

Certificate of Compliance

Certificate Number:
E108780

Report Reference:
E108780-20250722

Issue Date:
2025-07-28

Issued to:

**LS ELECTRIC Co Ltd
95 Baekbong-ro Heungdeok-gu
Cheongju-si Chungcheongbuk-do 28439 Republic of Korea**

This certificate confirms that representative samples of:

**FLAME ARREST-PROTECTED COMPONENTS FOR USE IN
REFRIGERATION AND AIR-CONDITIONING EQUIPMENT
EMPLOYING A2L REFRIGERANTS**

See Addendum Page for Product Designation(s).

Have been evaluated by UL in accordance with the component requirements in the Standard(s) indicated on this Certificate. UL Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for installation in complete equipment submitted for investigation to UL LLC.

See Addendum Page for Standards

Additional Information:

See UL Product iQ® at <https://iq.ulprospector.com> for additional information.

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Recognized Component Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance provides authorization to apply the UL Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Recognized Component Mark on the product.



A handwritten signature in black ink, appearing to read 'David Piecuch'.

David Piecuch
UL Mark Certification Program Owner

CERTIFICATE OF COMPLIANCE

Certificate number E108780
Report reference E108780-20250722
Date 2025-07-28

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

USR, CNR – FLAME ARREST-PROTECTED COMPONENTS FOR USE IN REFRIGERATION AND AIR-CONDITIONING EQUIPMENT EMPLOYING A2L REFRIGERANTS

Magnetic Motor Controllers, Contactors : MC-22a/4, MC-32a/4 & MC-40a/4, MC-50a/4 & MC-65a/4 & MC-75a/4 & MC-85a/4, as described in E108780 Volume 1 Section 4.

Magnetic Motor Controllers, Contactors : MC-185a & MC-225a, MC-100a/4 & MC-130a/4 & MC-150a/4 & MC-185a/4 & MC-225a/4, MC-265a & MC-330a & MC-400a & MC-265a/4 & MC-330a/4 & MC-400a/4, MC-500a & MC-630a & MC-800a & MC-500a/4 & MC-630a/4 & MC-800a/4 as described in E108780 Volume 1 Section 5.

Magnetic Motor Controllers, Contactors : MC-32a & MC-40a, as described in E108780 Volume 1 Section 10.

Magnetic Motor Controllers, Contactors : MC-50a & MC-65a, as described in E108780 Volume 1 Section 11.

Magnetic Motor Controllers, Contactors : MC-75a & MC-85a & MC-100a, as described in E108780 Volume 1 Section 12.

Magnetic Motor Controllers, Contactors : MC-6a & MC-9a & MC-12a & MC-18a, as described in E108780 Volume 1 Section 14.

Magnetic Motor Controllers, Contactors : MC-9b & MC-12b & MC-18b & MC-22b, as described in E108780 Volume 1 Section 15.

Magnetic Motor Controllers, Contactors : MC-130a & MC-150a, as described in E108780 Volume 1 Section 16.



Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact UL Solutions Customer Service at <https://www.ul.com/contact-us>.



EU Declaration of Conformity

MANUFACTURER : LS ELECTRIC CO.,Ltd.

Cheong Ju Plant #1, 95, Beakbong-ro, Heung deok-gu, 28439,
Cheongju-si, Chungcheongbuk-do, Republic of KOREA

Declaration under our own responsibility that the product(s):

Product : Magnetic Contactors, Thermal Overload Relays.

Models :

Magnetic contactor

3P : 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-600a, MC-630a, MC-800a, MC-1260a, MC-1400a, MC-1700a,
MC-2100a, MC-2650a

4P : MC-6a/4, MC-9a/4, MC-12a/4, MC-18a/4, MC-22a/4, MC-32a/4, MC-40a/4, MC-50a/4, MC-65a/4,
MC-75a/4, MC-85a/4, MC-100a/4, MC-130a/4, MC-150a/4, MC-185a/4, MC-225a/4, MC-265a/4,
MC-330a/4, MC-400a/4, MC-500a/4, MC-630a/4, MC-800a/4.

