



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

Certificate No.: **IECEx ETL 19.0040X** Page 1 of 4 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2019-09-19

Applicant: **Amphenol Industrial Operations**
40-60 Delaware Avenue
Sidney, NY 13838. USA
United States of America

Equipment: **EXS-17***, EXS -18***, 'Starline' EX Range Panel Mounted Receptacle**

Optional accessory:

Type of Protection: **Flameproof 'db', increased Safety 'eb', protection by enclosure 'tb'**

Marking: Ex db eb IIC T6 Gb
Ex db eb IIC T5 Gb
Ex db eb IIC T4 Gb
Ex tb IIIC T4 Db
Ex tb IIIC T5 Db
Ex tb IIIC T6 Db

Approved for issue on behalf of the IECEx
Certification Body:

Todd L. Relyea

Position:

Certification Officer

Signature:
(for printed version)

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 www.iecex.com or use of this QR Code.



Certificate issued by:

Intertek
3933 US Route 11 South
Cortland NY 13045-2995
United States of America

intertek



IECEx Certificate of Conformity

Certificate No.: **IECEx ETL 19.0040X**

Page 2 of 4

Date of issue: 2019-09-19

Issue No: 0

Manufacturer: **Amphenol Industrial Operations**
40-60 Delaware Ave
Sidney, NY 13838. USA
United States of America

Additional
manufacturing
locations:

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 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

IEC 60079-7:2015 Explosive atmospheres – Part 7: Equipment protection by increased safety "e"
Edition:5.0

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 Reports:

GB/SIR/ExTR12.0248/00
GB/SIR/ExTR17.0130/00
GB/SIR/ExTR10.0201/00
GB/SIR/ExTR14.0061/00
GB/SIR/ExTR15.0282/00

GB/SIR/ExTR13.0144/00
GB/SIR/ExTR13.0064/00
GB/SIR/ExTR15.0117/00
GB/SIR/ExTR10.0143/00

GB/SIR/ExTR13.0144/01
GB/SIR/ExTR17.0241/00
GB/SIR/ExTR15.0073/00
US/ETL/ExTR19.0056/00

Quality Assessment Report:

GB/SIR/QAR08.0010/06



IECEx Certificate of Conformity

Certificate No.: **IECEx ETL 19.0040X**

Page 3 of 4

Date of issue: 2019-09-19

Issue No: 0

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Hermetic Panel Mount Receptacle EXS-17***, EXS -18***, 'Starline' EX Range Panel Mounted Receptacle

These receptacles comprise an stainless steel body intended to be mounted on a pressurized panel box. The receptacles and mating connectors form a plain spigot joint with their associated flameproof apparatus

The bodies each contain an insert assembly [insulator with contacts (pins/sockets)] at one end and a certified cable gland at the other. The plug and socket, when connected together, form a flamepath and are mechanically interlocked by means of a threaded nut retained by a grub screw. The range comprises six body (shell) sizes, each with a number of pin/tube size combinations. The connector shell size, pin configuration and rating are reflected in the individual type designations. The current ratings, at 1000 V maximum, are detailed in the tables below.

Shell sizes are provided with various ambient ranges to meet various temperature codes.

Ta = -40 °C to +40 °C = T6 (1135A max)

Ta = -40 °C to +55 °C = T5 (1135A Max)

Ta = -40 °C to +55 °C = T4 (1490A Max)

Ta = -60 °C to +40 °C = T6 (1135A Max)

Ta = -60 °C to +55 °C = T5 (1135A Max)

Ta = -60 °C to +55 °C = T4 (1490A Max)

Options:

Panel mounted receptacles are suitable for fitting to increased safety (Ex e) enclosures when the internal free volume of the receptacle is filled with epoxy resin.

SPECIFIC CONDITIONS OF USE: YES as shown below:

i. The panel mounted variants may be installed in suitably certified and dimensioned flameproof equipment providing that the certification of this flameproof equipment will allow such installation.

ii. The panel mounted variants may be fitted in an increased safety enclosure when the free internal space is filled with epoxy resin and providing the certification of the enclosure will allow such installation. An electric strength test in accordance with IEC 60079-7:2007 Clause 7.1 will be performed on each unit after installation of the epoxy resin.

iii. The EXS-17 and EXS-18 range of panel-mounted variants may be installed in a suitably certified and dimensioned flameproof equipment providing that the certification of this flameproof equipment will allow such installation. They have the following dimensioned spigot joints and are suitable for Group IIA, IIB or IIC, dependent upon the associated apparatus entry dimensions.

- The above Amphenol part numbers are examples of the product described by this report.
- The complete Amphenol product line offers several more insert assembly configurations that are described by the product code logic EXS-XX-H-YYY-ZZZ, where YYY is the shell size, and ZZZ is the insert assembly configuration number. Refer to the Amphenol Drawing "HERMETIC EXPLOSION PROOF PLUG-RECEPTACLE ASSEMBLY, Rev P7 for available configurations.
- The plug connectors that mate with the EX Hermetic Receptacles, are covered under SIRA certificates, IECEx SIR 10.0064X / Sira 03ATEX1101X

iv. The Ex-18 range connector does not incorporate an external earth facility. It is the responsibility of the user or installer to ensure adequate earth continuity by means of guidance given within the manufacturer's installation instructions.

v. If an application requires special, continuity features, within certain connector components, seek factory opinion regarding conductive hardware options. Final configurations are the electrical system designers responsibility, as they best understand the intricacies that make up their particular electrical system, and the environment in which they exist.

Conditions Of Manufacture:

i. The connectors shall be marked as detailed in the following table based upon the cement compound and type of sealing devices.

Cement compound Sealing devices Minimum ambient temperature
Resin 50-3150FR/Cat 190 Fluorosilicone O-rings and Silicone gaskets -60°C
Resin 50-3150FR/Cat 190 Buna (nitrile) rubber O-rings and gaskets -40°C

Annex:



IECEx Certificate of Conformity

Certificate No.: **IECEx ETL 19.0040X**

Page 4 of 4

Date of issue: 2019-09-19

Issue No: 0

Annex to [Annex for IECEx IECEx ETL 19.0040issue No. 0.pdf](#)



Annex to IECEx Certificate of Conformity

Certificate No:	IECEX ETL 19.0040	Issue No. 0
Annex No. 1		

Technical Documents			
Title:	Drawing No.:	Rev. Level:	Date:
Amphenol Star-line Ex Assembly Instructions	L-2120-3	Rev J	11/13/2017
HERMETIC EXPLOSION PROOF PLUG-RECEPTACLE ASSEMBLY	10-756552	A	8/1/2019
Software, Label, Format ATEX/IECEX Starline IECEx Series	10-718222	A	8/20/2019

Certificate issued by:

intertek
Total Quality. Assured.

Intertek NA Inc.
3933 US Route 11
Cortland NY 13045
USA

Page 1 of 2

SFT-IECEX-OP-19f (26 October 2018)



Annex to IECEx Certificate of Conformity

Certificate No:	IECEx ETL 19.0040	Issue No. 0
Annex No. 1		

IECEx Certified Components on Which Conformance Depends					
Item	Description	Manufacturer	Type	Certificate No. / Standards*	Coding / Ratings
1	None				
2					
3					

* "No applicable Technical Differences" or "Technical Differences evaluated and found satisfactory – for detail see ExTR"

Required Manufacturer Routine Testing		
Test	Title/Description of Test	Standard and Clause
1	None	
2		
3		