



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEX FMG 10.0010X	Issue No: 4	<u>Certificate history:</u>
Status:	Current	Page 1 of 5	Issue No. 4 (2014-03-25)
Date of Issue:	2014-03-25		Issue No. 3 (2014-01-08)
Applicant:	Rosemount Tank Radar AB Gamlestadvägen 18B SE-40251 Göteborg Sweden		Issue No. 2 (2012-02-20)
Electrical Apparatus:	Model 2240 Multi-Input Temperature Transmitter		Issue No. 1 (2011-08-18)
<i>Optional accessory:</i>			Issue No. 0 (2010-08-25)
Type of Protection:	Intrinsically Safe		
Marking:	Ex ia IIC Ga; Entity/FISCO; IP66/IP67 Ex ib IIC [ia Ga] Gb; FISCO; IP66/IP67		

Approved for issue on behalf of the IECEx
Certification Body:

J. E. Marquedant

Position:

Manager, Electrical Systems

Signature:
(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

FM Approvals LLC
1151 Boston-Providence Turnpike
Norwood, MA 02062
United States of America





IECEx Certificate of Conformity

Certificate No: IECEx FMG 10.0010X Issue No: 4
Date of Issue: 2014-03-25 Page 2 of 5
Manufacturer: **Rosemount Tank Radar AB**
Gamlestadsvägen 18B
SE-40251 Göteborg
Sweden

Additional Manufacturing
location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0
IEC 60079-11 : 2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0
IEC 60079-26 : 2006 Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga
Edition:2

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

US/FMG/ExTR10.0022/00 US/FMG/ExTR10.0022/01 US/FMG/ExTR10.0022/02
US/FMG/ExTR10.0022/03 US/FMG/ExTR10.0022/04

Quality Assessment Report:

NO/DNV/QAR07.0007/00



IECEx Certificate of Conformity

Certificate No: IECEx FMG 10.0010X

Issue No: 4

Date of Issue: 2014-03-25

Page 3 of 5

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

2240Sabcdefghij. Multi-Input Temperature Transmitter.

Energy Limitation Parameters

FISCO Input Parameters: $U_i = 17.5 \text{ V}$, $I_i = 380 \text{ mA}$, $P_i = 5.32 \text{ W}$, $C_i = 2.2 \text{ nF}$, $L_i = 2 \text{ }\mu\text{H}$

Entity Input Parameters: $U_i = 30 \text{ V}$, $I_i = 300 \text{ mA}$, $P_i = 1.3 \text{ W}$, $C_i = 2.2 \text{ nF}$, $L_i = 2 \text{ }\mu\text{H}$

CONDITIONS OF CERTIFICATION: YES as shown below:

- 1. The enclosure contains aluminum and is considered to present a potential risk of ignition by impact or friction. Care must be taken during installation and use to prevent impact or friction.*
- 2. Rating Ex ib IIC [ia Ga] Gb; FISCO 9240040-976; IP66/IP67 is only applicable when supplied from a certified Ex [ib] FISCO Power Supply with triplicate output voltage limitation meeting the requirements for two faults ("ia" voltage limitation).*
- 3. The Model 2240 Multi-input Temperature Transmitter will not pass the 500Vrms dielectric strength test and this must be taken into account during installation.*



IECEx Certificate of Conformity

Certificate No: IECEx FMG 10.0010X

Issue No: 4

Date of Issue: 2014-03-25

Page 4 of 5

EQUIPMENT (continued):

2240S*abcdeghij. Multi-Input Temperature Transmitter. where a = Performance Class: Any single character b = Number of Temperature Sensor Inputs: 16, 08, 04, 00, X c = Leads per Temperature Element: 4, 3, 0, X d = Auxiliary Inputs: A, 0, X e = Tank Bus: Power and Communication: F, X, U f = Hazardous Location Certification: I7, KC, KE, KF g = Custody Transfer Type Approval: Any single character h = Housing: A i = Cable/Conduit Connections: 1, 2, G, E, M j = Mechanical Installation: M, W, P, 0, X*



IECEX Certificate of Conformity

Certificate No: IECEx FMG 10.0010X

Issue No: 4

Date of Issue: **2014-03-25**

Page 5 of 5

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Drawing 9240040-946 changed from Rev 2 to Rev 3