



Electric power & Automation solutions

History of LS...



LSIS is now the industrial and energy area of the LS Group

Power Grid Business

The Power Grid Business Group promotes convergence solutions that combines extra-high voltage electric power facilities and systems with IT technology. Major products include gas insulated switchgear (GIS), power transformers and switchgear to transmit, transform and distribute electricity generated from power plants. We also focus on monitoring & diagnosis systems for electrical equipment and high voltage direct current (HVDC) systems.

Power Distribution Business

The Power Distribution Business Group provides solutions necessary for supplying power to industrial, commercial, and residential facilities, helping people to use electricity safely and conveniently. These solutions have allowed us to maintain the largest market share in the domestic power equipment market and to evolve into the leading company in the power business. Main products are Vacuum Circuit Breakers (VCB), Air Circuit Breakers (ACB), and Molded Case Circuit Breakers (MCCB) which protect electric power system ranging from low to medium voltage.

Automation & Drive Business

The Automation & Drive Business Group provides a wide range of solutions for factory automation. Major products include Programmable Logic Controller (PLC), AC Drive (LVD-Low Voltage Drive / MVD-Medium Voltage Drive), Human Machine Interface (HMI), and Servo. We are also engaging in automation systems and E/S (Energy Saving) businesses.

Convergence Business

The Convergence Business Group was newly organized in 2014 in order to manage new businesses of the company. It has four business divisions: Smart Grid Business Division, EV Solution Division, Photovoltaic System Solution Division and Public Business Division. Major products include various solutions for Smart Grid, powertrain solutions for EVs, Photovoltaic System Solutions ranging from modules to operation and maintenance services and cutting-edge railway signaling system essential for safe and efficient railway operations. businesses.



CLOSER THAN YOU IMAGINE

Where there is light to brighten the planet and energy to move the world, from homes and offices to factories and airports, LSIS is there.

More ubiquitous than you think, LSIS always stands by you.

MORE ADVANCED THAN YOU IMAGINE

LSIS has the power to move industries. Reading global trends one step ahead of the rest, LSIS is ensuring it increases each customer's competitiveness, while guiding their business into a bright new future.

LSIS is leading advanced infrastructure beyond anything you imagine.

FFUTURING SMART ENERGY

Opening the Future of Smart Energy



We are leading the way towards a new future through innovations that exceed our customers' expectations.



We are creating an efficient convenient future through ICT convergence and the integration of sophisticated technologies.



We are creating an abundant future by delivering safe clean energy.

MORE INNOVATIVE THAN YOU IMAGINE

We are creating a green business environment to free ourselves from environmental pollution and energy shortage. It may not be easy, but if you look at it closely the world best eco-friendly green technology is right beside us.

Our cutting edge technology contributes to an eco-friendly green world.

Product Overview

Electric Power Solutions

Metasol MS

Contactors, Overload Relays & Starters

A contactor is used to switch current to an electric motor or other high-power load. Large electric motors can be protected from overcurrent damage through the use of Overload Relays.



Features

Easy connection

- Din Rail connection without any special tools
- Direct connection with a surge unit

Simple wiring

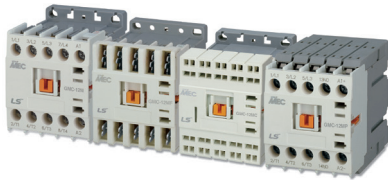
- Mounting unit, Adapter
- Reversing wire set

Easy Maintenance

- 4-terminal type: Coil terminals on both sides
- Module type of Screw terminal
- Interlock unit with built-in auxiliary contacts (2NC built-in)

- Rated current: 6 ~ 2100A with 10 Frame size
- Up to 500kW at 440V in category AC-3
- $U_{imp} = 8kV$, $U_i = 1,000V$
- Combination with Manual motor starters
- Various accessories
- UL, cUL, IEC and most other international standards

Meta-MEC mini-MS



Features

- Rating: 6 ~ 12A
- Compact size (1 Frame size)
- Various connections
 - Screw clamps, Fast-on, Cage clamps, Solder pins
- Accessories
 - Auxiliaries: Side & Front mount
 - Surge absorber unit
 - Electronic timer
- International standard
 - UL, cUL, IEC and most other international standards

