Certificate of Compliance

Certificate: 2615594 **Master Contract:** 218481

Project: 70042722 **Date Issued:** 2015-09-21

Issued to: **Max-Air Technology, Inc.**
751 Hoff Rd
O'Fallon, Missouri 63366
USA
Attention: Jeffrey Ellebrecht

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.

Issued by: Joshua Burdeshaw
Joshua Burdeshaw

PRODUCTS
CLASS - C225802 - PROCESS CONTROL EQUIPMENT-For Hazardous Locations-
CLASS - C225882 - PROCESS CONTROL EQUIPMENT-For Hazardous Locations - Certified to US Standards

Class I, Division 1, Groups C and D; Class II, Division 1, Groups E, F and G; Class III; Temperature Code T4A

Ex d IIB T5 Gb; Ex tb IIIC T108°C Db
Class I, Zone 1, AEx d IIB T5 Gb; Class II, Zone 21 AEx tb IIIC T108°C Db

- Limit Switch Boxes 48 Series with electrical ratings and Hazardous Locations Classification per Table below; Ambient Temperature Range -20°C to +60°C, Enclosure is Type 4X and IP67 rated

Notes: 1) Electrical ratings for this application are dictated by the limiting internal switch with the lowest electrical ratings.
2) Wiring to or from this device, which enters or leaves the system enclosure, must utilize wiring methods suitable for Class I, Division 1 Hazardous Locations, as appropriate for the installation
3) Enclosure Environmental ratings are achieved when conduit entries are torqued to at least 90.4 Nm (800 lbs/inch) and fasteners (Class A2-50) to 40Nm (354 lbs/inch) not-lubricated conditions.

Class I, Division 2, Groups A, B, C and D; Class II, Division 1, Groups E, F and G; Class III; Temperature Code T4A
Ex nA IIC T5 Gc; Ex tb IIIC T108°C Db
Class I, Zone 2 AEx nA IIC T5 Gc; Class II, Zone 21, AEx tb IIIC T108°C Db

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- Limit Switch Boxes 48 Series with electrical ratings and Hazardous Locations Classification per Tables below; Ambient Temperature Range -20°C to +60°C, Enclosure is Type 4X and IP67 rated

Notes: 1) Electrical ratings for this application are dictated by the limiting internal switch with the lowest electrical ratings.
2) Wiring to or from this device, which enters or leaves the system enclosure, must utilize wiring methods suitable for Class I, Division 2 Hazardous Locations, as appropriate for the installation
3) Enclosure Environmental ratings are achieved when conduit entries are torqued to at least 90.4 Nm (800 lbs/inch) and fasteners (Class A2-50) to 40Nm (354 lbs/inch) not-lubricated conditions.

	MEANING	DETAIL	Div rating	Part code
1	TYPE	MECH. SWITCHES	-	MS
		IND. SWITCHES	-	IS
		MAGN. SWITCHES	-	PS
2	MODEL / SERIES		-	48
3	THREADS	1/2 NPT	-	1
			-	
4	NUMBER OF SENSORS	(number)	-	1→4
5	INDICATOR	STD, form A, yellow/red	-	0
		Lport, form A, 3way	-	2
		Tport, form A, 3way	-	3
		Arrow, form A, 3way	-	4
		STD, form B, yellow/red	-	5
		STD, form B, green/red	-	6
		Lport, form B, 3way	-	7
		Tport, form B, 3way	-	8
6	MATERIAL & COLOR	Aluminum, black	-	M
		Aluminum, RAL 9006	-	G
		Stainless Steel	-	7
7	SWITCHES/ SENSORS	Omron D3V or Cherry D44	Div 1 only	0
		Hamlin	Div 1 & 2	0
		NS5002	Div 1 & 2	A
		IS5001	Div 1 & 2	B
		IS5026	Div 1 & 2	D
		IS0003	Div 1 & 2	E
		NJ2-V3-N	Div 1 & 2	F
		NBB2-V3-E2	Div 1 & 2	G
		NBB3-V3-Z4	Div 1 & 2	H
		NBB2-V3-E3	Div 1 & 2	K

