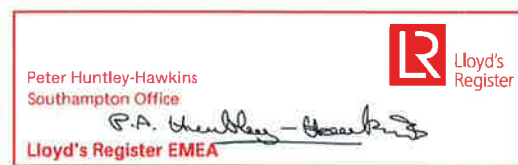


Type Approval Certificate Extension

This is to certify that Certificate No. 90/00130(E5) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER	Mersen France SB S.A.S. 15 Rue Jacques de Vaucanson 69720 Saint Bonnet De Mure France
PLACE OF PRODUCTION	NOLAM TUNISIA Rue de Nabeul Lot No.4 Zone Industrielle de M'Ghira, Tunisia
DESCRIPTION	Low voltage HRC Fuse Bases
TYPE	1. Plastic fuse bases Types EP,TP,PP for fuse links NH type sizes 00,0,1,2,3 for 1 to 4 poles 2. Ceramic fuse bases Types E,EB,P,PP for fuse links NH type sizes 00,0,1,2,3 for 1 & 3 poles
APPLICATION	Marine, applications for switchboard use in environmental categories ENV1 and ENV2 as defined in LR Test Specification No. 1 2015
Certificate No.	90/00130(E6)
Issue Date	12 February 2016
Expiry Date	20 June 2020
Sheet	1 of 2



P.A. Huntley Hawkins
Marine Technology & Engineering Services, Southampton
Lloyd's Register EMEA

Lloyd's Register EMEA

Southampton Boldrewood Innovation Campus, Burgess Road, Southampton, SO16 7QF

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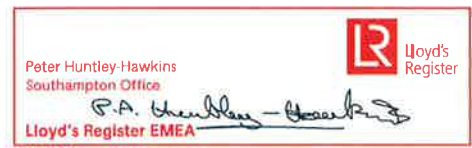
SPECIFIED STANDARDS ICE 60269-1, IEC 60269-2

"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."

The attached Design Appraisal Document No. 90/00130(E6) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 90/00130(E5) to which this extension should be attached.

Certificate No. 90/00130(E6)
Issue Date 12 February 2016
Expiry Date 20 June 2020
Sheet 2 of 2



P.A. Huntley Hawkins
Marine Technology & Engineering Services, Southampton
Lloyd's Register EMEA

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Southampton Boldrewood Innovation Campus, Burgess Road, Southampton, SO16 7QF

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Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



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Page 1 of 2
Document number 90/00130(E6)
Issue number 1

DESIGN APPRAISAL DOCUMENT

Date 12 February 2016	Quote this reference on all future communications MTES/ETS/TA/MJH/PAHH/WP24218953
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LLOYD'S REGISTER TYPE APPROVAL SYSTEM, 2015.

Issued to: MERSEN FRANCE SB S.A.S
for: LOW VOLTAGE HRC FUSE BASES
TYPE APPROVAL CERTIFICATE No. 90/00130(E6)

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System, 2015 and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

NH BASES Marine Testing Program	5 Jan 2016
Fusetech QMS EMS 2014 DAKKS Certificate	29 April 2014
ISO Certificate	10 Aug 2015
LR/ Client Email Regarding Test Results	27 Jan 2016
Excel Sheet Highlighting required changes	Undated

TEST REPORTS

MERSEN Test Lab Test Report No 2015252/A (BB001EPBR)	18 Nov 2015
MERSEN Test Lab Report No 2015252/B (BB003RFSBLOC)	20 Nov 2015
MERSEN Test Lab Report No 2015252/C (BB12PP)	18 Dec 2015
MERSEN Test Lab Report No 2015252/D (BB22PP)	18 Dec 2015
MERSEN Test Lab Test Report No 2015252/E (BB01E)	16 Dec 2015
MERSEN Test Lab Test Report No 2015252/F (BB003E)	17 Nov 2015
MERSEN Test Lab Test Report No 2015252/G (BB31P)	17 Nov 2015
ENVIRONNETECH Mechanical Test Report RENV-FNN-15-400691/A (00)	14 Oct 2015
MERSEN NH Data Sheet	Undated



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Document number	90/00130(E6)
Issue number	1

DESIGN APPRAISAL DOCUMENT

Date	Quote this reference on all future communications
12 February 2016	MTES/ETS/TA/MJH/PAHH/WP24218953

Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the Lloyd's Register Type Approval System Procedure.



P.A. Huntley-Hawkins
Principal Specialist
Marine Technology & Engineering Services, Southampton
Lloyd's Register EMEA

**Part 2
Fuses (Part 2)**

Producer/Licence No.	Type		Rating		Category Additional Tests	Remarks	Cert. No		
	Link	Base	Carrier	Volts				Amperes/Watts	
Mersen France SB S.A.S., 15 Rue Jacques de Vaucanson, 69720 Saint Bonnet De Mure, France.	-	Plastic Plastic fuse bases Types EP,TP,PP for fuse links NH type sizes 00,0,1,2,3 for 1 to 4 poles	-	690V	12W	Marine applications for switchboard use in environmental categories ENV1 and ENV2 as defined in LR Test Specification No. 1 2015 IEC 60269-1 IEC 60269-2	Expires: 20 June 2020 For use with approved fuses.	90/00130(E6)	
	-		BB00	-	690V				25W
	-		BB01	-	690V				25W
	-		BB02	-	690V				25W
	-		BB03	-	690V				25W
	-		BB04	-	690V				25W
	-		BB11	-	690V				32W
	-		BB12	-	690V				32W
	-		BB13	-	690V				32W
	-		BB14	-	690V				32W
	-		BB21	-	690V				45W
	-		BB22	-	690V				45W
	-		BB23	-	690V				45W
	-		BB24	-	690V				45W
	-	BB31	-	690V	60W				
	-	BB32	-	690V	60W				
	-	BB33	-	690V	60W				
	-	BB34	-	690V	60W				
	-	Ceramic Ceramic fuse bases Types E,EB,P,PP for fuse links NH type sizes 00,0,1,2,3 for 1 & 3 poles	-	690V	160A				
	-		BB00	-	690V				160A
	-		EB00	-	690V				160A
	-		BB01	-	690V				160A
	-		BB03	-	690V				160A
	-		BB11	-	690V				250A
	-		BB12	-	690V				400A
	-		BB13	-	690V				250A
	-		BB23	-	690V				400A
	-		BB31	-	690V				630A
	-	BB33	-	690V	630A				

G.A. Van der Meer - Head of Dept

12 February 2016

