



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 QPS 12.0002X Issue No: 3 Certificate history:
Status: **Current** Issue No. 3 (2017-07-07)
Date of Issue: **2017-07-07** Page 1 of 5 Issue No. 2 (2016-02-26)
Applicant: **Amphenol EEC** Issue No. 1 (2015-04-26)
4050 North Rockwell Street, Chicago, IL 60618 Issue No. 0 (2012-06-06)
United States of America

Equipment: **EFP Series Electrical Connectors**
Optional accessory:

Type of Protection: **'d'**

Marking:

IECEX QPS 12.0002X
Ex d IIC T5 or T6 Gb
IP68
1000 V Max, 2157A Max
ta= -55°C/-40°C to 40°C/50°C/60°C

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

Dave Adams

Position:

Manager, Hazardous Locations Department [Ex Equipment]

*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 the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

**QPS
Evaluation Services Inc.
81 Kelfield St
Unit 8
Toronto, Ontario M9W 5A3
Canada**





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Manufacturer: **Amphenol EEC**
4050 North Rockwell Street, Chicago, IL 60618
United States of America

Additional Manufacturing location(s):

DRAKA MARINE OIL AND GAS, PRYSMAIN GROUP
1610 GREENS ROAD, SUITE 300
HOUSTON, TX 77032
United States of America

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 60079-1 : 2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:6

*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:

[CA/QPS/ExTR11.0001/02](#) [CA/QPS/ExTR11.0001/03](#)

Quality Assessment Report:

[NO/PRE/QAR15.0023/01](#) [CA/QPS/QAR15.0001/00](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

EFP Series

EFP-1-22-33-444444-55-66667899-10-11

Where:

1-Connector Style

2-Shell Type

3-Cable Adaptor Styles

4-Sealing Method

5-Shell Size

6-Conductor Size

7 Contact Gender

8 Termination Style

9-Insert Orientation

10-Color Coding

11-Variations

Note: Connector Style "T" is not permitted

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Cable Glands used in the assembly shall be IECEx certified components with equivalent or superior ratings to those marked on the connectors and suitable for the supplied cable
2. The connectors must be electrically isolated before connecting or disconnecting the connector halves
3. Protective covers must be secured when the connectors are not engaged
4. End user shall verify creepage and clearance requirements from IEC 60079-7 are satisfied based on the working voltage of the intended installation when used with an Ex e rated device
5. End user shall ensure that the dielectric strength test from IEC 60079-7 clause 7.1 is satisfied before installation when used with an Ex e rated device



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EQUIPMENT (continued):

The temperature class and ambient temperature can be varied based on the maximum wattage in the connector. The maximum wattage is determined from the maximum current and resistance values of the conductors used in the connector using ohm's law and industry standards for resistive values of the conductors.

Connector	Upper Ambient Temperature of +40°C		Upper Ambient Temperature of +50°C		Upper Ambient Temperature of +60°C	
	Temperature Class		Temperature Class		Temperature Class	
	T6	T5	T6	T5	T6	T5
12	23.8	31.7	17	24.3	10.7	18.7
16	39.6	52.8	30.2	43.2	14.6	25.6
20	52.1	69.4	37.2	53.1	17.1	29.8
24	64.3	85.1	47	67.1	24.1	42.1
28	79.5	106.1	57.3	81.8	29.8	52.2

Note: the ambient temperature can be extended down to -55°C when potted with Hysol EE4183



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue 1 - correction to specific conditions of use and upper ambient of 60°C

Issue 2 - re-issue of ExtR to include change in Applicant and Manufacturer name

Issue 3 - update to include revised marking label and QAR reference