

CERTIFICATE

(1) EC-Type Examination

(2) **Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC**

(3) EC-Type Examination Certificate Number: **DEKRA 11ATEX0105 X** Issue Number: **3**

(4) Equipment: **Temperature Transmitters Model Mp88710H-Ex, Model Mp88710-Ex, Model Mp82710H-Ex and Model Mp82710-Ex and Display Model Mp82000D-Ex**

(5) Manufacturer: **S-Products B.V.**

(6) Address: **Nijverheidscentrum 26, 2761 JP Zevenhuizen
The Netherlands**

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

(8) DEKRA Certification B.V., notified body number 0344 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the directive.

The examination and test results are recorded in confidential test report number 214350100.

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

EN 60079-0 : 2012

EN 60079-11 : 2012

EN 60079-26 : 2007

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment according to the Directive 94/9/EC. Further requirements of the directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

(12) The marking of the equipment shall include the following:



II 1 G Ex ia IIC T4 ... T6 Ga

This certificate is issued 8 July 2013 and, as far as applicable, shall be revised before the date of cessation of presumption of conformity of (one of) the standards mentioned above as communicated in the Official Journal of the European Union.

DEKRA Certification B.V.

T. Pijpker
Certification Manager



(13) **SCHEDULE**

(14) **to EC-Type Examination Certificate DEKRA 11ATEX0105 X**

Issue No. 3

(15) **Description**

Temperature Transmitters Model Mp88710H-Ex, Model Mp88710-Ex, Model Mp82710H-Ex and Model Mp 82710-Ex are loop powered transmitters that convert the measurement signal of a temperature sensor (RTD or thermocouple), a resistance value or a mV signal into a 4 - 20 mA current signal (Models Mp88710H-Ex and Mp82710H-Ex additionally with HART communication). Transmitters Model Mp88710H-Ex and Mp88710-Ex are rail-mounted versions, Transmitters Model Mp82710H-Ex and Mp82710-Ex are head-mounted versions. The Temperature Transmitters are provided with connection facilities for optional display Model Mp82000D-Ex.

Ambient temperature range -40 °C to +85 °C (temperature class T4);
-40 °C to +75 °C (temperature class T5);
-40 °C to +60 °C (temperature class T6).

Electrical data

Supply and output signal (terminals + and -/lower terminals):
in type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit, with following maximum values:

$U_i = 30 \text{ V}$, $I_i = 100 \text{ mA}$, $P_i = 750 \text{ mW}$, $C_i = 0 \text{ nF}$, $L_i = 0 \text{ mH}$.

Sensor or mV input (terminals TC/mV/RTD + and -/upper terminals):
in type of protection intrinsic safety Ex ia IIC, with following maximum values:
 $U_o = 6,3 \text{ V}$, $I_o = 165 \text{ mA}$, $P_o = 242 \text{ mW}$, $C_o = 34,5 \text{ }\mu\text{F}$, $L_o = 1 \text{ mH}$.

The sensor input circuit is infallibly galvanically isolated from the supply and output circuit.

Installation instructions

The instructions provided with the equipment shall be followed in detail to assure safe operation.

(16) **Test Report**

No. 214350100.

(17) **Special conditions for safe use**

Ambient temperature and temperature class in accordance with (15).

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at (9).

(19) **Test documentation**

As listed in Test Report No. 214350100.