



Marine & Offshore

Certificate number: 03924/F0 BV

File number: ACE 03/017/01

Product code: 2645H

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

MERSEN FRANCE SB S.A.S
SAINT BONNET DE MURE - FRANCE

for the type of product

FUSES / FUSES COMBINATION UNITS (LOW VOLTAGE)

Fuse links with indicator NH00, NH0, NH1, NH2, NH3 series (aM, gG).

Requirements:

BV Rules for the Classification of Steel Ships.
IEC 60269-1 (2009).

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: 25 Feb 2027

For Bureau Veritas Marine & Offshore,

At BV LYON, on 25 Feb 2022,

Huseyin Ozbulduk



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 :

Designation/Fuse-link	Rated voltage(V)	Rated current (A)	Breaking capacity (kA)
Knife-Cartridge			
NH00 gG	690	8-100	120 kA 400/500V
NH00 gG	500	125-160	
NH00 aM	690	16-100	
NH00 aM	500	125-160	
NH0 gG	690	10-100	80 kA 690V
NH0 gG	500	125-160	
NH0 aM	690	40-160	
NH1 gG	690	16-200	
NH1 gG	500	224-355	
NH1 aM	690	50-250	
NH2 gG	690	32-315	
NH2 gG	500	355-500	
NH2 aM	690	100-400	
NH3 gG	690	315-500	
NH3 gG	500	630-800	
NH3 aM	690	315-500	
NH3 aM	500	630	

2. DOCUMENTS AND DRAWINGS :

Specification ref. DS-LFBCA5-05-0416_EN, dated 21.Jun.2016.
 Specification ref. DS-LFBCA54-03-0616_EN, dated 21.Jun.2016.
 Specification ref. DS-LFBCA6-05-0416_EN, dated 21.Jun.2016.
 Specification ref. DS-LFBCS4-06-0616_EN, dated 21.Jun.2016.
 Specification ref. DS-LFBCG5-04-0416_EN, dated 22.Jun.2016.
 Specification ref. DS-LFBCG6-04-0416_EN, dated 21.Jun.2016.

3. TEST REPORTS :

According to test reports filed in ACE 03/017/01.
 Test report N° 3238, dated 27

4. APPLICATION / LIMITATION :

4.1 - BV Rules for the Classification of Steel Ships.
 4.2 - Approval also valid for ships to be granted with the notations: **AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.**
 4.3 - Equipment covered by this Type Approval certificate can be installed on ships contracted for construction before 1 January 2022. On or after this date of 1 January 2022, equipment is to comply with IACS UR E10 Rev. 7.

5. PRODUCTION SURVEY REQUIREMENTS :

5.1 - The above products are to be supplied by **MERSEN FRANCE SB S.A.S** in compliance with the type described in this certificate.
 5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.
 5.3 - **MERSEN FRANCE SB S.A.S** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.
 5.4 - For information, **MERSEN FRANCE SB S.A.S** has declared to Bureau Veritas the following production site:

FUSETECH Kft.
Guba S. u. 38
7400 Kaposvar
HUNGARY

6. MARKING OF PRODUCT :

The items prescribed below shall be marked on a easily visible place of fuse surface in an indelible way.

- 1 - Rated voltage (V)
- 2 - Rated current (A)
- 3 - Rated breaking capacity
- 4 - Fusing Factor
- 5 - Manufacturer's name
- 6 - Model N°
- 7 - Approved class name.

7. OTHERS :

7.1 - It is **MERSEN FRANCE SB S.A.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 N° 03924/E1 BV issued on 03 Apr 2017 by the Society.

***** END OF CERTIFICATE *****