



## ***Confirmation of Product Type Approval***

Please refer to the "Service Restrictions" shown below to determine if Unit Certification is required for this product. This certificate reflects the information on the product in the ABS Records as of the date and time the certificate is printed.

Pursuant to the Rules of the American Bureau of Shipping (ABS), the manufacturer of the below listed product held a valid Manufacturing Assessment (MA) with expiration date of 30/SEP/2018. The continued validity of the Manufacturing Assessment is dependent on completion of satisfactory audits as required by the ABS Rules.

And; a Product Design Assessment (PDA) valid until 08/SEP/2018 subject to continued compliance with the Rules or standards used in the evaluation of the product.

The above entitle the product to be called Product Type Approved.

The Product Design Assessment is valid for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

**Product Name: Busbar Trunking System**

**Model Name(s): ERIFLEX Flexibar - Plain Copper, ERIFLEX Flexibar - Tinned Plated Copper, ERIFLEX Flexibar SUMMUM - Plain Copper.**

**Presented to:**

ERICO FRANCE SARL  
RUE CHARLES DALLIERE BP 31  
France

**Intended Service:**

Marine & Offshore Applications - Low Voltage Industrial Power Distribution and Control, including Switchboards, Motor Control Centers, Panelboards, Industrial Control Panels, Power Supplies, Drive Units, Transformers, Electrical Machinery, HVAC Chiller Controls, Power Converters, and Busbar Systems.

**Description:**

Panelboard Accessory - Flexibar Flexibar: Flexible Insulated Busbar: Plain & Tinned Plated Copper /w PVC insulation, Summum Plain Copper w/ Silicone insulation. See attached "pdf" for complete Model List.

**Tier:**

3

**Ratings:**

Tinned Plated Copper and Plain Copper: Maximum Continuous Voltage 1000 V AC/1500 V DC, UL Listed Max 600 V, Temperature: 105° C (Max) Summum Plain Copper: Maximum Continuous Voltage 1000 V AC/1500 V DC, Temperature: -50° C up to 280° C (315° C short time) Maximum Length: 3 meters - Plain and Tin-plated copper; 2 meters - Summum

**Service Restrictions:**

Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined. Where used in Panelboards, Dead Front Switchboards, and Motor Control Centers, (1) Ampacities are to be per Table 1 in UL Report E125470, (2) The acceptability of the Temperature Rise at the connection point of the Flexibar to

a Component, such as to a Circuit Breaker wiring terminal, shall be evaluated in the End-Use Application, (3) The ability of the Flexibar to withstand a Short Circuit shall be evaluated in the End-Use Application.

**Comments:**

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

**Notes / Documentation:**

Supporting Data: \* Brochure Eriflex Flexbar Technical Characteristics, shts 4, 5 & 6; \* Brochure 1/5 to 5/5 -P\_I\_FLEXIBAR\_SUM\_v2\_EN.doc, Eriflex Flexibar Summum Plain Copper IEC 439.1; \* Brochure 1/8 to 8/8 -P\_I\_FLEXIBAR\_CR\_v2\_EN.doc, Eriflex Flexibar Plain Copper IEC 439.1; \* Brochure 1/5 to 5/5 -P\_I\_FLEXIBAR\_CE\_v2\_EN.doc, Eriflex Flexibar Tinned Plated Copper IEC 439.1; \* UL File E125470, Flexibar, Issued 5-11-90, Revised 2008-03-05, 18 July 2001, 29 MAY 2002; \* UL File E316390, Test Record of PVC Insulated Single dated 2008-02-08.

**Term of Validity:**

This Product Design Assessment (PDA) Certificate 08-HS365878-2-PDA, dated 09/Sep/2013 remains valid until 08/Sep/2018 or until the Rules or specifications used in the assessment are revised (whichever occurs first). This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product. Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA. Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

**ABS Rules:**

2013 Steel Vessels Rules 1-1-4/7.7, 1-1-A3, 4-8-3/1.7, 4-8-3/5.3 & 4-8-3/5.5.1

**National Standards:**

UL File: E125470 UL 758 2nd Ed, UL 94 VO

**International Standards:**

IEC 60439-1, IEC 60695-2-11, IEC 60754-1

**Government Authority:****EUMED:****Others:****Model Certificate****Model Certificate No****Issue Date****Expiry Date**

PDA

08-HS365878-2-PDA

09/SEP/2013

08/SEP/2018



ABS Programs

ABS has used due diligence in the preparation of this certificate and it represents the information on the product in the ABS Records as of the date and time the certificate was printed. Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. Limited circumstances may allow only Prototype Testing to satisfy Type Approval. The approvals of Drawings and Products remain valid as long as the ABS Rule, to which they were assessed, remains valid. ABS cautions manufacturers to review and maintain compliance with all other specifications to which the product may have been assessed. Further, unless it is specifically indicated in the description of the product; Type Approval does not necessarily waive witnessed inspection or survey procedures (where otherwise required) for products to be used in a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS. Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.