MODULE" (Equivalent wording is acceptable).

- The INSTRUCTION/ OPERATOR'S MANUAL shall contain:

- The complete listing of approved battery cells for battery pack model number 7-2813-1
- The following cautions and warnings in English (may also be provided in French) –
  - "⚠ WARNING: DO NOT MIX OLD/NEW OR DIFFERENT TYPE BATTERIES" (Equivalent wording is acceptable).
  - "⚠ WARNING: CHANGE AND/OR RECHARGE BATTERIES ONLY IN A NONHAZARDOUS LOCATION" (Equivalent wording is acceptable).



## *Supplement to Certificate of Compliance*

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*The products listed, including the latest revision described below,  
are eligible to be marked in accordance with the referenced Certificate.*

### **Product Certification History**

<b>Project</b>	<b>Date</b>	<b>Description</b>
70015718	Dec 19 2014	Update Report 70013111 to include Class II, Division 1, Groups E, F, G certification with revised MMR mechanical assembly and Power Module pcb assembly, schematic and top-level G1 schematic.
70013111	Oct 14 2014	Evaluation to CSA-us certification of Model G1-SCBA accessories for CL I, Div 1, Groups CD T1.