

Top 100
Global
Innovator
for 10 years

EMSOL
MODULAR LV MDB
Low Voltage Main Distribution Switchboard



LSELECTRIC



Modular LV MDB Switchboard

LS ELECTRIC modular type LV MDB is designed and produced to construct high quality power system. With high performance and high quality, it can be applied to various industrial fields.

With our modular LV MDB, your electric system can be optimized. You can easily customize, install and maintain our product which is compliant with IEC 61439-1&2 standard.

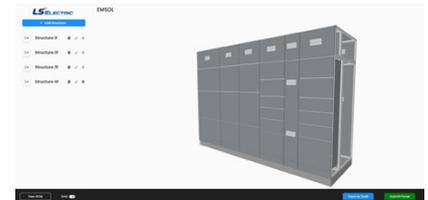
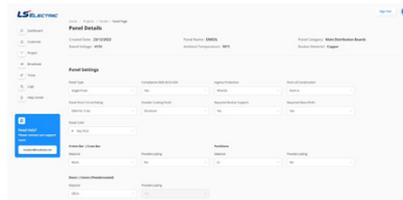


Stability and reliability

- Fully typed tested according to IEC 61439-1&2 standard
- Partitioning up to Form 4b Type 7
- Degree of protection : IP43/54/55
- DEKRA/ASTA certificate of verification tests

Customization

- Modular structure, excellent assemblability
- Easy configuration



Busbar system

- Applying copper / aluminium busbar

Adopted LS ACB & MCCB

- For accurate operation and optimization of the solution, LS components are implemented to establish protection and communication network.
- LS low voltage devices are comply with the applicable standards.



Applications

- Manufacturing industry
- Railway and airport
- Water and wastewater
- Commercial and residential complexes
- Hospitals, hotels, resort and shopping malls



Specification of MDB

Type	EMSOL LV MDB					
Busbar system	Copper busbar			Aluminum busbar		
Rated current (*at 50°C ambient)	4000 A*	2500 A*	1600 A*	4000 A	2500 A	1600 A
Rated insulation voltage (Ui)	1000 V			750 V		
Rated operating voltage (Ue)	415 V					
Rated impulse withstand voltage (Uimp)	12 / 8 kV			8 kV		
Frequency	50 / 60 Hz					
Rated Short-time withstand current (Icw)						
Main horizontal busbar	65 kA / 3 sec 65 kA / 1 sec	50 kA / 3 sec 50 kA / 1 sec	50 kA / 3 sec 50 kA / 1 sec	65 kA / 1 sec 65 kA / 1 sec	65 kA / 1 sec 65 kA / 1 sec	50 kA / 1 sec 50 kA / 1 sec
Vertical distribution busbar						
Rated peak withstand current (Ipk)	143 kA peak	105 kA peak	105 kA peak	143 kA peak	143 kA peak	105 kA peak
Installation	Indoor in dry conditions or in moderate humidity levels and factors of air pollution ("Normal operating conditions" as in IEC 61439-2)					
Form of internal separation	Form 4b Type 7					
Degree of protection according to IEC 60529	IP 43 / 54 / 55			IP 43		
Test certificates	DEKRA			ASTA		
Standard	IEC 61439-2:2020, Ed 3.0			IEC 61439-2:2011, Ed 2.0		

Configuration

ACB / MCCB Panel								MCCB Distribution Panel								
Busbar system	Current (A)	Typical size (mm)						Current (A)	Typical size (mm)							
Copper	~ 1600	600	300	660	960	100	2220	~ 100	210	300	300	600	960	100	2220	
		660														
		720														
	~ 2500	840						~ 250	300		420		1200			
~ 4000	960	420		1200			~ 400	300								
Aluminum	~ 1600	600	420	720	960	100	2100	~ 100	360	300	420	540	960	100	2220	
		720														
		840														
	~ 2500	720						~ 250	360		540					
		840						~ 400	420			540				
~ 4000	840	540		1320			~ 630	420			600					
	960															

Modular LV MDB

Features

User-friendly design

- 120° opening hinged doors allow enough space for operation and maintenance
- Switchboard can be installed regardless position of side walls with LHS (Left Hand Side), RHS(Right Hand Side) reversible hinged doors



