

## Type Approval Certificate Extension

This is to certify that Certificate No. 07/10001 for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

**PRODUCER** 

LSIS Co., Ltd.

PLACE OF

PRODUCTION

1, Songjeong-dong, Heungdeok-gu, Cheongju-si,

Chungcheongbuk-do, 361-720, Korea

DESCRIPTION

Magnetic Contactors and Thermal Overload Relays

**TYPE** 

MC and MT Series

Contactor: MC-9, MC-12, MC-18, MC-25, MC-32, MC-35, MC-40,

MC-50, MC-63, MC-65, MC-75, MC-85, MC-95

Thermal Overload Relay: MT-32, MT-63, MT-95

Type name is followed by Properties Version:
MT-xx/2H; 3H: Non differential Type
MT-xx/3K: Differential Type
MT-xx/3D: Delay Type

APPLICATION

Marine, offshore and industrial applications for use in environmental categories ENV2 and ENV3 as defined in LR Type Approval System Test Specification No. 1-2002 where the Test Specification is satisfactory for the intended operation.

**STANDARD** 

IEC 60947-4-1

OTHER CONDITIONS

The system or device incorporating these relays shall be subjected to the electromagnetic compatibility tests specified for

the zones on which it is intended to operate.

Certificate No.

07/10001 (E1)

**Issue Date** 

9 January 2012

**Expiry Date** 

8 January 2017

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H. Murase Yokohama Design Support Office

Lloyd's Register

Lloyd's Register, registered office: 71 Fenchurch Street, London EC3M 4BS

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## **RATINGS**

## Magnetic Contactors

Туре	Utilisation	Rated Operational Current Ie amperes at rated operational voltage Ue							
-71-	Category	200 ~ 240V		380 ~ 440V		500 ~ 550V		690V	
		Amp	kW	Amp	kW	Amp	kW	Amp	kW
MC-9	AC-2, 3	11	2.5	9	4	7	4	5	4
MC-12	AC-2, 3	13	3.5	12	5.5	12	7.5	9	7.5
MC-18	AC-2, 3	18	4.5	18	7.5	13	7.5	9	7.5
MC-25	AC-2,3	25	5.5	25	11	22	15	18	15
MC-32	AC-2,3	32	7.5	32	15	28	18.5	20	18.5
MC-35	AC-2, 3	35	11	35	18.5	30	22	21	22
MC-40	AC-2,3	40	11	40	18.5	32	22	23	22
MC-50	AC-2,3	55	15	50	22	43	30	28	30
MC-63	AC-2, 3	63	15	63	25	45	30	30	30
MC-65	AC-2,3	65	18.5	65	30	60	33	35	33
MC-75	AC-2,3	75	22	75	37	64	37	42	37
MC-85	AC-2,3	85	25	85	45	<i>7</i> 5	45	45	45
MC-95	AC-2,3	95	25	95	45	85	50	50	45

Operating Coil: 600V 50/60Hz or less, 250V d.c. or less

~	TT.:1:	Rated Operational Current				
Type	Utilisation	Ie amperes at rated operational voltage Ue 200 ~ 240V 380 ~ 440V				
	Category	200 ~		380 ~ 440V		
		Amp	kW	Amp	kW	
MC-9	AC-4	8	1.5	6	2.2	
MC-12	AC-4	11	2.2	9	4	
MC-18	AC-4	16	3.7	11	4	
MC-25	AC-4	18	3.7	13	5.5	
MC-32	AC-4	20	4.5	17	7.5	
MC-35	AC-4	23	5.5	20	11	
MC-40	AC-4	25	5.5	24	11	
MC-50	AC-4	35	7.5	32	15	
MC-63	AC-4	40	7.5	35	15	

Thermal	7
Current Ith	
(=AC-1)	
Amp	1
25	
25	
40	1
40	1
50	1
55	1
60	
70	1
75	1
	4

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MC-65	AC-4	50	11	47	22
MC-75	AC-4	55	13	52	25
MC-85	AC-4	65	15	62	30
MC-95	AC-4	68	18.5	65	33

100	
110	
135	
140	
	110 135

Operating Coil: 600V 50/60Hz or less, 250V d.c. or less

## Thermal Overload Relays

Type	Setting Range	Combination with	Maximum
Note)	Amperes	Contactor Types	Voltage (a.c.)
MT-32	Various from 0.1~ 0.16 to 22~32	MC-9, -12, -18, -25, -32	690
MT-63	Various from 4~6 to 45~65	MC-35, -40, -50, -63	690
MT-95	Various from 7~10 to 70~95	MC-65, -75, -85, -95	690

Note: Type name is followed by Versions: MT-xx/2H; 3H: Non differential type

MT-xx/3K

: Differential type

MT-xx/3D

: Delay type

"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 of any modification or changes to the equipment in order to obtain a valid certificate."

The attached Design Appraisal Document No. 07/10001(E1) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 07/10001 to which this extension should be attached.

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