EUROPEAN UNION RECOGNISED ORGANISATION (EU RO) MUTUAL RECOGNITION TYPE APPROVAL CERTIFICATE

Certificate No:
MRE000001M

In accordance with Article 10.1 of EU Regulation 391/2009

This Certificate is issued to

Schneider Electric Industries SAS

Rueil Malmaison, **France**

for
Electrical/Electronic Relays

with type designation(s)
LRD, LR3, LR3D & LAD

The product is found to comply with
EU RO Mutual Recognition Technical Requirements for Electrical/Electronic Relays

Intended service
Thermal overload Relay for installation in enclosures onboard ship and mobile offshore units.

This is to certify:

that the Product referred to herein has been inspected for the Manufacturer, pursuant to the relevant requirements of the European Union Recognised Organisation Mutual Recognition procedure, required by Article 10.1 of EU Regulation 391/2009, and has been found in accordance with those requirements.

This Certificate is valid until **2030-11-05**.

Issued at **Høvik** on **2025-11-06**

DNV local unit: **Netherlands VMC**

Approval Engineer: **Qiang William Guo**

for **DNV**

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

Frederik Tore Elter
Head of Section

Product description

Thermal overload relays for protection of a.c. circuits and motors against overloads, phase failure, long starting time and prolonged stalling of the motor.

Type designation	Use
LRD01 to LRD35	Differential thermal overload relay, Class 10A w/screw clamp terminal
LR3D01 to LR3D35	Undifferential thermal overload relay, Class 10A w/screw clamp terminal
LRD013 to LRD223	Differential thermal overload relay, Class 10A w/spring terminal
LR3D013 to LR3D223	Undifferential thermal overload relay, Class 10A w/spring terminal
LRD016 to LRD356	Differential thermal overload relay, Class 10A w/lug-clamps
LR3D016 to LR3D356	Undifferential thermal overload relay, Class 10A w/lug-clamps
LRD04L to LRD32L	differential thermal overload relays, Class 20 with screw clamp terminal
LRD04L6 to LRD32L6	differential thermal overload relays, Class 20 with connection by lug clamps
LR3D04L to LR3D32L:	thermal overload relays for unbalanced loads ,Class 20 with screw clamp terminal
LR3D04L6 to LR3D32L6	thermal overload relays for unbalanced loads, Class 20 with connection by lug clamps
LRD3322 to LRD33696	Differential thermal overload relay, Class 10A w/screw clamp terminal
LRD4365 to LRD4369	Differential thermal overload relay, Class 10A, w/ screw clamp terminal
LR3D3322 to LR3D33696	Undifferential thermal overload relay, Class 10A w/screw clamp terminal
LR3D4365 to LR3D4369	Undifferential thermal overload relay, Class 10A w/screw clamp terminal
LAD7C and LAD7C1	Prewiring kit for direct connection with NC relay and contactors
LAD7B10	Terminal block for LRD01 to LRD35 & LR3D01 to LR3D35
LAD-703	Remote tripping or electric reset device
LAD7B205	Terminal block for LRD04...32 and LR3D04...32

LRD : Differential version (sensitive to phase failure)
LR3D : Undifferential version (not sensitive to phase failure)

Technical data:

Relay type	**LRD01 to 16** **LR3D01 to D16**	**LRD21 to 35** **LR3D21 to**	**LRD04L to LRD32L** **LR3D04L to LR3D32L**	**LRD3322 to LRD33656** **LR3D3322 to LR3D33656**
Rated insulation voltage (V)	400/690*	400/690*	400/690*	400/690*
Rated impulse voltage (kV)	6	6	6	6
Frequency limits(Hz)	0 - 400	0 - 400	50/60	0 - 400
Setting range(A)	0.1 - 13	12 - 38	0,4-0,63A to 23-32A	17 - 104
Iq (440V) (kA)	80	80	80	70

Relay type	**LRD33676 to LRD33696** **LR3D33676 to LR3D33696**	**LRD4365 to LRD4369** **LR3D4365 to LR3D4369**
Rated insulation voltage (V)	400/690*	400/690*
Rated impulse voltage (kV)	6	6
Frequency limits(Hz)	0 - 400	0 - 400
Setting range(A)	95 - 140	80 - 140
Iq (440V) (kA)	70	70

***See voltage restrictions under "Application limitation".**

Manufactured by

Schneider Electric France, 6-8 rue de Bailly – B.P. 97812 21078 Dijon Cedex, France	Schneider Thailand limited Bangpoo Industrial Estate Samutprakarn, Thailand
Schneider Shanghai Industrial Control Co.,Ltd No.629 Suide Road,Putuo District, Shanghai P.R.China	

Application/Limitation

For installation inside switchboards / enclosures onboard ships and offshore units.

