



Marine & Offshore

Certificate number: 02859/F1 BV

File number: ACE 14/163/02

Product code: 2662D

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

ERICO FRANCE SARL
ANDREZIEUX BOUTHEON - FRANCE

for the type of product

INSULATED BUSBARS (LOW VOLTAGE)

Insulated Conductor

Type: nVent ERIFLEX Flexibar and nVent ERIFLEX Flexibar Advanced

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships.

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 27 Apr 2020

For Bureau Veritas Marine & Offshore,

At BV LYON, on 22 Oct 2018,

Florian Aulen



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

Product model or type designation:

- Single core "**FLEXIBAR**" (1 kV)
- Single core "**FLEXIBAR ADVANCED**" (1kV)

Product description:

Flexible Insulated Conductor

2. DOCUMENTS AND DRAWINGS:

Manufacturer's Catalogue - 8802 & Specifications dated 2004.

Manufacturer's Catalogue Ref. ERIFLEX-CAT-P1300C-P274LT17EUFR-FR-1805, dated 2018

3. TEST REPORTS:

CETIM PV N° 3/6/2196 of 7 March 1983.

LCIE Test Report N° 284 156 of 19 September 1985.

POLYREC PV N° CB of 2 September 1988.

LI N° 16303 of 26 September 1989.

UNIVERSITAT KAISERSLAUTERN - Test Report of July 1988.

Test Report ERICO N° 43/98 of 30 November 1998.

ERICO Test Report N° 57/04 dated 25/06/2004.

ERICO Test Report N° PV 81/09 dated 12/Oct./2009. The tests were witnessed by a Society Surveyor.

APAVE Test Report N° 9556430-001-1, dated 01 Mar 2017.

APAVE Test Report N° 9533892-001-1, dated 11 Jun 2018.

4. APPLICATION / LIMITATION:

4.1 - According to BV Rules for the Classification of Steel Ships and IEC 60092 series.

4.2 - The nominal current on the busbars will be calculated with an ambient temperature higher than 40°C.

5. PRODUCTION SURVEY REQUIREMENTS:

5.1 - The INSULATED BUSBARS (LOW VOLTAGE) are to be supplied by **ERICO FRANCE SARL** in accordance with the type described in this certificate.

5.2 - This type of product is within the category DBV of Bureau Veritas Rule Note NR320.

5.3 - For information, **ERICO FRANCE SARL** has declared to Bureau Veritas the following production site(s):

ERICO FRANCE SARL
Rue Benoît-Fourneyron
B.P.31
Z.I. Sud
42161 ANDREZIEUX BOUTHEON
FRANCE

6. MARKING OF PRODUCT:

- Trade name,
- Date of manufacture and serial number,
- Equipment type number or model identification under which it was type-tested.

7. OTHERS:

7.1 - It is **ERICO FRANCE SARL**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

7.2 - This certificate supersedes the Type Approval Certificate No. 02859/F0 BV issued on 27 Apr 2015 by the Society.

*** END OF CERTIFICATE ***