

MARINE DIVISION

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Certificate number: 20796/A0 BV

File number : ACE 15/767/01

Product code : 2552D

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

TYPE APPROVAL CERTIFICATE

as per Bureau Veritas Classification Rules

This certificate is issued to

MARECHAL ELECTRIC

SAINT- MAURICE - FRANCE

for the type of product

PLUGS AND SOCKETS

Plugs and Sockets.
Type: DSN1, DSN3 and DSN6.

Regulations and standards :

BUREAU VERITAS Rules for the Classification of Steel Ships.
IEC 60309-1:2005, IEC 60947-3.

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 of the Regulations and standards mentioned above.

This certificate is valid until : 01 Aug 2013

At Paris la Défense, on : 01 Aug 2008

For BUREAU VERITAS,
By order of the Secretary

Approval office

Local office : BV LE HAVRE

Surveyor : F. Andrieu

L.COURREGELONGUE



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. 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 :

DSN1, DSN3 and DSN6 - Plugs and Sockets.

1.1 - Main Characteristics:

	DSN1	DSN3	DSN6
Rated Voltage:	500 V AC Max.	690 V AC Max.	1000 V AC Max.
Rated Current:	20A Max.	32A Max.	63A Max.
Utilization Category:	AC22 / AC23 according to IEC 60947-3 (Low-Voltage Switchgear & Controlgear)		
Number of Contact:	2 to 5		
Protection Index:	IP 66/67		
Use Temperature:	-40°C to +60°C		

2. DOCUMENTS AND DRAWINGS :

Marechal Electric:

General Catalogue 2008.

DS/DSN/DN - Operating Instructions N° 6F - Rev. 8.

Drawings: DSN1 - No. 5-2-6099 Rev. B2 dated 24/06/08, DSN3 - No. 5-2-6100 Rev. B0 dated 01/07/08 and DSN6 - No. 5-2-6101 Rev. B0 dated 01/07/08.

Technical Files No. DT/DSN1/BVM/08 Rev. A, No. DT/DSN3/BVM/08 Rev. A and No. DT/DSN6/BVM/08 Rev. A, all dated 27/06/08.

3. TEST REPORTS :

LCIE:

Test Plan for Marine Certification of Plugs and Sockets, Report No. 80123-569004A dated 7 April, 2008.

Environmental Test Report No. 81838-571667A dated 21 May 2008.

CB Test Certificates (IEC 60309-1:2005 (ed 4.1)):

DSN1 - FR 60042266D dated 2006-02-15

DSN3 - FR 60042266E dated 2006-02-15

DSN6 - FR 60042266F/A1 dated 2007-05-03.

4. APPLICATION / LIMITATION OF USE:

4.1 - BUREAU VERITAS Rules for the Classification of Steel Ships.

4.2 - Approval also valid for units having to comply with IMO Resolution A649 (The "MODU Code").

4.3 - Approval also valid for ships having to comply with BV Rules for the Classification and the Certification of Yachts.

5. PRODUCTION SURVEY REQUIREMENTS :

MARECHAL ELECTRIC has declared to Bureau Veritas that the type of product described in this certificate are manufactured at the following production site:

MARECHAL ELECTRIC
2 rue Denis Papin, Z.I. de la Maine
76150 MAROMME
FRANCE

6. MARKING OF PRODUCT :

- According to IEC 60309-1.

7. OTHERS :

This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the units at any time and that:

MARECHAL ELECTRIC
5 avenue du chemin des Presles
94417 SAINT- MAURICE
FRANCE

will accept full responsibility for informing shipbuilders, ship-owners or their sub-contractors of the proper methods of use and general maintenance of the units and the conditions of this approval.

*** END OF CERTIFICATE ***