Thermal overload relay

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

Are in conformity with the provisions of the following (E)EU Directive(s)
when Installed in accordance with the installation instructions contained
in the product documentation :

2014/35/EU Low-Voltage Directive

2014/30/EU EMC Directive

2011/65/EU + 2015/863/EU – RoHS Directive

And that standards and/or technical specifications referenced below
Have been applied :

**Low-voltage Switchgear and Controlgear,
General rules**

Electromechanical contactors and motor-starters

Electromechanical control circuit devices

Technical Documents

EN 60947-1:2007/A2:2014

EN IEC 60947-4-1:2019/AC:2020-05

EN 60947-5-1:2017/AC:2020-05

EN IEC 63000:2018

Done at Cheong-Ju. 18. June. 2025.

Signatures :


J. S. Park

Technical Director


J. Y. Lee

Technical Manager

LS  **ELECTRIC**



中国国家强制性产品认证证书

证书编号: 2024120304119288

认证委托人名称及地址

LS ELECTRIC Co., Ltd.

127, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do, Republic of Korea

生产者名称及地址

LS ELECTRIC Co., Ltd.

127, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do, Republic of Korea

生产企业名称及地址

SEONG WOO Electric Co. Ltd

(Songjeong-dong), 27, Wolmyeong-ro 75beon-gil, Heungdeok-gu Cheongju-si,
Chungcheongbuk-do, Korea

产品名称和系列、型号、规格

接触器

MC-50a/4、MC-65a/4、MC-75a/4、MC-85a/4 详细规格见附件

产品标准和技术要求

GB/T 14048.4-2020

上述产品符合《强制性产品认证实施规则 低压电器 低压元器件》
(CNCA-C03-02: 2024)的要求, 特发此证。

发证日期: 2024年10月18日 有效期至: 2029年07月29日

证书信息和有效性可扫描下方二维码或登录发证机构网站查验,
也可在认监委网站(www.cnca.gov.cn)查询。

本证书为变更证书, 证书首次颁发日期: 2024年07月30日



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方圆标志认证集团
China Quality Mark Certification Group





中国国家强制性产品认证证书

证书编号：2024120304119288

证书附页：第 1 页共 2 页

1、型号规格：

Uimp:8kV; Ui:1000V; Ith:80A(MC-50a/4), 100A(MC-65a/4), 110A(MC-75a/4), 135A(MC-85a/4); MC-50a/4; AC-1:Ue/Ie:200V~240V/380V~440V/500V~550V/690V/80A;
AC-3:Ue/Ie:200V~240V/55A, 380V~440V/50A,500V~550V/43A,690V/28A;
MC-65a/4: AC-1:Ue/Ie:200V~240V/380V~440V/500V~550V/690V/100A; AC-3:Ue/Ie:200V~240V/380V~440V/65A, 500V~550V/60A, 690V/35A;
MC-75a/4: AC-1:Ue/Ie:200V~240V/380V~440V/500V~550V/690V/110A; AC-3:Ue/Ie:200V~240V/380V~440V/75A, 500V~550V/64A, 690V/42A;
MC-85a/4: AC-1:Ue/Ie:200V~240V/380V~440V/500V~550V/690V/135A; AC-3:Ue/Ie:200V~240V/380V~440V/85A, 500V~550V/75A, 690V/45A;
Us:AC24V, 42V, 48V, 100V, 110V, 220V, 240V, 380V, 400V, 415V, 440V, 500V, 550V, 50Hz; AC1 20V, 240V
50/60Hz; DC12V, 20V, 24V, 48V, 60V, 80V, 100V, 110V, 125V, 200V, 220V, 250V; 3P、4P; IP20
;
配用的辅助触头: 1NO1NC; Ith:16A; Uimp:6kV, Ui:600V; AC-15:120V/6A, 240V/3A, 380V/1.9A, 480V/1.5A, 500V/1.4A, 600V/1.2A; AC-125V/1.1A, 250V/0.55A, 400V/0.31A, 500V/0.27A, 600V/0.2A。 DC-13:

2、型号的解释：

本页为证书附页，应与证书主页同时使用。



中国国家强制性产品认证证书

证书编号: 2024120304119288

证书附页: 第 2 页共 2 页



本页为证书附页，应与证书主页同时使用。



中国国家强制性产品认证证书

CERTIFICATE FOR CHINA COMPULSORY PRODUCT CERTIFICATION

Certificate No.: 2024120304119288

THE APPLICANT

LS ELECTRIC Co., Ltd.

127, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do, Republic of Korea

THE MANUFACTURER

LS ELECTRIC Co., Ltd.

127, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do, Republic of Korea

THE FACTORY

SEONG WOO Electric Co.Ltd

(Songjeong-dong), 27, Wolmyeong-ro75beon-gil, Heungdeok-gu Cheongju-si,
Chungcheongbuk-do, Korea

PRODUCT AND MODEL(S)

Contactor

MC-50a/4、MC-65a/4、MC-75a/4、MC-85a/4 Please refer to the attachment for detailed specifications

STANDARDS AND TECHNICAL REQUIREMENTS

THIS IS TO CERTIFY THAT THE ABOVE-MENTIONED PRODUCT COMPLIES WITH THE REQUIREMENTS OF
IMPLEMENTATION RULE FOR CHINA COMPULSORY CERTIFICATION (CNCA-C03-02: 2024).

DATE OF ISSUE: 2024-10-18

DATE OF VALIDITY: 2029-07-29

THE INFORMATION AND VALIDITY OF THIS CERTIFICATE MAY BE VERIFIED BY THE QR CODE AND
THE WEBSITE OF ISSUER AND CNCA (WWW.CNCA.GOV.CN).

THIS CERTIFICATE HAS BEEN UP-ISSUED. THE DATE OF INITIAL ISSUE IS 2024-07-30.



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方圆标志认证集团
China Quality Mark Certification Group





中国国家强制性产品认证证书

CERTIFICATE FOR CHINA COMPULSORY PRODUCT CERTIFICATION

Certificate No.: 2024120304119288

ANNEX: Page 1 of 1

GB/T 14048.4-2020

THIS ANNEX SHALL BE USED TOGETHER WITH THE CERTIFICATE.





中国国家强制性产品认证证书

证书编号: 2024120304119895

认证委托人名称及地址

LS ELECTRIC Co., Ltd.

127, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do, Republic of Korea

生产者名称及地址

LS ELECTRIC Co., Ltd.

127, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do, Republic of Korea

生产企业名称及地址

LS ELECTRIC Co., Ltd. Cheongju 1 Plant

95, Baekbong-ro, HeungDeok-Gu, CheongJu-Si, ChungCheongBuk-Do, Korea

产品名称和系列、型号、规格

接触器

MC-130a、MC-150a; 详细规格见附录

产品标准和技术要求

GB/T 14048.4-2020

上述产品符合《强制性产品认证实施规则 低压电器 低压元器件》
(CNCA-C03-02: 2024)的要求, 特发此证。

发证日期: 2024年08月29日 有效期至: 2029年08月28日

证书信息和有效性可扫描下方二维码或登录发证机构网站查验,
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方圆标志认证集团
China Quality Mark Certification Group





中国国家强制性产品认证证书

证书编号: 2024120304119895

证书附页: 第 1 页共 1 页

MC-130a、MC-150a; Uimp: 8kV; Ui: 1000V; Ith: 200A (MC-130a), 250A (MC-150a); MC-130a: AC-1: Ue/Ie: 440V/200A; AC-3: Ue/Ie: 200V/240V/130A, 380V/440V/130A, 500V/550V/90A, 690V/60A; AC-4: Ue/Ie: 200V/240V/93A, 380V/440V/90A; MC-150a: AC-1: Ue/Ie: 440V/250A; AC-3: Ue/Ie: 200V/240V/150A, 380V/440V/150A, 500V/550V/100A, 690V/60A; AC-4: Ue/Ie: 200V/240V/120A, 380V/440V/110A; Iq=10kA; IP20; Us: AC24V, 48V, 100V~240V, 110V~120V, 110V, 220V, 220V~240V, 300V, 380V~440V, 400V, 500V (50/60Hz), AC500V (50/60Hz, 电子式)、AC24V~48V (50/60Hz, 电子式)、AC300V~400V (50/60Hz, 电子式), DC24V, 48V, 110V, 220V, 100V~220V; 极数: 3P; 配用的辅助触头: UA-1 X2, 2NO2NC; Ith: 16A; AC-15: Ue/Ie: 120V/6A, 240V/3A, 380V/1.9A, 480V/1.5A, 500V/1.4A, 600V/1.2A; DC-13: Ue/Ie: 125V/1.1A, 250V/0.55A, 400V/0.31A, 500V/0.27A, 600V/0.2