EMPR



Features

- Reduction of panel space
- EMC tested according to EN
- Adjustable trip time (trip class 5, 10, 15, 20, 30)
- Inverse time or definite time characteristics are available
- Various functions for protection against
 - Overload, phase failure, unbalance, reverse phase
- Wide adjustable range
- Manual reset as standard
- UL, cUL, IEC certified

MMS



Features

- Rated current: 0.1 ~ 100A with 3 Frame size
- Up to 45kW at 400V in category AC-3
- $U_{imp} = 6kV$, $U_i = 690V$
- Combination with Susol/Metasol MC
- Various accessories
- UL, cUL, IEC and most other international standards

MCB



Features

- Protection: Short circuit & Overload (AC & DC)
- Rated current: 1~63A
- 1, 2, 3, 4 Poles
- Multi-function terminal: Screw, Lug & Ring tongue
- Rated breaking capacity: 6~10kA at 120/277/240/480V
- Rail mounting
- UL489 & 489DC, UL486E(Lug), UL1077, IEC 60898, IEC 60947-2, IEC 61008, IEC 61009

Electric Power Solutions

Susol UL MCCB

The new series Susol with thermal-magnetic or electronic circuit breakers are designed to protect low voltage electrical systems from damage caused by overloads and short circuits.



Features

For Power Distribution

- High breaking capacity
- Powerful engineering tools
- Optimum coordination techniques
- Reverse feeding

For Protection of Motors and Their Control Devices

- Optimal overload protection
- Guaranteed Short Circuit Current Ratings

For Extensive Applications

- Wide range of optimized auxiliaries and accessories
- Rated current: Up to 1200A 2, 3pole(UTE & UTS Series)
 - AF: 100, 150, 250, 400, 600, 800, 1200AF
 - Ampere Range: 15 ~ 1200A
- High breaking capacity: 100kA at 480VAC/50kA at 600V
- Various Trip Unit: ATU, FMU, FTU, MCS, MCP
- Variable Accessories
 - Electrical auxiliaries[AX, AL, UVT, SHT]
 - Extended handle, Flange handle, Locking devices
- UL (489 & 489DC and 508), IEC standards

Susol UL ACB

Susol ACB provides you with total solutions with an advanced trip relay for measurement, diagnosis, analysis, and communication as well as protective functions for absolute protective coordination and electric power monitoring system.



Features

Up to 5000A, Susol ACB provides 3 frames.

It makes each frame, smaller and more compact.

Designed to optimize panel space.

- High breaking capacity: 85/100/130kA (at 508Vac)
- 3 ampere frame sizes: 1600/3200/5000AF
- N phase current conducting capacity: 100%
- Multi-functional digital trip relays
 - N/A/P/S type OCR
 - L/S/I/G Protection
- Various accessories (53 types)
- Compact size & high breaking capacity
- Complete full line-up
- UL Listed / ANSI Certified

Susol VCB

Vacuum Circuit Breaker, VCB are installed in the medium voltage distribution lines to protect the life and load of equipment. In case of failures, such as over current, short circuit and ground fault current, the VCB works by interrupting the circuit through the inner Vacuum Interrupter, which is activated by a signal from a remote relay.



Features

Main circuit structure with high reliability.

- Maximizing the durability and reliability of the main circuit contactors (Stego Tulip contactor).
- Strong structure for the temperature rise (Natural cooling system).

Convenience of switchgear configuration and a variety of accessories.

- Rated voltage: 4.76/15/27kV
- Rated current: 1200, 2000, 3000A
- Rated short-circuit breaking current: Up to 50kA
- CB Compartment available (Box type cradle)
- Various accessories(18 types)
- Compact size & high breaking capacity
- Complete full line-up
- IEEE Std C37.09, IEEE Std C37.20.2, ANSI C37.54, ANSI C37.55

Automation Solutions

C100

Micro Drive

Cost effective, compact drive with V/F and sensorless vector control. Advanced features including power loss ride through, PID control, Safe Off Relay and Built-in potentiometer. Dual rated for CT and VT.



