

Member of the FM Global Group

FM Approvals
1151 Boston Providence Turnpike
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# CERTIFICATE OF COMPLIANCE

## HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

FTL825—abcdefg. Nivotester AIS/I, II, III/1/A, B, C, D, E, F, G - XA00646F [AEx ia] IIC ANI/I, II, III/2/A, B, C, D, E, F, G NIFW – XA00646F [AEx ic] IIC

Uo < 22Vdc; Io < 166mA; Po < 970mW; Co < 0.165μF; Lo < 2.8mH; Ci ≤ 1nF; Li = 0mH; Ri > 132Ω\*

a = Approval: (FB or 8C)

b = Housing: (3 or 9(different color))

c = Power Supply: (A or E)

d = Switch output: (4)

e = Additional Approval: (LC, LE, LF or LV)

f = Accessory Enclosed: (PA)

g = Tagging: (Z1)

#### **Equipment Ratings:**

Intrinsically safe Associated Apparatus for outputs to Class I, II & III, Division 1, Group A, B, C, D, E, F & G; Class I, Division 2, Groups A, B, C, D, E, F & G; alternatively intrinsically safe outputs for Class I, Zone 0, Group IIC Ta = +60°C; non-incendive outputs for Class I, Zone 2, Group IIC Ta = +60°C in accordance with entity requirements when installed per Installation Drawing XA00646F hazardous (classified) locations.

<sup>\*</sup>Refer to Control Drawing XA00646F for additional C<sub>0</sub>/C<sub>a</sub> & L<sub>0</sub>/L<sub>a</sub> values.



### FM Approved for:

Endress+Hauser GmbH+Co. KG Haupstrasse 1 D-79689 Maulburg Germany

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
ANSI/ISA-82.02.01	2008
ANSI/ISA 60079-0	2009
ANSI/ISA 60079-11	2011
ANSI/ISA 60079-26	2006

Original Project ID: 3044839 Approval Granted: May 30, 2012

Subsequent Revision Reports / Date Approval Amended

Report Number Date Report Number Date

FM Approvals LLC

Robert L. Martell Jr. Assistant Vice President Date

May 30, 2012

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# CERTIFICATE OF COMPLIANCE

# HAZARDOUS LOCATION ELECTRICAL EQUIPMENT PER CANADIAN REQUIREMENTS

This certificate is issued for the following equipment:

FTL825—abcdefg. Nivotester
AIS/I, II, III/1/A, B, C, D, E, F, G - XA00646F
[Ex ia] IIC
ANI/I, II, III/2/A, B, C, D, E, F, G NIFW - XA00646F
[Ex ic] IIC [Ex n] IIC

Uo < 22Vdc; Io < 166mA; Po < 970mW; Co < 0.165μF; Lo < 2.8mH; Ci ≤ 1nF; Li = 0mH; Ri > 132Ω\*

a = Approval: (FB or 8C)

b = Housing: (3 or 9(different color))

c = Power Supply: (A or E)

d = Switch output: (4)

e = Additional Approval: (LC, LE, LF or LV)

f = Accessory Enclosed: (PA)

g = Tagging: (Z1)

#### **Equipment Ratings:**

Intrinsically safe Associated Apparatus for outputs to Class I, II & III, Division 1, Group A, B, C, D, E, F & G; outputs to Class I, Division 2, Groups A, B, C, D, E, F & G; alternatively intrinsically safe outputs for Class I, Zone 0, Group IIC Ta = +60°C; non-incendive outputs for Class I, Zone 2, Group IIC, Ta = +60°C in accordance with entity requirements when installed per Installation Drawing XA00646F hazardous locations.

<sup>\*</sup>Refer to Control Drawing XA00646F for additional C<sub>0</sub>/C<sub>a</sub> & L<sub>0</sub>/L<sub>a</sub> values.



### FM Approved for:

Endress+Hauser GmbH+Co. KG Haupstrasse 1 D-79689 Maulburg Germany

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

C22.2 No. 0.4-04 2004

C22.2 No. 142-M1987 1987 (R2004) Can C22.2 No. 157-92 1992 (R2006)

C22.2 No. 1010.1 2004

CAN/CSA E60079-0 2002 (R2006)

CAN/CSA E60079-11 2011

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Robert L. Martell Jr.

Assistant Vice President

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