



Marine & Offshore

Certificate number: 19412/D0 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*

www.veristar.com

## TYPE APPROVAL CERTIFICATE

*This certificate is issued to*

**SCHNEIDER ELECTRIC INDUSTRIES 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.

IEC 60947-1 (2014)

IEC 60947-4-1 (2018)

*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: 15 Apr 2029**

**For Bureau Veritas Marine & Offshore,**

At BV LYON, on 15 Apr 2024,

Yann Krempelwicz

***This certificate was created electronically and is valid without signature***



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 electronic version is available at: <http://www.veristarm.com/veristarnb/jsp/viewPublicPdfTypepec.jsp?id=js3abw8gy4>

BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

## THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION:

TeSys Model D -		Thermal Overload Relay			
Type	Trip Class	Setting range (A)	Ui	Uimp	For combination with contactor types
<b>Differential version - phase loose sensitive :</b> - LRD01 to LRD35 (screw clamp terminals) - LRD013 to LRD223 (Spring terminal connection) - LRD016 to LRD356 (lug-clamp connection)					
<b>Undifferential version - not phase loose sensitive:</b> - 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-D09...D38 (0.1...10A) LC1-D12...D38 (9...13A) LC1-D18...D38 (12...18A) LC1-D25...D38 (16...32A) LC1-D32...D38 (30...38A)

Accessories	
LAD-7B106	Terminal block for LRD-01 ...35 and LRD3-D01... 35
LAD-7C1	Pre-wiring kit allowing direct connection of relay NC contact to the contactors LC1-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 Code	Circuit Voltage --for LAD-703--	Code
Code	Voltage	Frequency
J	12 V d.c.	-
B	24 V d.c. 24 V a.c.	- 50/60Hz
E	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 V a.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°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 - IEC EE CB Scheme Certificate N° DE1-50111, dated 2012-05-21.
- 3.5 - IEC EE CB Scheme Certificate N° FR\_707024, dated 29 Nov 2019.
- 3.6 - IEC EE CB Scheme Certificate N° FR\_707035, dated 29 Nov 2019.
- 3.7 - IEC EE CB Scheme Certificate N° DE1-52794, dated 03 Sep 2013.
- 3.8 - Test report N° 1911990011, dated 26 Sep 2019.
- 3.9 - Test report N° 1911990012, dated 26 Sep 2019.
- 3.10 - Test report N° 129163-659446A-Cr150306, dated 06 Mar 2015.
- 3.11 - Test report N° 129163-659446B-Cr150306, dated 06 Mar 2015.

**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.

4.3 - Equipment covered by this Type Approval certificate has been tested according to requirements of IACS UR E10 rev 8.

**5. PRODUCTION SURVEY REQUIREMENTS:**

5.1 - The above products are to be supplied by **SCHNEIDER ELECTRIC INDUSTRIES SAS - 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 INDUSTRIES SAS - 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 INDUSTRIES SAS - ELECTROPOLE 38EQI** has declared to Bureau Veritas the following production site:

**SCHNEIDER ELECTRIC FRANCE**  
**6/8 rue du Bailly**  
**ZI de Saint-Apollinaire**  
**21078 DIJON**  
**FRANCE**  
**FRANCE**

**6. MARKING OF PRODUCT:**

According to IEC 60947 specifications.

**7. OTHERS:**

7.1 - It is **SCHNEIDER ELECTRIC INDUSTRIES SAS - 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/C0 BV issued on 26 Mar 2019 by the Society.

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