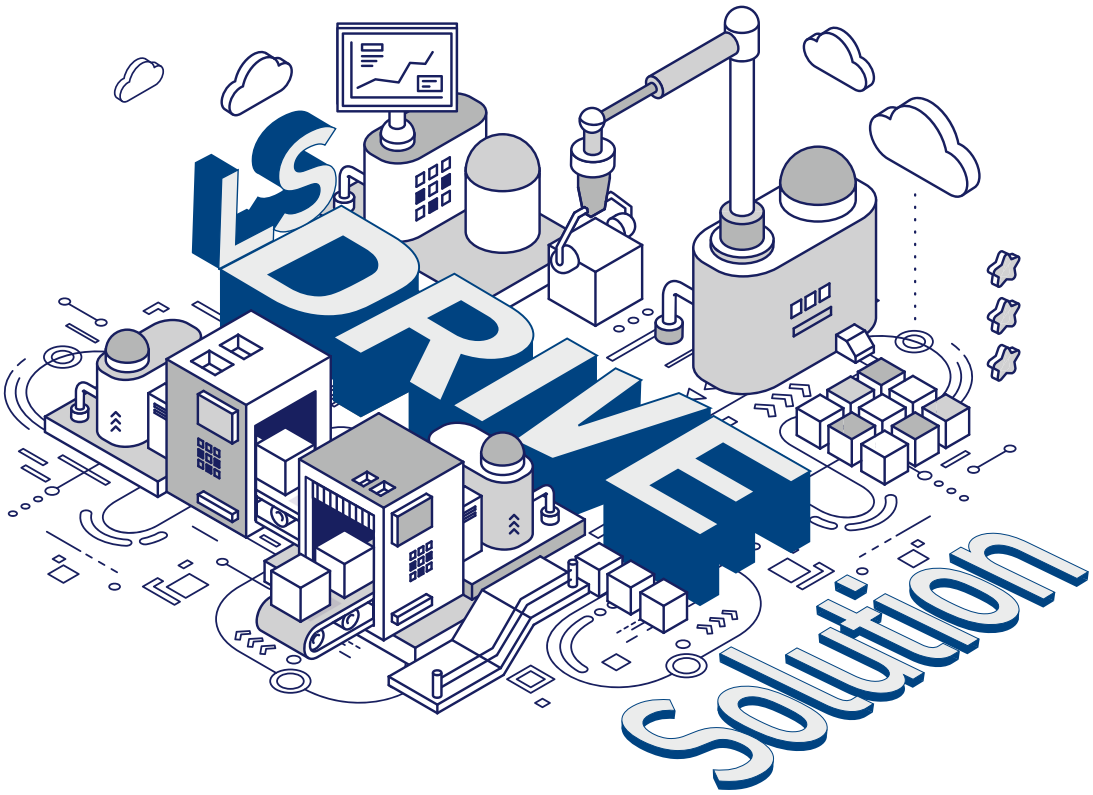
Beyond X™ Drive Solution

Low-Voltage Drive

LS ELECTRIC

Contents



Leading Innovation, Creating Tomorrow

Realization of innovative energy saving with LS Drive Solution.

40%

Supplies 40% of the drives distributed in Korea

LS Drive is a control component that realizes energy efficiency as it controls the rotation speed of motors with changing power frequency.

LS ELECTRIC a leading company that first introduced a universal drive in Korea, has both obtained a lot of certificates on high-efficiency drives and produces more than 40% of the drives supplied in Korea.

LS offers an optimal solution for high efficiency and energy saving solution in various industries with the iG5A, the best-selling(3 mil.) general purpose product; the iS7, the representing LS standard line-up; the S100/H100/G100/M100, the innovative new 100 series. Additionally, it has a medium-voltage drive that is capable of handling capacity up to 12.5MVA. It is carving out new spaces in the high value-added market such as power generation, shipbuilding, marine, cement, metal and power plant industries. With our solutions, LS was ranked top in KS-QEI (Korean Standard – Quality Excellence Index) in the area of customer satisfaction for 4 years in a row from 2013.

LS is taking a leap from the domestic leader in the drive market to a global leader and expanding the overseas market by developing differentiated products for each country and application and pursuing continuous activities for customer satisfaction.

Fulfilling the ultimate convenience with the optimal automation environment

LS provides our customers with the best solution with a configured automation environment, ranging from various unit machineries to large-scale process control.

Total Solution

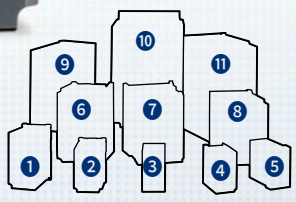
LS offers a total solution instead of merely selling devices. We provide an optimal solution for our customers with our product competitiveness and delivery performance in various areas, including fans, pumps, compressors, conveyors, winding machines and extruders. With LS drives, you will meet with a new experience of increased productivity, improved product quality and reduced maintenance cost.

For Purchase to Maintenance With our Experts

You may receive specialized support from purchase to maintenance with our global LS network organization. Our experts will accompany you for purchase, installation, test (trial) run and maintenance.

LS Global Network

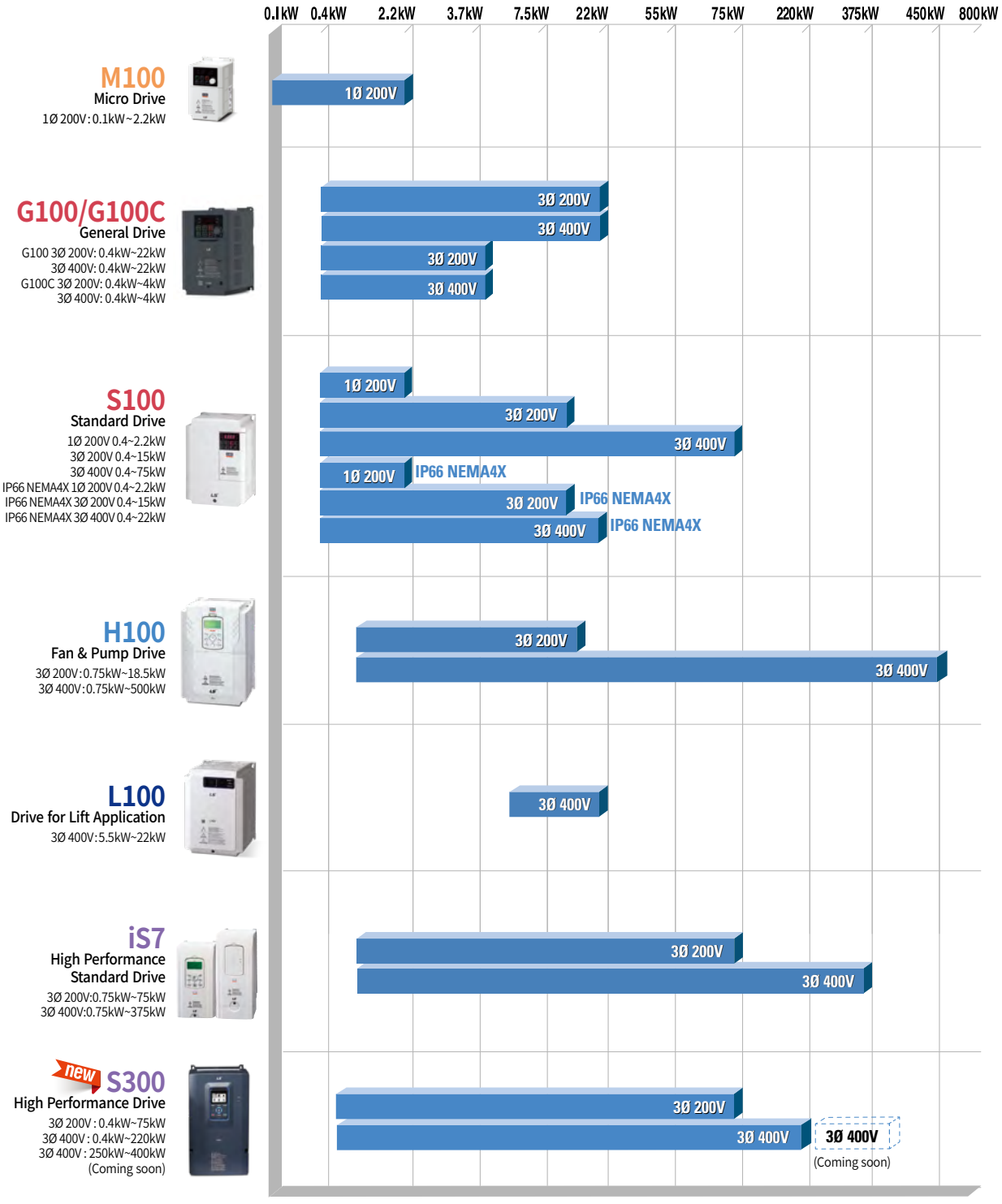
We have 96 special agents, 62 specialty stores, 22 authorized service depots and 4 tech-shops in Korea, offering quick and convenient services for our customers.
We have a corporation all over the world, including China, Japan, Vietnam, U.S.A, U.A.E and the Netherlands, and have 224 partners in 77 countries.



1. General Drive G100
2. Micro Drive M100
3. Standard Drive S100
4. Micro Drive M100
5. General Drive G100
6. Fan/Pump-only Drive H100
7. Standard Drive S100 (NEMA4X IP66)
8. Fan/Pump-only Drive H100
9. High-Performance Standard Drive iS7
10. Standard Drive S100
11. High-Performance Drive S300 new

LS Drive at a Glance

LS Drive is characterized by its user-convenience interface, accurate and flexible control, and various functions. LS Drive Series with varied capacities and excellent function will be an optimal option for your company's competitiveness.



No.1 Drive in Korea! **Why do you choose LS Drive?**

From 1983 to the present, LS ELECTRIC has won the honor of being ranked 1st in the domestic market share, as well as 1st place in Korean quality satisfaction for 4 consecutive years*, and 9 consecutive years** in the Derwent Top 100 global innovators. LS ELECTRIC has established itself as a leading company in Korea by standing shoulder-to-shoulder with global companies with the new technology, experience and expertise gained through continuous investment in R&D.

LS Drive – Main Features

- **Energy Saving**
- **Product Options**
- **Easy to Buy**
- **Convenient Installation & Test Run**
- **Fast & Convenient A/S**

* From 2013 to 2016, LS ELECTRIC was selected as the No. 1 company in the Korean quality satisfaction survey hosted by the ministry of trade, industry and energy and the Korea standards association.

** From 2012 to 2020, LS ELECTRIC was selected as the Derwent Top 100 global innovators by the world's leading academic information service company, 'Clarivate analytics'.

LS Drive Comparison Table



Series Name			M100		G100(C)			S100	
			Standard I/O	Advanced I/O	G100	G100C	G100 (Safety)	Standard I/O	Multiple I/O
Voltage & Capacity			1Ø 100~120V 0.2~0.75kW 1Ø 200~240V 0.1~2.2kW		3Ø 200V 0.4~22kW 3Ø 400V 0.4~22kW	3Ø 200V 0.4~4.0kW 3Ø 400V 0.4~4.0kW	3Ø 200V 0.4~22kW 3Ø 400V 0.4~22kW	1Ø 200~240V 0.4~2.2k 3Ø 200~240V 0.4~15k 3Ø 380~480V 0.4~75k	
Control Mode	V/F		○		○			○	
	Slip Compensation		○		○			○	
	Sensorless Vector		○		○			○	
	Sensored Vector		-		-			-	
Overload Capacity *HD; Heavy Duty *ND; Normal Duty			Rated current 150%/1min		HD: Rated current 150%/1min ND: Rated current 120%/1min			HD: Rated current 150%, ND: Rated current 120%,	
Input Terminal	Multifunction		3 points(P1~P3)	5 points(P1~P5)	5 points(P1~P5)		8 points (P1~P8)	5 points(P1~P5)	7 points(P1~P7)
	Analog(Voltage)		1 point(0~10V)	1 point(0~10V)	1 point(-10~10V)		1 point (-10~10V)	1 point(-10~10V)	1 point(-10~10V)
	Analog(Current)		-	1 point(4~20mA)	1 point(0~20mA)		1 point (0~20mA)	1 point(4~20mA)	1 point(4~20mA)
	Pulse		-	-	-			-	1 point(0~32kHz)
Output Terminal	Relay		1 point(A/B/C)	2 points(A/B/C, A/C)	2 points(A/B/C, A/C)		2 points (A/B/C, A/C)	1 point(A/B/C)	1 point(A/B/C)
	Open Collector		1 point	-	-		-	1 point	1 point
	Analog		1 point(0~10V)	1 point(0~10V)	1 point(0~10V)		2 points (0~10V or 0~20mA)	1 point(0~10V or 0~20mA)	1 point(0~10V or 0~20mA)
Dynamic Braking Unit			Built-in: 1.5~2.2kW		Built-in			Built-in: 0.4~22kW Option: 30~75kW	
EMC Filter			Built-in (C2)		Built-in: 3Ø 400V 0.4~22kW (C3)			Built-In option: 1Ø 200V 0.4~ Built-In option: 3Ø 400V 0.4~ Built-in: 3Ø 400V 5.5~75	
DC Reactor			-		Option: 11~22kW			Built-in: 3Ø 400V 30~75	
Communications (*:Under Development)	Industry Ethernet	EtherNet IP/ Modbus TCP(2Port)	-		○			-	
		PROFINET	-		-			○	
		CC-Link IE	-		-			-	
		RAPIEnet+	-		○			-	
	FieldBus	DeviceNet	-		-			-	
		Profibus-DP	-		○			○(Excluding IP66 7.5kW o	
		CANopen	-		○			○	
		CC-Link	-		-			-	
		Modbus RTU	○(Comm. Type built-in)		○(Built-in)			○(Built-in)	
		Fnet, Rnet	-		-			-	
		LS INV 485	○(Comm. Type built-in)		○(Built-in)			○(Built-in)	
	Motion	EtherCAT	-		-			○	
	BAS (Building Automation)	BACnet/IP	-		-			-	
		BACnet/MSTP	-		-			-	
		Lonworks	-		-			-	
		MetaSys N2	-		-			-	
Other Options			Remote cable(1/2/3/5m), Remote keypad		Remote cable(1/2/3/5m), Remote keypad, Conduit			Extension I/O, Remote cabel(Remote keypad, Flange, C	
Certification			KC, CE, UL, cUL		KC, CE, UL, cUL, Safety			KC, CE, UL, cUL, Safe	
Enclosure Type			IP20		IP20 UL type 1(Conduit option)			0.4~75kW: IP20, UL Type 1(Con 0.4~22kW: IP66(Indoor us	





30~75kW I/O	H100	L100	iS7	S300
kW kW kW	3Ø 200~240V 0.75~18.5kW [ND] 3Ø 380~480V 0.75~90kW [ND] 3Ø 380~500V 110~500kW [ND]	3Ø 380~480V 5.5~22kW	3Ø 200~230V 0.75~75kW 3Ø 380~480V 0.75~375kW	3Ø 200~240V 0.4~75kW 3Ø 380~480V 0.4~220kW
	○	○	○	○
	○	○	○	○
	-	-	○	○
	-	○	○	○
/1min /1min	ND - 0.75~90kW: 120%/1min - 110~500kW: 110%/1min	Rated current 150%/1min	HD: Rated current 150%/1min ND: Rated current 110%/1min	HD: 150%/ 1min ND : 200V: 45kW below 120% 1min, 55kW more 110% 1min 400V: 75kW below 120% 1min, 90kW more 110% 1min
7 points(P1~P7)	7 points(P1~P7)	7points(P1~P7), 4points(FX,RX,BX,RST)	8 points(P1~P8)	8 points(DI1~DI8)
1 point(-10~10V)	1 point(-10~10V)	1points(-10~10V)	1 point(-10~10V)	3 points (V/I)
1 point(4~20mA)	1 point(0~20mA)	1points(0~20mA)	1 point(0~20mA)	
1 point(0~32kHz)	1 point(0~32kHz)	-	-	1 points(0~32kHz)
2 v(A/B/C, A/C)	5 points(A/B/C, A/C, A/C, A/C, A/C)	4points (A/C, A/C, A/C, A/C), Fault contact 2points (A/C, B/C)	2 points(A/B/C, A/C)	2 points(A/B/C, A/C)
1 point	1 point	-	1 point	1 point
2 points(0~10V or 0~20mA)	2 points(0~10V or 0~20mA)	2points(-10V~10V)	2 points(0~10V, 0~20mA)	2 points(0~10V or 0~20mA)
	Built-in: 0.75~30kW Option: 37~500kW	Built-in: 5.5~22kW	Built-in: 0.75~22W Option: 30~375kW	Built-in: 200V 0.4~18.5kW, 400V 0.4~37kW External : 200V 22~75kW, 400V 45~220kW
2.2kW (C2) 4.0kW (C3) kW (C3)	Built-in: 3Ø 400V 0.75~500kW (C3)	Built-in: 3Ø 380~480V 5.5~22kW (C2)	Built-in: 3Ø 200/400V 0.75~7.5kW (C2) 3Ø 200/400V 11~22kW (C3)	Built-in full capacity (C3)
5kW	Built-in: 3Ø 400V 37~500kW	-	Built-in: 3Ø 200V 0.75~22kW 3Ø 400V 0.75~220kW	Built-in full capacity
	○	-	○	○
	-	-	○	○
	-	-	○	○
	○	-	○	-
	-	-	○	○
r less)	-	-	○	-
	-	-	○	-
	-	-	○	
	○(Built-in)	-	○(Built-in)	○(Built-in)
	-	-	○	-
	○(Built-in)	○(Built-in)	○(Built-in)	○(Built-in)
	-	-	-	○
	○	-	-	-
	○(Built-in)	-	-	-
	○(Built-in)	-	○	-
	○(Built-in)	-	-	-
1/2/3/5m), Conduit	Extension I/O, Remote cabel(2/3m), Flange, Conduit, Disconnect switch	ELIO, Incremental Encoder, Sin/Cos Encoder, Sin/Cos_Endat Encoder, Remote Cable	PLC, Extension I/O, Safety(Built-In option), Synchronous, Position, Binary input, Encoder, 24V Encoder, Remote cable(2/3m)	Extension I/O, Remote Cable(2/3/5m), LD encoder, OC encoder, Synchronous options *Basic built-in (Safey, 24V power, position control)
ty	KC, CE, UL, cUL, [Marin] ABS, BV, CCS, DNV/GL, KR, LR, NK, RINA, RS	KC, CE	KC, CE, UL, cUL, Safety, C-Tick	KC, CE, UL, cUL [Marin] Acquiring 9 classifications
duit option) e only)	0.75~185kW: IP20 220~500kW: IP00 0.75~500kW: UL Type 1 (Conduit option)	IP00	200V Class 0.75~22kW, 400V Class 0.75~75kW : IP21 (UL Type 1(Conduit option)) 200V Class 30~75kW, 400V Class 90~375kW : IP00 (200V Class 30~75kW, IP20(Conduit option))	IP20

Guide to LS Drive Options

The table below is to guide you in searching for products that are appropriate for your business and load among a wide range of LS drive products. For further information, please contact LS.

