



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 09 ATEX 0075X

- (4) Equipment or protective system: **Flameproof temperature sensors
type XD-TOP.; XD-APTOP...; XD-TT...; XD-APTT...**
- (5) Manufacturer: **TERMOAPARATURA WROCLAW**
- (6) Address: **Zębice, ul. Rzemieślnicza 4, 55-010 Święta Katarzyna, Poland**
- (7) This equipment or protective system and any of acceptable variation thereto is 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°

09/0075 dated May 2009

(9) Compliance with Essential Health and safety requirements has been assured by compliance with:

EN 60079-0:2006; EN 60079-1:2007; EN 60079-26:2007

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.

(10) 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.

(11) The marking of the equipment or protective system shall include following:

 **II 1/2G Ex d IIC T6-T5**

This EC-Type Examination Certificate is valid till: **31 May 2014**

Responsible person:


Dipl. Ing. Sindler Jaroslav
Head of certification body



Date of issue: 14.05.2009

Number of pages: 3
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Physical Technical Testing Institute
Ostrava-Radvanice

(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 09 ATEX 0075X**

(15) Description of Equipment or Protective System:

The temperature sensor consists of measuring insert, which on the one end contains an single or double platinum sensing resistor and/or an one or two thermocouples. The second end of the measuring insert is provided with terminal block or transmitter/display protected by connection head type: XD-AD, XD-ADwin, or XD-SD.

d1 opening in the connection head body along with bush on the measuring insert creates flameproof joint. To the opening **D1** is screw-on thermowell with proper wall thickness (over 1mm) made of corrosion resistant steel.

Connection heads were approved by separate certificate: FTZU 03 ATEX 0074U(XD-AD, XD-ADwin) and FTZU 06 ATEX 0326U (XD-SD).

Technical specification:

Mentioned in Application manual

(16) Report No. : 09/0075

(17) Special conditions for safe use:

17.1 Maximum range of temperature measurement: -20 to 60°C

17.2 Ambient temperature: -40 to 75°C for sensor without electronic transmitter for temperature class T6.

17.3 Ambient temperature and temperature class of sensor with transmitter and transmitter/display depends on its power dissipation.

17.4 It must be kept IP degree of sensor connection to the vessel wall minimum IP67.

17.5 Sensor must be effectively grounded to the vessel wall.

17.6 Using of the connection head with a window is limited by $T_{serv} = 85^{\circ}\text{C}$

(18) Essential Health and Safety Requirements:

Covered by standards mentioned in (9) of this certificate.

The Directive 94/9/EC, Annex II, cl. 1.0.6-Instruction has to be accepted.

Responsible person:


Dipl. Ing. Sindler Jaroslav
Head of certification body



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(14) **EC-Type Examination Certificate N° FTZÚ 09 ATEX 0075**

(19)

LIST OF DOCUMENTATION

Drawing No.	Documentation	Date of issue
M-0804	Application manual	18.01.2009
C-0804	Catalogue of the temperature sensor for hazardous areas	21.12.2008
PR-074-09	Sensor Ex d with thermowell without transmitter	06.01.2009
PR-075-09	Sensor Ex d with thermowell with transmitter	06.01.2009
PR-076-09	Sensor Ex d with thermowell, transmitter and display	06.01.2009
PR-078-09	Thermowell type P	18.03.2009
PR-079-09	Thermowell type G	18.03.2009
PR-081-09	Thermowell type GB	18.03.2009
PR-082-09	Thermowell type BT	06.01.2009
PR-083-09	Thermowell type FT	06.01.2009
PR-084-09	Thermowell type T	18.03.2009
PR-085-09	Thermowell type SW	06.01.2009
PR-087-09	Thermocouple TC measuring insert	06.01.2009
PR-088-09		06.01.2009
PR-089-09		06.01.2009
PR-090-09		06.01.2009
PR-091-09	Resistance RTD measuring insert	06.01.2009
PR-092-09		06.01.2009
PR-093-09		06.01.2009
PR-094-09		06.01.2009
PR-095-09	Thermocouple TC measuring insert	06.01.2009
PR-096-09		06.01.2009
PR-097-09		06.01.2009
PR-098-09		06.01.2009
PR-099-09	Resistance RTD measuring insert	06.01.2009
PR-100-09		06.01.2009
PR-101-09		06.01.2009
PR-102-09		06.01.2009
PR-103-09	Connection diagram	06.01.2009
PR-104-09		06.01.2009
PR-105-09		06.01.2009
PR-106-09	Marking label	06.01.2009
PR-107-09		06.01.2009
PR-109-09		06.01.2009
PR-108-09	Threaded 1/2NPT plug	06.01.2009

Responsible person:


Dipl. Ing. Šindler Jaroslav
Head of certification body



Date of issue: 14.05.2009

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(13)

Schedule

(14)

Supplement No. 1 to
EC-Type Examination Certificate N° FTZÚ 09 ATEX 0075X

(15) Description of Equipment:

The object of this supplement is as follow:

- Recertification according to the new standard EN 60079-0:2009.
- Prolongation of certificate validity.

Technical parameters and construction parameters remain unchanged.

(16) Report No.: 09/0075-1

dated 17.10.2013

(17) Special conditions for safe use: Remain unchanged

(18) Essential Health and Safety Requirements:

They are included in standards, which are mentioned in clause (10) of this certificate according which was equipment certified and in the documentation elaborated by manufacturer.

(19) List of Documentation:

Document No.:

PR-107-09

PR-109-09

M-0804

Date:

Rev. B 08.07.2013

Rev. B 08.07.2013

08.07.2013

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 17.10.2013

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