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 14.0037X issue No.:1	Certificate history: Issue No. 1 (2016-11-16) Issue No. 0 (2014-4-22)
Status:	**Current**	
Date of Issue:	**2016-11-16**	Page 1 of 4

Applicant:

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

Equipment:

MTL5514D Single Channel Switch / Proximity Detector Interface with Dual Output, Line Fault Detection & Phase Reversal

Optional accessory:

Type of Protection: **Type of Protection 'nA nC'**

Marking: **Ex nA nC 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)

pp Allan Ogden

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.

Certificate issued by:

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

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Certificate No.: IECEx BAS 14.0037X

Date of Issue: **2016-11-16** Issue No.: **1**

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 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-15 : 2010 Edition: 4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

*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/ExTR14.0090/00 GB/BAS/ExTR16.0242/00

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 MTL5514D Single Channel Switch / Proximity Detector Interface with Line Fault Detection & Phase Reversal is designed to restrict the transfer of energy from unspecified non-hazardous area equipment to an intrinsically safe circuit by limitation of voltage and current. Relays and a transformer provide galvanic isolation between the hazardous and non-hazardous area circuitry.

The interface monitors either a detector or switch located in the hazardous area and controls two non-hazardous area loads via relays. The interface is also fitted with independent phase reversal controls and Line Fault Detection (LFD) circuitry allowing an alarm condition to be signalled for either state, set by switches on the side of the interface.

The equipment comprises an isolating transformer, relays, zener diodes and current limiting resistors to provide voltage and current limitation. These, together with other electronic components are mounted on a single printed circuit board (PCB) and housed in a moulded plastic enclosure. Polarised plugs and sockets are provided for hazardous and non-hazardous area connections. LED indication is provided to indicate Power-on, state of the outputs and LFD status.

This certificate covers the installation of the MTL5514D Single Channel Switch / Proximity Detector Interface with Line Fault Detection & Phase Reversal (IECEx BAS 13.0124) in a Zone 2 location.

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.

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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/ExTR16.0242/00** File Reference: **16/0371**

Annex: IECEx BAS 14.0037X Annex.pdf

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

MTL5514D Single Channel Switch / Proximity Detector Interface with Dual Output, Line Fault Detection & Phase Reversal

Input / Output Parameters:

Supply Circuit – Terminals 13 & 14

U_i = 20 – 35V d.c.

Detector / Switch Inputs – Terminals 1 w.r.t. 2 / 3

7 – 9V d.c.
or
The maximum values for the intrinsically safe circuits have to be taken from IECEx Certificate No. IECEx BAS 13.0124.

Relay Contact Outputs – Terminals 7, 8 & 9 (Channel 1) & Terminals 10, 11 & 12 (Channel 2)

Single pole relays with changeover contacts can switch up to 35V, 2A and 100VA.