		NBB2-V3-E0	Div 1 & 2	L
		NCB2-V3-N0	Div 1 & 2	N
		IS0004	Div 1 & 2	P
		STEM 530 WITH HSR834W	Div 1 & 2	M
		HONEYWELL V7	Div 1 only	S
8	BRACKET	None	-	0
		30x130 Namur 30	-	1
		30x130 H50 Namur 50	-	2
		80x30 Namur 30 STD	-	3
		80x30 Namur 30, diff. Layout	-	4
		80x30 Namur 20, diff. Layout	-	5
		universal bracket	-	6
		80x30 Namur 30, diff. Layout, 90° rot	-	7
		80x30 Namur 20, diff. Layout, 90° rot	-	8
		(Std. version, 7-8-7-8)	-	(void)
9	SPECIAL OPTIONS	circuit board 7-8-7-9	-	1
		Circuit board 7-8-9-10	-	2
		"C" mounting	-	3
			-	

APPLICABLE REQUIREMENTS

CAN/CSA Standard C22.2 No. 0-10 August 2011	General Requirements – Canadian Electrical Code, Part II
CAN/CSA C22.2 No. 142-M1987 (Reaffirmed 2009)	Process Control Equipment – Industrial Products
UL 508 Seventeenth Edition	Industrial Control Equipment
CAN/CSA Standard C22.2 No. 25-M1966 Reaffirmed 2009	Enclosures for Use in Class II Groups E, F, and G Hazardous Locations
CAN/CSA Standard C22.2 No. 30-M1986 Reaffirmed 2007	Explosion-Proof Enclosures for Use in Class I Hazardous Locations Industrial Products
UL 1203 Fourth Edition	Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for use in Hazardous (Classified) Locations
CAN/CSA C22.2 No. 213-M1987 Reaffirmed 2008	Non-incendive Electrical Equipment for Use in Class I, Division 2, Hazardous Locations – Industrial Products
ANSI/ISA 12.12.01 - 2012 Approved 9 July 2012	Nonincendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations

CAN/CSA-C22.2 No. 60079-0:11 (IEC 60079-0:2007, MOD)	Explosive atmospheres - Part 0: Equipment - General requirements
CAN/CSA-C22.2 No. 60079-1:11 (IEC 60079-1:2007, MOD)	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures “d”
CAN/CSA-C22.2 No. 60079-15:12 (IEC 60079-15:2005, MOD)	Electrical apparatus for explosive gas atmospheres - Part 15: Construction, test and marking of type of protection “n” electrical apparatus
CAN/CSA-C22.2 No. 60079-31:12 (IEC 60079-131:2008, MOD)	Explosive atmospheres — Part 31: Equipment dust ignition protection by enclosure “t”
ANSI/ISA-60079-0 (12.00.01)-2009	Explosive atmospheres - Part 0: Equipment - General Requirements
ANSI/ISA-60079-1 (12.22.01)-2009	Explosive Atmospheres - Part 1: Equipment Protection by Flameproof Enclosures “d”
ANSI/ISA-60079-15 (12.12.02)-2012	Electrical Apparatus for Use in Class I, Zone 2 Hazardous (Classified) Locations: Type of Protection "n"
ANSI/ISA-60079-31 (12.10.03)-2009	Explosive Atmospheres – Part 31: Equipment Dust Ignition Protection by Enclosure “t”
CAN/CSA Standard C22.2 No. 94.1-07 and Harmonized ANSI/UL Standard 50 1st Ed. – Sep. 2007 & update No. 1, July 2008	Enclosures for Electrical Equipment, Non-Environmental Considerations
CAN/CSA Standard C22.2 No. 94.2-07 and Harmonized ANSI/UL Standard 50E 1st Ed. – Sep. 2007 & update No. 1, July 2008	Enclosures for Electrical Equipment, Environmental Considerations
CAN/CSA C22.2 No. 60529:05	Degrees of protection provided by enclosure (IP Code)
ANSI/ISA 60529:05	Degrees of protection provided by enclosure (IP Code)