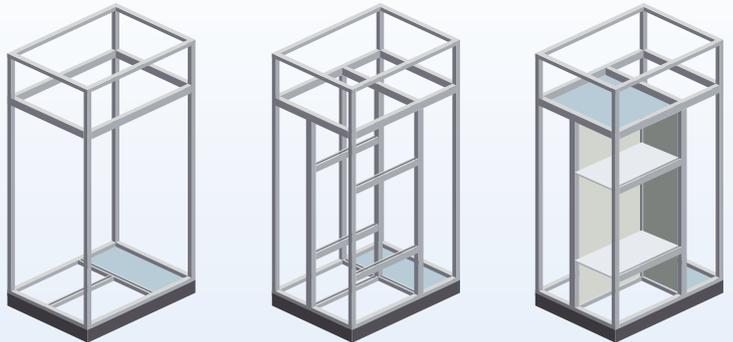
LS low voltage devices inside

- Perfect coordination is designed with LS circuit breakers to isolate only the source of abnormal power
- Long and reliable life expectancy, and tested short-circuit withstand capability
- Various applicable accessories
- **Components**
 - ACB : Up to 6300 A (Tested up to 4000 A)
 - MCCB : Up to 1600 A
- Components specification on p.6



Modular type

- Modular type enclosure system leads in empowering on time delivery, lead time reduction and simplification
- Client can select and compose devices for each panel to maximize efficiency



2 tier busbar system

- 2 tier busbar has 57% higher current carrying capacity than 1 tier busbar, and that leads to lower busbar temperature during operation
- Depth of panel can be dramatically reduced compare to 1 tier busbar in ratings 2500A and above systems



Continuity of service

- Form 4b structure
 - Prevent fault from spreading by metal & insulated partitions and maintain availability of a power supply
 - Provides safer, easier, and faster maintenance

Calculated and extra structure

- Based on LS components, minimum clearance and creepage distances were calculated. Upon the distances, each modules were designed to have extra space to prevent insulation from breaking down caused by abnormal power incoming.

Low Voltage Main Distribution Switchboard

Specification of devices

ACB	Rated current frame (AF)	Rated current (A)	Rated voltage (V)	Type	Withstand current Icw (at 415V/1s)	Breaking capacity Icu (at 415V, kA)	Rated service breaking capacity (% x Icu)
Metasol (Susol)	6300	4000, 3200, 2500, 2000	Up to 690	AS-G	100	120	100
	5000	4000, 3200, 2500, 2000		AS-F	85	100	
	4000	4000, 3200, 2500, 2000, 1600, 1250, 1000, 800, 630, 400, 200		AS-E	85	85	
	2000	2000, 1600, 1250, 1000, 800, 630, 400, 200		AS(AH)-D	65(65)	70(85)	
	1600	1600, 1250, 1000, 800, 630, 400, 200		AN-D	50	65	
Susol Compact	1600	1600, 1250, 1000, 800		AN / AH-C	42 / 50	50 / 60	
	1000	1000, 800		AR-C	10*	150	
	800	800, 630, 400		AN / AH / AR-C	42 / 50 / 10*	50 / 60 / 150	

MCCB	Rated current frame (AF)	Rated current (A)	Rated voltage (V)	Type	Breaking capacity Icu (at 415V, kA)	Rated service breaking capacity (% x Icu)
Susol	1600	1600	Up to 690	TS-N / H	50 / 70	100(H: 75)
	1250	1250		TS-N / H	50 / 70	100(H: 75)
	800	800		TS-N / H / L	65 / 100 / 150	100
	630	630, 500		TS-N / H / L	65 / 85 / 150	100
	400	400, 300		TS-N / H / L	65 / 85 / 150	100
	250	250, 200, 160, 125		TS-N / H / L	50 / 85 / 150	100
	160	160, 125		TS-N / H / L	50 / 85 / 150	100
	160	160, 125, 100		TD-N / H / L	50 / 85 / 150	100
	100	100, 80, 63, 50, 40		TS-N / H / L	50 / 85 / 150	100
	100	100, 80, 63, 50, 40, 32, 25, 20, 16		TD-N / H / L	50 / 85 / 150	100
Metasol	800	800, 700	ABN / S / L	37 / 65 / 85	100(L: 75)	
	400	400, 350, 300, 250	ABN / S / H / L	37 / 50 / 65 / 85	100(L: 75)	
	250	250, 225, 200, 175, 150, 125, 100	ABN / S / H / L	26 / 37 / 50 / 60	100	
	125	125, 100, 75, 60, 50, 40, 30, 20, 15	ABS / H / L	37 / 50 / 60	100	

Specification of enclosure

Description	Material	Thickness
Frame Bar	CRCA with PC / Galvanized steel	2 mm
Cross Bar	CRCA with PC / Galvanized steel	2 mm
Hinged Door	CRCA with PC	1.6 mm / 2 mm
Bolted Cover	CRCA with PC	1.6 mm / 2 mm
Gland Plate	CRCA with PC / Aluminium	3 mm / Customer requirement
Side Separation Plate	CRCA with PC / Galvanized steel	1.2 mm
Feeder Separation Plate	CRCA with PC / Galvanized steel	1.2 mm
Coupling Sheet	CRCA with PC / Galvanized steel	1.2 mm
Busbar Chamber Separation Sheet	CRCA with PC / Galvanized steel	1.2 mm
Top Cover / Bottom Cover	CRCA with PC / Galvanized steel	1.6 mm
Mounting Plate	CRCA with PC / Galvanized steel	2 mm
Cable Ladder	CRCA with Zinc blue passivation plating	2 mm
Plinth	CRCA / ISMC with PC	3 mm CRCA / 75 ISMC / 100 ISMC
Busbar Support Fixing Channel	CRCA with Zinc blue passivation plating	2 mm
Busbar Insulators	DMC / SMC / NYLON 66	
Busbar Insulator Support	CRCA with PC	2 mm / 3 mm
With Modular Accessories	CRCA with Zinc blue passivation plating	



Metasol ACB



Susol MCCB



Metasol MCCB

Test certificate

Test certificate

DEKRA

TEST CERTIFICATE

Issued to: LS ELECTRIC CO. LTD
Cheongju Plant 2
Wangmyong-ro #201 68, Heungdeok-gu, Cheongju-si
Chungcheongbuk-do
South Korea

For the product: Low-voltage switchgear and controlgear assembly

Trade name: LS ELECTRIC - EMSCOL

Type/Model: HSDA Modular Panel Board

Rated voltage: U_N 1600 A (at 50 °C ambient), U_L 415 V, U_L 1000 V, max. U_{ph} 12 kV
50 Hz, max. 60 Hz

Rated current: I_N 10 kA - 3 phase busbar and incoming units,
I_N 10 kA - 1 phase busbar and incoming units,
I_N 10 kA at 415 V (processing unit and outgoing units)
For more details see annex

Manufactured by: LS ELECTRIC CO. LTD
1882 Heungdeok, SDA 6F, Heungdeok City
Yuseong-gu, Daejeon
Korea, 30534

Subject: Design verification

Requirements: IEC 61439-2:2008, IEC 619
Clauses 17.2, 18.3, 18.6, 9.5, 10.4, 10.6, 10.9, 10.10, 10.11, 10.12, 8, 101

Remarks:

This Test Certificate is granted on account of an examination by DEKRA, the results of which are laid down in report no. 400263-01-INC, dated 28 October 2022.

The examination has been carried out on one single specimen of the product, submitted by the manufacturer. The Abbreviation does not include an assessment of the manufacturer's production. Conformity of the production with the specimen tested by DEKRA is not the responsibility of DEKRA.

Annex: 28 October 2022 Number: 400263-01
DEKRA Certification B.V.
H.L. Schmeits
Certification Manager

© Integral publication of this certificate and adjoining reports is allowed

DEKRA Certification B.V. - Weisler 190, 4825 MR Arnhem, P.O. Box 1016, 6802 ED Arnhem, The Netherlands
T +31 86 60 8000 F +31 86 60 8100 www.dekra-certification.com Company registration 50093266

<1600A>

TEST CERTIFICATE

Issued to: LS ELECTRIC CO. LTD
Cheongju Plant 2
Wangmyong-ro #201 68, Heungdeok-gu, Cheongju-si
Chungcheongbuk-do
South Korea

For the product: Low-voltage switchgear and controlgear assembly

Trade name: LS ELECTRIC - EMSCOL

Type/Model: Z500A Modular Panel Board

Rated voltage: U_N 2500 A (at 50 °C ambient), U_L 415 V, U_L 1000 V, max. U_{ph} 12 kV
50 Hz, max. 60 Hz

Rated current: I_N 20 kA - 3 phase busbar and incoming units,
I_N 10 kA - 1 phase busbar and incoming units,
I_N 10 kA at 415 V (processing unit and outgoing units)
For more details see annex

Manufactured by: LS ELECTRIC CO. LTD
1882 Heungdeok, SDA 6F, Heungdeok City
Yuseong-gu, Daejeon
Korea, 30534

Subject: Design verification

Requirements: IEC 61439-2:2008, IEC 619
Clauses 17.2, 18.3, 18.6, 9.5, 10.4, 10.6, 10.7, 10.9, 10.10, 10.11, 10.12, 8, 101

Remarks:

This Test Certificate is granted on account of an examination by DEKRA, the results of which are laid down in report no. 400263-02-INC, dated 28 October 2022.