Application		Type				Torque		Drive Series							
		Friction Load	Gravity Load	Fluid Load	Inertia Load	HD	ND	M100	G100/ G100C	S100	H100	L100	iS7	new S300	
 HVAC Refrigerator	Fan			●			●								
	Pump			●			●								
	Compressor			●		●									
 Metals & Materials Management	Fan			●			●								
	Pump			●			●								
	Compressor			●		●									
	Conveyor	●				●									
	Press				●	●									
	Winder (Drawing Machine)				●	●									
	Winder (Stranding Machine)				●	●									
	Hoist (Hoist)		●			●									
	Hoist (Trolley, Gantry)	●				●									
	Synchronized Position Control (Grinder)	●			●	●									
	Synchronized Position Control (Automatic Lathe)	●			●	●									
 Elevator & Escalator	E/L (High Speed)		●			●									
	E/L (Low Speed)		●			●									
	Synchronized Position Control (Door Open/Close)	●				●									
	Escalator	●				●									
	Multistory Parking Space		●			●									
 Textiles	Fan			●			●								
	Pump			●			●								
	Compressor			●		●									
	Spinning Machine (Threading & Spinning)				●	●									
	Winder (Weaving)				●	●									
	Winder (Knitting)				●	●									
	Washing & Drying (Washer & Dryer)			●	●	●									
	Printing														
	Extruder	●				●									
	Hoist (Hoist)		●			●									
	Hoist (Trolley, Gantry)	●				●									
 Plastic & Rubber	Fan / Blower			●			●								
	Pump			●			●								
	Compressor			●		●									
	Conveyor	●				●									
	Mixer			●		●									
	Extruder	●				●									
	Screw & Vibration Feeder				●	●									
	Injection Molding	●				●									
	Winder				●	●									
	Hoist (Hoist)		●			●									
	Hoist (Gantry, Trolley)	●				●									
 Energy	Fan			●			●								
	Pump			●			●								
	Compressor			●		●									
	Conveyor	●				●									
	Hoist (Hoist)		●			●									
	Hoist (Gantry, Trolley)	●				●									
	High-capacity Fan & Pump (Power Generation Industry)			●			●								

Optimal Suitable

	Description	Reason(s) for Choosing the Product
	It refers to a HVAC system related to heating, ventilation and air-conditioning, and its primary purpose is to control the building or factory's temperature and humidity. A refrigerator requires diverse analogue inputs and contact outputs for constant temperature control.	• H100 / iS7 / S300 As a drive exclusive for HVAC, it has exclusive functions applied to Fan/Pump, including a reservation function, advanced PID, Master/Follower and so forth. iS7 /S300 extended IO may be used for multifunction and analogue I/O extension.
	Metals are composed of ID/FD Fan/Pump for cooling from the stages of transferring raw materials (conveyor or hoist), casting and winding.	• iS7 / S300 / G100(C) Unlike other load types, the load of metals is larger, heavier and greater in tension. Thus, products that are equipped with sensor-less and sensored vector control as well as helper roll and winding control are needed. Hoist is used for load transfer also needs products that are easier to ensure torque.
	It is a power device used to transport persons or cargo, which consists of a (ultra) high-speed unit for passengers, (medium) low-speed unit for passengers, a unit for view; for hospital; for cargo; for vehicles and dumbwaiter. It requires a high noise level.	• iS7 / S300 / L100 Sensor-less and sensored vector mode for powerful torque control and E/L-only S/W are provided as a default.
	There are a wide range of processes, including threading, drawing, yarn dyeing, warping, beaming, weaving (loom), inspecting gray goods, refining, reducing, washing, dyeing and stenter process, so various loads ranging from the low-end load to high-end load of winders and twisters exist. Corrosion resistance and waterproof are required as there are a lot of high temperature and humidity environments.	• For VT load: H100 • For CT load: iS7 / S300 • For low-capacity load: S100 / G100(C) Products that meet various process features may be chosen. In particular, iS7, S100 built-in with S/W exclusive for winders uses WEB PID for precise winding. All products are applied with PCB Conformal Coating.
	There are processes such as injection molding to create a model by melting raw materials or winding the produced artificial thread and printed films. A part of injection molding is mixed with servo system for use, and it requires an accurate position control or torque control.	• iS7 / S300 / S100 / G100(C) iS7 installed with S/W exclusive for winders along with synchronization and position control is one of the representative products. S100 built-in with S/W only for winders is also used. It is recommended to use equivalent for small-capacity helper roll and conveyor.
	HVAC load is the major part of Energy, and the load of ID/FD Fan/Pump applied for power generation industry and the load that goes along with the high efficiency system in the local environment are the main components.	• H100 / iS7 / S300 We recommend inverter products that have obtained a certificate of high efficiency. iS7 / S300 may be used to partially respond to CT load. Without a separate controller, a built-in PID is capable of controlling pressure and flow.

Guide to LS Drive Options

Application		Type				Torque		Drive Series						
		Friction Load	Gravity Load	Fluid Load	Inertia Load	HD	ND	M100	G100/ G100C	S100	H100	L100	iS7	new S300
Marin	Fan			●			●							
	Pump			●			●							
	Compressor			●		●								
	Conveyor	●				●								
	Winch (Hoist)		●			●								
	Winch (Gantry, Trolley)	●				●								
	Hoist (Hoist)		●			●								
	Hoist (Gantry, Trolley)	●				●								
Food & Beverage	Fan			●			●							
	Pump			●			●							
	Compressor			●		●								
	Conveyor	●				●								
	Mixer			●		●								
	Extruder	●				●								
	Packing Machine (Synchronization, Position Control)	●				●								
	Cutting Machine (Synchronization, Position Control)	●				●								
	Labeling Machine (Synchronization, Position Control)	●				●								
	Hoist (Hoist)		●			●								
	Hoist (Gantry, Trolley)	●				●								
Pulp & Paper	Fan			●			●							
	Agitator Pump			●			●							
	Compressor			●		●								
	Winder (Fixed Contact Control)				●	●								
	Roller Drum				●	●								
	Drying Machine	●					●							
	Coating Machine	●				●								
	Slitter	●				●								
	Hoist (Hoist)		●			●								
	Hoist (Gantry, Trolley)	●				●								
Mining	Fan			●			●							
	Pump			●			●							
	Compressor			●		●								
	Conveyor	●				●								
	Crusher / Drill Machine	●				●								
	Excavators													
	Crane (Hoist)		●			●								
	Crane (Gantry/Trolley, Rotating/Turning)	●				●								
	Hoist (Hoist)		●			●								
	Hoist (Gantry, Trolley)	●				●								
Oil & Gas Chemical	Fan (Blower)			●			●							
	Oil & Rod Pump			●			●							
	Compressor			●		●								
	Conveyor	●				●								
	Mixer			●		●								
	Extruder	●				●								
Crane & Hoist	Crane (Hoist)		●											
	Crane (Gantry/Trolley, Rotating/Turning)	●				●								
	Hoist (Hoist)		●			●								
	Hoist (Gantry, Trolley)	●				●								
	Automatic Warehouse (Lift)		●			●								
	Automatic Garage (Gantry)	●				●								
Water & Wastewater	Fan			●										
	Pump			●			●							
	Compressor			●		●	●							
	Mixer			●		●								

Optimal Suitable

	Description	Reason(s) for Choosing the Product
	When the distributed control system was introduced in 1990s, automated processes were realized in various systems, including automatic and power control of generators; ballast and pump motors for cargo; and valve control. As IMO environmental regulation came into effect, the needs for auto control and energy efficiency have been accelerated. The classification system such as ABS (USA) /BV (France) /DNV (Norway) /LR (USA) /RINA (Italy) is required.	• H100 / iS7 / S300 These products that have obtained the certificate of classification are included in a lineup, which are gradually applied in the shipping industry. Based on the classification, the products have satisfied the power and environmental requirements necessary for ship installation. Also, there are reference cases of applying the products for merchant ships and marine cranes.
	High-performance IP products with a high-pressure jet function for washing are required for food sanitation and contamination prevention. Furthermore, customers prefer Decentralized Drives and there is growing demand for drives with functions such as accurate positioning and synchronizing of packing machines, labeling machines and conveyors.	• S100(IP66) General load is applicable to ensure water and dust resistance.
	In general, it is a load with smaller tension when compared with steel so precise control and fast responsiveness are needed. In most cases, it is fabricated as a System Drive (AFE + DC-type inverter). Wood or raw materials that have completed primary operation are chemically treated to produce paper, artificial fiber and etc.	• iS7 / S300 DC input-type inverter products or any product with a DC input function may be applied.
	Anti-environment properties such as explosion, dust and water resistance are needed, and higher reliability with application of a long-distance line is required. In case of excavators operated underground, the drive with higher performance and reliability to respond to high-torque, heavy duty load is required.	• iS7 / S300 The product was applied to cases such as subway construction, submarine tunnel and underground line construction, and high-powered devices with torque-synchronized operation are applicable. With our experiences in drive application to various power and user environmental settings, air-conditioning, pump and hoist units are applicable.
	High-capacity power and long-distance line application are needed when applied to large plants. The product should be highly reliable when it comes to risk including fire accidents as large-capacity products are applied for air-conditioning, pump and production.	• iS7 / S300 / H100 We have reference cases in the field of petrochemical and oil refining industry, and we offer various options and large-capacity products with the Drive System-applied technologies.
	3 basic operation modes include Hoist, Gantry and Trolley, and there is an additional function, Boom up/down, for marine cranes. Although features required for inverters differ according to the operation mode, they generally transport heavy cargo. Thus, it is recommended to use sensor-less and sensored vector mode.	• iS7 / S300 / S100 / L100 We recommend a lineup of products with sensor-less and sensored vector control functions that make it easier to ensure torque as heavy load is expected.
	Harmful gases generated upon sewage treatment should be prevented (coating), and it is HVAC App that generally requires a low level of THD. (AFE, Low Harmonic Drive)	• H100 / S300 A lineup of inverter products exclusively for HVAC system can be applied to all water treatment industry.

M100 Micro Drive

- 1Ø 115V : 0.2~0.75kW
- 1Ø 200V Class 0.1~2.2kW

An Optimal Compact Drive That is Applicable to Small Unit Machinery, Fans/Pumps and Conveyors.

Space efficiency is increased with a compact product design, side-by-side installation and standard installation of Din Rail. Product reliability is improved with a built-in C2 EMC filter and application of a new UL standard.
We offer two I/O types (standard type and advanced type), frequently-used parameter group, built-in potentiometer and parameter copier/remote keypad options. We ensure that users may easily install and use products.

Compact

M100 Drive is a small device that is cost-effective.
Space efficiency has increased with side-by-side installation.

Convenient Use

Din Rail installation is standard for M100 Drive, and RJ45 Port is provided for an easier connection with peripheral devices.

Intended Use

- Refrigerant compressor, air conditioner, refrigerator
- IAQ (Indoor Air Quality) industry sector
- Cargo terminal transfer line (Conveyor)
- Packaging machine transfer line (Conveyor)
- Unit machinery such as a lens grinder, spinning wheel and etc.

Product Type & Model

LSLV	0022	M100	-	1	E	O	F	N	S

LS Low Voltage Drive Series

Drive Capacity
0001: 0.1kW~0022: 2.2kW

Series Name

Input Voltage
S: 1Phase 100~120V
1: 1Ø 200V-240V

Keypad
E: LED Keypad

UL Type
O: UL Open Type

EMC Filter
F: Built-in EMC Filter (C2)

Reactor
N: Non-Reactor

I/O
S: Standard / A-Advanced

RoHS COMPLIANT

Main Functions

Features	Description	Benefits
Micro Size	85×135×100mm (W x H x D); Mini drive (based on 0.2kW)	Reduced area for product installation and increased convenience
EMC Filter	Filter that satisfies the following standard: EN61800-3 Category C2 (1st Environment)	No space and expenses for additional filter to reduce electromagnetic noise are needed
DIN Rail Installation	DIN rail and wall fixation to the rear and sides of the product with removal clips	Fast and easy product installation that lasts less than 5 minutes and maximized space efficiency through side-by-side installation
Quick Parameter Menu	Frequently-used useful parameters can be listed in the Quick Parameter group	Quick setting and improved operational convenience according to the customer's application type
Potentiometer	Standard potentiometer for analogue setting	Easy and flexible operation setting
Global Standard Requirement	Obtained CE certification and new UL 61800-5-1 standard	Ensures product reliability (Improved quality of insulation distance)

Control

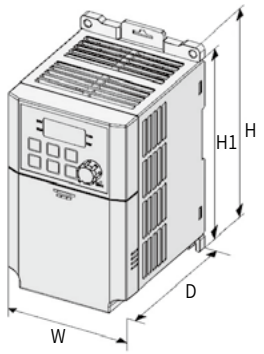
Control Mode	V/F, Slip compensation, Simple sensorless
Frequency Setting Resolution	Digital command: 0.01Hz Analog command: 0.06Hz/60Hz
Frequency Setting level	1% of Max. Output frequency
V/F Pattern	Linear, Square-law torque reduction, user V/F
Overload Capacity	Rated current: 150% 1min
Torque Boost	Passive torque boost, Auto torque boost

Operation

Operation Mode	Keypad/Terminal/Communication	
Frequency Setting	Analog: V1 0~10[V], I2(Advanced I/O) 0~20[mA] Digital: Keypad	
Operation Function	• Forward/Reverse rotation prevention • Frequency jump • Frequency limit • DC brake • Jog operation • up-down operation • 3-wire operation	• Dwell operation • Slip compensation • PID control • Energy saving operation • Speed search • Auto restart

1Ø 100~200V Class

Division			1 Phase 100~120V			1 Phase 200~240V					
			0002	0004	0008	0001	0002	0004	0008	0015	0022
Applied Motor	Heavy Duty	(HP)	0.25	0.5	1.0	0.125	0.25	0.5	1.0	2.0	3.0
		(kW)	0.2	0.4	0.75	0.1	0.2	0.4	0.75	1.5	2.2
Rated Output	Rated Capacity (kVA)		0.6	0.95	1.9	0.3	0.6	0.95	1.9	3.0	4.5
	Rated Current (A)		1.4	2.4	4.2	0.8	1.4	2.4	4.2	7.5	11.0
	Frequency (Hz)		0~400Hz			0~400Hz					
	Voltage (V)		3Ø 200~240V			3Ø 200~240V					
Rated Input	Rated Current (A)		3.7	7.4	13.9	1.0	1.8	3.7	7.1	13.6	18.7
	Frequency (Hz)		50~60Hz (±5%)			50~60Hz (±5%)					
	Voltage (V)		1Ø 100-120Vac (-15 % to +10 %)			1 phase 200-240Vac (-15 % to +10 %)					
Cooling Type			Natural cooling			Natural cooling		Forced fan cooling			
Weight (kg)			1		1.36	0.66		1		1.45	



Product Dimension

Unit: mm (inches)

1 Phase 100~120V	W	H1	H	D
0002M100-S 0004M100-S	85 (3.34)	163 (6.42)	153 (6.02)	123 (4.84)
0008M100-S	100 (3.94)	190 (7.48)	180 (7.08)	140 (5.51)

1 Phase 200~240V	W	H1	H	D
0001M100-1 0002M100-1	85 (3.34)	145 (5.70)	135 (5.31)	100 (3.93)
0004M100-1 0008M100-1		163 (6.42)	153 (6.02)	123 (4.84)
0015M100-1 0022M100-1	100 (3.94)	190 (7.48)	180 (7.08)	140 (5.51)

G100/G100C General Drive

- G100 3Ø 200V 0.4kW~22kW
  3Ø 400V 0.4kW~22kW
- G100C 3Ø 200V 0.4kW~4.0kW
  3Ø 400V 0.4kW~4.0kW

GOOD DESIGN

G100, an Optimal General Drive for Various Industrial Sectors!

It is a general drive optimized for wide use in all industrial sectors with powerful sensor-less functions, improved hardware performance and certified high product reliability.

Improved Torque Performance Through Powerful Sensor-less Vector Control Functions

With improved sensor-less vector control functions when compared to our original standard drive, it maintains high torque performance at low speed and efficiently controls the motor.

Various User Convenience Functions and Field Network Support

G100 enables compact installation with DIN rail and side-by-side installation. It supports RJ port connection on the front of the product and greatly enhances the convenience of connecting with peripheral devices.
EtherNet/IP, Modbus-TCP, Profibus-DP, Support CANopen option, Built-in RS485

High Product Reliability

The heat-resisting property and intensity of our enclosure have significantly increased, and the insulation distance improved with our design that meets UL61800-5-1 standard.

