



Marine & Offshore

Certificate number: 17193/C0 BV

File number: ACE 02/008/36

Product code: 2633H

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
SCHNEIDER ELECTRIC INDUSTRIES SAS
 Grenoble Cedex 09 - FRANCE

for the type of product
CIRCUIT BREAKERS (LOW VOLTAGE)
 MASTERPACT UR 50 - 60

Requirements:

BV Rules for the Classification of Steel Ships.
 IEC 60947-2 (2016), IEC 60068-1 (2013), IEC 60068-2 (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: 01 Sep 2022

For Bureau Veritas Marine & Offshore,
 At BV LYON, on 01 Sep 2017,
 Jean-Marc Cabuzel



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:

- Product model or type designation:

Masterpact UR 50-60

- Product description:

Circuit Breakers (Low Breakers)

Characteristic	<i>UR 50</i>	<i>UR 60</i>	Remarks
Rated current (A)	5000	6000	at 45°C
Rated insulation voltage U_i (V)	1000	1000	
Number of poles	3	3	
Rated operational voltage U_e (V)	690	690	50/60 Hz
Ultimate breaking capacity I_{cu} (kA rms)	150	150	220/415/440 V, 50/60 Hz
	100	100	690 V, 50/60 Hz
Rated short-time withstand current I_s (kA rms)	20	20	690 V, 50/60 Hz
Rated making capacity I_{cm} (kA peak)	330	330	220/415/440 V, 50/60Hz
	220	220	690 V, 50/60 Hz

Masterpact UR is equipped with two control units:

- Micrologic control unit for protection against overloads, low short-circuits and insulation faults:
 - Micrologic A "ammeter",
 - Micrologic P "power",
 - Micrologic H "harmonics",
 - Micrologic E "Energy",
- Specific control unit "UR control" module for protection against high short-circuits.

2. DOCUMENTS AND DRAWINGS:

SCHNEIDER ELECTRIC Catalogue: LV power circuit breakers - Masterpact UR 50 - 60 ; 2006.

SCHNEIDER ELECTRIC Marine certification file: Masterpact UR 50 - 60 ; 2006.

3. TEST REPORTS:

ASEFA Attestation of conformity N° 01a-06BT dated 15.03.2006 with record of proving test N° F03-2005-0470-00 dated 03.10.2005.

ASEFA Attestation of conformity N° 02a-06BT and 03a-06BT dated 15.03.2006 with record of proving test N° F03-2005-0471-00 dated 10.02.2006.

ASEFA Attestation of conformity N° 04a-06BT dated 17.03.2006 with test report N° F03-CEM20050469-01A dated 30.01.2006.

ASEFA Certificate of conformity N° 005a-06BT dated 15.03.2006 with record of proving test N° F01.05.03 dated 16.11.2005.

ASEFA Certificate of conformity N° 006a-06BT dated 15.03.2006 with record of proving test N° F01.05.04 dated 27.09.2005.

ASEFA Certificate of conformity N° 042a-06BT dated 15.03.2006 with record of proving test N° F01.05.02 dated 30.01.2006.

SOPEMEA test reports N° EHL06659/1 (Issue 1) and EHL06659/2 (Issue 1) dated 07.02.2006.

AEMC Laboratory EMC tests report N° R0509250C dated 08.11.2005.

ASEFA record of proving test N° 2005-0469-03 dated 14.02.2006.

4. APPLICATION / LIMITATION:

4.1 - According to BV Rules for the Classification of Steel Ships and IEC 60947 specifications.

4.2 - Approval valid for ships intended to be granted with the following additional class notations: **AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.**

4.3 - BUREAU VERITAS Environmental Category, **EC Code: 31.**

4.4 - The equipment fulfils the EMC requirements for installation in General power Distribution Zones.

5. PRODUCTION SURVEY REQUIREMENTS:

5.1 - The above products are to be supplied by **SCHNEIDER ELECTRIC INDUSTRIES SAS** 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 - **SCHNEIDER ELECTRIC INDUSTRIES SAS** 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 - **SCHNEIDER ELECTRIC INDUSTRIES SAS** has declared to Bureau Veritas the following production site(s):

Schneider Electric France
Rue de la Grange Batie - ZI Centr'Alp
38430 MOIRANS - France

Schneider Shangai Power Appl.Co Ltd
833 Kang Xiao, road Pudong Area
201315 SHANGAI - China

Schneider Electric Alpes
Voie Isaac Newton, ZI Alpespace
73800 FRANCIN - France

6. MARKING OF PRODUCT:

According to IEC 60947 specifications.

7. OTHERS:

7.1 - It is **SCHNEIDER ELECTRIC INDUSTRIES SAS'** 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 No. 17193/B0 BV issued on 03 Nov 2011 by the Society.

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