The examination has been carried out on one single specimen of the product, submitted by the manufacturer. The Abbreviation does not include an assessment of the manufacturer's production. Conformity of the production with the specimen tested by DEKRA is not the responsibility of DEKRA.

Annex: 28 October 2022 Number: 400263-02
DEKRA Certification B.V.
H.L. Schmeits
Certification Manager

© Integral publication of this certificate and adjoining reports is allowed

DEKRA Certification B.V. - Weisler 190, 4825 MR Arnhem, P.O. Box 1016, 6802 ED Arnhem, The Netherlands
T +31 86 60 8000 F +31 86 60 8100 www.dekra-certification.com Company registration 50093266

<2500A>

TEST CERTIFICATE

Issued to: LS ELECTRIC CO. LTD
Cheongju Plant 2
Wangmyong-ro #201 68, Heungdeok-gu, Cheongju-si
Chungcheongbuk-do
South Korea

For the product: Low-voltage switchgear and controlgear assembly

Trade name: LS ELECTRIC - EMSCOL

Type/Model: 4000A Modular Panel Board

Rated voltage: U_N 4000 A (at normal ambient), U_L 3800 A (at 50 °C ambient)
U_L 415 V, U_L 1000 V, max. U_{ph} 12 kV, 50 Hz, max. 60 Hz

Rated current: I_N 10 kA - 3 phase busbar and incoming units,
I_N 10 kA - 1 phase busbar and incoming units,
I_N 10 kA at 415 V (processing unit and outgoing units)
For more details see annex

Manufactured by: LS ELECTRIC CO. LTD
1882 Heungdeok, SDA 6F, Heungdeok City
Yuseong-gu, Daejeon
Korea, 30534

Subject: Design verification

Requirements: IEC 61439-2:2008, IEC 619
Clauses 17.2, 18.3, 18.6, 9.5, 10.4, 10.6, 10.9, 10.10, 10.11, 10.12, 8, 101

Remarks:

This Test Certificate is granted on account of an examination by DEKRA, the results of which are laid down in report no. 400263-03-INC, dated 28 October 2022.

The examination has been carried out on one single specimen of the product, submitted by the manufacturer. The Abbreviation does not include an assessment of the manufacturer's production. Conformity of the production with the specimen tested by DEKRA is not the responsibility of DEKRA.

Annex: 28 October 2022 Number: 400263-03
DEKRA Certification B.V.
H.L. Schmeits
Certification Manager

© Integral publication of this certificate and adjoining reports is allowed

DEKRA Certification B.V. - Weisler 190, 4825 MR Arnhem, P.O. Box 1016, 6802 ED Arnhem, The Netherlands
T +31 86 60 8000 F +31 86 60 8100 www.dekra-certification.com Company registration 50093266

<4000A>

ASTA

ASTA TYPE CERTIFICATE
VERIFICATION OF TEST

Project No: G104216708LC5001 Certificate No: ASTA-TYPE-000210

Applicant: LS ELECTRIC Co., Ltd., 68, Wangmyong-ro, 201 Beon-gil, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do, Korea, 30539

Apparatus: 1000 A, 415 V / 750 V / 8 kV (3-phase / 3 / U_{ph}), 50/60 Hz, IP 43, Form 4b, Power Switchgear and Controlgear Assembly (PSC-Assembly) incorporating three-phase & neutral horizontal and vertical busbar systems, a protective conductor, and 2000 A incoming ACB and four outgoing horizontal units comprising: ACB 1250 A, MCBs 200 A and 100 A.

The PSC-Assembly is suitable for indoor use and has a metallic enclosure.