Intended Use

Used in all industries including metal processing, molding machines, hydraulic / air conditioning equipment, food and beverage / textile machinery, lifts /conveyors and environment / water treatment

- Cutting / Bending / Polishing machines
- Fans / Pumps
- Injection machines / Conveyors
- Dust collectors / Freezers
- Compressors / Blower
- Hoist / Lift

Product Type & Model

LSLV	0008	G100	-	4	E	0	F	N	T

LS Low Voltage Drive Series

Drive Capacity
0004:0.4kW-0220:22kW

Series Name

Input Voltage
2 : 3-phase 200~240[V] / 4 : 3-phase 380~480[V]

Keypad
E: LED Keypad

UL Type
O: UL Open Type

EMC Filter
F: Built-in EMC Filter / N: Non-EMC Filter

Reactor
N: Non-DC Reactor

Safety
(blank): Non-safety / T: Safety

Main Functions

Features	Description	Benefits
Improved Control Performance	Improved sensor-less function and simplified function setting	Powerful torque performance at low speed and high load conditions
Din rail Mounting and Side-by-side Installation	Removable clips to fix the Din-Rail to the product rear and sides; 2mm installation span between products	Fast and simple product installation that takes less than 5 minutes; increased space efficiency of panels
RJ45 Port at the Front Side of the Product	Easily connected to peripheral devices; and parameter can be copied (read/write) without taking the product out from its box	Enhanced convenience in product setting and extended connection with peripheral devices
Various Field Communication Network Support	Modbus, Profibus-DP, CANopen and Ethernet IP communication network support	Connectible with widely-used field networks
Quick Parameter Menu	Frequently-used and useful parameters are set in Quick Parameter Menu (Favorites)	Quick setting with operational convenience according to the customer's application
EMC Filter	Filter that meets the Category C3 standard	Reduced electromagnetic noise and no additional space and expenses for filter installation necessary
Improved Heat-resisting Property and Intensity of Enclosures	The heat-resisting property and intensity have improved with a new material for our enclosures; the enclosures have gotten thicker to prevent damages	Significantly improved product reliability and MTTF 27 years guaranteed
Network Option, Installation Convenience	Communication network operation can be easily connected to the product body without removing its cover; Ethernet 2 port support at the lower part of the option	Easy and fast removable communication network option
Safe Torque Off (STO)	Duplexing input circuit is applied; safe input function that meets the following standards: EN ISO 13849-1 PLD and EN 61508 SIL2 (EN60204-1, Stop category 0)	Satisfied the safety standards of systems with a built-in safety design
Global Standard Requirement	Obtained a certification of CE and new UL 61800-5-1 standard	Product reliability guaranteed (Improved quality of insulation distance)

Control

Control Mode	V/F, slip compensation and sensor-less vector
Frequency Setting Resolution	Digital command: 0.01Hz; analogue command: 0.06Hz (based on 60Hz)
Frequency Level	1% of the peak output frequency
V/F Pattern	Linear, square-law torque reduction, user V/F
Overload Capacity	Heavy duty: 150% 1min, Normal duty: 120% min
Torque Boost	Passive torque boost; auto torque boost

Operation

Operation Mode		Keypad / Terminal Block / Communication Network operation options	
Frequency Setting		Analogue method: -10~10 (V), 0~10 (V), 4~20 (mA); digital method: keypad input	
Operation Function		PID control; 3-wire operation; frequency limit; second motor; forward/backward rotation prohibited; power switching; speed search; power braking; up-down operation; DC braking; frequency jump; slip compensation; auto restart; auto tuning; energy buffering operation; flux braking; and Fire Mode	
Input	Multifunction Terminal (5Points) P1~P5	NPN (Sink) / PNP (Source) options	
		Function: Forward operation; backward operation; reset; external trip; emergency trip; jog operation; switching frequency – high, middle, low; acceleration/deceleration by stage – high, middle, low; DC braking at pause; second motor option; frequency increase; frequency decline; 3-wire operation; switching to general operation during PID operation; switching to the body operation during option operation; analogue command fixed frequency; acceleration or deceleration stop option	
Output	Multifunctional Relay Terminal	Fault output and inverter operation mode output	(N.O., N.C.) AC 250V, 1A or below, DC 30V, 1A or below
	Analogue Output	0~10V Frequency, output current, output voltage, DC voltage options	

3-Phase 200V Class (0.4~22kW)

LSLV□□□□G100(C)-2□□□□			0004	0008	0015	0022	0040	0055	0075	0110	0150	0185	0220
Motor Rating	Heavy Duty [HD]	[kW]	0.4	0.75	1.5	2.2	4.0	5.5	7.5	11	15	18.5	22
		[HP]	0.5	1.0	2.0	3.0	5.4	7.5	10	15	20	25	30
	Normal Duty [ND]	[kW]	0.75	1.5	2.2	4.0	5.5	7.5	11	15	18.5	22	-
		[HP]	1.0	2.0	3.0	5.4	7.5	10	15	20	25	30	-
Output Rating	Capacity [kVA]	Heavy Duty (HD)	1.0	1.9	3.0	4.2	6.5	9.1	12.2	17.9	22.9	28.6	33.5
		Normal Duty (ND)	1.2	2.3	3.8	4.6	6.9	11.4	15.2	21.3	26.7	31.2	-
	Rated Current [A]	Heavy Duty (HD)	2.5	5.0	8.0	11.0	17.0	24.0	32.0	47	60	75	88
		Normal Duty (ND)	3.1	6.0	9.6	12.0	18.0	30.0	40.0	56	70	82	-
	Rated Current [A] (1-Phase Power Input)	Heavy Duty (HD)	1.5	2.8	4.6	6.1	9.3	12.8	17.4	26.8	34	41	48
		Normal Duty (ND)	2.0	3.6	5.9	6.7	9.8	16.3	22.0	31	38	45	-
	Frequency [Hz]		0~400Hz(IM Sensorless: 0~120Hz)					0~400Hz (IM sensorless: 0~120Hz)					
	Voltage [V]		3-Phase 200~240V					3-Phase 200~240V					
Input Rating	Voltage [V]		3-Phase 200~240VAC (-15%~+10%)					3-Phase 200~240VAC (-15%~+10%)					
	Frequency [Hz]		50~60Hz (±5%)					50~60Hz (±5%)					
	Rated Current [A]	Heavy Duty [HD]	2.2	4.9	8.4	11.8	18.5	25.8	34.9	53.2	68.4	85.5	101.6
		Normal Duty [ND]	3.0	6.3	10.8	13.1	19.4	32.7	44.2	63.8	79.8	94.6	-
G100 Weight [kg]			1.04	1.06	1.36	1.4	1.89	3.08	3.21	4.84	7.6	11.1	11.18
G100C Weight [kg]			0.81	0.83	1.10	1.13	1.78	-	-	-	-	-	-

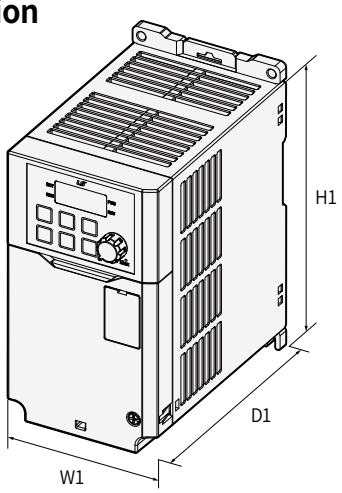
• Applicable capacity range with G100C (0.4kW~4kW)
• G100C doesn't support built-in EMC filter. (Not possible to add filter)

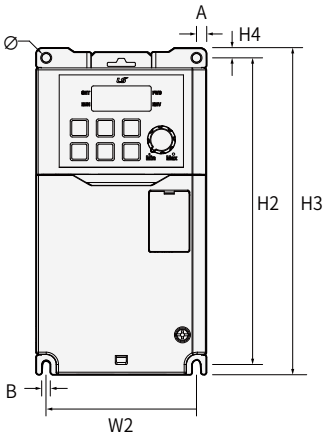
3-Phase 400V Class (0.4~22kW)

LSLV□□□□G100(C)-4□□□□			0004	0008	0015	0022	0040	0055	0075	0110	0150	0185	0220
Motor Rating	Heavy Duty [HD]	[kW]	0.4	0.75	1.5	2.2	4.0	5.5	7.5	11	15	18.5	22
		[HP]	0.5	1.0	2.0	3.0	5.4	7.5	10	15	20	25	30
	Normal Duty [ND]	[kW]	0.75	1.5	2.2	4.0	5.5	7.5	11	15	18.5	22	30
		[HP]	1.0	2.0	3.0	5.4	7.5	10	15	20	25	30	40
Output Rating	Capacity [kVA]	Heavy Duty (HD)	1.0	1.9	3.0	4.2	6.5	9.1	12.2	18.3	23.6	29.7	34.3
		Normal Duty (ND)	1.5	2.4	3.9	5.3	7.6	12.2	17.5	23.6	29.0	34.3	46.5
	Rated Current [A]	Heavy Duty (HD)	1.3	2.5	4.0	5.5	9.0	12.0	16.0	24	31	39	45
		Normal Duty (ND)	2.0	3.1	5.1	6.9	10.0	16.0	23.0	31	38	45	61
	Rated Current [A] (1-Phase Power Input)	Heavy Duty (HD)	0.7	1.4	2.1	2.8	4.9	6.4	8.7	15	18	23	27
		Normal Duty (ND)	1.3	1.9	2.8	3.6	5.4	8.7	12.6	18	23	27	35
	Frequency [Hz]		0~400Hz(IM Sensorless: 0~120Hz)					0~400Hz (IM sensorless: 0~120Hz)					
	Voltage [V]		3-Phase 380~480V					3-Phase 380~480V					
Input Rating	Voltage [V]		3-Phase 380~480VAC (-15%~+10%)					3-Phase 380~480VAC (-15%~+10%)					
	Frequency [Hz]		50~60Hz (±5%)					50~60Hz (±5%)					
	Rated Current [A]	Heavy Duty [HD]	1.1	2.4	4.2	5.9	9.8	12.9	17.5	27.2	35.3	44.5	51.9
		Normal Duty [ND]	2.0	3.3	5.5	7.5	10.8	17.5	25.4	35.3	43.3	51.9	70.8
G100 Weight [kg]			1.02 (1.04)	1.06 (1.08)	1.4 (1.44)	1.42 (1.46)	1.92 (1.98)	3.08 (3.24)	3.12 (3.28)	4.89 (5.04)	4.91 (5.06)	7.63 (7.96)	7.65 (7.98)
G100C Weight [kg]			0.82	0.85	1.14	1.14	1.77	-	-	-	-	-	-

• Applicable capacity range with G100C (0.4kW~4kW)
• G100C doesn't support built-in EMC filter. (Not possible to add filter)
• Maximum applicable capacity is indicated in case of using a 4-pole standard motor
• For the rated capacity, 200 and 400V class input capacities are based on 220 and 440V, respectively.
• The rated output current is limited based on the carrier frequency set at Cn.04.
• The output voltage becomes 20-40 % lower during no-load operations to protect the inverter from the impact of the motor closing and opening (0.4-4.0 kW models only).

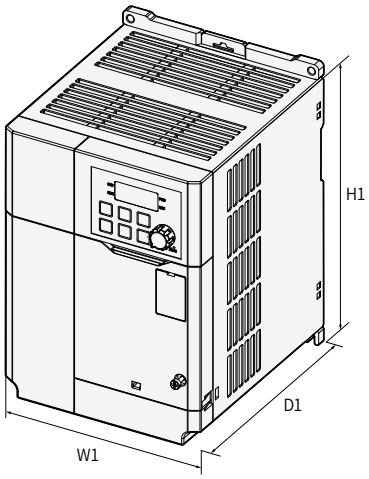
Product Dimension

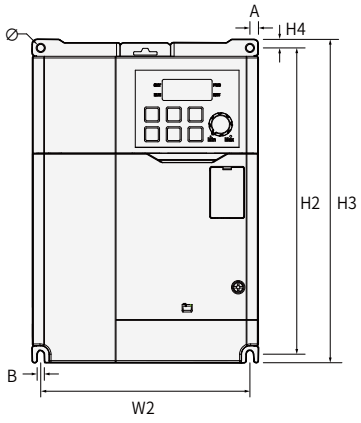




Unit: mm (inches)

Model	W1	W2	H1	H2	H3	H4	D1	A	B	Ø
0004G100-2	86.2 (3.39)	76.2 (3.00)	154 (6.06)	154 (6.06)	164 (6.46)	5 (0.20)	131.5 (5.18)	5 (0.20)	4.5 (0.18)	4.5 (0.18)
0008G100-2										
0004G100-4										
0008G100-4										
0015G100-2	101 (3.98)	90 (3.54)	167 (6.57)	167 (6.57)	177 (6.97)	5 (0.20)	150.5 (5.93)	5.5 (0.22)	4.5 (0.18)	4.5 (0.18)
0022G100-2										
0015G100-4										
0022G100-4										

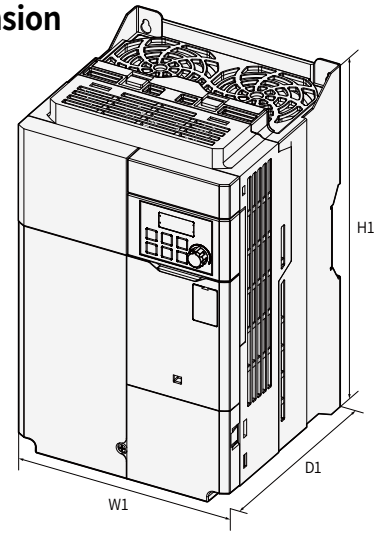


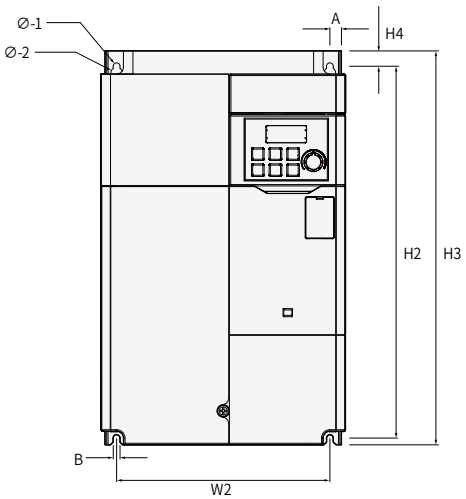


Unit: mm (inches)

Model	W1	W2	H1	H2	H3	H4	D1	A	B	Ø
0040G100-2	135 (5.31)	125 (4.92)	183 (7.20)	183 (7.20)	193 (7.60)	5 (0.20)	150.5 (5.93)	5 (0.20)	4.5 (0.18)	4.5 (0.18)
0040G100-4										
0055G100-2	180 (7.09)	Top: 162 (6.38) Bottom: 170 (6.70)	220 (8.66)	229.5 (9.04)	240 (9.45)	5.5 (0.22)	144 (5.67)	Top: 9 (0.35) Bottom: 5 (0.20)	4.5 (0.18)	Ø-1: 4.5 (0.18) Ø-2: 6 (0.24)
0075G100-2										
0055G100-4										
0075G100-4										

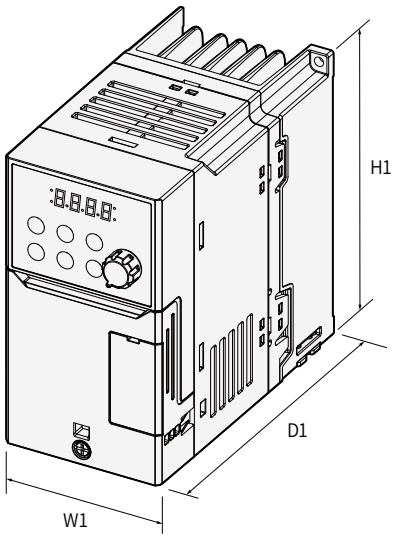
Product Dimension

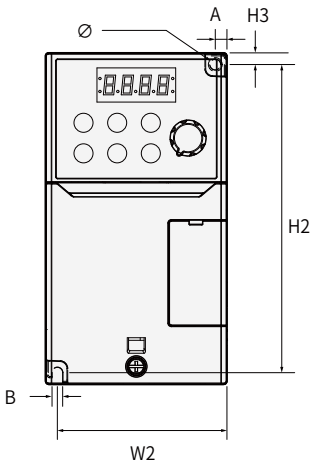




Unit: mm (inches)

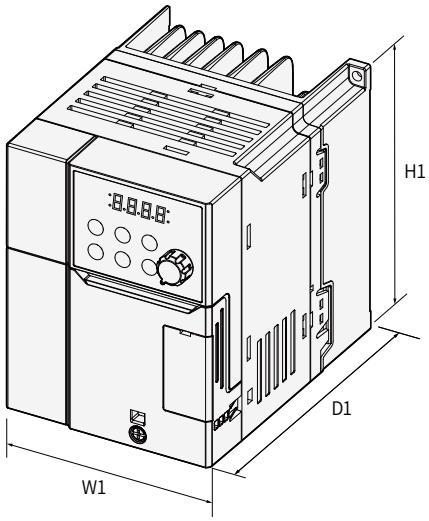
Model	W1	W2	H1	H2	H3	H4	D1	A	B	Ø
0110G100-2 0110G100-4 0150G100-4	180 (7.09)	157 (6.18)	290 (11.4)	273.7 (10.8)	290 (11.4)	11.3 (0.44)	173 (6.81)	8.5 (0.33)	5 (0.20)	Ø-1:5(0.20) Ø-2:8.5(0.33)
0150G100-2 0185G100-4 0220G100-4	220 (8.66)	193.8 (7.63)	345 (13.6)	331 (13.0)	345 (13.6)	8 (0.31)	187 (7.36)	10.1 (0.40)	6 (0.24)	Ø-1:6(0.24) Ø-2:11(0.43)
0185G100-2 0220G100-4	260 (10.2)	229.8 (9.05)	400 (15.7)	386 (15.2)	400 (15.7)	8 (0.31)	187 (7.36)	11.4 (0.45)	7 (0.28)	Ø-1:7(0.28) Ø-2:13.5(0.53)

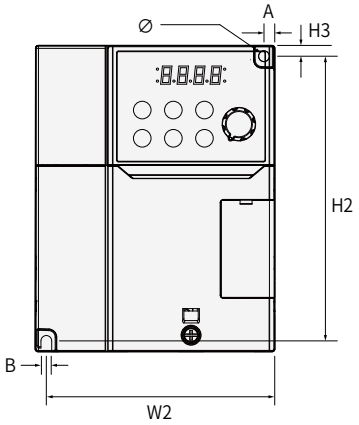




Unit: mm (inches)

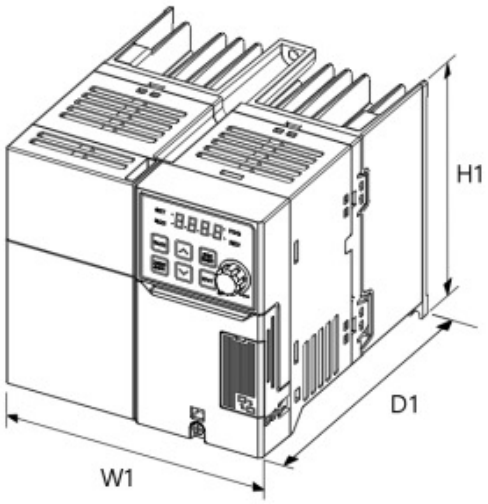
형명	W1	W2	H1	H2	H3	D1	A	B	Ø
0004G100C-2 0004G100C-4	70 (2.76)	65.5 (2.58)	128 (5.04)	119 (4.69)	4.5 (0.18)	130 (5.11)	4.5 (0.18)	4.5 (0.18)	4.5 (0.18)
0008G100C-2 0008G100C-4	70 (2.76)	65.5 (2.58)	128 (5.04)	119 (4.69)	4.5 (0.18)	135 (5.31)	4.5 (0.18)	4.5 (0.18)	4.5 (0.18)

