



Member of the FM Global Group

FM Approvals  
1151 Boston Providence Turnpike  
P.O. Box 9102 Norwood, MA 02062 USA  
T: 781 762 4300 F: 781-762-9375 www.fmapprovals.com

# CERTIFICATE OF COMPLIANCE

## HAZARDOUS LOCATION ELECTRICAL EQUIPMENT PER CANADIAN REQUIREMENTS

This certificate is issued for the following equipment:

**OMNI-ID UHF tag a-b-c-d**

IS / / / / ABCD\* / T\*

\*see Special conditions of use

a = Marketing or production name or blank. Not relevant to safety

b = Internal coupling structure

- R = Rigid coupling structure
- F = Flexible coupling structure
- C = Ceramic coupling structure

c = case type:

- E = Encased Tag
- M = Metal Tag
- L = Label Tag
- P = Painted Tag

d = fixed or handheld use:

- 1, = for non-fixed applications
- 2, 3, 4 = for non-fixed and fixed applications\*
- 5 or 6 = fixed applications only\*

\*see Special conditions of use

### Special conditions of use

1. The OMNI-ID tags shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application.
2. The Material Group shall be in accordance with the following table;

b =	c =	d =	Group (non-fixed applications)	Group (fixed applications) (see Note 3)
R or F	E or M	1	ABCD	-
		2	CD	ABCD
		3	CD	ABCD
		4	D	ABCD
		5	-	ABCD
		6	-	ABCD

3. Although not specifically marked the OMNI-ID tags are suitable for use in Class I Division 1 Groups A, B, C, and D but FOR FIXED INSTALLATIONS ONLY. For fixed installations as OMNI-ID tags are made from an electrically insulating material there may be a potential electrostatic charging hazard and the OMNI-ID tags shall not to be mounted in a high airflow dust laden atmosphere and should only be cleaned with a damp cloth.
4. For Rigid (b = -R) variants the maximum RF power from the tag reader to its antenna shall not exceed the following;

Tamb	T6	T5	T4
40 °C	0.25 W	0.66 W	1.5 W
50 °C	0.18 W	0.59 W	1.5 W
60 °C	0.12 W	0.53 W	1.5 W
70 °C	0.06 W	0.47 W	1.5 W
80 °C	N/A	0.40 W	1.5 W

5. For Flexible (b = -F) variants the maximum RF power from the tag reader to its antenna shall not exceed the following;

Tamb	T6	T5	T4
40 °C	0.13 W	0.36 W	0.79 W
50 °C	0.10 W	0.32 W	0.75 W
60 °C	0.06 W	0.29 W	0.72 W
70 °C	0.03 W	0.25 W	0.68 W
80 °C	N/A	0.22 W	0.65 W

#### OMNI-ID UHF tag a-F-L-d

IS / I / 1 / ABCD\* / T\*

\*see Special conditions of use

a = Marketing or production name or blank. Not relevant to safety

d = fixed or handheld use:

-1 to 4 = for non-fixed and fixed applications

-5 = for fixed applications only

#### Special conditions of use

1. The OMNI-ID tags shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application.
2. The Material Group shall be in accordance with the following table;

d =	Group (non-fixed applications)	Group (fixed applications) (see Note 3)
1	ABCD	-
2	CD	ABCD
3	CD	ABCD
4	D	ABCD
5	-	ABCD

3. Although not specifically marked the OMNI-ID tags are suitable for use in Class I Division 1 Groups A, B, C, and D but FOR FIXED INSTALLATIONS ONLY. For fixed installations as OMNI-ID tags are made from an electrically insulating material there may be a potential electrostatic charging hazard and the OMNI-ID tags shall not to be mounted in a high airflow dust laden atmosphere and should only be cleaned with a damp cloth.
4. The maximum RF power from the tag reader to its antenna shall not exceed the following;

Tamb	T6	T5	T4
40 °C	0.13 W	0.36 W	0.79 W
50 °C	0.10 W	0.32 W	0.75 W
60 °C	0.06 W	0.29 W	0.72 W
70 °C	0.03 W	0.25 W	0.68 W
80 °C	N/A	0.22 W	0.65 W

5. The OMNI-ID tags consist of a label covering a metallic foil which contains Aluminum and is considered to constitute a potential risk of ignition by impact or friction. Care must be taken during installation and use to

prevent impact or friction.

