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 FME 13.0002X**

Page 1 of 5

Certificate history:
Issue 2 (2019-06-05)
Issue 1 (2013-09-27)
Issue 0 (2013-05-10)

Status: **Current**

Issue No: 3

Date of Issue: 2023-02-20

Applicant: **Senmatic A/S**
Industrivej 8
5471 Soendersoe
Denmark

Equipment: **Type-CB Field Connection Box and Type-MNS temperature Sensor**

Optional accessory:

Type of Protection: **Intrinsic Safety 'i'**

Marking: ***Type-CB-a0cdefg. Connection Box.***

Ex ia IIC T4 Ga Ta = -50°C to +70°C

Type-CB-a1cdefg. Connection Box.

Type-CB-a2cdefg. Connection Box.

Ex ia IIC T6 Ga Ta = -50°C to +70°C

Type-MNS Temperature Sensor

Ex ia IIC T6 Ga Ta = -50°C to +70°C

Approved for issue on behalf of the IECEx Certification Body: **Andrew Was**

Position: **Certification Manager**

Signature:
(for printed version)

Date:
(for printed version)

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:

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FM Approvals
Member of the FM Global Group

IECEx Certificate of Conformity

Certificate No.: **IECEx FME 13.0002X**

Date of issue: 2023-02-20 Issue No: 3

Manufacturer: **Senmatic A/S**
Industrivej 8
5471 Soendersoe
Denmark

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:

GB/FME/ExTR13.0002/00 GB/FME/ExTR13.0002/01 GB/FME/ExTR13.0002/03
GB/FME/ExTR13.0002/04

Quality Assessment Report:

GB/EXV/QAR22.0012/00

IECEx Certificate of Conformity

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

The Type-CB connection box is a stainless steel enclosure which contains either terminals or PR Electronics 5335D (IECEx KEMA 10.0083X) temperature transmitters or a combination of the these items on hinged plates. The temperature transmitters or terminals are used to terminate up to 24 Type-MNS sensors (IECEx FME 13.0003X).

An alternative design uses a Rosemount Tank Radar 2240 transmitter (IECEx FMG 10.0010X) instead of the Junction Box

Type-CB-abcdefg. Connection Box.

a = Connection: 0, J, K, L, M or P.

b = Box: 0, 1 or 2.

c = Number of sensors: 01 to 24.

d = Module 1: 0, A, B, C or D.

e = Module 2: 0, A, B, C or D.

f = Module 3: 0, A, B, C or D.

g = Module 4: 0, A, B, C or D.

The Type-MNS Temperature Sensor is a mineral insulated thermometer with the measuring element glass encapsulated platinum for temperature measurement in insulation and concrete surroundings.

Type-MNS abcdefghijklmno. Sensor.

a= Sensor Length: 200mm to 30,0000mm

b = Outer Diameter: 5 or 6

c = Number of Elements: S or D

d = Wiring: 3 or 4

e = Resistance at 0°C: 1

f = Tolerance Class EN 60751: 1, 2, or C.

g = Sensor Tip: A

h = Lead-Out Wire: 1

i = Lead-Out Dimension: 0, 1, 2 or 3.

j = Lead-Out Wire/LK: 200mm, 700mm, 560mm.

k = Junction Box Fitting: 0, 1, 2 or 3.

l = Flange Fitting, 0, 1, 2 or 3

m = Sensor Tip Fitting: 0, 1, 2, 3 or 5.

n = Extension Length L2: 500mm to 10,0000mm or none.

o = Tag Number/Project number: Any 20 digits

SPECIFIC CONDITIONS OF USE: YES as shown below:
Type-CB-a0cdefg. Connection Box.

1. The sensor for the Type-CB has a service temperature range of -200°C to +100°C for the probe tip and -50°C to +70°C at the mounting flange. To avoid the effects of process temperature and other thermal effects care shall be taken to ensure that the temperature at the mounting flange does not exceed +70°C.

2. The enclosure of the Rosemount Tank Radar 2240 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.

IECEx Certificate of Conformity

Type-CB-a1cdefg. Connection Box.

Type-CB-a2cdefg. Connection Box.

1. The sensor for the Type-CB has a service temperature range of -200°C to +100°C for the probe tip and -50°C to +70°C at the mounting flange. To avoid the effects of process temperature and other thermal effects care shall be taken to ensure that the temperature at the mounting flange does not exceed +70°C.

Type-MNS. Sensor.

1. The Type-MNS has a service temperature range of -200°C to +100°C for the probe tip and -50°C to +70°C at the mounting flange. To avoid the effects of process temperature and other thermal effects care shall be taken to ensure that the temperature at the mounting flange does not exceed +70°C.

IECEx Certificate of Conformity

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Update to IEC 60079-0:2017 and documentation changes.