# IECEx Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION
## IEC Certification System for Explosive Atmospheres

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

Certificate No.: **IECEx FMG 10.0010X**

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Status: **Current**

Issue No: 9

Date of Issue: 2022-01-10

Applicant: **Rosemount Tank Radar AB**
Layoutvägen 1
SE-43533 Mölnlycke
**Sweden**

Equipment: **Model 2240 Multi-Input Temperature Transmitter**

Optional accessory:

Type of Protection: **Intrisic Safety**

Marking: Ex ia IIC T4 Ga; Tamb = -50ºC to +70ºC; Entity/FISCO; IP66/IP67

Ex ib [ia Ga] IIC T4 Gb; Tamb = -50ºC to +70ºC; FISCO; IP66/IP67

Certificate history:

Issue 8 (2021-07-09)
Issue 7 (2021-02-23)
Issue 6 (2019-12-10)
Issue 5 (2019-03-22)
Issue 4 (2014-03-25)
Issue 3 (2014-01-08)
Issue 2 (2012-02-20)
Issue 1 (2011-08-18)
Issue 0 (2010-08-25)

Approved for issue on behalf of the IECEx Certification Body: **J. E. Marquedant**

Position: **VP, 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 www.iecex.com or use of this QR Code.

Certificate issued by:

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

FM Approvals
Member of the FM Global Group

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Manufacturer: **Rosemount Tank Radar AB**
Layoutvägen 1
SE-43533 Mölnlycke
**Sweden**

Additional manufacturing locations:

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 equipment 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

This Certificate **does not** indicate compliance with 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 Reports:

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
US/FMG/ExTR10.0022/05
US/FMG/ExTR10.0022/06
US/FMG/ExTR10.0022/07
US/FMG/ExTR10.0022/08
US/FMG/ExTR10.0022/09

Quality Assessment Report:

NO/PRE/QAR15.0014/04

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**EQUIPMENT:**
Equipment and systems covered by this Certificate are as follows:

**Model 2240S Multi-Input Temperature Transmitter.**

**SPECIFIC CONDITIONS OF USE: 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 [ia Ga] IIC Gb; FISCO D9240040-976; 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.

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**Equipment (continued):**

**2240Sabcdefghijk. Multi-Input Temperature Transmitter.**

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.
k = Options: WR3, WR5, ST, Q1, Q4 and/or Q7.

Energy Limitation Parameters
Ui = 30V, Ii = 300mA, Pi = 1.3W, Ci = 2.2nF, Li = 2µH

FISCO Parameters:
Ui = 17.5V, Ii = 380mA, Pi ≤ 5.32W, Ci = 2.2nF, Li = 2µH

RTD Terminals, X11 (16 Channels)
Uo = 5.9V, Io = 398mA, Po = 585mW,
Groups A/B, IIC Co = 43µF, Lo = 0.2mH
Groups C/D, IIB, Co = 1000µF, Lo = 0.7mH
Groups D, IIA, Co = 1000µF, Lo = 1.8mH
Sensorbus Terminals, X5:
Uo = 6.6V, Io = 223mA, Po = 363mW
Groups A/B, IIC Co = 22µF, Lo = 0.7mH
Groups C/D, IIB, Co = 500µF, Lo = 3.3mH
Groups D, IIA, Co = 1000µF, Lo = 6mH

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**DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**
Documentation Updates