



Certificate no.:
TAE00004WY

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Electrical Equipment

with type designation(s)

"Starline" EX Range Series Connectors and "Starline" EX Hermetic Receptacles (Details acc. to Page 2)

issued to

**Amphenol EEC, Inc.
Des Plaines, IL, USA**

is found to comply with

DNV rules for classification – Ships, offshore units, and high speed and light craft

Application:

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Temperature D

Humidity B

Vibration A

Issued at **Høvik** on **2024-08-01**

This Certificate is valid until **2029-07-31**.

for **DNV**

DNV local unit: **Certification & Inspection Services**

Approval Engineer: **Maik Gagern**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Form code: TA 251

Revision: 2023-09

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Product description

"Starline" EX Range Series Connectors and "Starline" EX Hermetic Receptacles (see Note ###)

The connectors and receptacles constitute a series of various sizes with a variety of amperage capabilities and service ratings. Amperage capabilities and service ratings depend on the respective design details and insert.

Service Voltage Ratings: 240 V AC, 600 V AC, (1000 V AC for single contact design only)
Service Amperage: up to 1135 Amp.

Connectors	Panel Mounted Receptacles
Ex*-13***	Ex*-17***
Ex*-13-9***	Ex-18***
Ex*-15***	

Connector Style	Standard Marking	Fibre Optic Marking
13-2, 15-2, 17-2, 13-4, 15-4, 17-4	Ex d IIC T6 Gb	Ex op pr IIC T6 Gb
	Ex tb IIIC T80°C Db	Ex op is IIC T6 Gb
	Ex d IIC T5 Gb	Ex op pr IIC T5 Gb
	Ex tb IIIC T95°C Db	Ex op is IIC T4 Gb
13-3, 15-3, 17-3	Ex d IIC T4 Gb	----
	Ex tb IIIC T130°C Db	
	Ex d IIC T6 Gb	Ex op pr IIC T6 Gb
	Ex tb IIIC T80°C Db	Ex op is IIC T6 Gb
17-1	Ex d IIC T5 Gb	Ex op pr IIC T5 Gb
	Ex tb IIIC T95°C Db	Ex op is IIC T4 Gb
	Ex de IIC T4 Gb	----
	Ex tb IIIC T130°C Db	
18-1	Ex de IIC T6 Gb	----
	Ex tb IIIC T80°C Db	
	Ex de IIC T6 Gb	Ex op pr IIC T6 Gb
	Ex tb IIIC T80°C Db	Ex op is IIC T6 Gb
	Ex de IIC T5 Gb	Ex op pr IIC T5 Gb
	Ex tb IIIC T95°C Db	Ex op is IIC T4 Gb
	Ex de IIC T4 Gb	----
	Ex tb IIIC T130°C Db	

Hermetic Panel Mounted Receptacle
 EXS-17***
 EXS-18***
 EXS-19H***

Connector Style	Standard Marking
17-H 18-H6 18-H8 19-H (Standard Connector Style only)	Ex db eb IIC T6 Gb Ex tb IIIC T80°C Db
17-H 18-H6 18-H8 19-H (Standard Connector Style only)	Ex db eb IIC T5 Gb Ex tb IIIC T95°C Db
17-H 18-H6 18-H8 19-H (Standard Connector Style only)	Ex db eb IIC T4 Gb Ex tb IIIC T135°C Db
17-H 18-H6 18-H8 19-H (Standard Connector Style only)	Ex db eb IIC T3 Gb Ex tb IIIC T195°C Db

Application/Limitation

Makers instructions and details of Certificate of Conformity with regard to electrical explosion protection – in particular special conditions for safe use - shall be observed.

Note ###: All details about electrical explosion protection mentioned in this certificate are for information only. For relevant binding information the corresponding Certificate of Conformity with regard to electrical explosion protection, issued by a recognised Authority, shall be observed.

Temperature Class: D
 Humidity Class: B
 Vibration Class: A
 Suitable for installation on open deck

Type Approval documentation

Tests carried out

DNV GL Class Guideline DNVGL-CG-0339, Edition Aug. 2021
 Pressure Test, test configuration and data acc. to Trybar Pressure Test Report Trybar Ref. 1830, dated 2024-04-21
 Test pressure: 60bar

Test duration: 60 sec (minimum)

Marking of product

Manufacturer, Type, Rated Voltage, Rated Current

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE