





**Certificate:**  
**Project:** 70110604

**Master Contract:** 167534  
**Date Issued:** March 3, 2017

The ALTAIR 4XR incorporates previously certified sensors. It is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with this device. The manufacturer shall inform CSA of any modifications to the device that may impinge upon the explosion safety design of the ALTAIR 4XR.

**APPLICABLE REQUIREMENTS**

CSA C22.2 No. 0-10	General requirements - Canadian Electrical Code, Part II - Tenth Edition
CSA C22.2 No. 152-M1984	Combustible gas detection instruments - Second Edition
CSA C22.2 No. 157-92 (reaffirmed 2016)	Intrinsically safe and non-incendive equipment or use in hazardous locations - Third Edition
CAN/CSA-C22.2 No. 60079-0:15	Explosive atmospheres - Part 0: Equipment - General requirements - Third Edition
CAN/CSA-C22.2 No. 60079-1:16	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d" - Third Edition
CAN/CSA-C22.2 No. 60079-11:14	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i" - Second Edition
CAN/CSA-C22.2 No. 60529:16	Degrees of protection provided by enclosures (IP Code) - Second Edition
CAN/CSA-C22.2 No. 61010-1-12	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements - Third Edition
ANSI/UL/ISA 60079-0	Explosive atmospheres - Part 0: Equipment - General Requirements - Sixth Edition; 12.00.01
ANSI/UL/ISA 60079-1	Explosive Atmospheres - Part 1: Equipment Protection by Flameproof Enclosures "d" - Sixth Edition; 12.22.01
ANSI/UL/ISA 60079-11	Explosive Atmospheres - Part 11: Equipment protection by intrinsic safety "i" - Edition 6.2; 12.02.01
ANSI/ISA 60079-29-1	Explosive Atmospheres - Part 29-1: Gas detectors - Performance requirements of detectors for flammable gases - First Edition 12.13.01
UL 913	UL Standard for Safety Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division 1, Hazardous (Classified) Locations - Eighth Edition
UL 61010-1	UL Standard for Safety Electrical Equipment For Measurement, Control, and Laboratory Use; Part 1: General Requirements - Third Edition

**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 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.

**Nameplate adhesive label material approval information:**

The nameplate is a CSA accepted adhesive backed label manufactured by Zebra Technologies, 3 mil thick, imprintable gloss white polyester Z – Ultimate 3000T with a pressure sensitive 3000 adhesive using 5100 ribbon on a Zebra printer.

- Manufacturer’s name: “MSA - THE SAFETY COMPANY”, trademark or CSA master contract number “167534” adjacent to the CSA mark.
- The characters “CSA 17.70110604”, designating the certification body, followed by the last two digits of the year of report issue, followed by a period, followed by the original report number.
- Hazardous Location designation and/or Method of Protection (Ex) markings: As specified in the PRODUCTS section above.
- Temperature code: As specified in the PRODUCTS section above.
- Model number: As specified in the PRODUCTS section above.
- Battery pack details: As specified in the PRODUCTS section above. Due to product size marking may be provided in the manual.
- Ambient temperature rating: As specified in the PRODUCTS section above.
- Enclosure rating: IP68 (2 m, 1 hour).
- Serial number X... & Date code, which is comprised of a letter for month, two digit year, E0=no extended warranty and E1=extended warranty
- The following or equivalent wording:
  - “Exia”.
  - “INTRINSICALLY SAFE” and “SÉCURITÉ INTRINSÈQUE”;
  - “C22.2 No. 152” and “ANSI/ISA 60079-29-1”
  - “WARNING: UNDERSTAND MANUAL BEFORE OPERATING” and “AVERTISSEMENT: LIRE ATTENTIVEMENT LES INSTRUCTIONS AVANT DE METTRE EN MARCHÉ.”
- The following or equivalent warning markings: (Due to product size marking may be provided in the manual):
  - “WARNING: SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY” and “AVERTISSEMENT: LA SUBSTITUTION DE COMPOSANTS PEUT COMPROMETTRE LA SÉCURITÉ INTRINSÈQUE”
  - “WARNING: USE ONLY BATTERY PACK P/N 10083913” and “ATTENTION: UTILISEZ UNIQUEMENT BATTERIE P/N 10083913”
  - “WARNING: BATTERIES MUST ONLY BE CHANGED OR CHARGED IN AN AREA KNOWN TO BE NONHAZARDOUS.” and “AVERTISSEMENT: NE CHANGER OU CHARGER LES BATTERIES QUE DANS DES EMPLACEMENTS DESIGNES NON DANGEREUX.”
  - “WARNING: UNDERSTAND MANUAL BEFORE OPERATING” and “AVERTISSEMENT: LIRE ATTENTIVEMENT LES INSTRUCTIONS AVANT DE METTRE EN MARCHÉ.”
  - "CAUTION — OFF-SCALE READINGS MAY INDICATE EXPLOSIVE CONCENTRATION."



## *Supplement to Certificate of Compliance*

**Certificate:** 70110604

**Master Contract:** 167534 (024321\_0\_000)

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

### **Product Certification History**

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<b>Project</b>	<b>Date</b>	<b>Description</b>
70110604	2017-03-03	Original certification of the ALTAIR 4XR.