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# Type Approval Certificate Extension

*This is to certify* that Certificate No. 11/10017(E1) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

<b>PRODUCER</b>	LSIS Co., Ltd.
<b>PLACE OF PRODUCTION</b>	95, Baekbong-ro, Heungdeok-gu, 28439, Chengju-si, Chengcheongbuk-do, Republic of Korea
<b>DESCRIPTION</b>	Thermal Overload Relays
<b>TYPE</b>	MT Series Thermal Overload Relay : MT-12, MT-32, MT-63, MT-95, MT-150, MT-225, MT-400, MT-800 Type name is followed by Properties Version: MT-xx/2H; 3H : Non differential Type MT-xx/3K : Differential Type MT-xx/3D : Delay Type
<b>APPLICATION</b>	Marine, offshore and industrial applications for use in environmental categories ENV2 and EVN3 as defined in LR Type Approval System Test Specification No.1-2015 where the Test Specification is satisfactory for the intended operation.
<b>STANDARD</b>	IEC60947-4-1 (2009 3 <sup>rd</sup> Edition, A1:2012)

<b>Certificate No.</b>	16/40037(E2)
<b>Issue Date</b>	22 July 2016
<b>Expiry Date</b>	21 July 2021
<b>Sheet</b>	1 of 3



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Busan Technical Support Office  
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**RATINGS**

Type	Setting Range Amperes	Combination with Contactor Types	Maximum Voltage (a.c.)
MT-12 /2H/3H/3K	Various from 0.1~ 0.16 to 12~18	MC-6a, -9a, -12a, -18a	690
MT-12 /3D	Various from 1~ 1.6 to 12~18		
MT-32 /2H/3H/3K	Various from 0.1~ 0.16 to 28~40	MC-9b, -12b, -18b, -22b MC-32a, -40a	690
MT-32 /3D	Various from 1~ 1.6 to 28~40		
MT-63 /2H/3H/3K/3D	Various from 4~6 to 45~65	MC-50a, -65a	690
MT-95 /2H/3H/3K/3D	Various from 7~ 10 to 80~100	MC-75a, -85a, -100a	690
MT-150 /2H/3H/3K/3D	Various from 34~50 to 110~150	MC-130a, -150a	690
MT-225 /2H/3H/3K/3D	Various from 65~100 to 160~240	MC-185a, -225a	690
MT-400 /2H/3H/3K/3D	Various from 85~125 to 260~400	MC-265a, -330a, -400a	690
MT-800 /2H/3H/3K/3D	Various from 200~330 to 520~800	MC-500a, -630a, -800a	690

**Certificate No.** 16/40037(E2)  
**Issue Date** 22 July 2016  
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**Sheet** 2 of 3



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**OTHER CONDITION**

The system or device incorporating these relays shall be subject to the electromagnetic compatibility tests specified for the zones on which it is intended to operate

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

If the specified standards are amend during the validity of this certificates, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.

(In case of applications other than Marine) The application of this Type-Approval Certificate will be limited to the relevant scope of the Specified Standards and acceptance thereof by the local authorities.

*"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register Asia of any modification or changes to the equipment in order to obtain a valid certificate."*

*The Design Appraisal Document No. 16/40037(E2) and its supplementary Type Approval Terms and Conditions form part of this Certificate.*

All other details remain as the previous Certificate No. 11/10017(E1) to which this extension should be attached.

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## Lloyd's Register Asia

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### DESIGN APPRAISAL DOCUMENT

Date 22 July 2016	Quote this reference on all future communications BTS/ETS/E161986
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## LLOYD'S REGISTER TYPE APPROVAL SYSTEM, 2014.

Issued to: **LSIS CO., LTD.**

for: **MT SERIES, THERMAL OVERLOAD RELAY  
TYPE APPROVAL CERTIFICATE No. 16/40037(E2)**

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System, 2014 and this Design Appraisal Document forms part of the Certificate.

### APPROVAL DOCUMENTATION

Request for Marine Services	From 2502TA	06 January 2016
Declaration of Identity		06 January 2016
Production Quality Assessment Form		07 April 2016

### TEST REPORTS

Test Report by PT&T	R416-0529~36	07 April 2016
Test Report by PT&T	R416-1319	16 June 2016
Test Report by PT&T	R416-1321~7	16 June 2016
Test Report by DEKRA	2163435.70~7	23 June 2014
CB Test Certificate	NL-31652/A3	03 March 2016

### Supplementary Type Approval Terms and Conditions

*Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.*

*Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.*

*Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.*

*Lloyd's Register Asia reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the Lloyd's Register Type Approval System Procedure.*



Gun-Nam Park  
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Electrotechnical Systems

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**Part 2**  
**Relays - Thermal & Magnetic with Oil Dash Pot (Part 2)**

Producer/Licence No.	Type	Rating A.C. 50/60Hz			Category/ Additional Tests	Remarks	Cert. No.
		Standard	Voltage	Setting Range Amperes			
<b>LSIS Co., Ltd.</b> <b>95, Baekbong-ro, Heungdeok-</b> <b>gu, Chengju-si,</b> <b>Chengcheongbuk-do,</b> <b>Korea, Republic of</b>	MT series Thermal Overload Relays	IEC60947-4-1(2009, A1:2012)			ENV2 ENV3 (2015)	Expires: 21 July 2021	16/40037(E2)
	MT-12 /2H/3H/3K /3D		690V	0.1-0.16 to 12-18 1-1.6 to 12-18		For Combination with Contactor Types: MC-6a, -9a, -12a, -18a	
	MT-32 /2H/3H/3K /3D		690V	0.1-0.16 to 28-40 1-1.6 to 28-40		MC-9b, -12b, -18b, -22b, -32a, -40a	
	MT-63 /2H/3H/3K/3D		690V	4-6 to 45-65		MC-50a, -65a	
	MT-95 /2H/3H/3K/3D		690V	7-10 to 80-100		MC-75a, -85a, -100a	
	MT-150 /2H/3H/3K/3D		690V	34-50 to 110-150		MC-130a, -150a	
	MT-225 /2H/3H/3K/3D		690V	65-100 to 160-240		MC-185a, -225a	
	MT-400 /2H/3H/3K/3D		690V	85-125 to 260-400		MC-265a, -330a, -400a	
	MT-800 /2H/3H/3K/3D		690V	200-330 to 520-800		MC-500a, -630a, -800a	
	Note: Type name is followed by Versions: MT-xx/2H; 3H Non differential type MT-xx/3K Differential type MT-xx/3D Delay type						




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