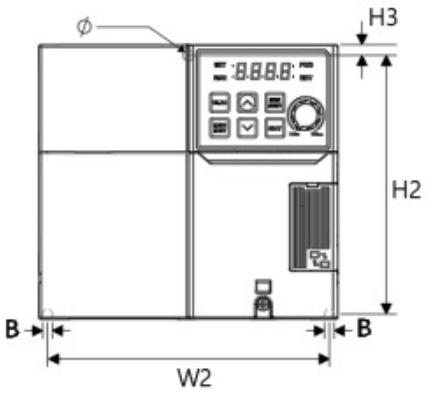




Unit: mm (inches)

Model	W1	W2	H1	H2	H3	D1	A	B	Ø
0015G100C-2	100 (3.93)	95.5 (3.76)	128 (5.04)	119 (4.69)	4.5 (0.18)	135 (5.31)	4.5 (0.18)	4.5 (0.18)	4.5 (0.18)
0015G100C-4									
0022G100C-2	100 (3.93)	95.5 (3.76)	128 (5.04)	119 (4.69)	4.5 (0.18)	135 (5.31)	4.5 (0.18)	4.5 (0.18)	4.5 (0.18)
0022G100C-4									





Unit: mm (inches)

Model	W1	W2	H1	H2	H3	D1	A	B	Ø
0040G100C-2	140 (5.51)	132 (5.20)	128 (5.04)	120.5 (4.74)	5 (0.20)	155 (6.10)	-	4.5 (0.18)	4.5 (0.18)
0040 G100C-4									

S100 Standard Drive

- 1Ø 200V Class 0.4~2.2kW
- 3Ø 200V Class 0.4~15kW
- 3Ø 400V Class 0.4~75kW

IP66

- 1Ø 200V Class 0.4~2.2kW
- 3Ø 200V Class 0.4~15kW
- 3Ø 400V Class 0.4~22kW

S100, a High-performance Standard Drive Boasting Power in a Compact Size

LS standard drive, S100 enhances added values of mechanical devices and equipment with its powerful sensor-less control and a wide range of user-centered functions. It meets the global standard and support various field networks. In particular, IP66 NEMA4X series are fully protected from foreign substances such as fine dust and water sprayed with a high-pressure sprayer.

Efficient Space Utilization

Space efficiency is maximized with its compact size, which is 40% smaller than the original product, and side-by-side installation.

Various Field Network Support

The drive supports the following networks: EtherCAT, EtherNet/IP, Profibus-DP, Modbus TCP, CANopen and etc

IP66/NEMA4X (PDS/Non-PDS)

The drive acquired the highest class IP66 / NEMA4X and it can be used without trouble under poor environment or even when externally exposed.

Intended Use

Applied to the following industries: metal, elevator/escalator, textile machinery, shipping, food and beverage, pulp/paper, coal mine, oil/gas and water treatment

- Hoist (hoist, gantry, trolley)
- Winder (loom, knitting machine)
- Mixer (agitator)
- Compressor
- Centrifugal separator
- General crane
- Conveyor

Product Type & Model

LSLV	0055	S100	-	4	E	O	F	N	S

LS Low Voltage Drive Series

Drive Capacity
0004: 0.4kW~0750: 75kW

Series Name

Input Voltage
1: 1Ø 200~240V / 2: 3Ø 200~240V / 4: 3Ø 380~480V

Keypad
E: LED Keypad / C: LCD Keypad

UL Type
O: UL Open Type / X-IP66

EMC Filter
N: Non-EMC / F: Built-in EMC

Reactor
N: Non-Reactor / D: Built-in DCL

I/O
M: 3.5mm / S-5mm

Main Functions

Features	Description	Benefits
Sensor-less Control and Static-type/Rotation-type Auto Tuning	Electric motor constant search is possible without rotating the motor even when the motor is installed at a place where rotation is impossible or when the system is already installed.	Accurate velocity and torque operation
Product Size Reduction and Side-by-side Installation	The product size is reduced up to 60% of its original size; simple replacement of cooling fans; installation span between products is about 2mm	Reduced installation area; and when multiple drives are installed, the control panel size is significantly reduced
Various Field Networks	EtherCAT, PROFINET, Profibus-DP, Ethernet IP, Modbus TCP and CANopen communication network support	Possible to connect to all widely-used field networks; comfortable maintenance of option cards and easy mounting
Compact PLC Function Option	With a combination of various function blocks, a simple PLC sequence programming is realized	High-level control programming with only the drive and without the external PLC
DC Reactor	Built-in DC reactor ※ 400V, 30~75kW	Improved power factor and THD reduction
Safe Torque Off (STO)	Duplexing input circuit is applied; safe input function that meets the following standards: EN 61508 SIL2 (EN60204-1, Stop category 0)	Satisfied the safety standards of systems with a built-in safety design
EMC Filter	Filter satisfying Category C3 (Class A) 2nd Environment CE standard ※ 1-phase 200V 0.4~2.2kW (C2) ※ 3-phase 400V 0.4~75kW (C3)	Reduced electromagnetic noise; additional space and expense for parts not required
IP66 (NEMA 4X) Enclosure Option	Completely protected from foreign substances such fine dust and water sprayed with a high-pressure sprayer	Inverters can be used even when exposed to the poor environment

Control

Control Mode	V/F, slip compensation, sensor-less vector, PM Sensorless
Frequency Setting Resolution	Digital command: 0.01Hz; analogue command: 0.06Hz (peak frequency: 60Hz)
Frequency Level	1% of the peak output frequency
V/F Pattern	Linear, square-law torque reduction, user V/F
Overload Capacity	Heavy duty: 150% 1min, Normal duty: 120% min
Torque Boost	Passive torque boost; auto torque boost

※ Please contact our salesperson for further details on PM sensor-less functions.

Operation

<table>
<tr><td colspan="2">Operation Mode</td><td colspan="2">Keypad/ Terminal Block / Communication Network options</td></tr>
<tr><td colspan="2">Frequency Setting</td><td colspan="2">Analogue method: -10~10 (V), 0~10 (V), 4~20 (mA); digital method: keypad, pulse train input</td></tr>
<tr><td colspan="2">Operation Function</td><td colspan="2">PID control; up-down operation; 3-wire operation; DC braking; frequency limit; frequency jump; secondary function; slip compensation; forward/backward rotation prohibited; auto restart; power switch; auto tuning; speed search; energy buffering; power braking; flux braking; leakage-reduced operation; Fire Mode</td></tr>
<tr><td rowspan="3">Input</td><td>Multifunctional Terminal Standard I/O (5Points) Multiple I/O (7Points)</td><td colspan="2">NPN (Sink) / PNP (Source) option
Function: Forward operation; backward operation; reset; external trip; emergency trip; jog operation; switching frequency – high, middle, low; acceleration/deceleration by stage – high, middle, low; DC braking upon pause; second motor option; frequency increase; frequency decline; 3-wire operation; switching to general operation during PID operation; switching to body operation during option operation; analogue command fixed frequency; acceleration/deceleration stop option</td></tr>
<tr><td>Analogue Input</td><td colspan="2">V1: -10~10V, V2: 0~10V / I2 4~20mA options</td></tr>
<tr><td>Pulse Train</td><td colspan="2">0~32kHz, Low Level: 0~2.5V, High Level: 3.5~12V</td></tr>
<tr><td rowspan="4">Output</td><td>Multifunctional Open Collector Terminal</td><td rowspan="2">Fault output and drive operation mode output</td><td>DC 24V, 50mA or below</td></tr>
<tr><td>Multifunctional Relay Terminal</td><td>(N.O., N.C.) AC 250V 1A or below, DC 30V 1A or below</td></tr>
<tr><td>Analogue Output</td><td colspan="2">0~12Vdc/0~24mA: selectable among frequency, output current, output voltage and DC terminal voltage</td></tr>
<tr><td>Pulse Train</td><td colspan="2">Up to 32kHz, 10~12 (V)</td></tr>
</table>

1Ø 200V Class (0.4~2.2kW)

LSLV□□□□S100-1□□□□□			0004	0008	0015	0022
Applied Motor	Heavy Duty	(HP)	0.5	1.0	2.0	3.0
		(kW)	0.4	0.75	1.5	2.2
	Normal Duty	(HP)	1.0	2.0	3.0	5.0
		(kW)	0.75	1.5	2.2	3.7
Output	Rated Capacity (kVA)	Heavy Duty	1.0	1.9	3.0	4.2
		Normal Duty	1.2	2.3	3.8	4.6
	Rated Current (A)	Heavy Duty	2.5	5.0	8.0	11.0
		Normal Duty	3.1	6.0	9.6	12.0
	Rated Frequency (Hz)		0~400Hz (IM Sensor-less: 0~120 (Hz))			
	Rated Voltage (V)		3Ø 200~240V			
Input	Rated Voltage (V)		1Ø 200~240VAC (-15%~+10%)			
	Rated Frequency (Hz)		50~60Hz (±5%)			
	Rated Current (A)	Heavy Duty	4.4	9.3	15.6	21.7
		Normal Duty	5.8	11.7	19.7	24.0
Weight (kg)	Non-EMC		0.9	1.3	1.5	2.0
	Built-in EMC		1.14	1.76	1.76	2.22

3Ø 200V Class (0.4~15kW)

LSLV□□□□S100-2□□□□□			0004	0008	0015	0022	0037	0040	0055	0075	0110	0150
Applied Motor	Heavy Duty	(HP)	0.5	1.0	2.0	3.0	5.0	5.4	7.5	10.0	15.0	20.0
		(kW)	0.4	0.75	1.5	2.2	3.7	4.0	5.5	7.5	11.0	15.0
	Normal Duty	(HP)	1.0	2.0	3.0	5.0	5.4	7.5	10.0	15.0	20.0	25.0
		(kW)	0.75	1.5	2.2	3.7	4.0	5.5	7.5	11.0	15.0	18.5
Output	Rated Capacity (kVA)	Heavy Duty	1.0	1.9	3.0	4.2	6.1	6.5	9.1	12.2	17.5	22.9
		Normal Duty	1.2	2.3	3.8	4.6	6.9	6.9	11.4	15.2	21.3	26.3
	Rated Current (A) (3Ø Input) (A)	Heavy Duty	2.5	5.0	8.0	11.0	16.0	17.0	24.0	32.0	46.0	60.0
		Normal Duty	3.1	6.0	9.6	12.0	18.0	18.0	30.0	40.0	56.0	69.0
	Rated Current (A) (1Ø Input) (A)	Heavy Duty	1.5	2.8	4.6	6.1	8.8	9.3	13.0	18.0	26.0	33.0
		Normal Duty	1.8	3.3	5.7	6.6	9.9	9.9	16.0	22.0	31.0	38.0
	Rated Frequency (Hz)		0~400Hz (IM Sensor-less: 0~120 (Hz))									
	Rated Voltage (V)		3Ø 200~240V									
Input	Rated Voltage (V)		3Ø 200~240VAC (-15%~+10%) / 1Ø 200~240VAC (-5%~+10%)									
	Rated Frequency (Hz)		50~60Hz (±5%) (Upon single-phase input, input frequency should only be 60Hz (±5%))									
	Rated Current (A)	Heavy Duty	2.2	4.9	8.4	11.8	17.5	18.5	25.8	34.9	50.8	66.7
		Normal Duty	3.0	6.3	10.8	13.1	19.4	19.4	32.7	44.2	62.3	77.2
Weight (kg)	Non-EMC		0.9	0.9	1.3	1.5	2.0	2.0	3.1	3.1	4.4	6.9
	Built-in EMC		-	-	-	-	-	-	-	-	-	-

- The motor capacity is calculated with a 4-pole standard motor.
- 200V Class is based on 220V, and 400V Class on 440V.
- The rated output current is limited according to the carrier frequency (Cn.04) setting.
- Upon no-load operation to protect the drive when the motor is open/closed, the output voltage is 20~40% lower than the original voltage. (only for 0.4~4.0kW)
- Dual rating is supported for products, excluding IP66/NEMA 4X.

3Ø 400V Class (0.4~22kW)

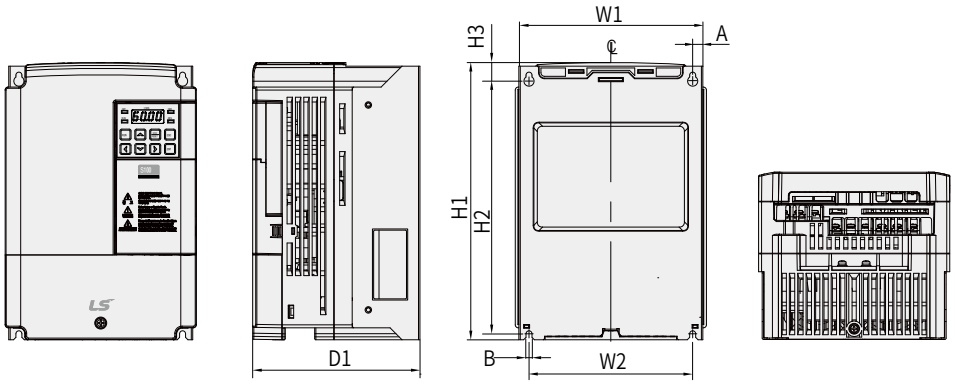
LSLV□□□□S100-4□□□□□			0004	0008	0015	0022	0037	0040	0055	0075	0110	0150	0185	0220
Applied Motor	Heavy Duty	(HP)	0.5	1.0	2.0	3.0	5.0	5.4	7.5	10.0	15.0	20.0	25.0	30.0
		(kW)	0.4	0.75	1.5	2.2	3.7	4.0	5.5	7.5	11.0	15.0	18.5	22.0
	Normal Duty	(HP)	1.0	2.0	3.0	5.0	5.4	7.5	10.0	15.0	20.0	25.0	30.0	40.0
		(kW)	0.75	1.5	2.2	3.7	4.0	5.5	7.5	11.0	15.0	18.5	22.0	30.0
Output	Rated Capacity (kVA)	Heavy Duty	1.0	1.9	3.0	4.2	6.1	6.9	9.1	12.2	18.3	22.9	29.7	34.3
		Normal Duty	1.5	2.4	3.9	5.3	7.6	7.6	12.2	17.5	22,9	29.0	33.5	44.2
	Rated Current (A) (3Ø Input) (A)	Heavy Duty	1.3	2.5	4.0	5.5	8.0	9.0	12.0	16.0	24.0	30.0	39.0	45.0
		Normal Duty	2.0	3.1	5.1	6.9	10.0	10.0	16.0	23.0	30.0	38.0	44.0	58.0
	Rated Current (A) (1Ø Input) (A)	Heavy Duty	0.8	1.5	2.3	3.1	4.8	5.4	7.1	9.5	15.0	18.0	23.0	27.0
		Normal Duty	1.3	1.9	3.0	3.9	5.9	5.9	9.5	14.0	18.0	23.0	27.0	35.0
	Rated Frequency (Hz)		0~400Hz (IM Sensor-less: 0~120 (Hz))											
	Rated Voltage (V)		3Ø 380~480V											
Input	Rated Voltage (V)		3Ø 380~480VAC (-15%~+10%) / 1Ø 200~240VAC (-5%~+10%)											
	Rated Frequency (Hz)		50~60Hz (±5%) (Upon single-phase input, input frequency should only be 60Hz (±5%))											
	Rated Current(A)	Heavy Duty	1.1	2.4	4.2	5.9	8.7	9.8	12.9	17.5	26.5	33.4	43.6	50.7
		Normal Duty	2.0	3.3	5.5	7.5	10.8	10.8	17.5	25.4	33.4	42.5	49.5	65.7
Weight (kg)	Non-EMC		0.9	0.9	1.3	1.5	2.0	2.0	-	-	-	-	-	-
	Built-in EMC		1.18	1.18	1.77	1.80	2.23	2.23	3.3	3.4	4.6	4.8	7.5	7.5

3Ø 400V Class (30~75kW)

LSLV□□□□S100-4□□□□□			0300	0370	0450	0550	0750
Applied Motor	Heavy Duty	(HP)	40.0	50.0	60.0	75.0	100.0
		(kW)	30.0	37.0	45.0	55.0	75.0
	Normal Duty	(HP)	50.0	60.0	75.0	100.0	120.0
		(kW)	37.0	45.0	55.0	75.0	90.0
Output	Rated Capacity (kVA)	Heavy Duty	46.0	57.0	69.0	84.0	116.0
		Normal Duty	55.0	67.0	78.0	106.0	126.0
	Rated Current (A) (3Ø Input) (A)	Heavy Duty	61.0	75.0	91.0	110.0	152.0
		Normal Duty	75.0	91.0	107.0	142.0	169.0
	Rated Current (A) (1Ø Input) (A)	Heavy Duty	32.0	39.0	47.0	57.0	78.0
		Normal Duty	39.0	47.0	55.0	73.0	87.0
	Rated Frequency (Hz)		0~400Hz (IM Sensor-less: 0~120 (Hz))				
	Rated Voltage (V)		3Ø 380~480V				
Input	Rated Voltage (V)		3Ø 380~480VAC (-15%~+10%) / 1Ø 200~240VAC (-5%~+10%)				
	Rated Frequency (Hz)		50~60Hz (±5%) (Upon single-phase input, input frequency should only be 60Hz (±5%))				
	Rated Current (A)	Heavy Duty	56.0	69.0	85.0	103.0	143.0
		Normal Duty	69.0	85.0	100.0	134.0	160.0
Weight (kg)	Non-EMC		25.0	34.0	34.0	43	43
	Built-in EMC		26.0	35.0	35.0		

- The motor capacity is calculated with a 4-pole standard motor.
- 200V Class is based on 220V, and 400V Class on 440V.
- The rated output current is limited according to the carrier frequency (Cn.04) setting.
- Upon no-load operation to protect the drive when the motor is open/closed, the output voltage is 20~40% lower than the original voltage. (only for 0.4~4.0kW)
- Dual rating is supported for products, excluding IP66/NEMA 4X.

