



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

Certificate No.:	IECEx SGS 23.0076X	Page 1 of 4	Certificate history:
Status:	Current	Issue No: 0	
Date of Issue:	2023-12-06		
Applicant:	Eaton Electric Limited Great Marlings Butterfield Luton Bedfordshire LU2 8DL United Kingdom		
Equipment:	Type PEX7250 Annunciator		
Optional accessory:			
Type of Protection:	Flameproof, Intrinsic Safety and Dust Protection by Enclosure		
Marking:	See schedule		

Approved for issue on behalf of the IECEx
Certification Body:

R S Sinclair

Position:

Technical Manager

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
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 or use of this QR Code.



Certificate issued by:

SGS United Kingdom Ltd
Rockhead Business Park
Staden Lane
Buxton, Derbyshire SK17 9RZ
United Kingdom





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Manufacturer: **Eaton Electric Limited**
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Manufacturing
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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 60079-1:2014](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

[IEC 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

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:

[GB/SGS/ExTR23.0128/00](#)

Quality Assessment Report:

[GB/BAS/QAR07.0017/10](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Type PEX7250 Annunciator Unit is rated up to 240Va.c. or 24Vd.c., 2.5A with a maximum internal dissipation of 90.05W.

The annunciator electronics assembly is housed within a IP66/67 Cortem Type CCFE-4-3020 or EJB-4-3020 Enclosure which may be fitted with a large window, as detailed by Component Certificate CESI 00 ATEX 036 U or IECEx CES 14.0017U

The enclosure contains an annunciator assembly comprising an arrangement of up to the following individual components in a variety of combinations:

1. 56 LED boards
2. A TAR module
3. 28 alarm boards with repeat relays
4. A power supply unit rated up to 100W.
5. 50 terminals.
6. A heater rated up to a maximum of 15W and / or sounder rated up to 3W
7. MTL5521 Solenoid / alarm driver (SGS23ATEX0018 or IECEx BAS 23.0012)

When fitted with the MTL 5521 solenoid / alarm driver, the maximum input is limited to 40W at a maximum ambient of +40°C. When the enclosure is fitted with the MTL5521, the enclosure must only be mounted vertically.

The Option C configuration of the Type PEX7250 Annunciator Unit incorporates 'SIL725' alarm boards with SIL2 rated repeat relay outputs. This option permits the equipment to be independently certified for SIL2 applications.

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SPECIFIC CONDITIONS OF USE: YES as shown below:

1. It is the responsibility of the installation engineer to ensure that suitably IECEx equipment certified Ex db IIB+H2 Cable glands and blanking plugs are installed to ensure that the IP rating of IP66/67 is maintained on the Ex d enclosure.
2. When the enclosure is fitted with the MTL5521, the enclosure must only be mounted vertically.



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Equipment (continued):

The equipment may be marked as below:

Option A

Ex db IIB+H2 T* Gb (Tamb -20°C to +**°C)
Ex tb IIIC T*°C Db (Tamb -20°C to +**°C) IP66/67

T Class for gas *	T Class for dust *	Ambient **
T6	T85°C	-20°C to +40°C
T5	T100°C	-20°C to +55°C

Option B (when fitted with MTL5521)

Ex db [ia Ga] IIB+H2 T6 Gb (Tamb -20°C to +40°C)
Ex tb [ia Da] IIIC T85°C Db (Tamb -20°C to +40°C) IP66/67

Option C (when fitted with SIL 725 product)

Ex db IIB+H2 T6 Gb (Tamb -20°C to +40°C)
Ex tb IIIC T85°C Db (Tamb -20°C to +40°C) IP66/67

To obviate the risk of hotspots and capacitor storage associated with the Type PEX7250 Annunciator Unit the enclosure must not be opened when an explosive gas atmosphere is present. A label is fitted to each and every enclosure which states this information.

Internal and external earthing facilities are provided.

Cable entry holes are provided as specified on the certified drawings for the accommodation of flameproof cable entry devices, with or without the interposition of a flameproof thread adapter. Unused entries are to be fitted with suitable certified flameproof stopping plugs. The cable entry devices, thread adapters and stopping plugs shall be suitably certified as equipment (not component).

Hazardous Area Terminals 2 / 3 w.r.t. 1

U_o	=	25V	C_i	=	0
I_o	=	147mA	L_i	=	0
P_o	=	0.92W			

The capacitance and either the inductance or the inductance to resistance ratio (L/R) of the hazardous area load connected must not exceed the following values:

GROUP	CAPACITANCE (μF)	INDUCTANCE (mH)	OR	L/R RATIO (μH/ohm)
IIC	0.11	1.4		40
IIB**	0.84	7.2		159
IIA	2.97	14.4		328
I	4.87	20.2		478

** Group IIB parameters also applicable for associated apparatus [Ex ia Da] IIIC

Notes:

- The above load parameters apply when one of the two conditions below is given:
 - the total L_i of the external circuit (excluding the cable) is $< 1\%$ of the L_o value or
 - the total C_i of the external circuit (excluding the cable) is $< 1\%$ of the C_o value.
- The above parameters are reduced to 50% when both of the two conditions below are given:
 - the total L_i of the external circuit (excluding the cable) is $\geq 1\%$ of the L_o value and
 - the total C_i of the external circuit (excluding the cable) is $\geq 1\%$ of the C_o value.

The reduced capacitance of the external circuit (including cable) shall not be greater than 1μF for Groups IIB, IIA & I and 600nF for Group IIC.