Manufactured By: LS ELECTRIC Co., Ltd., 68, Wangmyong-ro, 201 Beon-gil, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do, Korea, 30539

Test Report No: R420-1381

Designation: MOD - 1000A MODULAR LV MCB

The apparatus which is representative of the designation, supplied drawings and photographs has been evaluated in accordance with:

IEC 61439-2: Edition 2.0 2011-08 & BS EN 61439-2: 2011

Verification with reference to the tests listed in Annex A of IEC 61439-2: Edition 2.0 2011-08

1. Strength of material and parts	6. Dielectric properties
2. Degree of protection of enclosures	8B. Temperature rise tests
3. Clearance	11. Short-circuit withstand strength
4. Thermal stability	12. Electromagnetic compatibility (EMC)
5. Protection against electric shock and integrity of protective conductors	13. Mechanical operation
6/7/8. No verification by testing required	

The results are shown in the record of tests attached hereto. The values obtained and the general performance is considered to comply with the above standards and to justify the ratings assigned by the manufacturer as stated on the rating page(s) of this Certificate. This Certificate applies only to the apparatus tested. Responsibility for conformity of any apparatus being the same or other designations rests with the Manufacturer.

Certification Engineer
UKAS
4th November 2020
Date

<1600A>

ASTA TYPE CERTIFICATE
VERIFICATION OF TEST

Project No: G104216708LC5002 Certificate No: ASTA-TYPE-000376

Applicant: LS ELECTRIC Co., Ltd., 68, Wangmyong-ro, 201 Beon-gil, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do, Korea, 30539

Apparatus: 2500 A, 415 V / 750 V / 8 kV (3-phase / 3 / U_{ph}), 50/60 Hz, IP 43, Form 4b, Power Switchgear and Controlgear Assembly (PSC-Assembly) incorporating three-phase & neutral horizontal and vertical busbar systems, a protective conductor, and 2000 A incoming ACB and four outgoing horizontal units comprising: ACB 1250 A, 430 A, 200 A and 100 A.

The PSC-Assembly is suitable for indoor use and has a metallic enclosure.

Manufactured By: LS ELECTRIC Co., Ltd., 68, Wangmyong-ro, 201 Beon-gil, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do, Korea, 30539

Test Report No: R420-1382

Designation: MOD - 2500A MODULAR LV MCB

The apparatus which is representative of the designation, supplied drawings and photographs has been evaluated in accordance with:

IEC 61439-2: Edition 2.0 2011-08 & BS EN 61439-2: 2011

Verification with reference to the tests listed in Annex A of IEC 61439-2: Edition 2.0 2011-08

1. Strength of material and parts	6. Dielectric properties
2. Degree of protection of enclosures	8B. Temperature rise tests
3. Clearance	11. Short-circuit withstand strength
4. Thermal stability	12. Electromagnetic compatibility (EMC)
5. Protection against electric shock and integrity of protective conductors	13. Mechanical operation
6/7/8. No verification by testing required	

The results are shown in the record of tests attached hereto. The values obtained and the general performance is considered to comply with the above standards and to justify the ratings assigned by the manufacturer as stated on the rating page(s) of this Certificate. This Certificate applies only to the apparatus tested. Responsibility for conformity of any apparatus being the same or other designations rests with the Manufacturer.

Certification Engineer
UKAS
4th November 2020
Date

<2500A>

ASTA TYPE CERTIFICATE
VERIFICATION OF TEST

Project No: G104216708LC5003 Certificate No: ASTA-TYPE-000377

Applicant: LS ELECTRIC Co., Ltd., 68, Wangmyong-ro, 201 Beon-gil, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do, Korea, 30539

Apparatus: 4000 A, 415 V / 750 V / 8 kV (3-phase / 3 / U_{ph}), 50/60 Hz, IP 43, Form 4b (forced ventilation), Power Switchgear and Controlgear Assembly (PSC-Assembly) incorporating three-phase & neutral horizontal and vertical busbar systems, protective conductor, one 4000 A incoming ACB and four outgoing horizontal units comprising: ACB 2000 A and MCBs 1000 A, 400 A, 200 A and 100 A.

The PSC-Assembly is suitable for indoor use and has a metallic enclosure.

