



TYPE APPROVAL CERTIFICATE

Certificate no.:
TAE00003EH
Revision No:
2

This is to certify:

that the Overcurrent- and Short-Circuit Relay

with type designation(s)
MT type thermal Overload Relay

issued to
LS ELECTRIC Co., Ltd. (Cheong-ju Plant)
Cheongju-si, 04, Korea, Republic of

is found to comply with
DNV rules for classification – Ships, offshore units, and high speed and light craft

Application:

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

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Issued at **Busan** on **2024-05-02**

for **DNV**

This Certificate is valid until **2028-12-31**.

DNV local unit: **Seoul**

Approval Engineer: **Eun Sook Kim**

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 300,000 USD.



Product description

The type MT thermal overload relay is used for prevention of motor burn out in an overload or locked-rotor condition according to setting range and ampere range as listed below.

No	Type	Setting range – amperes	For combination with contactor types
1	MT-12	Various from 0.1 - 0.16 to 12 - 18	MC-6a,9a,12a,18a
	MT-32	Various from 0.1 - 0.16 to 28 - 40	MC-9b,12b,18b,22b,32a,40a
	MT-63	Various from 4 - 6 to 45 - 65	MC- 50a,65a
	MT-95	Various from 7 - 10 to 80 - 100	MC-75a,85a,100a
	MT-150	Various from 34 - 50 to 110 - 150	MC-130a,150a
2	MT-225	Various from 65 - 100 to 160 - 240	MC-185a,225a
3	MT-400	Various from 85 - 125 to 260 - 400	MC-265a,330a,400a
	MT-800	Various from 200 - 330 to 520 - 800	MC-500a,630a,800a

Remark: 1. MT-xx/2H,3H : Non differential type
 2. MT – xx/3K : Differential type
 3. MT – xx/3D : Delay Type

Application/Limitation

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

Type Approval documentation

Specification for magnetic contactor, MS-623-695 dated 2010-07-15

Test reports: R410-1291 MT-12 2H/3H/3K/3D dated 2010-08-27
 R410-1292 MT-32 2H/3H/3K/3D dated 2010-08-27
 R410-1293 MT-63 2H/3H/3K/3D dated 2010-08-27
 R410-1294 MT-95 2H/3H/3K/3D dated 2010-08-27
 R410-1295 MT-150 2H/3H/3K/3D dated 2010-08-27
 R410-1296 MT-225 2H/3H/3K/3D dated 2010-08-27
 R410-1297 MT-400 2H/3H/3K/3D dated 2010-08-27
 R410-1298 MT-800 2H/3H/3K/3D dated 2010-08-27

2163435.70,-71,-72,-73,-74,-75,-76,-77 dated 2014-06-23

Type assessment report for retention dated 2014-11-27

Renewal assessment report dated 2018-12-12

Type approval assessment report dated 2023-12-08

Tests carried out

Type tests according to IEC 60947-4-1. Environmental tests including dry heat, damp heat, vibration, high voltage, cold, inclination and insulation resistance test.

Marking of product

- Manufacturer name
- Model name
- Serial number
- Power ratings

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:



Job ID: **262.1-034051-8**
Certificate no.: **TAE00003EH**
Revision No: **2**

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine tests (RT) and selected type tests (ref. to applicable class programs) checked (if not available these tests shall 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.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE