



Member of the FM Global Group

FM Approvals  
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# CERTIFICATE OF COMPLIANCE

## HAZARDOUS LOCATION ELECTRICAL EQUIPMENT PER CANADIAN REQUIREMENTS

This certificate is issued for the following equipment:

**IM31-aEx-b. Isolator Barrier.**

AIS / I / 1 / ABCDEFG — IS-1.114; Entity;

NI / I / 2 / ABCD / T4, Ta = 70°C

Entity Parameters:

Terminals	Group	V <sub>oc</sub> /U <sub>o</sub>	I <sub>sc</sub> /I <sub>o</sub>	P <sub>o</sub>	C <sub>a</sub> /C <sub>o</sub>	L <sub>a</sub> /L <sub>o</sub>
		(V)	(mA)	(mW)	(μF)	(H)
1, 2, and 3	A,B/IIC	7.2	1	0.3	13.5	1.0
1, 2, and 3	C/IIB	7.2	1	0.3	240	1.0
1, 2, and 3	D/IIA	7.2	1	0.3	240	1.0
4, 5, and 6	A,B/IIC	7.2	1	0.3	13.5	1.0
4, 5, and 6	C/IIB	7.2	1	0.3	240	1.0
4, 5, and 6	D/IIA	7.2	1	0.3	240	1.0

a = Number of inputs/outputs: 11, 12, or 22.

b = Output type: U or I.

Special Condition of use:

- 1) The Isolator Barrier shall be installed in a tool secured enclosure in compliance with the mounting, spacing and segregation requirements of the ultimate application.

**IM72-aEx/L. Isolator Barrier.**

AIS / I / 1 / ABCDEFG — IS-1.108; Entity;

NI / I / 2 / ABCD / T4 Ta = 70°C

Entity Parameters Trapezoidal Characteristic:

Terminals	Groups	V <sub>oc</sub> /U <sub>o</sub> (V)	I <sub>sc</sub> /I <sub>o</sub> (mA)	R <sub>i</sub> (ohm)	P <sub>o</sub> (mW)	C <sub>a</sub> /C <sub>o</sub> (μF)	L <sub>a</sub> /L <sub>o</sub> (mH)
(1 and 3), (4 and 6)	A,B/IIC	27	95.3	297	674	0.03	2
(1 and 3), (4 and 6)	C/IIB	27	95.3	297	674	0.15	5
(2 and 3), (5 and 6)	A,B/IIC	17.5	95.3	297	674	0.10	1
(2 and 3), (5 and 6)	C/IIB	17.5	95.3	297	674	0.30	10

a = Number of inputs/outputs: 11 or 22.

Special Condition of use:

- 1) The Isolator Barrier shall be installed in a tool secured enclosure in compliance with the mounting, spacing and segregation requirements of the ultimate application.

**Equipment Ratings:**

Associated Apparatus with Intrinsically Safe connections to a Class I, II, & III, Division 1, Groups A, B, C, D, E, F, & G indoor hazardous (classified) locations, in accordance with Control Drawings 1.114 or IS-1.108. Also as Nonincendive for use in a Class I, Division 2, Groups A, B, C, and D indoor hazardous (classified) locations. The equipment has a Temperature Class T4, Ta = 70°C.

The apparatus shall be installed in a final enclosure in order to retain its safety approval.

**FM Approved for:**

TURCK Inc.  
3000 Campus Dr.  
Plymouth MN 55441

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
CSA C22.2 No. 213	1987
CSA C22.2 No. 142	1987

Original Project ID: 3025521C

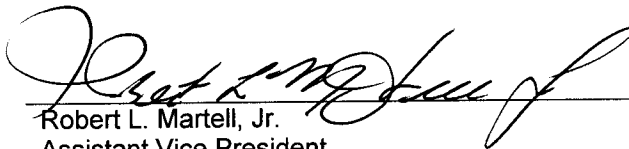
Approval Granted: *July 20, 2006*

Subsequent Revision Reports / Date Approval Amended

Report Number      Date

Report Number      Date

FM Approvals LLC

  
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Robert L. Martell, Jr.  
Assistant Vice President

*July 20, 2006*  
Date