



# 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](http://www.iecex.com)

Certificate No.: **IECEX SGS 23.0003X** Page 1 of 3 [Certificate history:](#)  
Status: **Current** Issue No: 0  
Date of Issue: 2023-08-01  
Applicant: **Eaton Electric Limited**  
Great Marlings  
Butterfield  
Luton  
Bedfordshire  
LU2 8DL  
**United Kingdom**  
Equipment: **Entity Spur Connector Type 9321-SC and Ex ia Spur Connector Type 9322-SC**  
Optional accessory:  
Type of Protection: **Intrinsic Safety**  
Marking: **Ex ia IIC T4 Ga (-40 °C ≤ Tamb ≤ +70 °C)**

Approved for issue on behalf of the IECEx  
Certification Body:

**R S Sinclair**

Position:

**Technical Manager**

Signature:  
(for printed version)

Date:  
(for printed version)

1/8/2023

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](http://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**





# IECEX Certificate of Conformity

Certificate No.: **IECEX SGS 23.0003X**

Page 2 of 3

Date of issue: 2023-08-01

Issue No: 0

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

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](#) Explosive atmospheres - Part 0: Equipment - General requirements  
Edition:7.0

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition:6.0

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/ExTR23.0003/00](#)

Quality Assessment Reports:

[GB/BAS/QAR06.0022/10](#)

[GB/BAS/QAR07.0017/10](#)



# IECEX Certificate of Conformity

Certificate No.: **IECEX SGS 23.0003X**

Page 3 of 3

Date of issue: 2023-08-01

Issue No: 0

## **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The Entity Spur Connector Type 9321-SC and Ex ia Spur Connector Type 9322-SC are FISCO devices certified to the requirements of IEC 60079-11 Annex G.

The equipment consists of components mounted on a printed circuit board housed within an IP20 enclosure formed by two moulded plastic parts that clip together. The complete assembly permits mounting on a DIN rail.

Electrical connections are made through means of a terminal where the input is marked as "Field" and the output terminals of the devices are marked "Trunk". A third, common connection is used, identified as the screen.

Refer to the certificate Annex for information pertaining to the entity parameters.

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

1. The plastic enclosure is a potential electrostatic hazard. Clean only with a damp cloth and do not mount in a high velocity dust laden atmosphere.

## **Annex:**

[IECEX SGS 23.0003X Issue 0 Annex.pdf](#)

The equipment has the following parameters:

**Entity Spur Connector Type 9321-SC Entity Parameters**

Input Parameters (FIELD + & -)	Output Parameters (TRUNK + & -)
$U_i = 30 \text{ V}$	$U_o = U_i$
$I_i = 1.4 \text{ A}$	$I_o = I_i$
$C_i = 0 \text{ F}$	$P_o = U_i \times 0.085$
$L_i = 0 \text{ H}$	$C_o = \text{See Note}$
	$L_o = \text{See Note}$

Note; Maximum output capacitance ( $C_o$ ) and maximum output inductance ( $L_o$ ) are the same as the output parameters of the certified power supply connected at the input terminals (FIELD + & -). Both the input and output circuits form part of the same intrinsically safe circuits.

**Ex ia Spur Connector Type 9322-SC Entity Parameters**

Input Parameters (FIELD + & -)	Output Parameters (TRUNK + & -)
$U_i = 17.50 \text{ V}$	$U_o = U_i$
$I_i = 380 \text{ mA}$	$I_o = I_i$
$C_i = 0 \text{ F}$	$P_o = 1.84 \text{ W}$
$L_i = 0 \text{ H}$	$C_o = \text{See Note}$
	$L_o = \text{See Note}$

Note; Maximum output capacitance ( $C_o$ ) and maximum output inductance ( $L_o$ ) are the same as the output parameters of the certified power supply connected at the input terminals (FIELD + & -). Both the input and output circuits form part of the same intrinsically safe circuits.