



TYPE APPROVAL CERTIFICATE

Certificate no.:
TAE0000201
Revision No:
3

This is to certify:

that the **Overcurrent- and Short-Circuit Relay**

with type designation(s)
Tesys D LRD3 / LR3D3

issued to

Schneider Electric Industries SAS
Eybens, France

is found to comply with

DNV rules for classification – Ships, offshore units, and high speed and light craft
IEC 60947

Application:

Products approved by this certificate are accepted for installation on all vessels classed by DNV.

Issued at **Høvik** on **2025-09-24**

This Certificate is valid until **2027-06-30**.

DNV local unit: **France CMC**

Approval Engineer: **Qiang William Guo**



for **DNV**

This document has been digitally signed and will
therefore not have handwritten signature

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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.

Name and place of manufacturer

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

Schneider Shanghai Industrial Control Co., Ltd.
 629 Suide Road Putuo District Shanghai 200331 China

Product description

Thermal overload relay with differential and non-differential type.

Rated insulation voltage U_i : 600 /690 V*
 Rated impulse voltage U_{imp} : 6 kV
 IP protection: IP20

Technical data :

| LRD3 LR3D 3 Class 10 | Current Range I_e (A) | $I_q = I_r$ (690V)* (kA) | I_q (440V) (kA) | Fuse aM (A max.) |
|----------------------------|----------------------------|--------------------------------|-------------------------|---------------------|
| 13 | 9.0 – 13.0 | 1 | 50 | 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 | | 40 |
| 50 | 37.0 – 50.0 | 3 | | 63 |
| 65 | 48.0 – 65.0 | 3 or 5 | | 63 |
| 80 | 62.0 – 80.0 | 3 or 5 | | 80 |

| LRD 3...L Class 20 | Current Range I_e (A) | $I_q = I_r$ (690V)* (kA) | I_q (440V) (kA) | Fuse aM (A max.) |
|-----------------------|----------------------------|--------------------------------|-------------------------|---------------------|
| 13 | 9.0 – 13.0 | 1 | 50 | 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 | 37.0 – 50.0 | 3 | | 63 |
| 65 | 48.0 – 65.0 | 5 | | 80 |

* See Application / limitation

Application/Limitation

For installation in enclosures on board ship and offshore units and the instruction from maker should be observe.

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

Environmental class

| | |
|-------------|---|
| Temperature | D |
| Humidity | B |
| Vibration | A |

Type Approval documentation

Technical documentation:

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

“Tesys protection components”, parts of manufacturer’s catalogue.

“TeSys d Thermal overload Relays 13 - 65A – Marine certification file”version 2.0 dated 2013-09-27.

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
CQC Test report No. CB2024CQC-114467 dated on 2024-06-19.
LCIE test reports no. 25119Y90003-01 and 25119Y90003-02 dated 2025-04-21.
LCIE test reports no. 25119Y90006-01 and 25119Y90006-02 dated 2025-05-12.

Tests carried out

Electrical tests in accordance with IEC 60947-4-1: 2023
Environmental test in accordance with DNV-CG-0339 Aug. 2021, 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