

1 EU-TYPE EXAMINATION CERTIFICATE



2 **Equipment or Protective systems intended for use in Potentially Explosive Atmospheres - Directive 2014/34/EU**

3 **EU-Type Examination Certificate No:** FM13ATEX0019X

4 **Equipment or protective system:** Type-MNS Temperature Sensor
(Type Reference and Name)

5 **Name of Applicant:** Senmatic A/S

6 **Address of Applicant:** Industrivej 8
Søndersø 5471
Denmark

7 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and documents therein referred to.

8 FM Approvals Europe Ltd, notified body number 2809 in accordance with Article 17 of Directive 2014/34/EU of 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report number:

3042101 dated 26th April 2013

9 Compliance with the Essential Health and Safety Requirements, with the exception of those identified in item 15 of the schedule to this certificate, has been assessed by compliance with the following documents:

EN 60079-0:2012+A11:2013 and EN 60079-11:2012

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.

11 This EU-Type Examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12 The marking of the equipment or protective system shall include:



II 1 G Ex ia IIC T6 Ga Ta = -50°C to +70°C


FM Approvals
Member of the FM Global Group

Digitally signed by Damien Mc Ardle
DN: cn=Damien Mc Ardle, o=FM Approvals, ou=FM Approvals Europe Ltd, email=damien.mcardle@fmapprovals.com, c=IE
Date: 2019.06.05 12:04:33 +01'00'

Damien Mc Ardle
Certification Manager, FM Approvals Europe Ltd.

Issue date: 05th June 2019

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

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SCHEDULE

to EU-Type Examination Certificate No. FM13ATEX0019X

13 Description of Equipment or Protective System:

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 30,000mm

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 10,000mm or none.

o = Tag Number/Project number: Any 20 digits

Electrical Ratings:

Ui=9.6V; Pi=700mW; Ii=400mA; Li=40µH; Ci=500nF

14 Specific Conditions of Use:

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.

15 Essential Health and Safety Requirements:

The relevant EHSRs that have not been addressed by the standards listed in this certificate have been identified and assessed in the confidential report identified in item 8.

16 Test and Assessment Procedure and Conditions:

This EU-Type Examination Certificate is the result of testing of a sample of the product submitted, in accordance with the provisions of the relevant specific standard(s), and assessment of supporting documentation. It does not imply an assessment of the whole production.

Whilst this certificate may be used in support of a manufacturer's claim for CE Marking, FM Approvals Europe Ltd accepts no responsibility for the compliance of the equipment against all applicable Directives in all applications.

This Certificate has been issued in accordance with FM Approvals Europe Ltd's ATEX Certification Scheme.

17 Schedule Drawings

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A list of the significant parts of the technical documentation is annexed to this certificate and a copy has been kept by the Notified Body.

18 Certificate History

Details of the supplements to this certificate are described below:

Date	Description
10 th May 2013	Original Issue.
27 th September 2013	<u>Supplement 1:</u> Report Reference: 3042101rev130715 dated 10 th September 2013 Description of the Change: Update to label drawings. Addition of character in model code to identify ATEX version.
21 st June 2016	<u>Supplement 2:</u> Report Reference: – RR205289 dated 15 th June 2016. Description of the Change: Minor changes to product. Updated to EU certificate.
05 th June 2019	<u>Supplement 3</u> Report Reference: RR218258 dated 21 st May 2019 Description of the Change: <ol style="list-style-type: none">1. Updated Label drawings with new company logo.2. Add model codes to drawings3. Certificate transferred from FM Approvals Europe Ltd., notified body no. 1725, to FM Approvals Europe Ltd., notified body no. 2809.

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Blueprint Report

Senmatic AS (119856)

Class No 3610

Original Project I.D. 3042101

Certificate I.D. FM13ATEX0019X

<u>Drawing No.</u>	<u>Revision Level</u>	<u>Drawing Title</u>	<u>Last Report</u>
103-1602	2	Label ATEX for Type MNS	RR218258
103-1603	2	Label Produkt for Type MNS	RR218258
103-454	02-09-13	Installation manual Type-MNS	RR205289
800-MNS-EX	5	Type MNS	RR218258