

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:

MBD40-ab/EX, Field Device Coupler

NI / I / 2 / ABCD / T4 Ta = 75°C AIS / I, II, III / 1 / ABCDEFG; IS-2.535; Entity I / 1 / Ex m e [ia] / IIC / T4 Ta = 75°C; IS-2.535; Entity

**Entity Parameters:** 

 $V_{oc} = 15.7 \text{ V dc}$ ,  $I_{sc} = 245 \text{ mA}$ , Po = 960mW,  $C_a = 476 \text{ nF}$ ,  $L_a = 0.58 \text{ mH}$ ,  $L_o / R_o = 37 \mu H / \Omega$ 

a = number of spurs; 4 or 8

b = design of terminals; C (Cage clamp), R (detachable blocks, at spur only), or S (screw type)

Special Conditions of Use:

1. Shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application.

#### **Equipment Ratings:**

#### I. Intrinsically Safe Outputs

Nonincendive for Class I, Division 2, Groups A, B, C & D, Increased Safety and Encapsulation for use in Class I, Zone 1, Group IIC; Hazardous (Classified) indoor/outdoor (IP54) Locations Intrinsically Safe Outputs, with entity parameters, for Connections to Class I, II & III, Division 1, Groups A, B, C, D, E, F & G, and Class I, Zone 0, Group IIC, in accordance with manufacturer's Control Drawing No. IS-2.535

#### II. Intrinsically Safe Outputs With Optional Enclosures

Nonincendive for Class I, Division 2, Groups A, B, C & D, Increased Safety and Encapsulation for use in Class I, Zone 1, Group IIC; Suitable for Class II, Division 2, Groups E, F & G Dust-Ignition Proof for Class II & III, Division 1, Groups E, F & G Hazardous (Classified) indoor/outdoor (TYPE 4X, IP54) Locations Intrinsically Safe Outputs, with entity parameters, for Connections to Class I, II & III, Division 1, Groups A, B, C, D, E, F & G, and Class I, Zone 0, Group IIC, in accordance with manufacturer's



Control Drawing No. IS-2.535

### III. Non-Intrinsically Safe Outputs

Nonincendive for Class I, Division 2, Groups A, B, C & D, Increased Safety and Encapsulation for use in Class I, Zone 1, Group IIC; Hazardous (Classified) indoor/outdoor (IP54) Locations

IV. Non-Intrinsically Safe Outputs With Optional Enclosures
Nonincendive for Class I, Division 2, Groups A, B, C & D,
Increased Safety and Encapsulation for use in Class I, Zone 1, Group IIC;
Suitable for Class II, Division 2, Groups E, F & G
Dust-Ignition Proof for Class II & III, Division 1, Groups E, F & G
Hazardous (Classified) indoor/outdoor (TYPE 4X, IP54) Locations

FM Approved for:

Turck Inc. 3000 Campus Drive Plymouth, MN 55441 USA



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

CAN/CSA-E60079-18	2004
CAN/CSA-E60079-7	2001
IEC 60529I	2001
CAN/CSA-E60079-11:02	2002
CAN/CSA-E60079-0:02	2002
CSA-C22.2 No. 94	2001
CSA-C22.2 No. 213	1987
CSA C22.2 No. 142	1993
CSA C22.2 No. 0.5	1999
CSA C22.2 No. 0.4	2004
CSA-C22.2 No. 157	2002

Original Project ID: 3045793C

Approval Granted: Octobe 9, 2012

Subsequent Revision Reports / Date Approval Amended

Report Number

Date

Report Number

Date

FM Approvals LLC

Patrick J. Byrne

Technical Team Manager

9 October 2012 Date