

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 (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

# UltraSwitch™ PS/PM Switch Box a-b-c-d-e-f-g-27-i-j-k-I

IS/ I, II, III / 1 / ABCDEFG / T\*; -40°C  $\leq$  Ta  $\leq$  80°C; IP66; Type 4X; Entity – RA-2 \*See Control Drawing

a = Brand sticker; Single letter or number (not relevant to safety)
b = Shaft; Single letter or number (not relevant to safety)
c = Connections; PS (1/2" NPT), PM (M20), PN (3/4" NPT) or PG (M25)
d = Number of open cable entries; 1, 2, or 3
e = Indicator option; Single letter or number (not relevant to safety)
f = Number of switches; 0, 1, 2, 3, or 4
g = Switch options; MG, P4, P5, PE, PT, N8, NP, NQ, NR, NS or NT
i = Analog output; 0
j = Wiring options; 0, 1, 2, 3, 4, or H
k = Minimum extra terminals; 0 thru 16

I = Special options; 0 or V

# UltraSwitch™ PS/PM Switch Box a-b-P-d-e-f-2-h

IS/ I, II, III / 1 / ABCDEFG / T\*; -40°C  $\leq$  Ta  $\leq$  80°C; IP66; Type 4X; Entity – RA-2 \*See Control Drawing

- a = Brand sticker; Single letter or number (not relevant to safety)
- b = Connections; C (1/2" NPT) or N (3/4" NPT)
- d = Indicator option; Single letter or number (not relevant to safety)
- e = Language
- f =Switch type; B or S
- h = Mounting selection; Single or triple letter or number (not relevant to safety)

# UltraSwitch™ PS/PM Switch Box a-b-c-d-e-f-g-28-i-j-k-I

NI/I/2/ABCD/T\*; -40°C  $\leq$  Ta  $\leq$  60°C; IP66; Type 4X; NIFW; RA-2 S/II/2/EFG/T6 -40°C  $\leq$  Ta  $\leq$  60°C; IP66; Type 4X S/III/1, 2/T6 -40°C  $\leq$  Ta  $\leq$  60°C; IP66; Type 4X \*See Control Drawing

a = Brand sticker; Single letter or number (not relevant to safety) b = Shaft; Single letter or number (not relevant to safety) c = Connections; PS (1/2" NPT), PM (M20), PN (3/4" NPT) or PG (M25)

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d = Number of open cable entries; 1, 2, or 3 e = Indicator option; Single letter or number (not relevant to safety) f = Number of switches; 0, 1, 2, 3, or 4 g = Switch options; P4, P5, PE, PP, PT or N8 i = Analog output; 0 j = Wiring options; 0, 1, 2, 3, 4, or H k = Minimum extra terminals; 0 thru 16

I = Special options; 0 or V

#### UltraSwitch™ PS/PM Switch Box a-b-P-d-e-f-1-h

NI/I/2/ABCD/T\*; -40°C  $\leq$  Ta  $\leq$  60°C; IP66; Type 4X; NIFW; RA-2 S/II/2/EFG/T6 -40°C  $\leq$  Ta  $\leq$  60°C; IP66; Type 4X S/III/1, 2/T6 -40°C  $\leq$  Ta  $\leq$  60°C; IP66; Type 4X \*See Control Drawing

a = Brand sticker; Single letter or number (not relevant to safety)
b = Connections; C (1/2" NPT) or N (3/4" NPT)
d = Indicator option; Single letter or number (not relevant to safety)
e = Language
f = Switch type; B, K or S
h = Mounting selection; Single or triple letter or number (not relevant to safety)

#### UltraSwitch™ PS/PM Switch Box a-b-c-d-e-f-g-28-i-j-k-I

NI/I/2/ABCD/T\*; -40°C  $\leq$  Ta  $\leq$  80°C; IP66; Type 4X; NIFW; RA-2 S/II/2/EFG/T6 -40°C  $\leq$  Ta  $\leq$  80°C; IP66; Type 4X S/III/1, 2/T6 -40°C  $\leq$  Ta  $\leq$  80°C; IP66; Type 4X \*See Control Drawing

a = Brand sticker; Single letter or number (not relevant to safety)

- b = Shaft; Single letter or number (not relevant to safety)
- c = Connections; PS (1/2" NPT), PM (M20), PN (3/4" NPT) or PG (M25)
- d = Number of open cable entries; 1, 2, or 3
- e = Indicator option; Single letter or number (not relevant to safety)
- f = Number of switches; 0, 1, 2, 3, or 4
- g = Switch options; PE, PP or PT
- i = Analog output; 0
- j = Wiring options; 0, 1, 2, 3, 4, or H
- k = Minimum extra terminals; 0 thru 16
- I = Special options; 0 or V

