

TYPE APPROVAL CERTIFICATE

Certificate No. : TJN00429-EL032 **Initial Approval** : 13th July, 2011.
Product : Magnetic Contactor
Manufacturer : LSIS Co., Ltd. - Cheongju Plant
 1 Songjeong-dong, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do
 361-720, Korea

Product Description : Type : MC-6a, MC-9a, MC-12a, MC-18a, MC-9b, MC-12b, MC-18b,
 MC-22b, MC-32a, MC-40a, MC-50a, MC-65a, MC-75a, MC-85a,
 MC-100a, MC-130a, MC-150a, MC-185a, MC-225a, MC-265a, MC-330a,
 MC-400a, MC-500a, MC-630a, MC-800a

" See Appendix 1 ~ 3 "

Approval Condition : " See Appendix 3 "

THIS IS TO CERTIFY that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows and entered in the "List of Approved Manufacturers and Type Approved Equipment".

Pt. 6, Ch. 1, Art. 109 of the Rules for Classification, Steel Ships & IEC 60947-4-1

This Certificate is valid until 12th July, 2016.
 Issued at Daejeon, Korea on 13th July, 2011.



KOREAN REGISTER OF SHIPPING

*General Manager of
 Materials and Equipment Team*

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 2 : The manufacturer should notify this Society of any modification or changes that may affect the validity of this Certificate.*

Appendix 1

Product Description and/or Approval Condition

Certificate No : TJN00429-EL032

Date of Issue : 13th July, 2011.

1. Product Description :

- Utilization Category : AC-2, AC-3

TYPE	ELECTRICAL RATINGS							
	200 ~ 240 V (A) (kW)		380 ~ 440 V (A) (kW)		500 ~ 550 V (A) (kW)		690 V (A) (kW)	
MC - 6a	9	2.2	7	3	6	3	4	3
MC - 9a	11	2.5	9	4	7	4	5	4
MC - 12a	13	3.5	12	5.5	12	7.5	9	7.5
MC - 18a	18	4.5	18	7.5	13	7.5	9	7.5
MC - 9b	11	2.5	9	4	7	4	6	4
MC - 12b	13	3.5	12	5.5	12	7.5	9	7.5
MC - 18b	18	4.5	18	7.5	13	7.5	9	7.5
MC - 22b	22	5.5	22	11	18	15	15	15
MC - 32a	32	7.5	32	15	28	18.5	20	18.5
MC - 40a	40	11	40	18.5	32	22	-	-
MC - 50a	55	15	50	22	43	30	28	30
MC - 65a	65	18.5	65	30	60	33	-	-
MC - 75a	75	22	75	37	64	37	42	37
MC - 85a	85	25	85	45	75	45	45	45
MC - 100a	105	30	105	55	85	55	-	-
MC - 130a	130	37	130	60	90	60	60	55
MC - 150a	150	45	150	75	100	70	60	55
MC - 185a	185	55	185	90	180	110	120	110
MC - 225a	225	75	225	132	200	132	150	140
MC - 265a	265	80	265	147	225	147	185	160
MC - 330a	330	90	330	160	250	160	220	200
MC - 400a	400	125	400	200	350	225	300	250
MC - 500a	500	147	500	265	400	265	380	300
MC - 630a	630	190	630	330	500	330	420	400
MC - 800a	800	220	800	440	720	500	630	500

< To be continued >

Appendix 2

Product Description and/or Approval Condition

Certificate No : TJN00429-EL032

Date of Issue : 13th July, 2011.

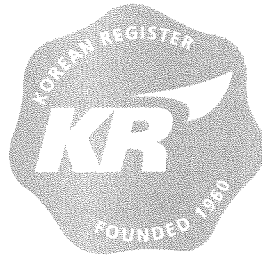
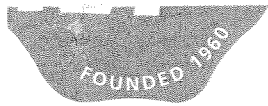
- Utilization Category : AC-4

TYPE	ELECTRICAL RATINGS			
	200 ~ 240 V (A)	240 ~ 380 V (kW)	380 ~ 440 V (A)	440 ~ 500 V (kW)
MC - 6a	7	1.5	5	2.2
MC - 9a	8	1.5	6	2.2
MC - 12a	11	2.2	9	4
MC - 18a	16	3.7	11	4
MC - 9b	8	1.5	6	2.2
MC - 12b	11	2.2	9	4
MC - 18b	16	3.7	11	4
MC - 22b	18	3.7	13	5.5
MC - 32a	20	4.5	17	7.5
MC - 40a	25	5.5	24	11
MC - 50a	35	7.5	32	15
MC - 65a	50	11	47	22
MC - 75a	55	13	52	25
MC - 85a	65	15	62	30
MC - 100a	80	19	75	37
MC - 130a	93	22	90	45
MC - 150a	120	30	110	55
MC - 185a	150	37	150	75
MC - 225a	180	45	180	90
MC - 265a	200	50	200	102
MC - 330a	220	55	220	110
MC - 400a	300	75	300	150
MC - 500a	350	90	350	176
MC - 630a	400	110	400	200
MC - 800a	530	160	630	300

- Utilization Category : AC-1

TYPE	ELECTRICAL RATINGS
	~ 440 V (A)
MC - 6a	25
MC - 9a	25
MC - 12a	25
MC - 18a	32
MC - 9b	25
MC - 12b	25
MC - 18b	40
MC - 22b	40
MC - 32a	50
MC - 40a	60
MC - 50a	70
MC - 65a	100
MC - 75a	110
MC - 85a	135
MC - 100a	160
MC - 130a	160
MC - 150a	210
MC - 185a	230
MC - 225a	275
MC - 265a	300
MC - 330a	350
MC - 400a	450
MC - 500a	580
MC - 630a	660
MC - 800a	900

< To be continued >



TYPE APPROVAL CERTIFICATE

Certificate No. : TJN00429-EL033 **Initial Approval** : 13th July, 2011.

Product : Thermal Overload Relay

Manufacturer : LSIS Co., Ltd. - Cheongju Plant
1 Songjeong-dong, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do
361-720, Korea

Product Description : Type : MT-12/2H/3H/3K/3D, MT-32/2H/3H/3K/3D, MT-63/2H/3H/3K/3D,
MT-95/2H/3H/3K/3D, MT-150/2H/3H/3K/3D, MT-225/2H/3H/3K/3D,
MT-400/2H/3H/3K/3D, MT-800/2H/3H/3K/3D

“ See Appendix 1 ”

Approval Condition : “ See Appendix 1 ”

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Appendix 1

Product Description and/or Approval Condition

Certificate No : TJN00429-EL033

Date of Issue : 13th July, 2011.

1. Product Description :

Type	Setting range - amperes	For combination with Contactor types
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
MT - 225	Various from 65 ~ 100 to 160 ~ 240	MC-185a, 225a
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 (Class 20)

2. Approval Condition :

- 1) This approval is granted on the basis of the test report nos. R410-1291/92/93/94/95/96/97/98 issued by PT&T and 2113421.50~53/2108402.50/2123631.50~56 issued by KEMA Quality B.V.
- 2) The product or packing is to be marked with manufacturer's name and type designation on a suitable position.
- 3) Individual Product Certification is not required.

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