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 24.0018**

Certificate history:

Status: **Current**

Issue No: 0

Date of Issue: 2024-09-10

Applicant: **Eaton Electric Limited**
Great Marlings
Butterfield
Luton
Bedfordshire
LU2 8DL
United Kingdom

Equipment: **PCL45USB configurator for MTL converters**

Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking: **[Ex ia Ga] IIC**

[Ex ia Da] IIIC

[Ex ia Ma] I

-10°C ≤ Ta ≤ +60°C

Approved for issue on behalf of the IECEx Certification Body: **P Oates**

Position: **Certification Manager**

Signature: (for printed version)

Date: 10/9/2024
(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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LU2 8DL
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Manufacturing locations:

Eaton Electric Limited
Great Marlings
Butterfield
Luton
Bedfordshire
LU2 8DL
United Kingdom

MTL Instruments PVT Limited
No 3 Old Mahabalipuram Road
Sholinganallur
Chennai .
India

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 Edition:7.0 — Explosive atmospheres - Part 0: Equipment - General requirements

IEC 60079-11:2023 Edition:7.0 — Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

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/ExTR24.0062/00

Quality Assessment Reports:

GB/BAS/QAR06.0022/11 GB/BAS/QAR07.0017/10

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The PCL45USB configurator allows MTL converters to be configured from a standard PC running a Microsoft® Windows® operating system.

This apparatus is an associated electrical apparatus and is normally mounted in a non-hazardous (safe) area. Converters can be configured from the safe area, while on-line, and configurations can be saved to disk and printed out when required. It is suitable for use with MTL4500 and MTL5500 range of products.

The configurator is made in a rectangular plastic case, inside of which is located the main electronics of the product. One single printed circuit board (PCBA) holds all electronics.

There are two fixed leads with connectors located on opposite sides of the case for connections:-

- PC side (Safe area connection): cable with USB connector,

- Converter side (Hazardous area connection): cable with 3.5mm 3 pole jack plug for MTL4500 and MTL5500 range of converters.

Input / Output Parameters

Safe Area Terminals (USB)

U_m = 253V r.m.s.

Hazardous Area Terminals (3.5mm Jack Plug)

U_o	=	6.51V	C_i	=	0.3nF	U_i	=	8V
I_o	=	15.2mA	L_i	=	1.3µH	P_i	=	27mW
P_o	=	25mW						

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

GROUP	CAPACITANCE (µF)	INDUCTANCE (mH)	OR	L/R RATIO (µH/ohm)
IIC	22	153		1,437
IIB**	500	615		5,749
IIA	1000	1,000		10,000
I	1000	1,000		10,000

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

Notes:
1) The above load parameters apply when one of the two conditions below is given:
- the total Li of the external circuit (excluding the cable) is < 1% of the Lo value or
- the total Ci of the external circuit (excluding the cable) is < 1% of the Co value.

2) The above parameters are reduced to 50% when both of the two conditions below are given:
- the total Li of the external circuit (excluding the cable) is ≥ 1% of the Lo value and
- the total Ci of the external circuit (excluding the cable) is ≥ 1% of the Co 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

SPECIFIC CONDITIONS OF USE: NO