



Member of the FM Global Group

FM Approvals
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CERTIFICATE OF COMPLIANCE

HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

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

IS / 1 / 1 / 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 / / / / 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 / / / / 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 / / / / 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, 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;

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 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 / I / 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;*

<i>Tamb</i>	<i>T6</i>	<i>T5</i>	<i>T4</i>
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:

Class 3600	2011
Class 3610	2010
Class 3810	2005

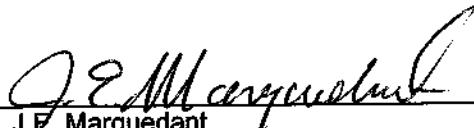
Original Project ID: 0003044096

Approval Granted: March 23, 2012

Subsequent Revision Reports / Date Approval Amended

Report Number	Date	Report Number	Date
130221	April 6, 2013		

FM Approvals LLC



J.E. Marquedant
Group Manager, Electrical

5 April 2013

Date