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

Type Approval documentation

Name	Number	Date
Schneider Catalogue ID-IEC-LRD / LR3D Pages 3 to 14		Not specified
Letter to DNV ref. CJ/052083, Item 2 - Listing of products		2005-06-06
Schneider Catalogue/"Motor starter solutions Control and protection components"		2001-10
Certificate of Conformity No. 01-44-278-01/ Issued by unspecified authority		2020-11-30
Schneider Catalogue 2025		2025-02
Test report	ASEFA-116-10BT & 117-10BT	2010-08-31
Test report	129163-659446A & 129163-659446B	2014-10-27
Test report	545-00, 546-00, 547-00, 548-00	Not specified
Test report	GV10058B	2001-05-31
Test report	G001008A	2000-10
Test report	G023044A	2002-03
Test report	FR_707024	2019-11-29
Test report	1911990012	2019-09-26
Test report	201800759_010	2020-10-19
Test report	129163-659446B-Cr150306	2015-03-06
Test report	FR_707035	2019-11-29
Test report	1911990011	2019-09-26
Test report	129163-659446A-Cr150306	2015-03-06
Test report	201800759_011	2020-10-11 to 2020-10-12
CB test certificate	FR_721617	2025-05-14
Test report	25119Y90010-02	2024-07-15
Test report	25119Y0010-02	2025-03-01
Test report	25119Y90010-01	2025-03-01
Test report	00901-CB2024CQC-113149	2024-04-29
CB test certificate	FR_721265	2025-03-20
CB test certificate	CN65907	2024-05-22
Test report	25119Y90004-02	2025-05-12
Test report	25119Y90004-01	2025-05-12
CB test certificate	FR_721615	2025-05-14
Test report	25119Y90005-01	2025-05-12

Marking of product
Schneider Electric and / or Telemecanique and Type designation.

Other Conditions
Electrical tests in accordance with EU RO MR Technical Requirements-Electrical/Electronic Relays-Rev.0.7, Type tests in accordance with IEC 60947-4-1:2023 and IEC 60947-5-1:2024. Environmental tests in accordance with IACS UR E10 rev.9.

Environmental test parameters:

Temperature:	-25 ºC and 55 ºC
Humidity:	Relative humidity up to 100% at all relevant temperatures
Vibration:	± 1mm / 0.7g
EMC:	General power zone
Enclosure:	IP20

Periodical assessment
The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are 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 annually.

Generic Statement for EU RO MR Type Approval Certificate

When a product is presented with this EU RO MR Type Approval Certificate for given application, its acceptability with regards to the limitations stated in the certificate conditions defined in 1b, 1c and 1d of the applied Technical Requirement will be evaluated by the EU RO in charge of classing the ship or being in charge of the unit/system certification.

In accordance with Article 10 of Regulation (EC) No 391/2009 of the European Parliament and of the Council of 23 April 2009 "on common rules and standards for ship inspection and survey organizations", the following organizations, recognized by the EU on this date, have agreed on the technical and procedural conditions under which they will mutually recognize this certificate:

- American Bureau of Shipping (ABS);
- Bureau Veritas (BV);
- China Classification Society (CCS);
- Croatian Register of Shipping (CRS);
- DNV;
- Indian Register of Shipping (IRS);
- Korean Register (KR);
- Lloyd's Register Group Ltd. (LR);
- Nippon Kaiji Kyokai General Incorporated Foundation (ClassNK);
- Polish Register of Shipping (PRS);
- RINA Services S.p.A. (RINA);
- Russian Maritime Register of Shipping (RS).

The scheme for the mutual recognition of class certificates for materials, equipment and components laid down by Article 10(1) of Regulation (EC) No 391/2009 is only enforceable within the Union in respect of ships flying the flag of a Member State. As far as foreign vessels are concerned, the acceptance of relevant certificates remains at the discretion of relevant non-EU flag States in the exercise of their exclusive jurisdiction, notably under the United Nations Convention on the Law of the Sea (UNCLOS). (In accordance with COMMISSION IMPLEMENTING REGULATION (EU) No 1355/2014 amending Regulation (EC) No 391/2009 - recital (25)).