### OMNI-ID UHF tag a-R-L-d

IS / / / 1 / ABCD\* / T\*

\*see Special conditions of use

a = Marketing or production name or blank. Not relevant to safety

d = fixed or handheld use:

-1, = for non-fixed applications

-2, 3, 4 = for non-fixed and fixed applications\*

-5 = fixed applications only\*

\*see Special conditions of use

#### Special conditions of use

1. The OMNI-ID tags shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application.
2. The Material Group shall be in accordance with the following table;

d =	Group (non-fixed applications)	Group (fixed applications) (see Note 3)
1	ABCD	-
2	CD	ABCD
3	CD	ABCD
4	D	ABCD
5	-	ABCD

3. Although not specifically marked the OMNI-ID tags are suitable for use in Class I Division 1 Groups A, B, C, and D but FOR FIXED INSTALLATIONS ONLY. For fixed installations as OMNI-ID tags are made from an electrically insulating material there may be a potential electrostatic charging hazard and the OMNI-ID tags shall not to be mounted in a high airflow dust laden atmosphere and should only be cleaned with a damp cloth.
4. The maximum RF power from the tag reader to its antenna shall not exceed the following;

Tamb	T6	T5	T4
40 °C	0.25 W	0.66 W	1.5 W
50 °C	0.18 W	0.59 W	1.5 W
60 °C	0.12 W	0.53 W	1.5 W
70 °C	0.06 W	0.47 W	1.5 W
80 °C	N/A	0.40 W	1.5 W

### OMNI-ID UHF tag a-C-c-d

IS / / / 1 / ABCD\* / T\*

\*see Special conditions of use

a = Marketing or production name or blank. Not relevant to safety

c = case type:

-E = Encased Tag

-M = Metal Tag

-P = Painted Tag

d = fixed or handheld use:

-1 = for non-fixed applications

-2 to 5 = for non-fixed and fixed applications

-6 = for fixed applications only

\*see Special conditions of use

#### Special conditions of use

1. The OMNI-ID tags shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application.
2. The Material Group shall be in accordance with the following table;

c =	d =	Group (non-fixed applications)	Group (fixed applications) (see Note 3)
E, M or P	1	ABCD	-
	2	CD	ABCD
	3	CD	ABCD
	4	D	ABCD
	5	-	ABCD
	6	-	ABCD

3. Although not specifically marked the OMNI-ID tags are suitable for use in Class I Division 1 Groups A, B, C, and D but FOR FIXED INSTALLATIONS ONLY. For fixed installations as OMNI-ID tags are made from an electrically insulating material there may be a potential electrostatic charging hazard and the OMNI-ID tags shall not to be mounted in a high airflow dust laden atmosphere and should only be cleaned with a damp cloth.
4. The maximum RF power from the tag reader to its antenna shall not exceed the following;

Tamb	T6	T5	T4
40 °C	0.19 W	0.50 W	1.10 W
50 °C	0.14 W	0.45 W	1.05 W
60 °C	0.09 W	0.40 W	1.00 W
70 °C	0.04 W	0.35 W	0.95 W
80 °C	N/A	0.31 W	0.90 W

#### OMNI-ID UHF tag a-R-P-d

IS / I / 1 / ABCD\* / T\*

\*see Special conditions of use

a = Marketing or production name or blank. Not relevant to safety

d = fixed or handheld use:

-1 = for non-fixed applications

-2, 3, 4, 5 = for non-fixed and fixed applications\*

-6 = fixed applications only\*

\*see Special conditions of use

#### Special conditions of use

1. The OMNI-ID tags shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application.
2. The Material Group shall be in accordance with the following table;

d =	Group (non-fixed applications)	Group (fixed applications) (see Note 3)
1	ABCD	-
2	CD	ABCD
3	CD	ABCD
4	D	ABCD
5	-	ABCD
6	-	ABCD

3. Although not specifically marked the OMNI-ID tags are suitable for use in Class I Division 1 Groups A, B, C, and D but FOR FIXED INSTALLATIONS ONLY. For fixed installations as OMNI-ID tags are made from an electrically insulating material there may be a potential electrostatic charging hazard and the OMNI-ID tags shall not to be mounted in a high airflow dust laden atmosphere and should only be cleaned with a damp cloth.
4. The maximum RF power from the tag reader to its antenna shall not exceed the following;

Tamb	T6	T5	T4
40 °C	0.25 W	0.66 W	1.5 W
50 °C	0.18 W	0.59 W	1.5 W
60 °C	0.12 W	0.53 W	1.5 W
70 °C	0.06 W	0.47 W	1.5 W
80 °C	N/A	0.40 W	1.5 W

### Equipment Ratings:

Intrinsically safe for Class I, Division 1, Groups A, B, C and D, or Groups C and D or Group D hazardous (classified) locations for non-fixed locations.

Intrinsically safe for Class I, Division 1, Groups A, B, C and D hazardous (classified) locations when installed in fixed applications when installed in accordance with the special conditions.

Temperature classification as indicated in the above tables.

### FM Approved for:

Extronics Ltd  
Middlewich, Cheshire United Kingdom

This certifies that the equipment described has been found to comply with the following Approval Standards and other documents:

CSA C22.2 No 157	1992
CAN/CSA-C22.2 No. 61010.1	2004

Original Project ID: 3044096C

Approval Granted: March 23, 2012

Subsequent Revision Reports / Date Approval Amended

Report Number	Date	Report Number	Date
130221	April 5, 2013		

FM Approvals LLC

  
J.E. Marquedant  
Group Manager, Electrical

5 April 2013  
Date