



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.:

IECEx BAS 15.0060X

issue No.:1

Status:

Current

Certificate history:

Issue No. 1 (2016-11-16)

Issue No. 0 (2015-7-9)

Date of Issue:

2016-11-16

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Applicant:

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

Equipment:

MTL4541YA Single Channel Current Repeater, 4/20mA Passive Input for Smart Transmitters

Optional accessory:

Type of Protection:

Type of Protection 'n'

Marking:

Ex nA IIC T4 Gc
(-20°C ≤ Ta ≤ +60°C)

Approved for issue on behalf of the IECEx
Certification Body:


R. S. Sinclair

Position:

Technical Manager

Signature:
(for printed version)

Date:


17 NOVEMBER 2016

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 the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

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





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

Additional Manufacturing location(s):

**MTL Instruments Pvt
Limited**
No 3 Old Mahabalipuram
Road
Sholinganallur
Chennai 600119
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 electrical apparatus 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 electrical 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/BAS/ExTR15.0121/00

GB/BAS/ExTR16.0241/00

Quality Assessment Report:

GB/BAS/QAR06.0022/06

GB/BAS/QAR07.0017/06



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The MTL4541YA Single Channel Current Repeater, 4/20mA Passive Input for Smart Transmitters is designed to repeat a current signal from a separately powered 4/20mA transmitter located in the hazardous area to unspecified equipment located 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 or zone 2 area by connection of a hand-held communicator (HHC).

The equipment comprises two isolating transformers that provide galvanic isolation between the hazardous and non-hazardous area circuitry, fuses, diodes, zener diodes 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. Polarised plug and sockets are provided for hazardous and non-hazardous area connections. The equipment is fitted with a power-on LED indication.

This certificate covers the installation of the MTL4541YA Single Channel Current Repeater, 4/20mA Passive Input for Smart Transmitters (IECEx BAS 15.0016) in a Zone 2 location. The equipment is designed to be installed on a separately certified backplane.

See Certificate Annex 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.
- 3) Any backplane used does not form part of this certificate and shall be separately certified for use in Zone 2.
- 4) The external backplane must be fitted with two retention clips type MTL 012-533 that allow the equipment to be 'clipped' to the backplane. The retention clips shall always be in place when the equipment is energised.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Variation 1.1

To permit the manufacturer's name to be changed on the certificate and equipment marking. No other changes are made to the equipment design.

ExTR: GB/BAS/ExTR16.0241/00

File Reference: 16/0371

SGS Baseefa Limited
Rockhead Business Park
Staden lane, Buxton, Derbyshire
SK17 9RZ
United Kingdom



ANNEX to IECEx BAS 15.0060X

Issue No. 0

Date: 2015/07/09

MTL4541YA Single Channel Current Repeater, 4/20mA Passive Input for Smart Transmitters

Input / Output Parameters

Power Supply Input - Terminals 13 & 14

Supply Voltage Range = 20 – 35V d.c.

Isolator ID Input – Terminals 12 & 13

Maximum Input Voltage = 3V d.c.

4/20mA Signal Output – Terminals 8 & 9

Nominal Output of 4-20mA into a maximum load of 360Ω

Transmitter Inputs

Terminals 1 & 2

Maximum output voltage = 8.6V d.c.

Or

The maximum values for the intrinsically safe circuits have to be taken from IECEx Certificate No. IECEx BAS 15.0016.