



# IECEx Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: **IECEx EPS 23.0020X**

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Certificate history:

Status: **Current**

Issue No: 0

Date of Issue: 2023-07-20

Applicant: **Pyromation LLC**  
5211 Industrial Road  
Fort Wayne, IN 46825  
**United States of America**

Equipment: **Temperature transmitter T7x**

Optional accessory:

Type of Protection: **Intrinsic safety "i"**

Marking: Ex ia IIC T6...T4 Ga (Head)  
Ex ia IIC T6...T4 Gb (Head)  
Ex ia [ia Ga] IIC T6...T4 Gb (Field)  
Ex ib [ia Ga] IIC T6...T4 Gb (DIN rail)

Approved for issue on behalf of the IECEx  
Certification Body:

Position:

Signature:  
(for printed version)

Date:  
(for printed version)



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2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting [www.iecex.com](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

**Bureau Veritas Consumer Products Services Germany GmbH**  
Businesspark A96  
86842 Türkheim  
Germany





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Manufacturer: **Pyromation LLC**  
5211 Industrial Road  
Fort Wayne, IN 46825  
**United States of America**

Manufacturing  
locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

## STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements  
Edition:7.0

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition:6.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

## TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

DE/EPS/ExTR23.0024/00

Quality Assessment Report:

GB/SIR/QAR15.0011/06



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## EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The temperature transmitter type T7x is a two-wire transmitter with analogue output. It has measuring input circuits for resistance thermometers (RTD) in 2-, 3- or 4-wire connection, thermocouples and voltage transmitters. Setting up is done using the HART-Protocol for T72 or PC programming for T71.

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

## SPECIFIC CONDITIONS OF USE: YES as shown below:

In hazardous areas it is not permitted to use the CDI interface of T7x for configuration.

The head transmitter and DIN rail transmitter must be protected against electrostatic charge/ discharge.

## Annex:

IECEX EPS 23.0020X\_0 - Annex.pdf





Annex to IECEx Certificate of Conformity  
IECEX EPS 23.0020X  
Issue 0



**Applicant:**

Pyromation LLC  
5211 Industrial Road  
Fort Wayne, IN 46825  
United States

**Electrical Apparatus:**

Temperature Transmitter, type T7x

**Description:**

Electrical data:

**Head transmitter:**

Power supply

(terminals + and -)

$U_i \leq 30 \text{ V DC}$   
 $I_i \leq 100 \text{ mA}$   
 $P_i = 800 \text{ mW}$   
 $C_i = \text{negligibly small}$   
 $L_i = \text{negligibly small}$

Sensor circuit

(terminal 3 to 6)

$U_o \leq 4.3 \text{ V DC}$   
 $I_o \leq 4.8 \text{ mA}$   
 $P_o \leq 5.2 \text{ mW}$

Max. connection values

Ex ia IIC

$L_o = 50 \text{ mH}$        $C_o = 3 \mu\text{F}$

Ex ia IIB

$L_o = 100 \text{ mH}$        $C_o = 18 \mu\text{F}$

Ex ia IIA

$L_o = 100 \text{ mH}$        $C_o = 48 \mu\text{F}$

**DIN rail transmitter:**

Power supply

(terminals + and -)

$U_i \leq 30 \text{ V DC}$   
 $I_i \leq 100 \text{ mA}$   
 $P_i = 700 \text{ mW}$   
 $C_i = \text{negligibly small}$   
 $L_i = \text{negligibly small}$

Sensor circuit

(terminal 3 to 6)

$U_o \leq 4.3 \text{ V DC}$   
 $I_o \leq 4.8 \text{ mA}$   
 $P_o \leq 5.2 \text{ mW}$

Max. connection values

Ex ia IIC

$L_o = 50 \text{ mH}$        $C_o = 3 \mu\text{F}$

Ex ia IIB

$L_o = 100 \text{ mH}$        $C_o = 18 \mu\text{F}$

Ex ia IIA

$L_o = 100 \text{ mH}$        $C_o = 48 \mu\text{F}$



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Display interface  
(CDI connection)

$U_o \leq 4.3 \text{ V DC}$   
 $I_o \leq 100 \text{ mA}$   
 $C_i = \text{negligibly small}$   
 $L_i = \text{negligibly small}$

Max. connection values

Ex ia IIC	$L_o = 5.6 \text{ mH}$	$C_o = 1.7 \text{ }\mu\text{F}$
Ex ia IIB	$L_o = 28 \text{ mH}$	$C_o = 10 \text{ }\mu\text{F}$
Ex ia IIA	$L_o = 48 \text{ mH}$	$C_o = 33 \text{ }\mu\text{F}$

Ambient temperature range:

Type (order option)	Temperature class	Ambient temperature Zone 1/ EPL Gb	Ambient temperature Zone 0/ EPL Ga
T7x Head transmitter without display	T6	$-50 \text{ }^\circ\text{C} \leq T_a \leq +55 \text{ }^\circ\text{C}$	$-50 \text{ }^\circ\text{C} \leq T_a \leq +40 \text{ }^\circ\text{C}$
	T5	$-50 \text{ }^\circ\text{C} \leq T_a \leq +70 \text{ }^\circ\text{C}$	$-50 \text{ }^\circ\text{C} \leq T_a \leq +60 \text{ }^\circ\text{C}$
	T4	$-50 \text{ }^\circ\text{C} \leq T_a \leq +85 \text{ }^\circ\text{C}$	$-50 \text{ }^\circ\text{C} \leq T_a \leq +60 \text{ }^\circ\text{C}$
T7x Head transmitter with display (D10)	T6	$-40 \text{ }^\circ\text{C} \leq T_a \leq +55 \text{ }^\circ\text{C}$	
	T5	$-40 \text{ }^\circ\text{C} \leq T_a \leq +70 \text{ }^\circ\text{C}$	
	T4	$-40 \text{ }^\circ\text{C} \leq T_a \leq +85 \text{ }^\circ\text{C}$	
T7x Field housing without display	T6	$-50 \text{ }^\circ\text{C} \leq T_a \leq +55 \text{ }^\circ\text{C}$	
	T5	$-50 \text{ }^\circ\text{C} \leq T_a \leq +70 \text{ }^\circ\text{C}$	
	T4	$-50 \text{ }^\circ\text{C} \leq T_a \leq +85 \text{ }^\circ\text{C}$	
T7x Field housing with display	T6	$-40 \text{ }^\circ\text{C} \leq T_a \leq +55 \text{ }^\circ\text{C}$	
	T5	$-40 \text{ }^\circ\text{C} \leq T_a \leq +70 \text{ }^\circ\text{C}$	
	T4	$-40 \text{ }^\circ\text{C} \leq T_a \leq +85 \text{ }^\circ\text{C}$	
T7x...D (DIN rail transmitter)	T6	$-50 \text{ }^\circ\text{C} \leq T_a \leq +43 \text{ }^\circ\text{C}$	
	T5	$-50 \text{ }^\circ\text{C} \leq T_a \leq +58 \text{ }^\circ\text{C}$	
	T4	$-50 \text{ }^\circ\text{C} \leq T_a \leq +85 \text{ }^\circ\text{C}$	