



EC-Type Examination Certificate

(1)

(2)

Equipment or Protective Systems Intended for use
in Potentially Explosive Atmospheres
Directive 94/9/EC

(3) EC-Type Examination Certificate Number:

FTZÚ 13 ATEX 0207 X

(4) Equipment: **Temperature sensor, type TI 1000 Ex**

(5) Manufacturer: **MM GROUP, s.r.o.**

(6) Address: **Veveří 20/1378, 735 64 Havířov 4, Czech Republic**

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

(8) The Physical Technical Testing Institute, notified body number 1026 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system 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 Report N°

13/0207 dated 19.06.2014

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

EN 60079-0:2012 EN 60079-18:2009

(10) If the sign „X“ is placed after the certificate number, it indicates that the equipment or protective system 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 testing of the specified equipment or protective system in accordance to the directive 94/9/EC. 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 following:



II 2GD

Ex mb IIC T6...T5 Gb

Ex mb IIIC T75°C...T95°C Db



I M2

Ex mb I Mb

This EC-Type Examination Certificate is valid till: **23.06.2019**

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of certification body



Date of issue: **23.06.2014**

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This certificate is granted subject to the general conditions of the Physical Technical Testing Institute.
This certificate may only be reproduced in its entirety and without any change, schedule included.

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**Physical Technical Testing Institute
Ostrava-Radvanice**

(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 13 ATEX 0207X**

(15) Description of Equipment:

The temperature sensor TI 1000 Ex is a device containing Pt1000 (RTD) and electrical protective device. Electrical components are placed in metal stem with head and are protected with encapsulation "mb". The device is designed for connection to evaluation circuits via permanently connected cable that forms inseparable part of the temperature sensor.

Rated voltage: DC 12 V +10%

Rated current: ≤ 50 mA

Ambient temperature and temperature of measured medium: $0^{\circ}\text{C} \leq T_a \leq 40^{\circ}\text{C}$, or $0^{\circ}\text{C} \leq T_a \leq 60^{\circ}\text{C}$

(16) Report No.: 13/0207

(17) Special conditions for safe use:

17.1 The device is designed for two ranges of ambient temperature and temperature of measured medium:

Ambient temperature and temperature of measured medium	Temperature class	Max. surface temperature without dust layer
$0^{\circ}\text{C} \leq T_a \leq 40^{\circ}\text{C}$	T6	T75°C
$0^{\circ}\text{C} \leq T_a \leq 60^{\circ}\text{C}$	T5	T95°C

17.2 Resistance of equipment to impact complies for high risk of mechanical danger for equipment groups II and III, and low risk of mechanical danger for equipment group I.

(18) Essential Health and Safety Requirements:

Essential health and safety requirement of Directive 94/9/EC are covered by the standard mentioned in (9), according which the product was verified.

(19) List of documentation:

Instructions for use and technical conditions TI 1000 Ex, version No.1	25.09.2013
Drawings and schematics No.: MM TI1000Ex 00-00-11	24.09.2013
MM TI1000Ex 00-00-01	24.09.2013
MM TI1000Ex 00-00-02	24.09.2013
MM TI1000Ex 00-00-03	24.09.2013
MM TI1000Ex 00-00-04	24.09.2013
MM TI1000Ex 00-00-05	24.09.2013
MM TI1000Ex 00-00-06	24.09.2013
MM TI1000Ex 00-00-07	24.09.2013
MM TI1000Ex 00-00-8	24.09.2013
MM TI1000Ex 00-00-9	24.09.2013
MM TI1000Ex 00-00-10	24.09.2013
MM TI1000Ex 00-00-12	24.09.2013
Encapsulation procedure m_ZAP TI	27.09.2013

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