本页为证书附页, 应与证书主页同时使用。



中国国家强制性产品认证证书

CERTIFICATE FOR CHINA COMPULSORY PRODUCT CERTIFICATION

Certificate No.: 2024120304119895

THE APPLICANT

LS ELECTRIC Co., Ltd.

127, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do, Republic of Korea

THE MANUFACTURER

LS ELECTRIC Co., Ltd.

127, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do, Republic of Korea

THE FACTORY

LS ELECTRIC Co., Ltd. Cheongju 1 Plant

95, Baekbong-ro, HeungDeok-Gu, CheongJu-Si, ChungCheongBuk-Do, Korea

PRODUCT AND MODEL(S)

Contactors

MC-130a、MC-150a; Electrical parameters are specified in attachmen

STANDARDS AND TECHNICAL REQUIREMENTS

GB/T 14048.4-2020

THIS IS TO CERTIFY THAT THE ABOVE-MENTIONED PRODUCT COMPLIES WITH THE REQUIREMENTS OF
IMPLEMENTATION RULE FOR CHINA COMPULSORY CERTIFICATION (CNCA-C03-02: 2024).

DATE OF ISSUE: 2024-08-29

DATE OF VALIDITY: 2029-08-28

THE INFORMATION AND VALIDITY OF THIS CERTIFICATE MAY BE VERIFIED BY THE QR CODE AND
THE WEBSITE OF ISSUER AND CNCA (WWW.CNCA.GOV.CN).



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China Quality Mark Certification Group



IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME
CB TEST CERTIFICATE

Product

Magnetic Contactor

Name and address of the applicant

LS ELECTRIC CO LTD
127 LS-RO DONGAN-GU ANYANG-SI, GYEONGGI-DO, 14119
REPUBLIC OF KOREA

Name and address of the manufacturer

LS ELECTRIC CO LTD
127 LS-RO DONGAN-GU ANYANG-SI, GYEONGGI-DO, 14119
REPUBLIC OF KOREA

Name and address of the factory

LS ELECTRIC CO LTD
95 BAEKBONG-RO HEUNGDEOK-GU CHEONGJU-SI,
CHUNGHEONGBUK-DO, 28439
REPUBLIC OF KOREA

Note: When more than one factory, please report on page 2
☐ Additional Information on page 2

Ratings and principal characteristics

Utilization Category – AC1,
Rated Operational Voltage(Vac):240/440/550/690/1000Vac,
MC-265a/4:400 A, MC-330a/4:500 A, MC-400a/4:520 A

☒ Additional Information on page 2

Trademark (if any)



Customer's Testing Facility (CTF) Stage used

CTF Stage 2

Model / Type Ref.

MC-265a/4, MC-330a/4, MC-400a/4

Additional information (if necessary may also be reported on page 2)

☐ Additional Information on page 2

A sample of the product was tested and found to be in conformity with

IEC 60947-4-1:2018, IEC 60947-1:2007, IEC 60947-1:2007/AMD1:2010,
IEC 60947-1:2007/AMD2:2014

As shown in the Test Report Ref. No. which forms part of this Certificate

NC10517-D57-CB-1 issued on 2021-06-28

This CB Test Certificate is issued by the National Certification Body



- ☐ UL (US), 333 Pfingsten Rd IL 60062, Northbrook, USA
- ☒ UL (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK
- ☐ UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN
- ☐ UL (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA

For full legal entity names see www.ul.com/ncbnames

Date: 2021-08-06

Signature:

Jan-Erik Storgaard

Additional Ratings:

