

EU-TYPE EXAMINATION CERTIFICATE



[1]

[2]

**Component intended for use on/in Equipment or Protective System
Intended for use in Potentially Explosive Atmospheres
Directive 2014/34/EU**

[3]

EU-Type Examination Certificate Number: **DEMKO 14 ATEX 1266U Rev. 2**

[4]

Product: **Micro-Pellistor gas sensor, MP-7217-XX, MP-7218-XX and VQ548MP-XX**

[5]

Manufacturer: **SGX Europe Sp. z o.o.**

[6]

Address: **Ligocka 103, 40-568 Katowice, Poland**

[7]

This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

[8]

UL International Demko A/S, notified body number 0539 in accordance with Article 17 of the Council Directive 2014/34/EU of the European Parliament and the Council, dated 26 February 2014, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to design and construction of components intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report no. **4787277715**

[9]

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN 60079-0:2012+A11:2013
EN 60079-26:2007**

**EN 60079-11:2012
EN 50303:2000**

[10]

The sign "U" is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.

[11]

This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

[12]

The marking of the component shall include the following:

VQ548MP-XX

II 1 G Ex ia IIC Ga

I M 1 Ex ia I Ma

MP-7217-XX and MP-7218-XX

II 1 G Ex ia IIC

I M 1 Ex ia I

Certification Manager

Jan-Erik Storgaard

Notified Body

This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the product sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all products to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2014-07-09

Re-issued: 2016-06-29



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[13]

Schedule

[14]

EU-TYPE EXAMINATION CERTIFICATE No.

DEMKO 14 ATEX 1266U Rev. 2

Report: 4787277715

[15]

Description of Component:

This certificate covers 3 types of 3-pin flammable gas sensors intended for incorporation into gas detection equipment.

The MP-7217-XX contains a micro-pellistor mounted on a PCB and enclosed within a non-metallic enclosure. The micro-pellistor is mounted on a circular PCB with 3 semi-circle protrusions to allow mounting to the end-product PCB by means of welding/soldering.

The MP-7218-XX construction is the same as the MP-7217-XX with the exception that the mounting PCB is designed to allow the sensor to be inserted into a SIM card type socket.

The VQ548MP-XX contains a MP-7217-XX device permanently sealed within a larger non-metallic enclosure and mounted on an additional PCB fitted with 3 pins to allow the VQ548MP-xx to be mounted into a socket in the end-equipment.

Nomenclature:

Type MP-721X - YY where:

X = Printed Circuit Board (PCB) arrangement.
May be 7 for round PCB, to be fitted directly to end product printed circuit board and compatible with VQ548MP final assembly or;

8 for a square PCB, intended to be mounted in a SIM card type socket.

YY = Optional - any two alphanumerical characters that specify customer requested testing and or conditioning.

VQ548MP-XX where:

XX = Optional - any two alphanumerical characters that specify customer requested testing and or conditioning.

Temperature range

The service temperature range is -40 °C to +75 °C.

Electrical data

Intrinsically safe specifications:

Entity Parameters:

U_i : 10 V
I_i : 3.33 A
P_i : 1.3 W
L_i : 0 H
C_i : 0 F

[16]

Descriptive Documents

The scheduled documents are listed in the report no. provided under item no. [8] on page 1 of this EU-Type Examination Certificate.

[17]

Schedule of limitations:

- The sensors have been determined suitable for Group I and Group II environments, provided no Group I dust enters the sensor, for a service temperature range of -40°C to +75°C.
- The sensors have been assessed for internal mounting only and shall not form part of the external enclosure of the end-product.
- The sensors provide adequate separation between internal conductors and accessible external surfaces for voltages ≤ 10 V. The end-product designer must ensure that adequate separation is provided from conductors.
- A minimum ingress protection rating of IP20 was considered for the purposes of the assessment. The end-product enclosure is required to give the required ingress protection (IP) rating for the intended environment.
- The maximum surface temperature rise of the sensor has been determined to be 30 K.
- The sensors have been subjected to the small component ignition test at a temperature of +100 °C in a diethyl ether atmosphere.
- The end-product designer must limit the steady-state current into the sensor to less than 641 mA with considerations made to any other applicable clauses of the standards used for the end product.

[13]

Schedule

[14]

EU-TYPE EXAMINATION CERTIFICATE No.

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[18]

Essential Health and Safety Requirements

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in Annex III to Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014.



The trademark **SENSORTECH** will be used as the company identifier on the marking label for the VQ548MP-XX only.

Additionally, the trademark **SGX** will be used as the company identifier on the marking label for the MP-7217-XX and MP-7218-XX.