(1) # EU - Type Examination Certificate

(2) Equipment and protective systems intended for use in potentially explosive atmospheres – **Directive 2014/34/EU**

(3) EU - Type Examination Certificate Number

EPS 23 ATEX 1 088 X **Revision 0**

(4) Equipment: Temperature transmitter, type T142

(5) Manufacturer: Pyromation LLC

(6) Address: 5211 Industrial Road
Fort Wayne, IN 46825
United States

(7) This equipment and any acceptable variation thereto are specified in the annex to this certificate and the documentation therein referred to.

(8) Bureau Veritas Consumer Products Services Germany GmbH, notified body No. 2004 in accordance with Article 21 given in the Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014, 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 of the Directive. The examination and test results are recorded in the confidential documentation under the reference number 17TH0301.

(9) Compliance with the essential health and safety requirements has been assured by compliance with:

EN IEC 60079-0:2018 **EN 60079-11:2012**

(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 annex to this certificate.

(11) This EU - Type Examination Certificate relates only to the design and construction of the specified equipment in accordance with Directive 2014/34/EU. Further requirements of this Directive apply to the manufacture of this equipment and its placing on the market. Those requirements are not covered by this certificate.

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

II 1G Ex ia IIC T6...T4 Ga
II 2D Ex ia IIIC T85°C...T110°C Db

Certification department of explosion protection

Ulrich Feike

Tuerkheim, 2023-07-20

ZERTIFIZIERUNGSSTELLE BUREAU VERITAS 1828 Bureau Veritas CPS Germany GmbH

(13) # Annex

(14) **EU - Type Examination Certificate EPS 23 ATEX 1 088 X** **Revision 0**

(15) Description of equipment:

The Temperature Transmitters Type T142 consist of an enclosure, made of aluminum or stainless steel, containing electronic circuits, terminals and optionally a display. The transmitter is used to convert the measurement signal of an external or an integral assembled temperature sensor into an output signal.

The transmitter provides a 4-20 mA current output signal with HART communication.

The equipment is intended for the application inside the explosion hazardous area.

Electrical data:

Power supply			
(Terminals + and -)	Ui	≤	30 V DC
	Ii	≤	300 mA
	Pi	=	1000 mW
	Ci	=	5 nF
	Li	=	negligible
Sensor circuit			
(Terminals 1 to 6)	Uo	≤	4.3 V DC
	Io	≤	4.8 mA
	Po	≤	5.2 mW

Max. connection values

Single values:		
Ex ia IIC	Lo = 40 mH	Co = 10.4 µF
Ex ia IIB/ IIIC	Lo = 150 mH	Co = 160 µF
Ex ia IIA	Lo = 300 mH	Co = 1000 µF

Combined values:			
Ex ia IIC	Lo = 50 mH	and	Co = 3.0 µF
Ex ia IIB/ IIIC	Lo = 100 mH	and	Co = 18 µF
Ex ia IIA	Lo = 100 mH	and	Co = 48 µF

Ambient temperature range:

The temperature class and the maximum surface temperature of the enclosure, applicable to a maximum dust layer thickness of 5 mm, are depending on the ambient temperature range, as listed in the following tables.

Gas application:

Type (order option)	Temperature class	Ambient temperature EPL Gb	Ambient temperature EPL Ga
T142 (without display)	T6	-50 °C ≤ Ta ≤ +55 °C	-50 °C ≤ Ta ≤ +40 °C
	T5	-50 °C ≤ Ta ≤ +70 °C	-50 °C ≤ Ta ≤ +50 °C
	T4	-50 °C ≤ Ta ≤ +85 °C	-50 °C ≤ Ta ≤ +60 °C
T142 (with display)	T6	-50 °C ≤ Ta ≤ +55 °C	-50 °C ≤ Ta ≤ +40 °C
	T5	-50 °C ≤ Ta ≤ +70 °C	-50 °C ≤ Ta ≤ +50 °C
	T4	-50 °C ≤ Ta ≤ +80 °C	-50 °C ≤ Ta ≤ +60 °C

Dust application:

Type (order option)	Max surface temperature	Ambient temperature EPL Db
T142 (without display)	T85 °C	-40 °C ≤ Ta ≤ +55 °C
	T100 °C	-40 °C ≤ Ta ≤ +70 °C
	T110 °C	-40 °C ≤ Ta ≤ +85 °C
T142 (with display)	T85 °C	-40 °C ≤ Ta ≤ +55 °C
	T100 °C	-40 °C ≤ Ta ≤ +70 °C
	T110 °C	-40 °C ≤ Ta ≤ +80 °C

(16) Reference number: 17TH0301

(17) Special conditions for safe use:

When the enclosure of the Temperature transmitter Type T142 is made of aluminum, if it is mounted in an area where the use of EPL Ga apparatus is required, it must be installed such, that, even in the event of rare incidents, ignition sources due to impact and friction sparks are excluded.

(18) Essential health and safety requirements:

Met by compliance with standards.

ZERTIFIZIERUNGSSTELLE BUREAU VERITAS 1828 Bureau Veritas CPS Germany GmbH

Certification department of explosion protection Tuerkheim, 2023-07-20

Ulrich Feike