Features

- 1 phase 230V / 0.2~3HP (0.1~2.2kW)
- 3 phase 230V / 0.2~10HP (0.1~7.5kW)
- 3 phase 480V / 0.5~10HP (0.4~7.5kW)
- Built-in EMC Filter (Option for 480V)
- Built-in Potentiometer
- Built-in Safety Torque Off
- Side by Side Installation
- Enhanced Size Competitiveness

S100

Standard Industrial Drive

Compact industrial drive with V/F and sensorless vector control. Advanced features including power loss ride through, PID control, Safe Off Relay, various communication options. Dual rated for CT and VT. NEMA4X model also available!



Features

- [Standard Enclosure]
- 1 phase 230V / 0.5~3HP (0.4~2.2kW)
- 3 phase 230V / 0.5~20HP (0.4~15kW)
- 3 phase 480V / 0.5~100HP (0.4~75kW)
- [NEMA4X Enclosure]
- 3 phase 230V / 0.5~20HP (0.4~15kW)
- 3 phase 480V / 0.5~30HP (0.4~22kW)
- 1 phase UL Rating for 230V & 480V
- Built-in EMC Filter (Option for 480V)
- Built-in Safety Torque Off
- Side by Side Installation
- Heatsink out the Back (Flange Option)
- PM Motor Control
- Compliance with Field Networks
 - Ethernet IP, Modbus TCP/IP, Profinet, EtherCAT, Profibus-DP, CANopen

H100

HVAC / Fan & Pump Drive

Combining air and water into a single VFD. The H100 satisfies two markets with one drive. Some features included are damper control, broken pipe, fire mode, and a payback counter. LCD keypad HOA standard on all H100s.



Features

- 3 phase 230V / 1~25HP (0.75~18.5kW)
- 3 phase 480V / 1~125HP (0.75~90kW)
- * Scheduled to increase 480V HP up to 700HP by end of year '17.
- 1 phase UL Rating for 230V & 480V
- Built-in EMC Filter (Option for 480V)
- BACnet, Modbus-RTU, Metasys N2 Communication Protocol as standard
- UL Plenum Rated
- Side by Side Installation
- Heatsink out the Back (Flange Option)
- LCD Keypad designed for HVAC / Fan & Pump Applications
- Specialized function for HVAC
- Fire Mode
- Scheduling function (Real Time Clock)
- Energy Saving Display (Payback Counter)
- LonWorks Communication Protocol available as an option

Automation Solutions

H100 Bypass

The Bypass Solution for HVAC
Optimize your HVAC applications with the user friendly H100 Bypass.
This new Bypass from LSIS offers security by avoiding downtime and energy savings using the advanced H100 series VFD.



Features

- 3 phase 230V / 7.5~25HP (5.5~18.5kW)**
- 3 phase 480V / 7.5~75HP (5.5~55kW)**
- 3 Contactor Bypass
- HAND/OFF/AUTO Bypass Switch
- Built-in DC Reactor (Built-in AC Reactor also available up to 40HP)
- UL Plenum Rated
- NEMA1 Enclosure
- BACnet, Modbus-RTU, Metasys N2 Communication Protocol as standard
- Compact Size
- Easy Wiring and Installation
- Auto Bypass Function
- Motor OL Trip Detection
- Easy Maintenance
- KEB, Kinetic Energy Buffering
- Fire Mode
- Built-in Five Relay Outputs
- Real Time Clock

iS7

Advanced Standard Drive
The iS7 is the most powerful and advanced drive in the line up. Motor control types include V/F, sensorless vector, and vector control. Three option module slots with PLC, synchronous, communication options. Used in oil & gas pump jacks, crane, wind & winder applications.