Manufactured By: LS ELECTRIC Co., Ltd., 68, Wangmyong-ro, 201 Beon-gil, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do, Korea, 30539

Test Report No: R420-1383

Designation: MOD - 4000A MODULAR LV MCB

The apparatus which is representative of the designation, supplied drawings and photographs has been evaluated in accordance with:

IEC 61439-2: Edition 2.0 2011-08 & BS EN 61439-2: 2011

Verification with reference to the tests listed in Annex A of IEC 61439-2: Edition 2.0 2011-08

1. Strength of material and parts	6. Dielectric properties
2. Degree of protection of enclosures	8B. Temperature rise tests
3. Clearance	11. Short-circuit withstand strength
4. Thermal stability	12. Electromagnetic compatibility (EMC)
5. Protection against electric shock and integrity of protective conductors	13. Mechanical operation
6/7/8. No verification by testing required	

The results are shown in the record of tests attached hereto. The values obtained and the general performance is considered to comply with the above standards and to justify the ratings assigned by the manufacturer as stated on the rating page(s) of this Certificate. This Certificate applies only to the apparatus tested. Responsibility for conformity of any apparatus being the same or other designations rests with the Manufacturer.

Certification Engineer
UKAS
2nd November 2020
Date

<4000A>

Partnership

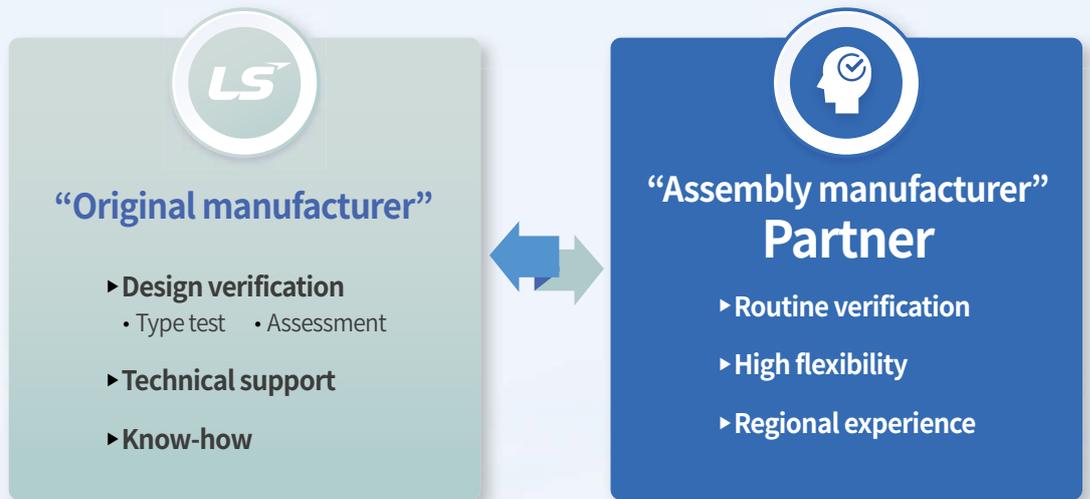
Partnership

Becoming an advanced global partner means increasing the partner's value through following works in your place.

1st partnership

If you become a “Assembly manufacturer”, LS will provide consulting services and technical assistance according to the stage of business.

1st



Support & services for 1st partnership

Technical documentation

- Design drawings
- Assembly guide / manual
- Operation & maintenance

Production training & support

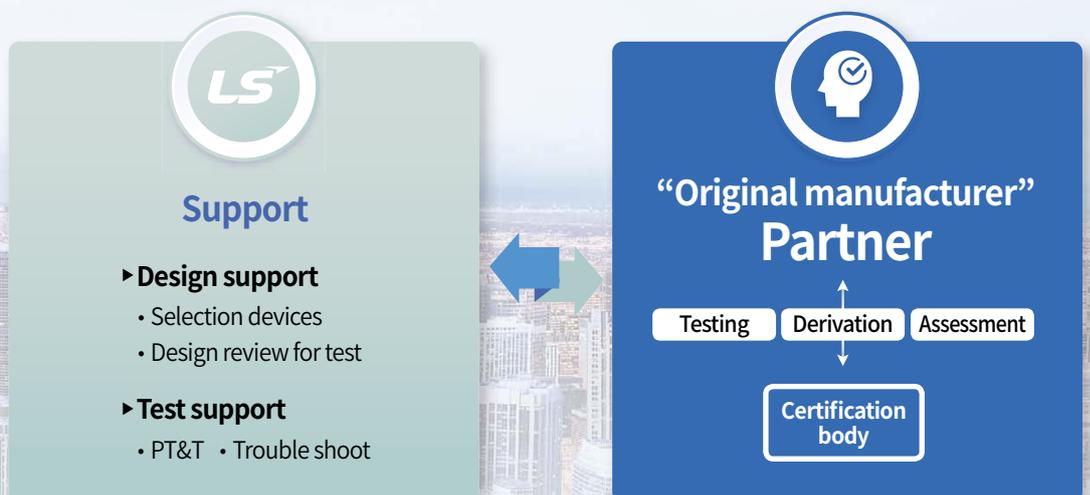
- Technical training
- Assembly training
- Inspection training

