



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 14.0126X issue No.:1

Status: Current

Date of Issue: 2016-11-16

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Certificate history:
Issue No. 1 (2016-11-16)
Issue No. 0 (2014-11-12)

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

Equipment: HCU16-xxx HART Connection Units
Optional accessory:


Type of Protection: Type of Protection 'n'

Marking: Ex nA IIC T4 Gc (-40°C ≤ Ta ≤ +70°C)

Approved for issue on behalf of the IECEx Certification Body: R.S. Sinclair

Position: Technical Manager

Signature:
(for printed version)


16 NOVEMBER 2016

Date:

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/ExTR14.0240/00](#)

[GB/BAS/ExTR16.0298/00](#)

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 HCU16-xxx HART Connection Unit is designed to connect to certified HART Multiplexer systems (such as the MTL4851 & MTL4852 and MTL4854 HART Multiplexer Systems) to provide external connection facilities for up to sixteen 'Smart' 4/20mA HART Field devices.

The equipment comprises a single printed circuit board mounted on a DIN rail mounted enclosure with screw terminals connections for System and Field connections of the sixteen field devices. External connection to the certified HART Multiplexer system is made via a ribbon cable connected to a mechanically retained plug and socket.

The HCU16-xxx HART Connection Unit is available with either none, series or parallel connected termination resistors fitted to the 'Smart' 4/20mA HART Field devices connections. The configuration is defined by the code at the end of the model number. The following variants of the equipment are covered by this certificate: -

HCU16	HART Connection Unit with no Termination Resistors fitted
HCU16-S150	HART Connection Unit with 150Ω series Termination Resistors fitted
HCU16-S200	HART Connection Unit with 200Ω series Termination Resistors fitted
HCU16-S240	HART Connection Unit with 240Ω series Termination Resistors fitted
HCU16-P250	HART Connection Unit with 250Ω parallel Termination Resistors fitted

Input Parameters:

HART Multiplexer System Connector P1

Maximum Working Voltage = 35V d.c.

Field Device Connection Terminals SYSTEM & FIELD Terminals Tx1, Ch1+ & Ch1- to Tx16, Ch16+ & Ch16-

These terminals provide connection for up to sixteen individual 4/20mA HART Field devices.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- 1) The equipment must be installed in an area of not more than pollution degree 2 in accordance with IEC 60664-1, and in an enclosure that provides a minimum degree of protection of at least IP54 and complies with the relevant requirements of IEC 60079-0 and IEC 60079-15.
- 2) External 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 circuits connected have been de-energised.
- 3) The certified equipment to which the HCU16-xxx is connected must be fitted with transient protection devices to be set at a level not exceeding 140% of the peak rated voltage.



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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/ExTR16.0298/00

File Reference: 16/0371