



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 ExTC 17.0004X

Issue No: 0

Status: **Current**

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Date of Issue: **2017-10-10**

Applicant: **Controlled Systems Ltd**
Unit 1 Ryder Close
Swadlincote
Derbyshire DE11 9EU
United Kingdom

Equipment: **9468-ET Ethernet Isolator**

Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking:

[Ex ia Ma] I

-40°C ≤ Tamb ≤ +70°C

*Approved for issue on behalf of the IECEx
Certification Body:*


David Price

Position:

Certification Authority

*Signature:
(for printed version)*

Date:


2017-10-10

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:

Ex Testing and Certification Pty Ltd
1/30 Kennington Drive
Tomago NSW 2322
Australia



TESTING & CERTIFICATION



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Manufacturer: **Controlled Systems Ltd**
Unit 1 Ryder Close
Swadlincote
Derbyshire DE11 9EU
United Kingdom

Additional Manufacturing location(s):

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 60079-11 : 2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

*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:

[AU/EXTC/ExTR17.0006/00](#) [GB/SIR/ExTR08.0076/00](#)

Quality Assessment Report:

[GB/SIR/QAR07.0023/10](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The 9468-ET Ethernet Isolator Module is intended for installation in a non-hazardous (safe) area and is designed to extend an ethernet network into a hazardous area, it also acts as an isolating interface between a 9400 series ethernet network in the hazardous area and equipment in the safe area.

Refer to Annexe for further details.

SPECIFIC CONDITIONS OF USE: YES as shown below:

Refer to Annexe for details.

Annex:

[IECEX EXTC 17.0004X Certificate Annexe.pdf](#)

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Annexe



Annexe for Certificate No.:

IECEX EXTC 17.0004X

Issue No.:

0

Description (Cont'd from certificate):

The electronic components of the 9468-ET Ethernet Isolator Module are mounted on printed circuit boards within a plastic enclosure that is designed for mounting on a DIN rail. External electrical connections are made via screw type terminals and/or connectors mounted on the top of the enclosure. The Module may optionally be encapsulated, but this is not a requirement of this certification.

This equipment is certified by Sira, covered by certificate IECEX SIR 07.0043 based on IECEX ExTR GB/SIR/ExTR08.0076/00 (Sira reference R52A17748C). The ExTR covered compliance to IEC 60079-0:2004; IEC 60079-11:2006; IEC 61241-0:2004; IEC 61241-11:2005; IEC 60079-26:2006. This certificate covers the assessment of the equipment to the current editions of IEC 60079-0:2011 and IEC 60079-11:2011 for Group I applications only.

Conditions of Certification pertaining to Issue 0 of this Certificate:

1. The 9468-ET Ethernet Isolator Module shall be mounted in an enclosure providing a degree of protection of at least IP54 ensuring that existing segregation distances are not impaired. The enclosure shall also comply with the requirements of clauses 7 and 8 of IEC 60079-0:2011.
2. The external connections for the 9648_ET Ethernet Isolator Module have the following parameters:

Safe Area Supply Terminals T1, T2 wrt T3, T4

Um = 230 Vac ± 10%

Un = 30 V dc

Ci = 0

Li = 0

Intrinsically Safe Power Supply Input – optional PoEx Terminals T14 and T15
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Ui = 15.4 V

Ci = 0.075 µF

Li = 0

RJ45 Connector to/from the safe area (10/100 Base T)

Um = 230 V ± 10%

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Annexe



Annexe for Certificate No.:

IECEX EXTC 17.0004X

Issue No.:

0

RJ45 Connector to/from the hazardous area (10/100 Base T)

*Ethernet port, intended for connection only to other RJ45 connectors on other 9400 Series Ethernet Modules, all powered from a single intrinsically safe supply.
Connection to other Ethernet Systems requires special consideration and is outside the scope of this report.*

Uo = 0 Vdc

Io = 0 Adc

Po = 0 W

Ci = 0.075 μ F

Li = 0

Ui = 15.4 V (PoEx)

NOTE: When an intrinsically safe power supply is connected to PoEx terminals T14 and T15, the output parameters above (Uo, Io and Po) are replaced by the output parameters (Uo, Io, Po, Co, Lo and Lo/Ro) for the intrinsically safe power supply but with the Co value reduced by 0.075 μ F.

Drawing list pertaining to Issue 0 of this Certificate:

Manufacturer's Documents				
Title:	Drawing No.:	Pages	Rev. Level:	Date:
ZENER DIODE ASSEMBLY	CSL-ZENER	1	3	2003-01-28
ZENER PCB	13003-PCB	1	Orig	2002-08-23
ETHERNET ISOLATOR 9468 ASSEMBLY	9468-ASSY	1	1	2007-10-26
10/100MB ETHERNET ISOLATOR PSU BOARD CIRCUIT DIAGRAM	9468-PSU	1	4	2008-04-04
10/100MB ETHERNET ISOLATOR MAIN BOARD CIRCUIT DIAGRAM	9468-BX	1	5	2008-03-29
10/100MB ETHERNET ISOLATOR PSU BOARD ARTWORKS	9468-PSU PCB	1	4	2008-04-04
10/100MB ETHERNET ISOLATOR MAIN BOARD ARTWORKS	9468-BX PCB	1	5	2008-03-29
MTL Planar Transformer – Type TRF305	TFR305	2	2	2007-12-10
9468 Ethernet Isolator QLD IECEX Certification Label Drawing	9468 QLD IECEX Label	1	1	2017-10-06