Physical Technical Testing Institute
Ostrava – Radvanice

(1)

EC-Type Examination Certificate

(2)

Equipment or Protective Systems Intended for Use in Potentially Explosive Atmospheres (Directive 94/9/EC)

(3) EC-Type Examination Certificate Number:

FTZÚ 14 ATEX 0182X

(4) Equipment or protective system: **Smart Temperature Transmitter type DPT-2000ALW**

(5) Manufacturer: **Delta Controls Limited**

(6) Address: **Riverside Business Park, Dogflud Way, Farnham, GU9 7SS, United Kingdom**

(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°:

14/0182 dated 26.09.2014

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

EN 60079-0:2012; EN 60079-11:2012; EN 60079-26:2007; EN 50303:2000

(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 1/2G Ex ia IIC T4/T5/T6 Ga/Gb
I M1 Ex ia I Ma (version with enclosure ss316)
II 1D Ex ia IIIC T105°C Da

This EC-Type Examination Certificate is valid till: **30.09.2019**

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

PHYSICAL-TECHNICAL TESTING INSTITUTE FTZÚ Ex AO 210 NB 1026

Date of issue:26.09.2014

FTZÚ, s.p., Pikartská 1337/7, 716 07 Ostrava-Radvanice, Czech Republic,
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Physical Technical Testing Institute
Ostrava – Radvanice

(13) **Schedule**

(14) EC-Type Examination Certificate N° FTZÚ 14 ATEX 0182X

(15) Description of Equipment or Protective System:

The Temperature Transmitter type DPT-2000ALW is designed to convert temperature signal into an electrical signal. The apparatus comprises several printed circuit boards and LCD, all housed in a metal enclosure which can be made of light alloy for group II applications but only of stainless steel for mine (group I) application. One of the housing cover contains a window.

External connections are made via integral terminals and cable glands which must be of certified type if they are mounted on the version for combustible dust hazard application.

The transmitters intended as group II 1/2G equipment shell be installed into the partition between the hazardous areas of category 1G and 2G.

Temperature classes T4, T5 or T6 depend on the input power and maximum ambient temperature – see bellow.

Intrinsically safe parameters:

a) supply from a power source with linear output characteristic:
U_i = 30 V; I_i = 0,1 A; C_i = 20 nF; L_i = 1,1 mH; P_i = 0,75 W; T_a = 80°C and T4; T_a = 70°C and T5;
P_i = 0,5 W; T_a = 45°C and T6

b) supply from a power source with trapezoidal output characteristic:
U_i = 24 V; U_Q = 48 V; I_i = 50 mA; C_i = 20 nF; L_i = 1,1 mH; P_i = 0,6 W; T_a = 80°C and T5
P_i = 0,5 W; T_a = 45°C and T6

c) supply from a power source with rectangular output characteristic:
U_i = 24 V; I_i = 25 mA; P_i = 0,6 W; C_i = 20 nF; L_i = 1,1 mH T_a = 80°C and T5

Degree of protection: IP66/ IP67

Minimum ambient temperature: $T_{a\,min}$ = - 40°C

(16) Report No.: 14/0182

Responsible person:
Dipl. Ing. Lukáš Martinák
Head of Certification Body

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(13) **Schedule**

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(17) Special conditions for safe use:

17.1 For the permissible ambient temperature range see (15).

17.2 The ambient temperature range is reduced to Ta = -20°C to +60°C if the device is installed as group I M1 equipment.

(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 and in the manufacturer's instruction for use.

(19) List of Documentation:

Document/Drawings:	*Rev./Ver.:*	*Date:*	*Nr. of Pages:*
DTR.DPT.ALW.02	-	12.2013	32
DPT2000-C001-TA	1	04.2014	2

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

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