Product Dimension

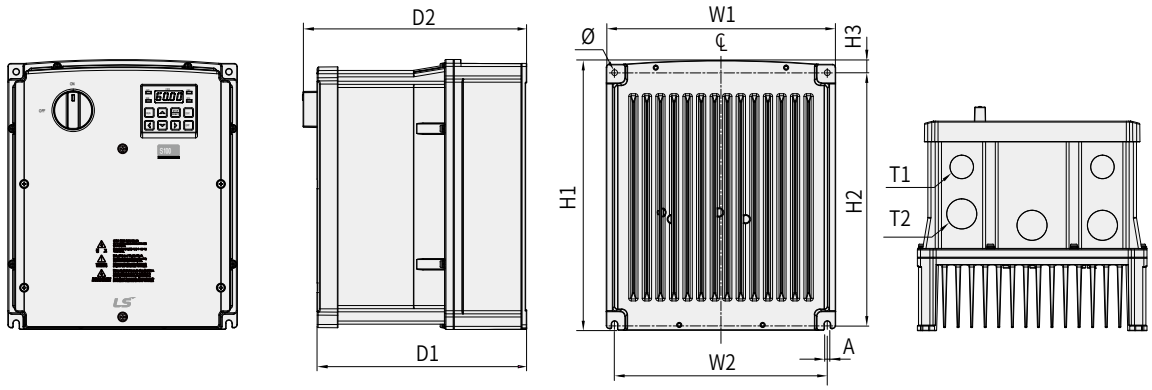


IP20 Type

Unit: mm (inches)

Model	W1	W2	H1	H2	H3	D1	A	B	Ø
LSLV0004S100-2	68 (2.68)	61.1 (2.41)	128 (5.04)	119 (4.69)	5 (0.20)	123 (4.84)	3.5 (0.14)	4 (0.16)	4.2 (0.17)
LSLV0004S100-4	68 (2.68)	61.1 (2.41)	128 (5.04)	119 (4.69)	5 (0.20)	123 (4.84)	3.5 (0.14)	4 (0.16)	4.2 (0.17)
LSLV0004S100-1	68 (2.68)	61.1 (2.41)	128 (5.04)	119 (4.69)	5 (0.20)	128 (5.04)	3.5 (0.14)	4 (0.16)	4 (0.16)
LSLV0008S100-2	68 (2.68)	61.1 (2.41)	128 (5.04)	119 (4.69)	5 (0.20)	128 (5.04)	3.5 (0.14)	4 (0.16)	4 (0.16)
LSLV0008S100-4	68 (2.68)	61.1 (2.41)	128 (5.04)	119 (4.69)	5 (0.20)	128 (5.04)	3.5 (0.14)	4 (0.16)	4 (0.16)
LSLV0008S100-1	100 (3.94)	91 (3.58)	128 (5.04)	120 (4.72)	4.5 (0.18)	130 (5.12)	4.5 (0.18)	4.5 (0.18)	4.5 (0.18)
LSLV0015S100-2	100 (3.94)	91 (3.58)	128 (5.04)	120 (4.72)	4.5 (0.18)	130 (5.12)	4.5 (0.18)	4.5 (0.18)	4.5 (0.18)
LSLV0015S100-4	100 (3.94)	91 (3.58)	128 (5.04)	120 (4.72)	4.5 (0.18)	130 (5.12)	4.5 (0.18)	4.5 (0.18)	4.5 (0.18)
LSLV015S100-1	100 (3.94)	91 (3.58)	128 (5.04)	120 (4.72)	4.5 (0.18)	145 (5.71)	4.5 (0.18)	4.5 (0.18)	4.5 (0.18)
LSLV022S100-2	100 (3.94)	91 (3.58)	128 (5.04)	120 (4.72)	4.5 (0.18)	145 (5.71)	4.5 (0.18)	4.5 (0.18)	4.5 (0.18)
LSLV022S100-4	100 (3.94)	91 (3.58)	128 (5.04)	120 (4.72)	4.5 (0.18)	145 (5.71)	4.5 (0.18)	4.5 (0.18)	4.5 (0.18)
LSLV0022S100-1	140 (5.51)	132.2 (5.21)	128 (5.04)	120.7 (4.75)	3.7 (0.15)	145 (5.71)	3.9 (0.15)	4.4 (0.17)	4.5 (0.18)
LSLV0037S100-2	140 (5.51)	132.2 (5.21)	128 (5.04)	120.7 (4.75)	3.7 (0.15)	145 (5.71)	3.9 (0.15)	4.4 (0.17)	4.5 (0.18)
LSLV0037S100-4	140 (5.51)	132.2 (5.21)	128 (5.04)	120.7 (4.75)	3.7 (0.15)	145 (5.71)	3.9 (0.15)	4.4 (0.17)	4.5 (0.18)
LSLV0040S100-2	140 (5.51)	132.2 (5.21)	128 (5.04)	120.7 (4.75)	3.7 (0.15)	145 (5.71)	3.9 (0.15)	4.4 (0.17)	4.5 (0.18)
LSLV0040S100-4	140 (5.51)	132.2 (5.21)	128 (5.04)	120.7 (4.75)	3.7 (0.15)	145 (5.71)	3.9 (0.15)	4.4 (0.17)	4.5 (0.18)
LSLV0004S100-1 [2]	68 (2.68)	63.5 (2.5)	180 (7.09)	170.5 (6.71)	5 (0.20)	130 (5.12)	4.5 (0.18)	4.5 (0.18)	4.2 (0.17)
LSLV0004S100-4 [2]	68 (2.68)	63.5 (2.5)	180 (7.09)	170.5 (6.71)	5 (0.20)	130 (5.12)	4.5 (0.18)	4.5 (0.18)	4.2 (0.17)
LSLV0008S100-4 [2]	68 (2.68)	63.5 (2.5)	180 (7.09)	170.5 (6.71)	5 (0.20)	130 (5.12)	4.5 (0.18)	4.5 (0.18)	4.2 (0.17)
LSLV0008S100-1 [1]	100 (3.94)	91 (3.59)	180 (7.09)	170 (6.69)	5 (0.20)	140 (5.51)	4.5 (0.18)	4.5 (0.18)	4.2 (0.17)
LSLV0015S100-1 [1]	100 (3.94)	91 (3.59)	180 (7.09)	170 (6.69)	5 (0.20)	140 (5.51)	4.5 (0.18)	4.5 (0.18)	4.2 (0.17)
LSLV0015S100-4 [1]	100 (3.94)	91 (3.59)	180 (7.09)	170 (6.69)	5 (0.20)	140 (5.51)	4.5 (0.18)	4.5 (0.18)	4.2 (0.17)
LSLV0022S100-4 [2]	100 (3.94)	91 (3.59)	180 (7.09)	170 (6.69)	5 (0.20)	140 (5.51)	4.5 (0.18)	4.5 (0.18)	4.2 (0.17)
LSLV0022S100-1 [1]	140 (5.51)	132 (5.20)	180 (7.09)	170 (6.69)	5 (0.20)	140 (5.51)	4 (0.18)	4 (0.18)	4.2 (0.17)
LSLV0037S100-4 [2]	140 (5.51)	132 (5.20)	180 (7.09)	170 (6.69)	5 (0.20)	140 (5.51)	4 (0.18)	4 (0.18)	4.2 (0.17)
LSLV0040S100-4 [2]	140 (5.51)	132 (5.20)	180 (7.09)	170 (6.69)	5 (0.20)	140 (5.51)	4 (0.18)	4 (0.18)	4.2 (0.17)
LSLV0055S100-2	160 (6.30)	137 (5.39)	232 (9.13)	216.5 (8.52)	10.5 (0.41)	140 (5.51)	5 (0.20)	5 (0.20)	-
LSLV0075S100-2	160 (6.30)	137 (5.39)	232 (9.13)	216.5 (8.52)	10.5 (0.41)	140 (5.51)	5 (0.20)	5 (0.20)	-
LSLV0055S100-4 [2]	160 (6.30)	137 (5.39)	232 (9.13)	216.5 (8.52)	10.5 (0.41)	140 (5.51)	5 (0.20)	5 (0.20)	-
LSLV0075S100-4 [2]	160 (6.30)	137 (5.39)	232 (9.13)	216.5 (8.52)	10.5 (0.41)	140 (5.51)	5 (0.20)	5 (0.20)	-
LSLV0110S100-2	180 (7.09)	157 (6.18)	290 (11.4)	273.7 (10.8)	11.3 (0.44)	163 (6.42)	5 (0.20)	5 (0.20)	-
LSLV0110S100-4 [2]	180 (7.09)	157 (6.18)	290 (11.4)	273.7 (10.8)	11.3 (0.44)	163 (6.42)	5 (0.20)	5 (0.20)	-
LSLV0150S100-4 [2]	180 (7.09)	157 (6.18)	290 (11.4)	273.7 (10.8)	11.3 (0.44)	163 (6.42)	5 (0.20)	5 (0.20)	-
LSLV0150S100-2	220 (8.66)	193.8 (7.63)	350 (13.8)	331 (13.0)	13 (0.51)	187 (7.36)	6 (0.24)	6 (0.24)	-
LSLV0185S100-4 [2]	220 (8.66)	193.8 (7.63)	350 (13.8)	331 (13.0)	13 (0.51)	187 (7.36)	6 (0.24)	6 (0.24)	-
LSLV0220S100-4 [2]	220 (8.66)	193.8 (7.63)	350 (13.8)	331 (13.0)	13 (0.51)	187 (7.36)	6 (0.24)	6 (0.24)	-
LSLV0300S100-4 [2]	275 (10.8)	232 (9.13)	450 (17.7)	428.5 (16.87)	14 (0.55)	284 (11.2)	7 (0.28)	7 (0.28)	-
LSLV0370S100-4 [2]	325 (12.8)	282 (11.10)	510 (20.1)	486.5 (19.15)	16 (0.63)	284 (11.2)	7 (0.28)	7 (0.28)	-
LSLV0450S100-4 [2]	325 (12.8)	282 (11.10)	510 (20.1)	486.5 (19.15)	16 (0.63)	284 (11.2)	7 (0.28)	7 (0.28)	-
LSLV0550S100-4	325 (12.8)	275 (10.83)	550 (21.7)	524.5 (20.65)	16 (0.63)	309 (12.2)	9 (0.35)	9 (0.35)	-
LSLV0750S100-4	325 (12.8)	275 (10.83)	550 (21.7)	524.5 (20.65)	16 (0.63)	309 (12.2)	9 (0.35)	9 (0.35)	-

1) EMC filter built-in class2 2) EMC filter built-in class3



IP66 Type

Unit: mm (inches)

Model	W1	W2	H1	H2	H3	D1	D2	A	Ø	T1	T2
LSLV0004S100-2X	180 (7.09)	170 (6.69)	256.6 (10.10)	245 (9.65)	8.2 (0.32)	174.2 (6.86)	188.2 (7.41)	4.5 (0.18)	4.5 (0.18)	22.3 (0.88)	-
LSLV0008S100-2X	180 (7.09)	170 (6.69)	256.6 (10.10)	245 9.65)	8.2 (0.32)	174.2 (6.86)	188.2 (7.41)	4.5 (0.18)	4.5 (0.18)	22.3 (0.88)	-
LSLV0004S100-4X 1)	180 (7.09)	170 (6.69)	256.6 (10.10)	245 (9.65)	8.2 (0.32)	174.2 (6.86)	188.2 (7.41)	4.5 (0.18)	4.5 (0.18)	22.3 (0.88)	-
LSLV0008S100-4X 1)	180 (7.09)	170 (6.69)	256.6 (10.10)	245 (9.65)	8.2 (0.32)	174.2 (6.86)	188.2 (7.41)	4.5 (0.18)	4.5 (0.18)	22.3 (0.88)	-
LSLV0015S100-2X	220 (8.66)	204 (8.03)	258.8 (10.19)	241 (9.49)	11.8 (0.46)	201 (7.91)	215 (8.46)	5.5 (0.22)	5.5 (0.22)	22.3 (0.88)	28.6 (1.13)
LSLV0022S100-2X	220 (8.66)	204 (8.03)	258.8 (10.19)	241 (9.49)	11.8 (0.46)	201 (7.91)	215 (8.46)	5.5 (0.22)	5.5 (0.22)	22.3 (0.88)	28.6 (1.13)
LSLV0037S100-2X	220 (8.66)	204 (8.03)	258.8 (10.19)	241 (9.49)	11.8 (0.46)	201 (7.91)	215 (8.46)	5.5 (0.22)	5.5 (0.22)	22.3 (0.88)	28.6 (1.13)
LSLV0040S100-2X	220 (8.66)	204 (8.03)	258.8 (10.19)	241 (9.49)	11.8 (0.46)	201 (7.91)	215 (8.46)	5.5 (0.22)	5.5 (0.22)	22.3 (0.88)	28.6 (1.13)
LSLV0015S100-4X 1)	220 (8.66)	204 (8.03)	258.8 (10.19)	241 (9.49)	11.8 (0.46)	201 (7.91)	215 (8.46)	5.5 (0.22)	5.5 (0.22)	22.3 (0.88)	28.6 (1.13)
LSLV0022S100-4X 1)	220 (8.66)	204 (8.03)	258.8 (10.19)	241 (9.49)	11.8 (0.46)	201 (7.91)	215 (8.46)	5.5 (0.22)	5.5 (0.22)	22.3 (0.88)	28.6 (1.13)
LSLV0037S100-4X 1)	220 (8.66)	204 (8.03)	258.8 (10.19)	241 (9.49)	11.8 (0.46)	201 (7.91)	215 (8.46)	5.5 (0.22)	5.5 (0.22)	22.3 (0.88)	28.6 (1.13)
LSLV0040S100-4X 1)	220 (8.66)	204 (8.03)	258.8 (10.19)	241 (9.49)	11.8 (0.46)	201 (7.91)	215 (8.46)	5.5 (0.22)	5.5 (0.22)	22.3 (0.88)	28.6 (1.13)
LSLV0055S100-2X	250 (9.84)	232 (9.13)	328 (12.91)	308 (12.13)	11 (0.43)	227.2 (8.94)	241.2 (9.50)	6 (0.24)	6 (0.24)	22.3 (0.88)	28.6 (1.13)
LSLV0075S100-2X	250 (9.84)	232 (9.13)	328 (12.91)	308 (12.13)	11 (0.43)	227.2 (8.94)	241.2 (9.50)	6 (0.24)	6 (0.24)	22.3 (0.88)	28.6 (1.13)
LSLV0055S100-4X 1)	250 (9.84)	232 (9.13)	328 (12.91)	308 (12.13)	11 (0.43)	227.2 (8.94)	241.2 (9.50)	6 (0.24)	6 (0.24)	22.3 (0.88)	28.6 (1.13)
LSLV0075S100-4X 1)	250 (9.84)	232 (9.13)	328 (12.91)	308 (12.13)	11 (0.43)	227.2 (8.94)	241.2 (9.50)	6 (0.24)	6 (0.24)	22.3 (0.88)	28.6 (1.13)
LSLV0110S100-2X	260 (10.24)	229 (9.02)	399.6 (15.73)	377 (14.84)	14.6 (0.57)	245.4 (9.66)	259.6 (10.22)	6 (0.24)	-	22.3 (0.88)	34.9 (1.37)
LSLV0150S100-2X	300 (11.81)	270.8 (10.66)	460 (18.11)	436.5 (17.19)	15.5 (0.61)	250 (9.84)	264 (10.39)	6 (0.24)	-	22.3 (0.88)	44.5 (1.75)
LSLV0110S100-4X 1)	260 (10.24)	229 (9.02)	399.6 (15.73)	377 (14.84)	14.6 (0.57)	245.4 (9.66)	259.6 (10.22)	6 (0.24)	-	22.3 (0.88)	34.9 (1.37)
LSLV0150S100-4X 1)	260 (10.24)	229 (9.02)	399.6 (15.73)	377 (14.84)	14.6 (0.57)	245.4 (9.66)	259.6 (10.22)	6 (0.24)	-	22.3 (0.88)	34.9 (1.37)
LSLV0185S100-4X 1)	300 (11.81)	270.8 (10.66)	460 (18.11)	436.5 (17.19)	15.5 (0.61)	250 (9.84)	264 (10.39)	6 (0.24)	-	22.3 (0.88)	44.5 (1.75)
LSLV0220S100-4X 1)	300 (11.81)	270.8 (10.66)	460 (18.11)	436.5 (17.19)	15.5 (0.61)	250 (9.84)	264 (10.39)	6 (0.24)	-	22.3 (0.88)	44.5 (1.75)

1) EMC filter built-in class3

H100 Fan & Pump Drive

- 3Ø 200V 0.75~18.5kW
- 3Ø 400V 0.75~500kW

Significant Energy Saving With LS Drive Solutions

This product is developed to build an environment-friendly system that realizes significant energy saving in the industrial field of fans/pumps and water treatment based on the leading drive solutions.

Safe System Control

For safe pump operation, the following functions are provided for users: Soft Fill; start and stop slope adjustment; valve deceleration time setting; multi-motor control; and scheduling operation.

Optimized for HVAC and Water Treatment

User-friendly functions for convenient use of fans/pumps such as pump clean, auxiliary motor PID compensation and load tuning.