Test certificates

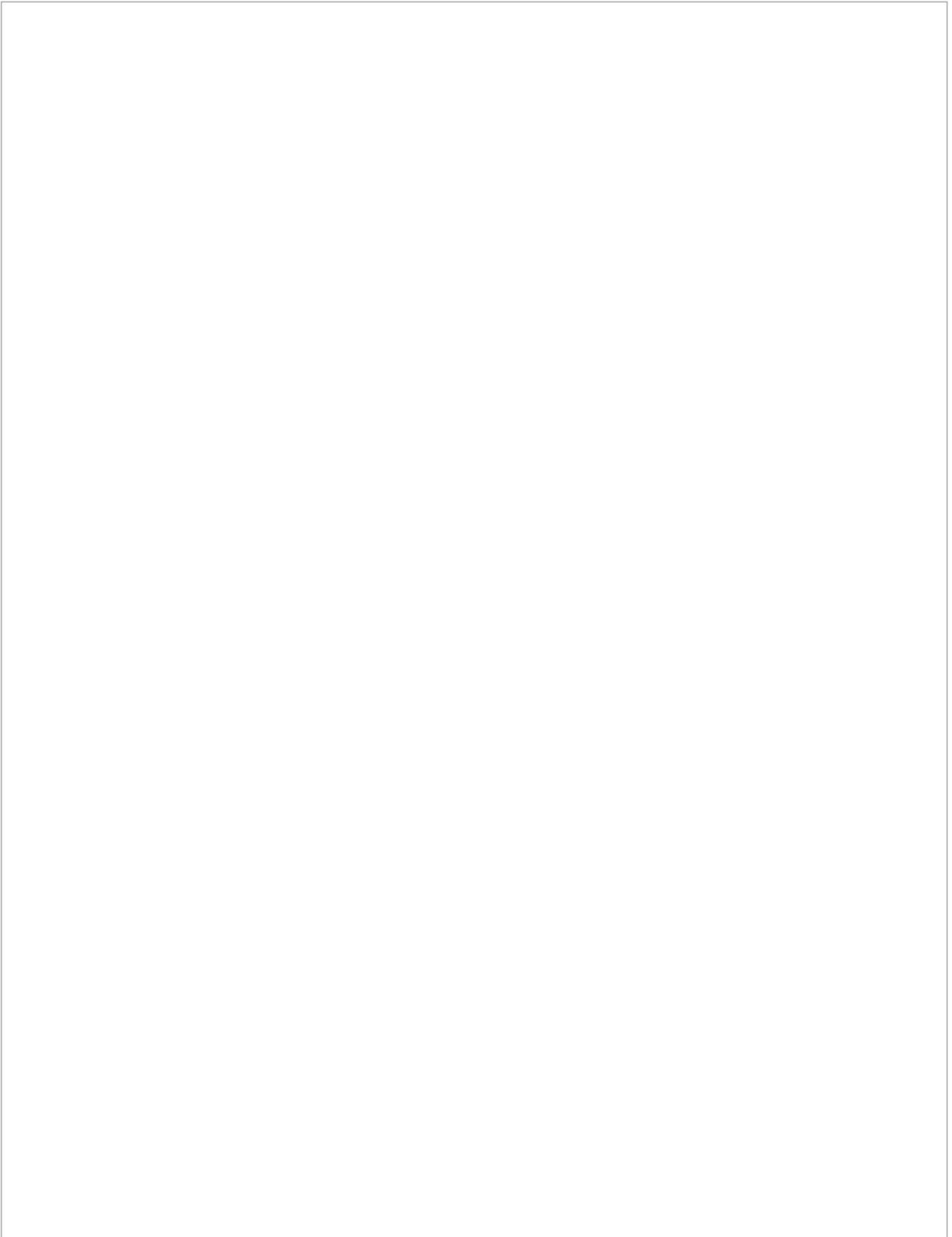
2nd partnership

If you want to become a “Original manufacturer”, LS will also support you.

2nd



Memo

A large, empty rectangular box with a thin black border, occupying most of the page below the header. It is intended for the user to write the content of their memo.



