



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 QPS 12.0002X	Page 1 of 5	<u>Certificate history:</u>
Status:	Current	Issue No: 8	Issue 7 (2023-08-29)
Date of Issue:	2024-02-26		Issue 6 (2023-07-13)
Applicant:	AMPHENOL EEC, INC. 1701 Birchwood Ave Des Plaines, IL 60018 United States of America		Issue 5 (2021-07-19)
Equipment:	EFP Series Electrical Connectors		Issue 4 (2020-12-22)
Optional accessory:			Issue 3 (2017-07-07)
Type of Protection:	'd' "e"		Issue 2 (2016-02-26)
Marking:	IECEX QPS 12.0002X		Issue 1 (2015-04-26)
	Ex db IIC T5 or T6 Gb or		Issue 0 (2012-06-06)
	Ex db eb 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:

D. Adams, P. Eng.

Position:

Manager, Hazardous Locations [Ex Equipment] Department

Signature:
(for printed version)

Date:
(for printed version)

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:

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





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Manufacturer: **AMPHENOL EEC, INC.**
1701 Birchwood Ave
Des Plaines, IL 60018
United States of America

Manufacturing locations: **CCS Connector and Cable Specialties**
4325 FM 2351
Building 2, Ste 200
Friendswood, TX 77546
United States of America

Prysmian Cables & Systems USA, Inc. LLC
1610 Greens Rd.,
Suite 300
Houston
Texas 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 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](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

[IEC 60079-7:2017](#) Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

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:

[CA/QPS/ExTR11.0001/02](#)
[CA/QPS/ExTR11.0001/05](#)

[CA/QPS/ExTR11.0001/03](#)
[CA/QPS/ExTR11.0001/06](#)

[CA/QPS/ExTR11.0001/04](#)
[CA/QPS/ExTR11.0001/07](#)

Quality Assessment Report:

[GB/SIR/QAR08.0010/15](#)



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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)

/00 – Original

/01 – Correction to specific conditions of use and upper ambient to 60°C

/02 – re-issue of ExTR to include change in Applicant and Manufacturer name

/03 – update to include revised marking label

/04 – re-issue of ExTR to include change in Applicant's and Manufacturer's address, addition of "CCS Connectors and Cable Specialties" as additional manufacturing location and revise marking label to include new manufacturer address and include "db" and "eb" marking.

/05 – re-issue Certificate to update the legal name of one of the additional manufacturing locations from "DRAKA MARINE OIL AND GAS, PRYSMIAN GROUP" to "Prysmian Cables & Systems USA, Inc. LLC"

/06 – re-issue of ExTR to make the following changes:

- Include Epoxies 50-3150FR/Cat 190 potting compound as an alternative potting compound for the subject equipment
- Update ExTRs to address requirements from the latest editions of the applicable standards.

/07 - re-issue of ExTR to make the following changes

- Label drawing, EFP-9500-10 Rev S
- Submission drawing, EFP-SERIES-CERT Rev D