MC-265a/4				
Rated Operational Voltage(Vac)	AC1	AC2	AC3	AC4
200~240	400	-	265	-
380~440	400	-	265	-
500~550	400	-	-	-
690	400	-	-	-
1000	400	-	-	-

MC-330a/4				
Rated Operational Voltage(Vac)	AC1	AC2	AC3	AC4
200~240	500	-	330	-
380~440	500	-	330	-
500~550	500	-	-	-
690	500	-	-	-
1000	500	-	-	-

MC-400a/4				
Rated Operational Voltage(Vac)	AC1	AC2	AC3	AC4
200~240	520	-	400	-
380~440	520	-	400	-
500~550	520	-	-	-
690	520	-	-	-
1000	520	-	-	-

Additional information (if necessary)


- ☐ UL (US), 333 Pfingsten Rd IL 60062, Northbrook, USA
- ☒ UL (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK
- ☐ UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN
- ☐ UL (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA

For full legal entity names see www.ul.com/ncbnames

Date: 2021-08-06

Signature: 
Jan-Erik Storgaard

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME
CB TEST CERTIFICATE

Product

Magnetic Contactor

Name and address of the applicant

LS ELECTRIC CO LTD
127 LS-RO DONGAN-GU ANYANG-SI, Gyeonggi-do, 14119
REPUBLIC OF KOREA

Name and address of the manufacturer

LS ELECTRIC CO LTD
127 LS-RO DONGAN-GU ANYANG-SI, GYEONGGI-DO, 14119
REPUBLIC OF KOREA

Name and address of the factory

LS ELECTRIC CO LTD
95 BAEKBONG-RO HEUNGDEOK-GU CHEONGJU-SI,
CHUNGCHONGBUK-DO, 28439
REPUBLIC OF KOREA

Note: When more than one factory, please report on page 2

☐ Additional Information on page 2

Ratings and principal characteristics

AC-1:200~240/380~440/500~550/690/1000V , MC-500a/4: 700A,MC-630a/4:900A,MC-800a/4:1050A,

☒ Additional Information on page 2

Trademark (if any)



Customer's Testing Facility (CTF) Stage used

CTF Stage 2

Model / Type Ref.

MC-630a/4, MC-800a/4, MC-500a/4

Additional information (if necessary may also be reported on page 2)

☐ Additional Information on page 2

A sample of the product was tested and found to be in conformity with

IEC 60947-4-1:2018, IEC 60947-1:2007, IEC 60947-1:2007/AMD1:2010, IEC 60947-1:2007/AMD2:2014

As shown in the Test Report Ref. No. which forms part of this Certificate

NC10517-D39-CB-1 issued on 2021-06-28

This CB Test Certificate is issued by the National Certification Body



- ☐ UL (US), 333 Pfingsten Rd IL 60062, Northbrook, USA
- ☒ UL (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK
- ☐ UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN
- ☐ UL (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA

For full legal entity names see www.ul.com/ncbnames

Date: 2021-08-06

Signature:

Jan-Erik Storgaard

Additional Ratings:

Rated currents for the utilization categories:

MC-500a/4				
Rated Operational Voltage(Vac)	AC1	AC2	AC3	AC4
200~240	700	-	500	-
380~440	700	-	500	-
500~550	700	-	-	-
690	700	-	-	-
1000	700	-	-	-

MC-630a/4				
Rated Operational Voltage(Vac)	AC1	AC2	AC3	AC4
200~240	900	-	630	-
380~440	900	-	630	-
500~550	900	-	-	-
690	900	-	-	-
1000	900	-	-	-

MC-800a/4				
Rated Operational Voltage(Vac)	AC1	AC2	AC3	AC4
200~240	1050	-	800	-
380~440	1050	-	800	-
500~550	1050	-	-	-
690	1050	-	-	-
1000	1050	-	-	-

Additional information (if necessary)


- ☐ UL (US), 333 Pfingsten Rd IL 60062, Northbrook, USA
- ☒ UL (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK
- ☐ UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN
- ☐ UL (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA

For full legal entity names see www.ul.com/ncbnames

Date: 2021-08-06

Signature:


Jan-Erik Storgaard