Safety Instructions

- For your safety, please read user's manual thoroughly before operating.
- Contact the nearest authorized service facility for examination, repair, or adjustment.
- Please contact qualified service technician when you need maintenance. Do not disassemble or repair by yourself!
- Any maintenance and inspection shall be performed by the personnel having expertise concerned.



- According to The WEEE Directive, please do not discard the device with your household waste.



www.ls-electric.com

■ **LS ELECTRIC Middle East FZE (Dubai, U.A.E.)**

Tel: 971-4-886-5360 E-Mail: middleeast@ls-electric.com

■ **Headquaters**

127, LS-ro(hogye-dong) Dongan-gu, Anyang-si, Gyeonggi-Do, 14119, Korea

■ **Seoul Office**

LS Yongsan Tower, 92, Hangang-daero, Yongsan-gu, Seoul, 04386, Korea
Tel: 82-2-2034-4916, 4684, 4429

■ **Overseas Subsidiaries**

- **LS ELECTRIC Japan Co., Ltd. (Tokyo, Japan)**
Tel: 81-3-6268-8241 E-Mail: japan@ls-electric.com
- **LS ELECTRIC (Dalian) Co., Ltd. (Dalian, China)**
Tel: 86-411-8730-5872 E-Mail: china.dalian@lselectric.com.cn
- **LS ELECTRIC (Wuxi) Co., Ltd. (Wuxi, China)**
Tel: 86-510-6851-6666 E-Mail: china.wuxi@lselectric.com.cn
- **LS ELECTRIC Vietnam Co., Ltd. (Hanoi, Vietnam)**
Tel: 84-222-2221-110 E-Mail: vietnam@ls-electric.com
- **LS ELECTRIC America Inc. (Chicago, USA)**
Tel: 1-800-891-2941 E-Mail: sales.us@lselectricamerica.com
- **LS ELECTRIC Europe B.V. (Hoofddorp, Netherlands)**
Tel: 31-20-654-1424 E-Mail: europartner@ls-electric.com
- **LS ENERGY SOLUTIONS LLC (Charlotte, USA)**
Tel: 1-704-587-4051 E-Mail: cmfeldman@ls-es.com
- **LS ELECTRIC Türkiye Co., Ltd. (Istanbul, Türkiye)**
Tel: 90-212-806-1252 E-Mail: turkiye@ls-electric.com
- **LS ELECTRIC IBERIA S.L.U. (Madrid, Spain)**
Tel: 34-910-28-02-74 E-Mail: iberia@ls-electric.com

■ **Overseas Branches**

- **LS ELECTRIC India Office (India)**
Tel: 91-80-6142-9108 E-Mail: Info_india@ls-electric.com
- **LS ELECTRIC Tokyo Office (Japan)**
Tel: 81-3-6268-8241 E-Mail: tokyo@ls-electric.com
- **LS ELECTRIC Beijing Office (China)**
Tel: 86-10-5095-1631 E-Mail: china@lselectric.com.cn
- **LS ELECTRIC Shanghai Office (China)**
Tel: 86-21-5237-9977 E-Mail: china@lselectric.com.cn
- **LS ELECTRIC Guangzhou Office (China)**
Tel: 86-20-3818-2883 E-Mail: china@lselectric.com.cn
- **LS ELECTRIC Chengdu Office (China)**
Tel: 86-28-8670-3201 E-Mail: china@lselectric.com.cn
- **LS ELECTRIC Qingdao Office (China)**
Tel: 86-532-8501-2065 E-Mail: china@lselectric.com.cn
- **LS ELECTRIC Nanjing Office (China)**
Tel: 86-25-8467-0005 E-Mail: china@lselectric.com.cn
- **LS ELECTRIC Bangkok Office (Thailand)**
Tel: 66-90-950-9683 E-Mail: thailand@ls-electric.com
- **LS ELECTRIC Jakarta Office (Indonesia)**
Tel: 62-21-2933-7614 E-Mail: indonesia@ls-electric.com
- **LS ELECTRIC Moscow Office (Russia)**
Tel: 7-499-682-6130 E-Mail: info@lselectric-ru.com
- **LS ELECTRIC America Western Office (Irvine, USA)**
Tel: 1-949-333-3140 E-Mail: america@ls-electric.com
- **LS ELECTRIC Singapore Office (Singapore)**
Tel: 65-6958-8162 E-Mail: singapore@ls-electric.com
- **LS ELECTRIC Italy Office (Italy)**
Tel: 39-030-8081-833 E-Mail: italia@ls-electric.com