Intended Use

Applied to the following industries: building, metal, pulp/paper, coal mine, oil/gas and water treatment; (fan/pump, dryer)

Marine Certifications

ABS, BV, CCS, DNV/GL, KR, LR, NK, RINA, RS

Product Type & Model

LSLV	0008	H100	-	4	C	O	F	N

LS Low Voltage Drive Series

Drive Capacity
0008: 0.75kW~5000: 500kW

Series Name

Input Voltage
2: 3Ø 200~240 (V)
4: 3Ø 380~480 (V)

Keypad Type
C: LCD Keypad

UL Type
O: UL Open

EMC Filter
F: Built-in EMC
N: Non EMC

Reactor
D: Built-in DC Reactor
N: Non DC Reactor

Main Functions

Features	Description	Benefits
HVAC-only Function	Multi Motor Control, PID operation, flow (flux) compensation, scheduling operation	Optimized operation for HVAC load
Fan/Pump Protection Function	Protective functions include Soft Fill; valve deceleration time setting; pump clean; pipe breakage level detection; Underload Detection; lubrication Fire Mode	Support for optimized fan/pump system performance; extended life of machinery with load; and reduced maintenance cost
Built-in EMC Filter	400V 5.5~30kW, 110~500kW built-in(C3) 400V 37~500kW built-in option (C3) ※ With a filter, 75~90kW meets the EMC standard	Reduced electromagnetic noise and additional space and cost for parts unnecessary
Various Field Networks	RS-485 and BACnet network support for general HVAC system; Modbus-RTU, Metasys N2 and LonWorks options	Connectable with all widely-used field networks; simple maintenance of option cards and easier mounting
Reduced Product Size and Side-by-Side Installation	The product size is reduced up to 60% of its original size; simple replacement of cooling fans; installation span between products is about 2mm	Reduced installation area; and when installing multiple motors, the control panel size is significantly reduced
DC Reactor	400V 37~500kW products have a built-in DC reactor	Improved power factor; and THD reduction
Global Standard Requirement	UL Plenum-Rated 110~500kW; obtained a certificate of new UL 61800-5-1 (improved quality of insulation distance)	Product reliability enhanced as it meets the new global standard

Control

Control Mode	V/F, slip compensation
Frequency Setting Resolution	Digital command: 0.01Hz
	Analogue command: 0.06Hz (based on 60Hz)
Frequency Level	1% of the peak output frequency
V/F Pattern	Linear, square-law torque reduction, user V/F
Overload Capacity	5.5~90kW rated current: 120% 1min
	110~500kW rated current: 110% 1min
Torque Boost	Passive torque boost; auto torque boost

Operation

Operation Mode		Keypad, Terminal Block, Communication Network options	
Frequency Setting		Analogue method: -10 ~ 10V, 0 ~ 10V, 0 ~ 20mA	
		Digital method: keypad, pulse train input	
Operation Function		PID control; 3-wire operation; frequency limit; secondary function; forward/backward rotation prohibited; power switch; speed search; power brake; leakage-reduced operation; up-down operation; DC braking; frequency jump; slip compensation; auto restart; auto tuning; energy buffering operation; flux braking; energy saving operation	
Input	Multifunctional Terminal (7Points)	PNP(Source), NPN(Sink) options According to the parameter setting of IN-65~71 codes, the following functions can be set.	
		Forward operation; reset; emergency trip; switching frequency – high/middle/low; DC braking upon stop; frequency increase; 3-wire operation; acceleration or deceleration stop; MMC interlock; backward operation; external trip; job operation; acceleration/deceleration by stage – high/middle/low; second motor option; frequency decline; analogue command fixed frequency; switching to the general operation during PID operation; Pre Heat; pump cleaning; RTC (time event function)	
	Pulse Train	0~32kHz, Low Level: 0~0.8V, High Level: 3.5~12V	
Output	Multifunctional Open Collector Terminal	Fault output and drive operation mode output	DC26V, 50mA or below
	Fault Relay Terminal		N.O.: AC 250V, 2A or below; DC 30V, 3A or below N.C.: AC 250V, 1A or below; DC 30V, 1A or below
	Multifunctional Relay Terminal		AC250V, 5A or below, DC30V, 5A or below
	Analogue Output	0~12Vdc(0~20mA): Frequency, output current, output voltage, DC voltage options	
	Pulse Train	Up to 32kHz, 0~12V	

3Ø 200V Class (0.75~18.5kW)

LSLV□□□□H100-2□□□□□		0008	0015	0022	0037	0055	0075	0110	0150	0185
Applied Motor	HP	1.0	2.0	3.0	5.0	7.5	10	15	20	25
	kW	0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5
Output	Rated Capacity (kVA)	1.9	3.0	4.5	6.1	8.4	11.4	16.0	21.3	26.3
	Rated Current (A)	5	8	12	16	22	30	42	56	69
	Rated Frequency (Hz)	0~400Hz								
	Rated Voltage (V)	3Ø 200~240V								
Input	Rated Voltage (V)	3Ø 200~240VAC (-15%~+10%)								
	Rated Frequency (Hz)	50~60Hz (±5%)								
	Rated Current (A)	4.9	8.4	12.9	17.5	23.7	32.7	46.4	62.3	77.2
Weight (kg)		3.3	3.3	3.3	3.3	3.3	3.3	3.3	4.6	7.1

3Ø 400V Class (0.75~22kW)

LSLV□□□□H100-4□□□□□		0008	0015	0022	0037	0055	0075	0110	0150	0185	0220
Applied Motor	HP	1.0	2.0	3.0	5.0	7.5	10	15	20	25	30
	kW	0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22
Output	Rated Capacity (kVA)	1.9	3.0	4.5	6.1	9.1	12.2	18.3	23.0	29.0	34.3
	Rated Current (A)	2.5	4	6	8	12	16	24	30	38	45
	Rated Frequency (Hz)	0~400Hz									
	Rated Voltage (V)	3Ø 380~480V									
Input	Rated Voltage (V)	3Ø 380~480VAC (-15%~+10%)									
	Rated Frequency (Hz)	50~60Hz (±5%)									
	Rated Current (A)	2.4	4.2	6.5	8.7	12.2	17.5	26.5	33.4	42.5	50.7
Weight (kg)		3.3	3.3	3.3	3.3	3.3	3.3	3.4	4.6	4.8	7.5

3Ø 400V Class (30~90kW)

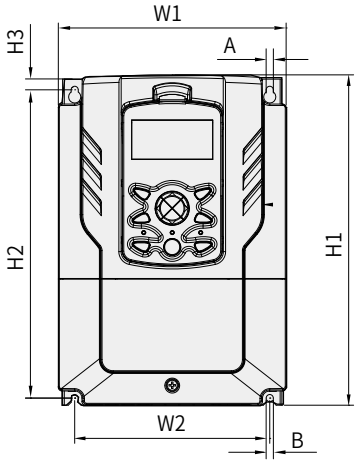
LSLV□□□□H100-4□□□□□		0300	0370	0450	0550	0750	0900
Applied Motor	HP	40	50	60	75	100	125
	kW	30	37	45	55	75	90
Output	Rated Capacity (kVA)	46.5	57.1	69.4	82.0	108.2	128.8
	Rated Current (A)	61	75	91	107	142	169
	Rated Frequency (Hz)	0~400Hz					
	Rated Voltage (V)	3Ø 380~480V					
Input	Rated Voltage (V)	3Ø 380~480VAC (-15%~+10%)					
	Rated Frequency (Hz)	50~60Hz (±5%)					
	Rated Current (A)	69.1	69.3	84.6	100.1	133.6	160.0
Weight (kg)/EMC Built-in		7.5	26	35	35	43	
Weight (kg)/Non EMC		-	25	34	34		

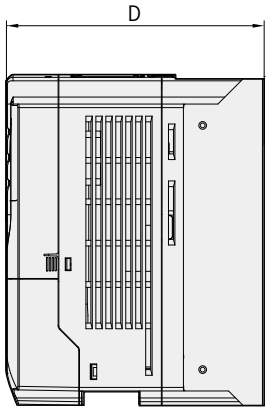
3Ø 400V Class (110~500kW)

LSLV□□□□H100-4□□□□		1100	1320	1600	1850	2200	2500	3150	3550	4000	5000
Applied Motor	HP	150	200	250	300	350	400	500	550	650	800
	kW	110	132	160	185	220	250	315	355	400	500
Output	Rated Capacity (kVA)	170	201	248	282	329	367	467	520	587	733
	Rated Current (A)	223	264	325	370	432	481	613	683	770	962
	Rated Frequency (Hz)	0~400Hz									
	Rated Voltage (V)	3Ø 380~500V									
Input	Rated Voltage (V)	3Ø 380~500VAC (-15%~+10%)									
	Rated Frequency (Hz)	50~60Hz (±5%)									
	Rated Current (A)	215.1	254.6	315.3	358.9	419.1	469.3	598.1	666.4	751.3	938.6
Weight (kg)		55.8	55.8	74.7	74.7	120.0	120.0	185.5	185.5	185.5	265

- The motor capacity is calculated with a standard 4-pole electric motor.
- 200V Class is based on 220V and 400V Class on 440V.
- The rated output current is limited according to carrier frequency (CON-04) setting.
- 400V 5.5~30kW capacity products have built-in EMC filters.
- 400V 37~55kW capacity products have an option to include built-in EMC filters.
- 400V 75~90kW capacity products satisfy the EMC standard with a separate filter.
- The overload tolerance of 200V 5.5~18.5kkW and 400V 5.5~90kW products is 120%.
- 400V 110~500kW capacity products have built-in EMC filters.
- The overload tolerance of 400V 110~500kW products is 110%.

Product Dimension





IP20 Type

Unit: mm (inches)

Model	W1	W2	H1	H2	H3	D	A	B
LSLV0008H100-2	160 (6.30)	137 (5.39)	232 (9.13)	216.5 (8.52)	10.5 (0.41)	181 (7.13)	5 (0.20)	5 (0.20)
LSLV0015H100-2								
LSLV0022H100-2								
LSLV0037H100-2								
LSLV0055H100-2								
LSLV0075H100-2								
LSLV0110H100-2								
LSLV0008H100-4								
LSLV0015H100-4								
LSLV0022H100-4								
LSLV0037H100-4								
LSLV0055H100-4								
LSLV0075H100-4								
LSLV0110H100-4								
LSLV0150H100-2	180 (7.09)	157 (6.18)	290 (44.42)	273.7 (10.78)	11.3 (0.45)	205.3 (8.08)		
LSLV0150H100-4								
LSLV0185H100-4								
LSLV0185H100-2	220 (8.66)	193.8 (7.63)	350 (13.78)	331 (13.03)	13 (0.51)	223.2 (8.79)	6 (0.24)	6 (0.24)
LSLV0220H100-4								
LSLV0300H100-4								
LSLV0370H100-4	275 (10.83)	232 (9.13)	450 (17.72)	428.5 (16.87)	14 (0.55)	284 (11.18)	7 (0.28)	7 (0.28)
LSLV0450H100-4	325 (12.08)	282 (11.10)	510 (20.08)	486.5 (19.15)	16 (0.63)			
LSLV0550H100-4								
LSLV0750H100-4		275 (10.83)	550 (21.65)	524.5 (20.65)		309 (12.80)	9 (0.35)	9 (0.35)
LSLV0900H100-4								
LSLV1100H100-4	300 (11.81)	200 (7.87)	706 (27.80)	685.5 (26.99)	9.5 (0.37)	386 (15.20)		
LSLV1320H100-4								
LSLV1600H100-4	380 (14.96)	300 (11.81)	705 (27.76)			396 (15.59)		
LSLV1850H100-4								

IP00 Type

Model	W1	W2	H1	H2	H3	D	A	B
LSLV2200H100-4	426 (16.77)	320 (12.60)	922.3 (36.31)	895.5 (35.26)	15.5 (0.61)	440 (17.32)	11 (0.43)	11 (0.43)
LSLV2500H100-4								
LSLV3150H100-4	600 (23.62)	420 (16.54)	1000 (39.37)	972 (38.27)	15 (0.59)	500 (19.69)	14 (0.55)	14 (0.55)
LSLV3550H100-4								
LSLV4000H100-4								
LSLV5000H100-4	776 (30.55)	500 (19.69)	1054 (41.50)	1021 (40.20)	20 (0.79)			

L100

Drive for Lift Application

•3Ø 380~480V 5.5~22kW

L100 series, the optimal solution for lifting applications

Optimized for elevators and load lifting operation,
the LS ELECTRIC L100 series offers best-in-class performance.
With size-optimized solutions for these applications,
the L100 provides essential functions and options,
which further enhance customer value.

Best-in-class size competitiveness

Along with performance enhancement, size was reduced by applying heat dissipation analysis and utilising a 3D design process.

Optimization for Elevator/Lift

By Premium High Performance Vector Control, L100 can drive both IM/PM loads with optimal control algorithm (Voltage/Speed/Flux) for smooth and precise operation.
it saves your commissioning time through optimal Auto-tuning and essential Functions for Elevator operation.

Intended Use

- Elevator
- Lift
- Automatic warehouse parking facility

Product Type & Model

LSLV	0075	L100	-	4	N	N	F	N

LS Low Voltage Drive Series

Drive Capacity
0055 (5.5kW) ~ 0220 (22kW)

Series Name

Input Voltage
4 : 400V (380~480V)

Keypad Type
N : Non Keypad

UL Type
N : Non UL Type

EMC Filter
F : EMC Filter Type

Reactor
N : Non DC Reactor Type

RoHS COMPLIANT

Main Functions

Features	Description	Benefit
The Optimal Solution for Elevator	Creepless, Anti rollback control, Auto load cell configuration ,Using the battery operation mode, ALLS(Automatic Light Load Search), Anti-hunting	Providing optimal functions for driving elevator
Built-in EMC Filter, Braking Unit	Built-in EMC filter(C2) to reduce noise, built-in dynamic brake circuit to control generative load	Excellent noise resistance, regenerative power control
Enhanced Maintenance Convenience	LED for displaying status, LCD keypad connection with sliding door, Removable terminal for easy maintenance, Easy replacement of cooling fan	Convenient Installation & Test Run
Various Field Networks	Built-in CAN2.0B/RS232, CAN communication support	Enhanced maintenance convenience and test run, Simultaneous control maximum 8ea with CAN Communication
Best-in-class Size Competitiveness	Half-sized compared to other company products	Reduced installation space improves the efficiency of internal and external configuration of the control panel
Various Option Card	E/LIO, Incremental Encoder, EnDat Encoder, SIN/COS Encoder	Optimization of elevator and lift operation by providing various and optimized option cards

Control

Con-trol	Control method		Induction motor (IM)	•Speed (sensored •V/F control •Slip compensation
			Synchronous motor (PM)	Speed(Sensored)
	Speed control		[Induction motor (IM)] Analog settings: ± 0.1 % (25 ±10°C) of max speed (1800 rpm) Digital settings: ± 0.1 % (0-40°C) of max speed (1800 rpm) [Synchronous motor (PM)] Analog settings: ± 0.1 % (25 ±10°C) of max speed (680 rpm) Digital settings: ± 0.015 % (0-40°C) of max speed (680 rpm)	
	Speed setting resolution		Analog settings: ± 0.1 % of max speed Digital settings: 0.1 rpm	
	Speed control response speed		50Hz	
	Overload capacity		Rated current: 150%, 1 min.	
	Accel-eration /Decel-eration	Time settings	0.00-600.0 sec	
		Combination	4 acceleration/deceleration time choices	
		Pattern	Linear, S-Curve	

Operation

Input	Speed configuration	- Digital settings via the keypad - Analog input settings	- Multistep configurations via terminal input - Speed control via optional add-on modules
	Analog input	2 channels (V1, I1) 0 → 10 V, 10 → 0 V, -10 → 10 V, 10 → -10 V 0 → 20 mA, 20 → 0 mA 2 choices for multifunction analog input: speed or torque bias	
	Terminal contact input	FX, RX, BX, RST, P1, P2, P3, P4, P5, P6, P7 Various functions may be assigned to multifunction input terminals (P1-P7).	
Out-put	Analog output	2 channels (AO1, AO2) -10 → 10 V, 10 → -10 V, 0 → 10 V, 10 → 0 V output Various multifunction analog output options	
	Terminal contact output	Multifunction terminal contact output: 4 channels (A1-C1, A2-C2, A3-C3, A4-C4) Fault terminal contact output: 1 channel (30A-30C, 30B-30C)	

Specification

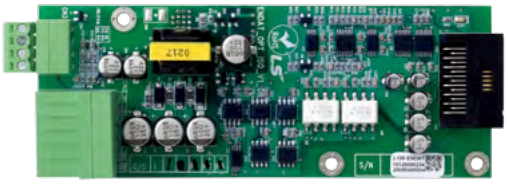
LSLV□□□□L100-4NNFN		0055	0075	0110	0150	0185	0220
Motor Note 1)	[HP]	7.5	10	15	20	25	30
	[kW]	5.5	7.5	11	15	18.5	22
Rated Output	Catacity[kVA] Note 1)	9.1	12.2	18.3	22.9	29.7	34.3
	Current[A]	12	16	24	30	39	45
	Speed	Induction motor: 0~3600[RPM], Synchronous motor: 0~680[RPM]					
	Voltage	0 ~ 380(480V Note 2))					
Rated Input	Voltage	3 phase 380–480V (–10% ~ +10%) Note 3)					
	Frequency	50 ~ 60 Hz(±5%)					
	Current[A]	12.9	17.5	26.5	33.4	43.6	50.7
Weight[kg (lbs)]		3.3 (7.3)	3.4 (7.5)	4.6 (10.2)	4.8 (10.6)	7.5 (16.6)	8.0 (17.7)

Note1) The rated motor capacity is based on a standard 4-pole motor. 400 V inverters are designed for a 440 V supply voltage.
Note2) The maximum output voltage cannot exceed the input voltage.
Note3) If the input voltage is greater than 480 V, apply input voltage derated by 10% from the rated input voltage. Also, install an AC reactor in the power input side if the voltage imbalance between the phases is greater than 2%.
[Voltage imbalance [%] = Max voltage [V] - Min voltage [V] / Three-phase average voltage [V] x 67 (IEC 61800-3 (5.2.3)]

Elevator I/O option card

Incremental Encoder

- Incremental A/B Pulse
- Power: DC5V/12V/15V supply
- Input: A+[PA], A-, B+[PB], B-
- Output: RA, RB, RG (Encoder A, B phase return pulse)
- Support Encoder: Line Dive (+5V), Open Collector (+12V, +15V), Complementary

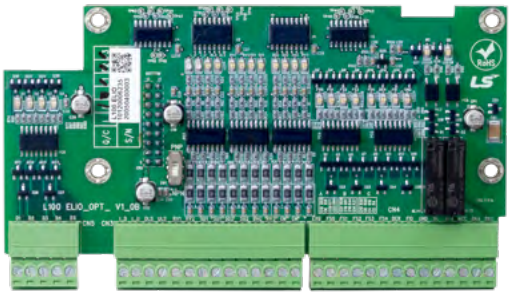


EnDat Encoder

- HEIDENHAIN Encoder (EnDat v2.2)
- Power: DC5V supply
- Input: SIN+, SIN-, COS+, COS-, DATA+, DATA-, CLK+, CLK-
- Output: RA, RB, RG
- Support Encoder: ECN413, ECN1313, ERN487, ERN1387

