

### INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification System for Explosive Atmospheres**

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx BAS 15.0119X**  Page 1 of 5

Certificate history:

Status: Current Issue No: 2

Issue 1 (2016-11-16) Issue 0 (2015-10-19)

2024-02-08 Date of Issue:

**Eaton Electric Limited** Applicant:

**Great Marlings** Butterfield Luton Bedfordshire LU2 8DL

**United Kingdom** 

Equipment: MTL5541 / MTL5544 Repeater Power Supply, 4/20mA for 2 or 3-Wire Transmitters

Optional accessory:

Type of Protection 'n' Type of Protection:

Ex nA IIC T4 Gc Marking:

 $(-20^{\circ}C \le Ta \le +60^{\circ}C)$ 

Approved for issue on behalf of the IECEx

Certification Body:

**D** Brearley

Position:

**Certification Consultant** 

Signature:

(for printed version)

(for printed version)

This certificate and schedule may only be reproduced in full.
 This certificate is not transferable and remains the property of the issuing body.
 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 UK Limited Rockhead Business Park** Staden Lane **Buxton, Derbyshire SK17 9RZ United Kingdom** 





Certificate No.: IECEx BAS 15.0119X Page 2 of 5

Date of issue: 2024-02-08 Issue No: 2

Manufacturer: Eaton Electric Limited

Great Marlings Butterfield Luton Bedfordshire LU2 8DL

**United Kingdom** 

Manufacturing locations:

Eaton Electric Limited MTL Instruments PVT Limited
Great Marlings No 3 Old Mahabalipuram Road

Butterfield Sholinganallur
Luton Chennai
Bedfordshire 600 119
LU2 8DL India

**United Kingdom** 

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 60079-0:2011 Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-15:2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Edition:4

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 Reports:

GB/BAS/ExTR15.0267/00 GB/BAS/ExTR16.0242/00 GB/SGS/ExTR24.0008/00

Quality Assessment Reports:

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



Certificate No.: IECEx BAS 15.0119X Page 3 of 5

Date of issue: 2024-02-08 Issue No: 2

#### **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The MTL5544 Repeater Power Supply, 4/20mA for 2 or 3-Wire Transmitters is designed to provide a floating d.c. supply for energising two conventional or 'Smart' 2 or 3-Wire 4/20mA Transmitters in the hazardous area and repeats these currents in either the non-hazardous area or zone 2, whilst restricting the transfer of energy from unspecified non-hazardous area or zone 2 mounted equipment to the connected transmitter by means of limitation of current and voltage. The equipment also allows bi-directional signal communication between the hazardous and non-hazardous area by connection of a hand-held communicator (HHC).

The MTL5544 Repeater Power Supply, 4/20mA for 2 or 3-Wire Transmitters comprises four isolating transformers that provide galvanic isolation between the hazardous and non-hazardous area circuitry, zener diode chains and resistors providing voltage and current limitation. The above, together with other electronic components, are mounted on a single printed circuit board (PCB) and housed in a moulded plastic enclosure designed to be mounted on a DIN rail. Polarised plug and sockets are provided for hazardous and non-hazardous area connections. An LED is fitted to provide power on indication.

The MTL5541 Repeater Power Supply, 4/20mA for 2 or 3-Wire Transmitters is a depopulated version of the MTL5544 and has only one channel populated. Both model variants are built on a common PCB.

This certificate covers the installation of the MTL5541 and MTL5544 Repeater Power Supply, 4/20mA for 2 or 3-Wire Transmitters (IECEx BAS 07.0069) in a Zone 2 location.

See Page 4 for electrical parameters.

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

- 1) The equipment must be installed in an area of not more than Pollution Degree 2 as defined in IEC 60664-1, and in an enclosure that provides a degree of protection of at least IP54 and meets the relevant requirements of IEC 60079-0 and IEC 60079-15.
- 2) All connections to the equipment must not be inserted or removed unless either the area in which the equipment is installed is known to be non-hazardous, or the circuit to which it is connected has been de-energised.



Certificate No.: IECEx BAS 15.0119X Page 4 of 5

Date of issue: 2024-02-08 Issue No: 2

Equipment (continued):

Input / Output Parameters

Power Supply Input - Terminals 13 & 14

Supply Voltage Range = 20 – 35V d.c.

4/20mA Signal Output – Terminals 11 & 12 (Ch.1) or Terminals 8 & 9 (Ch.2 – MTL5544 only)

For 20mA nominal output, the maximum load is  $450\Omega$  For 24mA nominal output, the maximum load is  $360\Omega$ 

**Transmitter Inputs** 

Terminals 1 & 2 (Ch.1) or Terminals 4 & 5 (Ch.2 – MTL5544 only)

Maximum output voltage = 28V d.c.

Terminals 1 & 3 (Ch.1) or Terminals 4 & 6 (Ch.2 - MTL5544 only)

Maximum output voltage = 1.1V d.c. Maximum input voltage = 30V d.c.

Terminals 2 & 3 (Ch.1) or Terminals 5 & 6 (Ch.2 - MTL5544 only)

Maximum output voltage = 28V d.c.

Or

The maximum values for the intrinsically safe circuits have to be taken from IECEx Certificate No. IECEx BAS 07.0069.



Certificate No.: IECEx BAS 15.0119X Page 5 of 5

Date of issue: 2024-02-08 Issue No: 2

### **DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**

### Variation 2.1

To permit minor product changes that do not affect the previous assessment.

ExTR: GB/SGS/ExTR24.0008/00 File Reference: 23/0605