Features

- [Standard Enclosure]**
- 3 Phase 230V / 1~100HP (0.75~75kW)**
- 3 Phase 480V / 1~600HP (0.75~375kW)**
- [NEMA12 Enclosure]**
- 3 Phase 230V / 1~30HP (0.75~22kW)**
- 3 Phase 480V / 1~30HP (0.75~22kW)**
- 1 phase UL Rating for 230V & 480V
- Built-in EMC Filter (230V & 480V: ~30HP)
- Built-in DC Reactor (230V: ~30HP, 480V: ~350HP)
- Heatsink out the Back (Flange Option)
- Standard Modbus-RTU communication with various communication available as option
 - Ethernet IP, Modbus TCP, Profibus DP, DeviceNet, CANopen, LonWorks
- User Friendly Option Cards
 - PLC card, Extension I/O 1&2, Synchronous, Position Control, Encoder, 24V Encoder, Binary, Auxiliary Power

HMI

Human Machine Interface (HMI) is Hardware and software for monitoring and operating the automation facilities, using graphics designed by users.



Features

- Windows CE
- High performance CPU
- 24Bit TFT color LCD
- Various graphic library, clipart, animation GIF supported
- Sound output Function: wav, mp3 format
- Human detection sensor
- SD, USB Host 3ch, USB Device 1ch
- Built-in EtherNet
- PLC Ladder monitoring supported (XGK/XBM/XBC PLC)
- VNC (Virtual Network Connection), Web server function for Remote control and monitoring
- 4", 5.7", 7", 8.4", 10.4", 12.1", 15" Type

Global Network



WWW.LSIS.COM/USA

■ LSIS USA Inc. Chicago Head office

2000 Millbrook Drive Lincolnshire, IL 60069
Tel: 847-941-8240~59 sales.us@lsis.com Fax: 847-941-8259

■ Headquarters

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



Specifications in this catalog are subject to change without notice due to continuous product development and improvement.

■ Global Network

Overseas Subsidiaries

- **LSIS USA Inc. >> Chicago, America**
2000 Millbrook Drive, Lincolnshire, Chicago, IL 60069, United States of America
Tel: 1-847-941-8240 / Fax: 1-847-941-8259 / E-mail: seungheonc@lsis.com
- **LSIS (Middle East) FZE >> Dubai, U.A.E**
LOB 19-205, JAFZA View Tower, Jebel Ali Free Zone, Dubai, United Arab Emirates
Tel: 971-4-886-5360 / Fax: 971-4-886-5361 / E-mail: hschob@lsis.com
- **LSIS Europe B.V. >> Schiphol-Rijk, Netherlands**
1st Floor, Tupoleviaan 48, 1119NZ, Schiphol-Rijk, The Netherlands
Tel: 31-20-654-1420 / Fax: 31-20-654-1429 / E-mail: junshickp@lsis.com
- **LSIS Japan Co.,Ltd >> Tokyo, Japan**
Tokyo Club Building 13F, 2-6, Kasumigaseki 3-chome, Chiyoda-ku, Tokyo, 100-0013
Tel: 81-3-6268-8241 / Fax: 81-3-6268-8240 / E-mail: jschuna@lsis.com
- **LSIS Dalian Co.,Ltd. >> Dalian, China**
No. 15, Liaohexi 3-Road, Economic and Technical Development Zone, Dalian 116600, China
Tel: 86-411-8273-7777 / Fax: 86-411-8730-7560 / E-mail: tangyh@lsis.com
- **LSIS Wuxi Co.,Ltd. >> WUXI, China**
102-A, National High & New Tech Industrial Development Area, Wuxi, Jiangsu, 214028, P.R.China
Tel: 86-510-8534-6666 / Fax: 86-510-522-4078 / E-mail: wangzy@lsis.com
- **LS-VINA Industrial Systems Co.,Ltd. >> Hanoi, Vietnam**
Nguyen Khe, Dong Anh, Hanoi, Vietnam
Tel: 84-4-6275-8055 / Fax: 84-4-3882-0220 / E-mail: sjbaik@lsis.com

Overseas Branches

- **LSIS Co.,Ltd. Rep.Office, Vietnam**
Gema Dept Tower 18F, 6 Le Thanh Ton, District 1, HCM, Vietnam
Tel: 84-8-3823-7890 / E-mail: hwymj@lsis.com
- **LSIS Moscow Office, Russia**
123610, Krasnopresnenskaya, nab, 12, building 1, office No.1005, Moscow, Russia
Tel: 7-495-258-1466, 1467 / Fax: 7-495-258-1466, 1467 / E-mail: jdpark1@lsis.com