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## Type Examination Certificate

for Electrical Equipment used in Potentially Explosive Atmosphere

Issued by Eurofins E&E CML Limited, Newport Business Park, New Port Road, Ellesmere Port CH65 4LZ, UK	
Applicant	Emerson Japan, Ltd. 1-2-5 Higashi-Shinagawa, Shinagawa-ku, Tokyo, Japan
Manufacturer name	<b>Rosemount Tank Radar AB</b> <b>Layoutvägen 1</b> <b>Mölnlycke, 43533</b> <b>Sweden</b>
Product name	Graphical Field Display
Type/model code	Model 2230 For details see attachment 1
Type of protection	Intrinsic Safety
Group, Temperature Class and EPL	IIC T4 Ga
The equipment shall be marked with the following	Ex ia IIC T4 Ga ; FISCO
Ratings	See attachment 2
Special condition for safe use	See attachment 3
Certificate number	<b>CML 17JPN2203X</b>
Term of validity	From 31-07-2017 to 30-07-2020 
	From 31-07-2020 to 30-07-2023 

This is to certify that the equipment specified above complies with the requirements stipulated in Ordinance on Examination of Machines and Other Equipment of the Ministry of Health, Labour and Welfare, Japan.

Issue date: 31-07-2020

Signature of chief examiner:



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CML 17JPN2203X

Issue: 2

## Attachment 1: Model code details

Model 2230aFbcdAefg

Where

- a = Default Language: Any single character without influence to the type of protection.
- F = Tankbus: Power and Communication: F (Bus powered 2-wire Foundation fieldbus (IEC 61158))
- b = Firmware: Any single character without influence to the type of protection.
- c = Hazardous Location Certificate: I4
- d = Custody Transfer Type Approval: Any single character without influence to the type of protection.
- A = Housing: A (Standard enclosure. Polyurethane-covered aluminum)
- e = Cable/Conduit Connections: 1, 2, G, E or M
- f = Mechanical Installation: W, D, X or P
- g = Options: Any multiple characters without influence to the type of protection or N/A.

## Attachment 2: Ratings

### Energy Limiting Parameters:

$U_i = 30V$ ,  $I_i = 300mA$ ,  $P_i = 1.3W$ ,  $C_i = 2.1nF$ ,  $L_i = 1.1\mu H$

### FISCO Parameters:

$U_i = 17.5V$ ,  $I_i = 380mA$ ,  $P_i = 5.32W$

### Ambient temperature

$T_a = -50^\circ C \leq T_a \leq +70^\circ C$

## Attachment 3: Special conditions for safe use

- i. The non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore, particularly when it is used for applications that specifically require Group II, Zone 0 located equipment, the equipment shall not be installed in a location where the external conditions are conducive to the buildup of Electrostatic charge on such surfaces. Additionally, the equipment shall only be cleaned with a damp cloth.
- ii. The enclosure contains aluminium 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.
- iii. The associated apparatus through which the equipment is supplied shall provide galvanic isolation between the input and output of the associated apparatus.
- iv. To maintain ingress protection ratings IP66 and IP67, thread sealant is required for cable entries and blanking plugs.
- v. When the Graphical Field display 2230 is connected to an Ex ib IIB FISCO power supply the Ex code of the 2230 as an installation shall be considered to be Ex ib IIB.