



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

Certificate No.: **IECEX SIR 15.0112X** issue No.: **0** Certificate history:

Status: **Current**

Date of Issue: **2015-11-18** Page 1 of 4

Applicant: **Amphenol Industrial**  
40-60 Delaware  
Sidney, NY  
13838-1395  
**United States of America**

Electrical Apparatus: **Amphe-EX Connectors Zone 2 Version Connectors Type 15-5 and Type 21-16**  
Optional accessory:

Type of Protection: **Type nA**

Marking: **Ex nA IIB+H2 T3 Gc**  
**Tamb = -40 °C to +100 °C**

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

Position: **Certification Manager**

Signature:  
(for printed version) 

Date: **2015-11-18**

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:

**SIRA Certification Service**  
**CSA Group**  
**Unit 6, Hawarden Industrial Park**  
**Hawarden**  
**Deeside**  
**CH5 3US**  
**United Kingdom**

**sira**  
CERTIFICATION



**CSA  
Group**



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Manufacturer: **Amphenol Industrial**  
40-60 Delaware  
Sidney, NY  
13838-1395  
**United States of America**

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 60079-15 : 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/SIR/ExTR15.0307/00](#)

Quality Assessment Report:

[GB/SIR/QAR08.0010/04](#)



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## Schedule

### EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Amphe-EX Zone 2 Version Connectors comprise a plug and receptacle shell that form in-line cable connections. The body of the plug may be made using aluminium, brass or stainless steel. When connected together the plug and receptacle are secured together by means of a coupling nut which is retained by a grub screw. Internally, the plug shell incorporates two recesses to accommodate two silicone O-rings, providing a degree of protection to level IP67. Also fitted within the plug shells are an insulator insert that houses crimp type contact pins or sleeves. The Amphe-EX Zone 2 Version Connectors come in the following options: Type 15-5, utilises a size 15 shell and has 5 contacts; Type 21-16, utilises a size 21 shell and has 16 contacts. The model code designations are as follows:

#### Model Code Designations:

Inline plug: EX2M-(A)06-(BB-CC)(D)(E)

Connector series type designation	EX2M
Shell material (A)	A-Aluminium, B-Brass, S-Stainless steel
Shell configuration	06 - In-line plug
Shell size (BB)	Either: 15 or 21
Insert arrangement (CC)	Shell size 15: 5, Shell size 21: 16
Contact type (D)	P - Pin, S - Socket
Alternate key position (E)	None

Refer to EQUIPMENT (continued) for additional description and Conditions of Manufacture.

### CONDITIONS OF CERTIFICATION: YES as shown below:

The user/installer shall comply with the following:

1. Cables shall be terminated in a non-hazardous area, or within an appropriate Ex e, Ex n or Ex d terminal enclosure/junction box.
2. It is the responsibility of the user/installer to ensure appropriate measures are taken to ensure the equipment is adequately protected from transient over voltages.
3. It is the responsibility of the user/installer to provide appropriate earthing hardware using the guidance given in the manufacturer's installation instructions. The user shall ensure that the materials of the hardware shall provide adequate protection against corrosion.
4. It is the users/installers responsibility to ensure that wiring to the equipment is completed in accordance with the wiring procedure detailed in the Instructions.
5. The user/installer shall ensure that the wiring fitted to the panel mount receptacles shall be suitable for a continuous operating temperature of at least 120°C when rated for a maximum ambient of 100°C.
6. The user installed conductors fitted to the panel mount receptacles are to be insulated between connection to the receptacle contacts and associated terminals within associated enclosures to which they are fitted.
7. The interface between the panel mount receptacles and associated Ex nA enclosure to which they may be fitted cannot be defined. Therefore it is the user's responsibility to ensure that the appropriate ingress protection level of the associated enclosure is maintained at this point.



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## EQUIPMENT(continued):

### Model Code Designations (continued):

Panel Mount receptacle: EX2M-(A)02-(BB-CC)(D)(E)

Connector series type designation	EX2M
Shell material (A)	A-Aluminium, B-Brass, S-Stainless steel
Shell configuration	02 - Bulkhead receptacle
Shell size (BB)	Either: 15 or 21
Insert arrangement (CC)	Shell size 15: 5, Shell size 21: 16
Contact type (D)	P - Pin, S - Socket
Alternate key position (E)	None

### Rating

60 Vac / 85 Vdc, 7 Amps maximum

### Conditions of manufacture

The Manufacturer shall comply with the following:

1. In accordance with Clause 6.5 of IEC 60079-15:2010, each plug and receptacle pair shall be fully assembled and subjected to a dielectric strength test of 500 Vrms. When the equipment utilises the Aluminium option, the metallic body shall be wrapped in an electrically conductive material for the purpose of the test. The voltage shall be applied between all conductors shorted together and the electrically conductive material.