SIN/COS Encoder

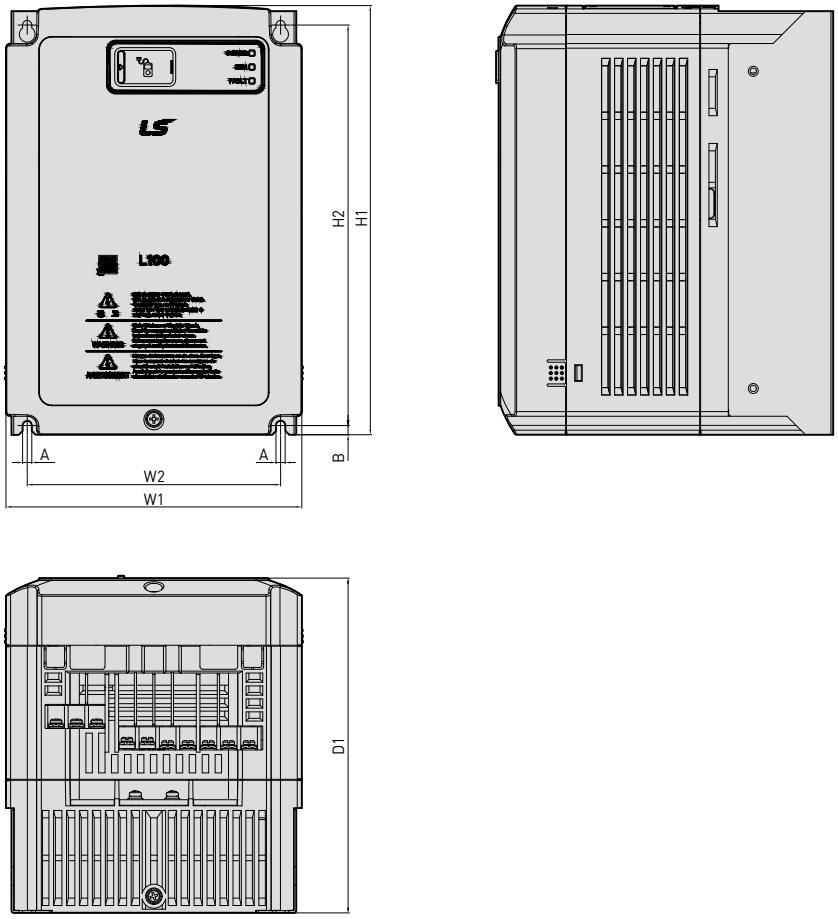
- HEIDENHAIN Encoder
- Power: DC5V supply
- Input: SIN+, SIN-, COS+, COS-, SIN2+, SIN2-, COS2+, COS2-
- Output: RA, RB, RG
- Support Encoder: ECN413, ECN1313, ERN487, ERN1387



Elevator I/O (ELIO)

- Dedicated to elevator I/O terminal
- Digital input: 9 points for the elevator car control (photo-coupler isolation, PNP/NPN input mode)
- Digital output: 10 points for the position of the elevator car and operation control (Isolated open collector 8 points, relay A (NO) 2 points)
- Fault information output: 4 points (Isolated open collector)

Product Dimension



Unit: mm (inches)

Model	W1	W2	H1	H2	D1	A	B	Weight [kg (lbs)]
LSLV055L100-4	160 [6.30]	137 [5.39]	232 [9.13]	217 [8.54]	181 [7.16]	5 [0.20]	5 [0.20]	3.3 (7.3)
LSLV075L100-4								3.4 (7.5)
LSLV110L100-4	180 [7.09]	157 [6.18]	290 [11.42]	274 [10.79]	205 [8.07]	5 [0.20]	5 [0.20]	4.6 (10.2)
LSLV150L100-4								4.8 (10.6)
LSLV185L100-4	220 [8.66]	194 [7.64]	350 [13.78]	331 [13.78]	223 [8.78]	6 [0.24]	6 [0.24]	7.5 (16.6)
LSLV220L100-4								8.0 (17.7)

iS7

High Performance Standard Drive

- 3Ø 200V 0.75kW~90kW
- 3Ø 400V 0.75kW~450kW

iS7, a High-performance and High-reliability Drive

iS7 is a high-performing standard drive that is applicable to any working environment.

Powerful Sensorless Vector Control

Sensorless vector algorithms developed with our accumulated technologies that demonstrate powerful control of low-speed torque and speed accuracy are built-in.

A Variety of Functions

V/F, V/F PG, slip compensation, sensorless vector, and sensored vector control are possible. LS satisfies any customer's needs through various functions such as torque control, droop control, KEB, Flying Start, and Easy Start.

Intended Use

- Warping / Beaming machine
- Laminating machine
- Drawing machine
- Tire line
- Elevator
- Construction lift
- Crane/Hoist
- Parking equipment
- Auto warehouse
- Press
- Washer/Dehydrator
- Compressor

Product Type & Model

SV	0008	iS7	-	2	N	O	F	D	W

LS Drive Starvert Series

Drive Capacity
0008: 0.75kW ~3750: 375kW

Series Name

Input Voltage
2: 3Ø 200~230V / 4: 3Ø 380~480V

Keypad
N: Non-Keypad / G: Graphic Keypad

UL Standard
O: Open / E: Enclosed UL Type 1 Note 1)

Filter
Blank: Non-Filter / F: Built-in EMC Filter

DC Reactor
Blank: Non-DC Reactor / D: Built-in DC Reactor / R: DB Resistor (Inner mounted) Note 2)

Customized Product
W: Winder / S: Synchronous / T: Safety Note 3)
Customization (W: Web control, S: Synchronization, V: Vessel E: High efficiency)

Note 1) For 0.75~75KW range, enclosed type 1 can be satisfied if conduit option installed.
Note 2) Built-in DB resistor option is available only for web version product from 0.75kW to 3.7kW.
DB resistor of IS7 porduct is the option of WEB product.
Applicable capacity is from 0.75 to 375 kW of IS7 porducts.
Note 3) For 0.75~160kW, safety type products have built-in safety options. However, safety options should be purchased and applied to general products for 185~375kW products.

ISO9001 ISO14001

Main Functions

Features	Description	Benefits
Powerful Control Performance	Sensor-less vector control, sensored control, and auto tuning	Improved accuracy in speed and torque operation
Safety Card	2-channel STO (Safety Torque Off) 0.75~160kW Safety option built-in (185~375kW optional built-in	Satisfied the safety standards and contacts with complete safety functions provided
Various Field Networks	Profibus-DP, Ethernet IP, Modbus TCP, CANopen, PROFINET, CC link, RAPIEnet, LonWorks, R-Net/F-Net communication network options	Possible to handle various field networks; convenient maintenance of options board; and easier mounting
EMC Filter	200V/400V 0.75~22kW capacity EMC filter built-in product options	Reduced electromagnetic noise; and additional space and expenses for parts unnecessary
DC Reactor	Capacity with built-in reactors ※ 200V 0.75~22kW ※ 400V 0.75~220kW	Minimized harmonics and power factor decline
Application-customized Functions	Web function (wire-drawing machine) S/W option; position and synchronization control option; and classification option	Flexible application for load equipment used in various industrial sectors

Control

Control Mode	V/F, V/F PG, Slip compensation, Sensorless, Sensored vector
Frequency Setting Resolution	Digital command: 0.01Hz / Analogue command: 0.06Hz (peak frequency: 60Hz)
Frequency Level	Digital command operation: 0.01% of the peak output frequency / Analogue command operation: 0.1% of the peak output frequency
V/F Pattern	Linear, square-law torque reduction, user V/F
Overload Capacity	CT (Heavy Duty) current rating: 150% 1min / VT (Normal Duty) current rating: 110% 1min
Torque Boost	Passive torque boost; auto torque boost

Operation

<table>
<tr><td colspan="2">Operation Mode</td><td colspan="2">Keypad / Terminal Block / Communication Network options</td></tr>
<tr><td colspan="2">Frequency Setting</td><td colspan="2">Analogue method: 0 ~ 10 (V), -10 ~ 10 (V), 0 ~ 20 (mA)
Digital method: Keypad</td></tr>
<tr><td colspan="2">Operation Function</td><td colspan="2">PID control; up-down operation; 3-wire operation; DC braking; frequency limit; frequency jump; secondary function; slip compensation; reverse rotation prevention; auto restart; power switching; auto tuning; speed search (Flying Start); energy buffering operation; Power Braking; Flux Braking; leakage-reduced operation; MMC; Easy Start</td></tr>
<tr><td rowspan="2">Input</td><td rowspan="2">Multifunctional Terminal (8Points)
P1 ~ P8 Note 5)</td><td colspan="2">NPN (Sink) / PNP (Source) Options</td></tr>
<tr><td colspan="2">Function: Forward operation; backward operation; reset; external trip; emergency trip; jog operation; switching frequency – high, middle, low; acceleration and deceleration by stage – high, middle, low; DC braking at pause; second motor option; frequency increase; frequency decline; 3-wire operation; switching to the general operation during PID operation; switching to body operation during option operation; analogue command fixed frequency; acceleration or deceleration stop</td></tr>
<tr><td rowspan="3">Output</td><td>Multifunctional Open Collector Terminal</td><td rowspan="2">Fault output and drive operation mode output</td><td>DC 26V 100mA or below</td></tr>
<tr><td>Multifunctional Relay Terminal</td><td>(N.O., N.C.) AC 250V 1A or below, DC 30V 1A or below</td></tr>
<tr><td>Analogue Output</td><td colspan="2">0 ~ 10 Vdc (20mA or below): Frequency, current, voltage, DC voltage options</td></tr>
</table>

Note 5) According to the parameter setting of IN-65~72, various functions related to multifunctional terminal can be set.

200V Class (0.75~22kW)

SV□□□□iS7-2□			0008	0015	0022	0037	0055	0075	0110	0150	0185	0220
Applied Motor Note 1)	Heavy Duty	(HP)	1	2	3	5	7.5	10	15	20	25	30
		(kW)	0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22
	Normal Duty	(HP)	2	3	5	7.5	10	15	20	25	30	40
		(kW)	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22	30
Output	Rated Capacity (kVA) Note 2)		1.9	3.0	4.5	6.1	9.1	12.2	17.5	22.9	28.2	33.5
	Rated Current (A) Note 3)	HD	5	8	12	16	24	32	46	60	74	88
		ND	8	12	16	24	32	46	60	74	88	124
	Rated Frequency (Hz)		0~400 (Hz) (Sensorless-1: 0~300Hz, Sensorless-2, Vector: 0~120Hz) Note 4)									
	Rated Voltage (V)		3Ø 200~230V Note 5)									
Input	Rated Voltage (V)		3Ø 200~230VAC (-15% ~ +10%)									
	Rated Frequency (Hz)		50~60 (Hz) (±5%)									
	Rated Current (A)	HD	4.3	6.9	11.2	14.9	22.1	28.6	44.3	55.9	70.8	85.3
		ND	6.8	10.6	14.9	21.3	28.6	41.2	54.7	69.7	82.9	116.1
Weight[kg], Non EMC&DCR			4.5				7.7		14		22.9	

200V Class (30~75kW)

SV□□□□iS7-2□			0300	0370	0450	0550	0750	-	-	-	-	-
Applied Motor Note 1)	Heavy Duty	(HP)	40	50	60	75	100	-	-	-	-	-
		(kW)	30	37	45	55	75	-	-	-	-	-
	Nomal Duty	(HP)	50	60	75	100	125	-	-	-	-	-
		(kW)	37	45	55	75	90	-	-	-	-	-
Output	Rated Capacity (kVA) Note 2)		46	57	69	84	116	-	-	-	-	-
	Rated Current (A) Note 3)	HD	116	146	180	220	288	-	-	-	-	-
		ND	146	180	220	288	345	-	-	-	-	-
	Rated Frequency (Hz)		0~400 (Hz) (Sensorless-1: 0~300Hz, Sensorless-2, Vector: 0~120Hz) Note 4)									
Input	Rated Voltage (V)		3Ø 200~230V Note 5)									
	Rated Voltage (V)		3Ø 200~230VAC (-15% ~ +10%)									
	Rated Frequency (Hz)		50~60 (Hz) (±5%)									
	Rated Current (A)	HD	121	154	191	233	305	-	-	-	-	-
		ND	152	190	231	302	362	-	-	-	-	-
Weight[kg], Non EMC&DCR			29.5	44		72.5		-	-	-	-	-

400V Class (0.75~22kW)

SV□□□□iS7-4□			0008	0015	0022	0037	0055	0075	0110	0150	0185	0220
Applied Motor Note 1)	Heavy Duty	(HP)	1	2	3	5	7.5	10	15	20	25	30
		(kW)	0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22
	Normal Duty	(HP)	2	3	5	7.5	10	15	20	25	30	40
		(kW)	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22	30
Output	Rated Capacity (kVA) Note 2)		1.9	3.0	4.5	6.1	9.1	12.2	18.3	22.9	29.7	34.3
	Rated Current (A) Note 3)	HD	2.5	4	6	8	12	16	24	30	39	45
		ND	4	6	8	12	16	24	30	39	45	61
	Rated Frequency (Hz)		0~400 (Hz) (Sensorless-1: 0~300Hz, Sensorless-2, Vector: 0~120Hz) Note 4)									
	Rated Voltage (V)		3Ø 380~480V Note 5)									
Input	Rated Voltage (V)		3Ø 380~480VAC (-15%~+10%)									
	Rated Frequency (Hz)		50~60 (Hz) (±5%)									
	Rated Current (A)	HD	2.2	3.6	5.5	7.5	11.0	14.4	22.0	26.6	35.6	41.6
		ND	3.7	5.7	7.7	11.1	14.7	21.9	26.4	35.5	41.1	55.7
Weight[kg], Non EMC&DCR			4.5				7.7		14		19.7	20.1

Note 1) The maximum applicable capacity when using a standard 4-pole electric motor is marked. (200V Class is based on 220V and 400V on 440V.)
Note 2) When it comes to the rated capacity, the input capacity of 200V is based on 220V and that of 400V on 440V. The current rating is based on the CT current.
Note 3) The output rated current is limited according to carrier frequency (CON-04) setting.
Note 4) When the control mode (DRV-09 Control Mode) is No.3 Sensorless-1 and No.4 Sensorless-2, the peak frequency of Sensorless-1 can be set up to 300Hz and that of Sensorless-2 up to 120Hz.
Note 5) The peak output voltage does not exceed the source voltage. The output voltage can be set within the source (power supply) voltage.
◆ The performance of NON DCR products is guaranteed only for CT (Heavy Duty) load.

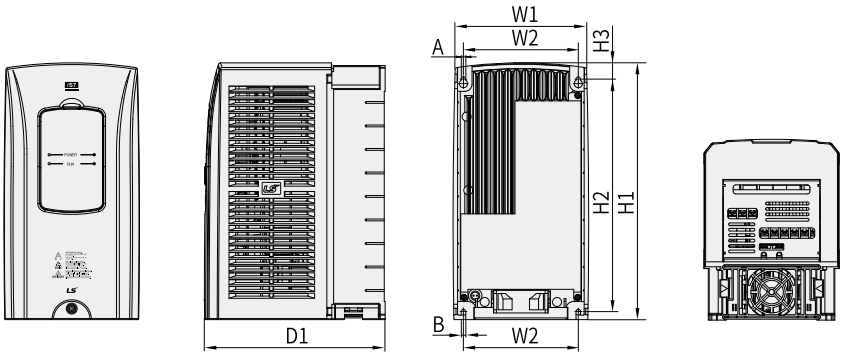
400V Class (30~375kW)

SV□□□□iS7-4□			0300	0370	0450	0550	0750	0900	1100	1320	1600	1850	2200	2800	3150	3750
Applied Motor Note 1)	Heavy Duty	(HP)	40	50	60	75	100	125	150	200	250	300	350	400	500	600
		(kW)	30	37	45	55	75	90	110	132	160	185	220	280	315	375
	Normal Duty	(HP)	50	60	75	100	125	150	200	250	300	350	400	500	600	700
		(kW)	37	45	55	75	90	110	132	160	185	220	280	315	375	450
Output	Rated Capacity (kVA) Note2)		46	57	69	84	116	139	170	201	248	286	329	416	467	557
	Rated Current (A) Note 3)	HD	61	75	91	110	152	183	223	264	325	370	432	547	613	731
		ND	75	91	110	152	183	223	264	325	370	432	547	613	731	877
	Rated Frequency (Hz)		0~400 (Hz) (Sensorless-1: 0~300Hz, Sensorless-2, Vector: 0~120Hz) Note 4)													
	Rated Voltage (V)		3Ø 380~480V Note 5)													
Input	Rated Voltage (V)		3Ø 380~480VAC (-15%, +10%)													
	Rated Frequency (Hz)		50~60 (Hz) (±5%)													
	Rated Current (A)	HD	55.5	67.9	82.4	102.6	143.4	174.7	213.5	255.6	316.3	404	466	605	674	798
		ND	67.5	81.7	101.8	143.6	173.4	212.9	254.2	315.3	359.3	463	590	673	796	948
Weight[kg], Non EMC&DCR			28			45		101*		114*		200*		252	352	

Note 1) The maximum applicable capacity when using a standard 4-pole electric motor is marked. (200V Class is based on 220V and 400V on 440V.)
Note 2) When it comes to the rated capacity, the input capacity of 200V is based on 220V and that of 400V on 440V. The current rating is based on the CT current.
Note 3) The output rated current is limited according to E carrier frequency (CON-04) setting.
Note 4) When the control mode (DRV-09 Control Mode) is No.3 Sensorless-1 and No.4 Sensorless-2, the peak frequency of Sensorless-1 can be set up to 300Hz and that of Sensorless-2 up to 120Hz.
Note 5) The peak output voltage does not exceed the source voltage. The output voltage can be set within the source (power supply) voltage.
◆ The performance of NON DCR products is guaranteed only for CT (Heavy Duty) load.