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 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:

Markings appear on a minimum 0.02 inch thick aluminum or stainless steel nameplate, secured to the outside of the enclosure using non-removable fasteners in blind holes. The following marking details can be stamped, etched, silkscreened, molded or embossed on the nameplate:

- Manufacturer Name: "Max-Air Technologies", or CSA Master Contract Number"218481", adjacent to the CSA Mark in lieu of manufacturer's name
- Model number: As specified in the PRODUCTS section above.
- Electrical Ratings: As specified in the PRODUCTS section above.
- Ambient temperature rating: As specified in the PRODUCTS section above.
- Manufacturer date in MMYY format, or serial number, traceable to month of manufacture.
- Enclosure ratings: As specified in the PRODUCTS section above.
- The CSA Mark with or without "C" and "US" indicators, as shown on the Certificate of Conformity.
- Hazardous Locations designations: As specified in the PRODUCTS section above.
- Temperature code: As specified in the PRODUCTS section above, optional marking
- Terminal Designations adjacent to each field wiring terminal
- The ground designation "GND" or equivalent adjacent to the equipment terminal

- The following words for "Class I, Division 1, Group C and D" marked equipment:

- *"Open circuit before removing cover"* and "*Circuit ouvert avant de retirer le couvercle*" or *"Keep cover tight while circuits are alive"* and "*Gardez couvercle etanche tandis que les circuits sont vivant*" or equivalent.
- *"Seal required within 18 inches"* and "*Seal neccesaire dans les 18 pouces*" or equivalent

The following words for "Class I, Division 2, Group A, B, C and D" marked equipment:

- *"WARNING – EXPLOSION HAZARD – Substitution of components may impair suitability for Class I, Division 2"* and "*AVERTISSEMENT – RISQUE D'EXPLOSION – La substitution de composants peut rendre ce materiel inacceptable pour les emplacements de Classe I, Divisions 2*" or equivalent
- *"WARNING – EXPLOSION HAZARD – Do not disconnect while circuit is alive unless area is known to be nonhazardous"* and "*AVERTISSEMENT – RISQUE D'EXPLOSION – Ne pas debrancher tant que le circuit est sous tension, a moins qu'il ne s'agisse d'un emplacement non dangereux"* or equivalent

An installation manual or data sheet shall be supplied with each unit, containing the following minimum marking information:

- Manufacturer's name and address
- Electrical ratings, ambient temperature rating and enclosure ratings as described in the PRODUCTS section
- Specification for appropriate wiring to the connector, including definition of pin functions, and specification for wire gauge.
- Mounting and installation instructions, including dimensions, and the following words, or equivalent:
  - Wiring to or from this device, which enters or leaves the system enclosure, must utilize wiring methods suitable for Class I, Division 2 (or Division 1) Hazardous Locations, as appropriate for the installation.
  - Enclosure Environmental ratings are achieved when conduit entries are torqued to at least 90.4 Nm (800 lbs/inch) and fasteners (Class A2-50) to 40Nm (354 lbs/inch) not-lubricated conditions.
- Above warning statements pertaining to Class I Divisions 1, respectively Class I Division 2 location

Supplement to Certificate of Compliance

Certificate: 2615594 **Master Contract:** 218481

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

Product Certification History

Project	Date	Description
70042722	2015-09-21	Evaluation to Update Report 2615594 to update the existing Product Listing to include the suggested new Model Code Tables and update the component section adding new inductive switch models.
70012284	2014-11-21	Evaluation to update Certificate 2615594 for Limit switch model series MS48, add Brand Name Emme Technology CMR 4683151, and add three alternate sensors.
2631365	2013-06-10	Update to report 2615594 with alternate internal switches.
2615594	2013-05-23	New model certification of Limit Switch Box 48 Series for use in Classified Hazardous Locations