

Marine & Offshore

Certificate number: 19412/C0 BV File number: ACE 02/003/48

Product code: 2657H

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 INDUSTRIE SAS - ELECTROPOLE 38EQI

EYBENS - FRANCE

for the type of product

THERMAL RELAYS

TeSys Model LRD and LR3D - Thermal Overload Relay

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships for the Classification of Steel Ships. IEC 60947-1 (2014) IEC 60947-4-1 (2009) + Amd.1 (2012).

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: 26 Mar 2024

For Bureau Veritas Marine & Offshore,

At BV LYON, on 26 Mar 2019, Florian Aulen





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.

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THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

TeSys Model D -	Thermal Overload Relay				
Туре	Trip Class	Setting range (A)	Ui	Uimp	For combination with contactor types
Differential version - phase loose sensitive: - LRD01 to LRD35 (screw clamp terminals) - LRD013 to LRD223 (Spring terminal connection) - LRD016 to LRD356 (lug-clamp connection) Undifferential version - not phase loose sensitive: - LR3D01 to LR3D35 (screw clamp terminals) - LR3D013 to LR3D223 (Spring terminal connection) - LR3D016 to LR3D356 (lug-clamp connection)	10A	0.1 to 38	690V	6kV	LC1-D09D38 (0.110A) LC1-D12D38 (913A) LC1-D18D38 (1218A) LC1-D25D38 (1632A) LC1-D32D38 (3038A)

Accessories	
LAD-7B106	Terminal block for LRD-0135 and LRD3-D01 35
LAD-7C1	Pre-wiring kit allowing direct connection of relay NC
	contact to the contactors LCl-D09 018
LAD-7C2	Pre-wiring kit allowing direct connection of relay NC
	contact to contactors LC1-D25 D38
LAD-703	Remote tripping of electrical reset device

Control	Circuit Voltage <u>for LAD-703</u>	Code
Code	Voltage	Frequency
J	12 Vd.c.	-
В	24 V d.c	-
	24 V a.c.	50/60Hz
Е	48 V d.c	-
	48 V a.c.	50/60Hz
DD	96 V d.c.	-
F	110 V d.c	-
	110 V a.c.	50/60Hz
M	220/230 V d.c	-
	220/230 V a.c.	50/60Hz
Q	380/400 Va.c.	50/60 Hz
N	415/440 V a.c.	50/60 Hz

2. DOCUMENTS AND DRAWINGS:

Manufacturer's catalogue ref 24516-EN_ver3.0, 24515-EN_ver7.0 and 24534-EN_ver5.2.

3. TEST REPORTS:

- $3.1 Schneider \ Test \ reports \ N^{\circ}s: 545-00(04-2001), \ 546-00(06-2001), \ 547-00(10-2001), \ 548-00(06-2001), \ G0010080A(10/2000), \ G0203044A(03/2002), \ GVI0058B(05/2001).$
- 3.2 KEMA Test reports N° 2076178.51, 2076178.52, 2076178.53, 2076178.54, 2076178.55, 2076178.56, 2076178.57, 2076178.58.
- 3.3 Schneider/ASEFA test reports N°K11 474 00, K11 477 00, K11 478 00, K11 479 00, K11 480 00, K11 481 00, K11 482 00, K11 483 00, K11 484 00, K11 485 00, F01 00 119, F01 00 120, F01 00 121, F01 00 122, F01 00 123, F01 00 124, F01 00 125.
- 3.4 IECEE CB Scheme Certificate N° DE1-50111, dated 2012-05-21.
- 3.5 IECEE CB Scheme Certificate N° FR659446A/A1, dated 09 Mar 2015.
- 3.6 IECEE CB Scheme Certificate N° FR659446B/A1, dated 09 Mar 2015.
- 3.7 IECEE CB Scheme Certificate N° DE1-52794, dated 03 Sep 2013.

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4. APPLICATION / LIMITATION:

- 4.1 BV Rules for the Classification of Steel Ships.
- 4.2 The equipment, once installed on board ship, is to be tested in accordance with the above referred Regulations under the supervision of a Society's Surveyor.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 The THERMAL RELAYS are to be supplied by **SCHNEIDER ELECTRIC ELECTROPOLE 38EQI** 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 ELECTROPOLE 38EQI** 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, **SCHNEIDER ELECTRIC ELECTROPOLE 38EQI** has declared to Bureau Veritas the following production site:

Schneider Electric France - Site de Dijon 6-8 RUE DE BAILLY BP 97812 21078 DIJON CEDEX FRANCE

6. MARKING OF PRODUCT:

According to IEC 60947 specifications.

7. OTHERS:

7.1 - It is **SCHNEIDER ELECTRIC ELECTROPOLE 38EQI**'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° 19412/B1 BV issued on 11 Apr 2015 by the Society.

*** END OF CERTIFICATE ***