

Certificate number: 05346/K1 BV File number: ACE 03/006/01

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

LEGRAND FRANCE-LIMOGES

LIMOGES - FRANCE

for the type of product

FUSES / FUSES COMBINATION UNITS (LOW VOLTAGE)

aM and gG FUSES.

Requirements:

BV Rules for the Classification of Steel Ships - IEC 60269-1, 2 and 2-1.

This certificate is issued to attest that BUREAU VERITAS 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: 28 Feb 2018

For BUREAU VERITAS,

At BV BORDEAUX, on 15 Nov 2013, Raphael Garnier





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. 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 Division 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 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		Rated Voltage (V)	Rated current (A)	Breaking capacity (kA)	Remarks
Fuse-link	Fuse-carrier				
10 x 38 gG	13394-13301 to 13325 13402 to 13425	500	0.5 to 25	100	With or without indicators.
10 x 38 aM	13001 to 13016	500	0.25 to 16	100	Without indicator.
10 x 38 aM	13020 & 13025	400	20-25	100	Without indicator.
10 x 38	13300				(neutral)
14 x 51 gG	14302 to 14350 14504 to 14550	500	2 to 50	100	With or without striker
14 x 51 aM	14002 to 14040 14102/14145	500	2 to 45	40	With or without striker
14 x 51 aM	14050 or 14150 14045 or 14145	400	45-50	100	With or without striker
14 x 51	14300				(neutral)
22 x 58 gG	15310 to 15396 15510 to 15596	500	4 to 100	100	With or without striker
22 x 58 gG	15397 & 15597	400	125	100	With or without striker
22 x 58 aM	15016 to 15096 15116 to 15195	500	16 to 100	100	With or without striker
22 x 58 aM	15097 & 15197	400	125	100	With or without striker.
22 x 58	15300			·	(neutral)

2. DOCUMENTS AND DRAWINGS:

According to catalogue 2007.

3. TEST REPORTS:

Laboratoire d'essais LEGRAND.

Test reports N°:

- S 00017.18.1 dated 05/12/2000
- S 00017.35.1 dated 08/10/2001
- S 00017.36.1 dated 08/10/2001
- S 00017.37.1 dated 03/10/2001
- S 00017.38.1 dated 12/10/2001 - S 00017.40.1 dated 06/12/2001
- S00023.168.1 dated 30/06/2006.
- S00158.8.1 dated 18/05/06
- S00158.9.1 dated 18/05/06
- S00158.11.1 dated 30/06/06
- S00158.12.1 dated 30/06/06
- E00315.8.2 dated 13/08/06
- E00315.9.1 dated 08/09/06 - E00315.9.2 dated 08/09/06
- E00315.9.3 dated 08/09/06
- E00315.12.1 dated 27/11/06

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4. APPLICATION / LIMITATION:

According to BV Rules for the Classification of Steel Ships.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 The above products are to be supplied by **LEGRAND FRANCE** in accordance with the type described in this certificate and Bureau Veritas Rules for the Classification of Steel Ships.
- 5.2 This type of product is within the category HBV of Bureau Veritas Rule Note NR320.
- 5.3 **LEGRAND FRANCE** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products:

LEGRAND FRANCE 128 Avenue du Ml De Lattre De Tassigny, 87045 CEDEX LIMOGES FRANCE

FERRAZ SHAWMUT TUNISIA Ancienne Zone Industrielle El Fahs BP 66 1140 El Fahs TUNISIA

6. MARKING OF PRODUCT:

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

- (l) 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 This approval is given with the understanding that the Society reserves the right to require check tests to be carried out on the units at any time and that **LEGRAND FRANCE** (**LIMOGES FRANCE**) will accept full responsibility for informing shipbuilders, shipowners or their sub-contractors of the proper methods of use and general maintenance of the units and the conditions of this approval.
- 7.2 This Certificate supersedes the Type Approval Certificate N° 05346/K0 BV issued on 28/02/2013 by the Society.

*** END OF CERTIFICATE ***