

# TYPE APPROVAL CERTIFICATE

Certificate No: TAE0000201 Revision No: 2

| inis is to certify:  |  |  |  |
|--|--|--|--|
| That the Overcurrent- and Short-Circuit Relay  |  |  |  |
| with type designation(s) Tesys D LRD3 / LR3D3  |  |  |  |
| Schneider Electric Industries S.A.S. Grenoble, France  |  |  |  |
| is found to comply with DNV rules for classification – Ships, offshore units, and high species 60947 | ed and light craft                     |  |  |
| Application:   |  |  |  |
| Products approved by this certificate are accepted for installation                                  | on all vessels classed by DNV.         |  |  |
|  |  |  |  |
| Issued at Høvik on 2022-07-04  |  |  |  |
| This Certificate is valid until <b>2027-06-30</b> .  DNV local station: <b>France CMC</b>            | for <b>DNV</b>                         |  |  |
| Approval Engineer: Nicolay Horn  | Marta Alonso Pontes<br>Head of Section |  |  |

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Form code: TA 251

Revision: 2021-03

www.dnv.com

Page 1 of 3



Page 1 of 3

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



Job Id: **262.1-007397-7** Certificate No: **TAE0000201** 

Revision No: 2

### Name and place of manufacturer

Schneider Electric France 6-8 rue du Bailly 21078 Dijon Cedex FRANCE

## **Product description**

Thermal overload relay with differential and non differential type.

Rated insulation voltage Ui : 600 /690 V\*
Rated impulse voltage Uimp: 6 kV
IP protection: IP20

#### Technical data:

| LRD3     | Current Range | lq = lr | Iq     | Fuse aM  |
|----------|---------------|---------|--------|----------|
| LR3D 3   | le (A)        | (690V)* | (440V) | (A max.) |
| Class 10 |               | (kA)    | (kA)   |          |
| 13       | 9.0 – 13.0    | 1       |        | 16       |
| 18       | 12.0 – 18.0   | 3       |        | 20       |
| 25       | 17.0 – 25.0   | 3       |        | 25       |
| 32       | 23.0 – 32.0   | 3       |        | 40       |
| 40       | 30.0 – 40.0   | 3       | 50     | 40       |
| 50       | 37.0 – 50.0   | 3       |        | 63       |
| 65       | 48.0 - 65.0   | 3 or 5  | 1      | 63       |
| 80       | 62.0 - 80.0   | 3 or 5  |        | 80       |

| LRD 3L   | Current Range | lq = lr | lq     | Fuse aM  |
|----------|---------------|---------|--------|----------|
|          | le (A)        | (690V)* | (440V) | (A max.) |
| Class 20 |               | (kA)    | (kA)   |          |
| 13       | 9.0 – 13.0    | 1       |        | 20       |
| 18       | 12.0 – 18.0   | 3       |        | 25       |
| 25       | 17.0 – 25.0   | 3       |        | 32       |
| 32       | 23.0 – 32.0   | 3       |        | 40       |
| 40       | 30.0 – 40.0   | 3       | 50     | 50       |
| 50       | 37.0 – 50.0   | 3       |        | 63       |
| 65       | 48.0 – 65.0   | 5       |        | 80       |

<sup>\*</sup> See Application / limitation

# **Application/Limitation**

For installation in enclosures onboard ship and offshore units

With Uimp = 6 kV the max. rated voltage is 600 V when used in a IT (ship) net. Applicable for use in applications with directly earthed systems with rated voltage of 400/690 V.

Environmental classes: Vibration: A, Temperature: D, Humidity: B.

### Type Approval documentation

Technical documentation:

«TeSys LRx, RM1 – Technical Data for Designers» part of cataloge

Form code: TA 251 Revision: 2021-03 www.dnv.com Page 2 of 3

<sup>&</sup>quot;Tesys protection components", parts of manufacturer's catalogue.

<sup>&</sup>quot;TeSys d Thermal overload Relays 13 - 65A - Marine certification file"version 2.0 dated 2013-09-27.



Job Id: **262.1-007397-7**Certificate No: **TAE0000201** 

Revision No: 2

#### Test reports:

Schneider Electric test report no. 2009036229\_001 dated 2009-02-12.

LCIE test reports no. 1911990013 & 1911990014 dated 2019-09-26.

LCIE test reports no. 150527-710254 & 150529-710258 dated 2018-01-24.

LCIE test reports nos 128422-665184-D00 to D04 all dated 2015-05-20. LCIE test reports nos. 110468-620644/00, 110468-620644/01, 110468-620644/02 & 110468-620644/03 all issued 2013-

04-04

#### **Tests carried out**

Electrical tests after IEC 60947-4-1 (2018). Environmental tests after "Standard for Certification no. 2.4" April 2006 (Power supply variation, power supply failure, dielectric, insulation, inclination, vibration, cold, dry heat and damp heat).

## **Marking of product**

Telemecanique - Schneider Electric- Type designation

#### Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval is complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routines (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Assessment to be performed at 2 and 3.5 years and at renewal.

**END OF CERTIFICATE** 

Form code: TA 251 Revision: 2021-03 www.dnv.com Page 3 of 3