#### UltraSwitch<sup>™</sup> PS/PM Switch Box a-b-P-d-e-f-1-h

NI/I/2/ABCD/T\*; -40°C  $\leq$  Ta  $\leq$  80°C; IP66; Type 4X; NIFW; RA-2 S/II/2/EFG/T6 -40°C  $\leq$  Ta  $\leq$  80°C; IP66; Type 4X S/III/1, 2/T6 -40°C  $\leq$  Ta  $\leq$  80°C; IP66; Type 4X \*See Control Drawing

- a = Brand sticker; Single letter or number (not relevant to safety)
- b = Connections; C (1/2" NPT) or N (3/4" NPT)
- d = Indicator option; Single letter or number (not relevant to safety)
- e = Language
- f = Switch type; B or K
- h = Mounting selection; Single or triple letter or number (not relevant to safety)

#### UltraSwitch™ PS/PM Switch Box a-b-c-d-e-f-g-60-i-j-k-I

IS/ I, II, III / 1 / ABCDEFG / T\*; -40°C  $\leq$  Ta  $\leq$  80°C; IP66; Type 4X; Entity – RA-2 NI/I/2/ABCD/T\*; -40°C  $\leq$  Ta  $\leq$  80°C; IP66; Type 4X; NIFW; RA-2

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S/II/2/EFG/T6 -40°C  $\leq$  Ta  $\leq$  80°C; IP66; Type 4X S/III/1, 2/T6 -40°C  $\leq$  Ta  $\leq$  80°C; IP66; Type 4X \*See Control Drawing

- a = Brand sticker; Single letter or number (not relevant to safety)
  b = Shaft; Single letter or number (not relevant to safety)
  c = Connections; PS (1/2" NPT), PM (M20), PN (3/4" NPT) or PG (M25)
- c = Connections; PS (1/2 NPT), PM (M20), PN (3/4 NPT) of PC
- d = Number of open cable entries; 1, 2, or 3
- e = Indicator option; Single letter or number (not relevant to safety)
- f =Number of switches; 0, 1, 2, 3, or 4
- g = Switch options; MG, P4, P5, PE, PP, PT, N8, NP, NQ, NR, NS or NT
- i = Analog output; 0
- j = Wiring options; 0, 1, 2, 3, 4, or H
- k = Minimum extra terminals; 0 thru 16
- I = Special options; 0 or V

### UltraSwitch<sup>™</sup> PS/PM Switch Box a-b-P-d-e-f-3-h

IS/ I, II, III / 1 / ABCDEFG / T\*; -40°C  $\leq$  Ta  $\leq$  80°C; IP66; Type 4X; Entity – RA-2 NI/I/2/ABCD/T\*; -40°C  $\leq$  Ta  $\leq$  80°C; IP66; Type 4X; NIFW; RA-2 S/II/2/EFG/T6 -40°C  $\leq$  Ta  $\leq$  80°C; IP66; Type 4X S/III/1, 2/T6 -40°C  $\leq$  Ta  $\leq$  80°C; IP66; Type 4X \*See Control Drawing

a = Brand sticker; Single letter or number (not relevant to safety)

b = Connections; C (1/2" NPT) or N (3/4" NPT)

d = Indicator option; Single letter or number (not relevant to safety)

- e = Language
- f = Switch type; B, K or S
- h = Mounting selection; Single or triple letter or number (not relevant to safety)

# **Equipment Ratings:**

Intrinsically Safe for Class I,II and III, Division 1, Groups A, B, C, D, E, F and G; Nonincendive for Class I, Division 2, Groups A, B, C and D Hazardous (classified) locations per Control Drawing. Temperature Class T4, T5 or T6. See Control Drawing RA-2 for details. Suitable for Class II, Division 2 Groups E, F and G; Suitable for Class III, Division 1 and 2 Indoor and Outdoor (Type 4X and IP66) Hazardous (classified) locations. Temperature Class T6.

FM Approved for:

Palmstierna International AB SE-171 54 Solna, Sweden

To verify the availability of the Approved product, please refer to www.approvalguide.com



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 3611	2004
Class 3810	2005
ISA-82.02.01	2004
ANSI/IEC 60529	2004
NEMA 250	2003

Original Project ID: 0003043047

Approval Granted: March 26, 2012

Subsequent Revision Reports / Date Approval Amended

Report Number	Date	Report Number	Date
120402	May 7, 2012		
3046224	September, 17 2012		
3048055	September 24, 2013		

FM Approvals LLC

Marguestia

J.É. Marquedant Group Manager, Electrical

24 September 2013 Date

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3043047 Page 4 of 4