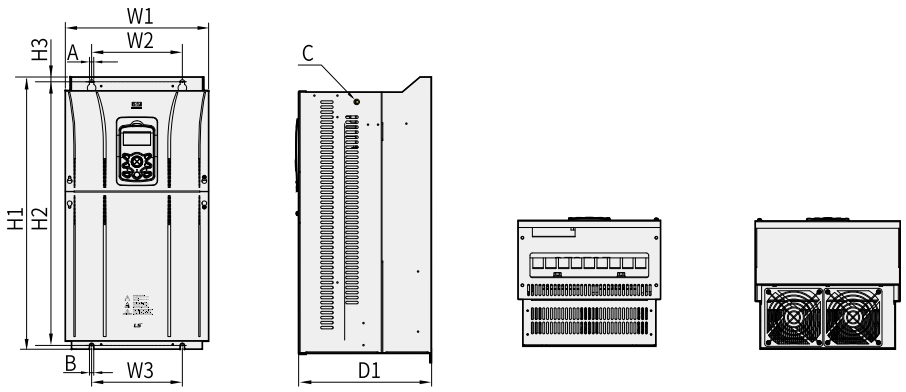
Product Dimension

(IP20/IP00)



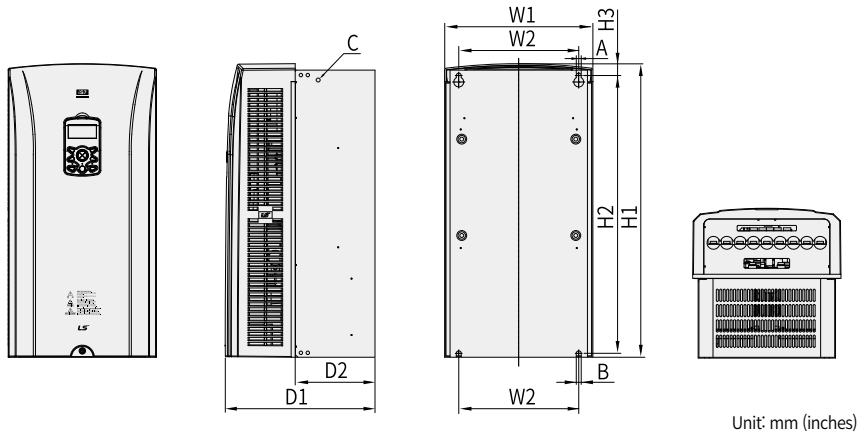
Unit: mm (inches)

Model	W1	W2	H1	H2	H3	D1	A	B
SV0008~0037iS7-2/4	150 (5.90)	127 (5.00)	284 (11.18)	257 (10.11)	18 (0.70)	200 (7.87)	5 (0.19)	5 (0.19)
SV0055~0075iS7-2/4	200 (7.87)	176 (6.92)	355 (13.97)	327 (12.87)	19 (0.74)	225 (8.85)		
SV0110~0150iS7-2/4	250 (9.84)	214.6 (8.44)	385 (15.15)	355 (13.97)	23.6 (0.92)	284 (11.18)	6.5 (0.25)	6.5 (0.25)
SV0185~0220iS7-2/4	280 (11.02)	243.5 (9.58)	461.6 (18.17)	445 (17.51)	10.1 (0.39)	298 (11.73)		



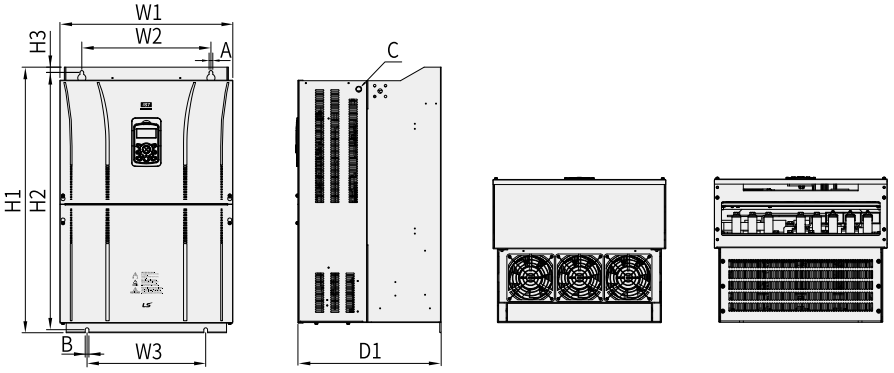
Unit: mm (inches)

Model	W1	W2/W3	H1	H2	H3	D1	A	B	C
SV0300iS7-2	300 (11.81)	190 (7.48)	570 (22.44)	552 (21.73)	10 (0.39)	265.2 (10.44)	10 (0.39)	9 (0.35)	M8
SV0370~0450iS7-2	370 (14.56)	270 (10.63)	630 (24.8)	609 (23.97)	11 (0.43)	281.2 (11.07)			M10
SV0550~0750iS7-2	465 (18.3)	381 (15.0)	750 (29.52)	723.5 (28.48)	15.5 (0.61)	355.6 (14.0)	11 (0.43)	11 (0.43)	M16



Unit: mm (inches)

Model	W1	W2	H1	H2	H3	D1	D2	A	B	C
SV0300~0450iS7-4	300.1 (11.81)	242.8 (9.55)	594.1 (23.38)	562 (22.12)	24.1 (0.94)	DCR type		10 (0.39)	10 (0.39)	M8
						302.7(11.92)	161(6.33)			
SV0550~0750iS7-4	370.1 (14.57)	312.8 (12.31)	663.5 (26.12)	631.4 (24.85)	24.1 (0.94)	DCR type				
						373.3(14.69)	211.5(8.32)			



Unit: mm (inches)

Model	W1	W2	W3	H1	H2	H3	D1	A	B	C
SV0900~1100iS7-4	510 (20.07)	381 (15.0)	350 (13.77)	783.5 (30.84)	759 (29.88)	15.5 (0.61)	422.6 (16.63)	11 (0.43)	11 (0.43)	M16
SV1320~1600iS7-4	510 (20.07)	381 (15.0)	350 (13.77)	861 (33.89)	836.5 (32.93)	15.5 (0.61)	422.6 (16.63)			
SV1850~2200iS7-4	690 (27.16)	581 (22.87)	528 (20.79)	1078 (42.44)	1043.5 (41.08)	25.5 (1.00)	449.6 (17.70)	14 (0.55)	15 (0.59)	M20
SV2800iS7-4	772 (30.39)	500 (19.69)	500 (19.69)	1140.5 (44.90)	1110 (43.70)	15 (0.59)	442 (17.40)	13 (0.51)	13 (0.51)	M16
SV3150~3750iS7-4	922 (36.30)	580 (22.83)	580 (22.83)	1302.5 (51.28)	1271.5 (50.06)	15 .5 (0.61)	495 (19.49)	14 (0.55)	14 (0.55)	

S300 High Performance Drive

- 3Ø 200V 0.4kW~75kW
- 3Ø 400V 0.4kW~220kW
- 3Ø 400V 250kW~400kW (Coming soon)

Expect more with even stronger performance S300

Experience the incomparable, high-quality performance of the LS high-performance S300 series

Strong Performance

- Improved V/F and sensorless control performance
- Enhanced motor control performance

Space Efficient Design

- 10-40% reduction in size by capacity
- Built-in DC Reactor and EMC Filter for all capacities

Predictive Maintenance

- Predicts and assesses lifespan for the main cap, fan, and relay
- Gold plate PCB and hole-plugging applied

Suitable for Users

- Smart LCD Operator
- Easy user sequence creation

Intended Use

- Press
- Freshener
- Lift
- Parking facility
- Warehouse/Bumping machine
- Metalworking machine
- Extruder
- Automatic warehouse
- Crane/hoist
- Compressor
- Stirrer

Product Type & Model

LSLV	0008	S300	-	2	C	O	F	D

LS Low Voltage Drive Series

Drive Capacity
0004:0.4kW ~ 2200:220kW (Heavy duty)

Series Name

Input Voltage
2: 3Ø 200V~400V
4: 3Ø 380~480V

Keypad
C: Smart LCD Operator

UL Type
O: UL Open Type Note1)

EMC Filter
F: Built-in EMC

Reactor
D: Built-in DC Reactor

Note1) Installing Conduit option fulfills UL Enclosed Type 1

Main Function

Features	Description	Benefits
Strong Performance	Improved V/F and sensorless control performance	Enhanced motor control performance
Suitable for Users	- Smart LCD Operator - Easy user sequence creation	- Multilingual - USB support (Up to 20 SLO parameters read & write) -RTC (Real Time Clock) Function
Predictive Maintenance	Provides state diagnostics for main capacitors, fans, and relays (with warning alarm settings)	Enhanced diagnostic and predictive maintenance
Built-in safety torque off (STO)	2-channel STO (Safety Torque Off)	Compliance with safety standards (Built-in safe torque off feature)
Built-in DC reactor	Built-in DC Reactor for all capacities	effective for improving the power factor and reducing the total harmonic distortion (THD)
Built-in EMC filter	Built-in EMC Filter for all capacities	2nd Environment(EN61800-3)/Category C3 (Class A)

Control

Control method	V/F control, slip compensation, V/F PG, sensorless vector, sensored vector	
Frequency settings power resolution	Digital command: 0.01Hz	
Frequency accuracy	Analog command: 0.06 Hz(60 Hz standard)	
	1% of maximum output frequency	
V/F pattern	Linear, square reduction, user V/F	
Overload capacity	Normal duty (ND)	200V: 45 kW or less 120%, 1 minute / 55 kW or more 110%, 1 minute 400V: 75 kW or less 120%, 1 minute / 90 kW or more 110%, 1 minute
	Heavy duty (HD)	150%/minute compared to CT rated current
Torque Boost	Manual torque boost, automatic torque boost	

Run

Operation type	Select among Smart Operator, terminal block, and communication operation			
Frequency Settings	Analog type: -10-10 V, 0-10 V, 0-20 mA Digital type: smart Operator, pulse train input			
Operation function	PID Control, Up-down operation, 3-Wire Operation, DC braking, Frequency (speed) limit, Frequency Jump, Second function, Slip compensation, Anti-forward and reverse direction rotation, Automatic restart, Commercial transition, Kinetic energy buffering operation, Speed search, Flux Braking, Power braking, Energy Saving Operation, Leakage reduction operation			
Input	Multifunction Terminal (8ea) DI1-DI8	Select between PNP (Source) and NPN (Sink) modes Functions can be set according to parameter settings at DIN-01, 03, 05, 07, 09, 11, 13, and 15 as follows: forward operation, reverse operation Reset, Emergency stop, External trip 1, 2, 3, 4, Jog operation, Multi-stage frequency: L/M/H/X Multi-stage acceleration and deceleration: high/medium/, low, Acceleration or deceleration stop Safe operation (Run Enable), 3-wire, Second operation (2nd Source), Switching to commercial power (Exchange), Increase/reduce/delete/save up-down operation, frequency, Fix command frequency Second motor selection, DC braking during stop, Timer settings (Timer Input), Deactivate auxiliary speed, FWD jog, REV jog, PID Enable, Open Loop, PID Ref, Gain Change, PID I-Term Clear, PID Output Hold, PID Sleep On/Change, PID Step Ref L/M/H		
	Pulse Train	0~32kHz	Low Level	0.0~0.8V
			High Level	3.5~12.0V
Output	Multifunction Open Collector Terminal	Trip output and inverter operation status output	Less than DC 26V, 50mA	
	Trip Relay Terminal		N.O.	Less than AC 250 V, 2 A, less than DC 30 V, 3 A
			N.C.	Less than AC 250 V, 1 A, less than DC 30 V, 1 A
	Multi function relay terminal		Less than AC 250 V, 5 A	
			Less than DC 30 V, 5A	
	Analog Output	0 - 10 Vdc (0-20 mA): frequency, output current, output voltage, DC voltage, and more are selectable		
	Pulse Train	Maximum of 32 kHz, 0-10 V		

200V Class (0.4-18.5kW)

Model: LSLV□□□□S300-2			0004	0008	0015	0022	0040	0055	0075	0110	0150	0185
Applied Motor Note 1)	Heavy Duty (HD)	[HP]	0.5	1	2	3	5	7.5	10	15	20	25
		[kW]	0.4	0.75	1.5	2.2	4	5.5	7.5	11	15	18.5
	Normal Duty (ND)	[HP]	1	2	3	5	7.5	10	15	20	25	30
		[kW]	0.75	1.5	2.2	4	5.5	7.5	11	15	18.5	22
Output Rating	Rated capacity	HD [kVA]	1.2	1.9	3.0	4.2	6.7	9.5	12.6	17.9	22.9	28.6
		ND [kVA]	1.9	3.0	4.6	6.1	8.4	11.4	16.0	21.3	26.7	31.2
	Rated current Note 2)	HD [A]	3.2	5	8	11	17.5	25	33	47	60	75
		ND [A]	5	8	12	16	22	30	42	56	70	82
	Output frequency	[Hz]	V/F, V/F-SC Note 3): 0.01~590									
			V/F-PG Note 4): 0~400									
			SLVC-IM Note 5), SLVC-PM Note 6), SVC-IM Note 7), SVC-PM Note 8): 0~400									
	Output voltage	[V]	3-phase 200~240									
Input Rating	Input Voltage	[V]	3-phase 200~240, -15%~+10%									
	Input frequency	[Hz]	50/60 ±5%									
	Rated Current	HD [A]	2.5	4.0	6.8	9.6	15.5	22.1	29.6	42.6	54.8	68.4
		ND [A]	4.0	6.8	10.5	14.1	19.5	26.9	38.1	51.1	63.9	75.8
Weight (kg)			3.2	3.3	3.5	3.7	3.8	5.5	5.6	7.2	12.9	13.2

200V Class 22-75 kW

Model: LSLV□□□□S300-2			0220	0300	0370	0450	0550	0750
Applied Motor Note 1)	Heavy Duty (HD)	[HP]	30	40	50	60	75	100
		[kW]	22	30	37	45	55	75
	Normal Duty (ND)	[HP]	40	50	60	75	100	125
		[kW]	30	37	45	55	75	90
Output Rating	Rated capacity	HD [kVA]	33.5	43.8	55.3	68.6	83.8	109.7
		ND [kVA]	41.9	52.6	64.4	80.4	109.7	131.5
	Rated current Note 2)	HD [A]	88	115	145	180	220	288
		ND [A]	110	138	169	211	288	345
	Output frequency	[Hz]	V/F, V/F-SC Note 3): 0.01~590					
			V/F-PG Note 4): 0~400					
			SLVC-IM Note 5), SLVC-PM Note 6), SVC-IM Note 7), SVC-PM Note 8): 0~400					
	Output voltage	[V]	3-phase 200~240					
Input Rating	Input Voltage	[V]	3-phase 200~240, -15%~+10%					
	Input frequency	[Hz]	50/60 ±5%					
	Rated Current	HD [A]	81.3	106.9	135.6	168.4	212.0	277.5
		ND [A]	102.3	129.1	158.1	198.5	277.5	332.5
Weight (kg)			19.1	26.7	38.8	39.1	54	73

Note 1) The motor capacity is based on a standard 4-pole motor.
Note 2) The rated output current is limited based on the carrier frequency (DRV-27 Carrier Frequency) settings.
Note 3) V/F slip compensation control mode
Note 4) V/F sensored (encorder) control(only available when the induction motor type is selected)
Note 5) Sensorless vector-induction motor control
Note 6) Sensorless vector-permanent magnet motor control
Note 7) Sensored vector-induction motor control
Note 8) Sensored vector-permanent magnet motor control

400V Class (0.4-22kW)

Model: LSLV□□□□S300-4			0004	0008	0015	0022	0040	0055	0075	0110	0150	0185	0220
Applied Motor Note 1)	Heavy Duty (HD)	[HP]	0.5	1	2	3	5	7.5	10	15	20	25	30
		[kW]	0.4	0.75	1.5	2.2	4	5.5	7.5	11	15	18.5	22
	Normal Duty (ND)	[HP]	1	2	3	5	7.5	10	15	20	25	30	40
		[kW]	0.75	1.5	2.2	4	5.5	7.5	11	15	18.5	22	30
Output Rating	Rated capacity	HD [kVA]	1.4	2.6	3.7	4.2	7.0	11.3	12.6	18.3	23.6	29.7	34.3
		ND [kVA]	1.9	3.1	4.6	6.1	9.2	13.3	18.3	23.6	29.0	34.3	46.5
	Rated Current Note 2) (380 - 460 V)	HD [A]	1.8	3.4	4.8	5.5	9.2	14.8	16.5	24	31	39	45
		ND [A]	2.5	4.1	6	8	12.1	17.5	24	31	38	45	61
	Rated Current Note 2) (460~480V)	HD [A]	1.7	3.1	4.4	5	8.3	13.4	14.9	21.6	27.9	35.1	40.5
		ND [A]	2.3	3.7	5.4	7.6	11	15.8	21.6	27.9	34.2	40.5	54.9
	Output frequency	[Hz]	V/F, V/F-SC Note 3): 0.01~590										
			V/F-PG Note 4): 0~400										
			SLVC-IM Note 5), SLVC-PM Note 6), SVC-IM Note 7), SVC-PM Note 8): 0~400										
	Output voltage	[V]	3-phase 380~480										
Input Rating	Input Voltage	[V]	3-phase 380~480, -15%~+10%										
	Input frequency	[Hz]	50/60 ±5%										
	Rated Current	HD [A]	1.4	2.7	4.1	4.8	8.1	13.1	14.8	21.8	28.3	35.6	41.6
		ND [A]	2.0	3.5	5.2	7.1	10.7	15.7	21.8	28.3	34.7	41.6	56.7
Weight (kg)			3.3	3.5	3.5	3.6	3.7	5.3	5.6	7.6	7.7	13.6	14

400V Class (30-75kW)

Model: LSLV□□□□S300-4			0300	0370	0450	0550	0750
Applied Motor Note 1)	Heavy Duty (HD)	[HP]	40	50	60	75	100
		[kW]	30	37	45	55	75
	Normal Duty (ND)	[HP]	50	60	75	100	125
		[kW]	37	45	55	75	90
Output Rating	Rated capacity	HD [kVA]	46.5	57.2	69.4	83.8	115.8
		ND [kVA]	57.2	69.4	81.5	108.2	128.8
	Rated Current Note 2) (380 - 460 V)	HD [A]	61	75	91	110	152
		ND [A]	75	91	107	142	169
	Rated Current Note 2) (460~480V)	HD [A]	54.9	67.5	81.9	99	136.8
		ND [A]	67.5	81.9	96.3	127.8	156
	Output frequency	[Hz]	V/F, V/F-SC Note 3): 0.01~590				
			V/F-PG Note 4): 0~400				
			SLVC-IM Note 5), SLVC-PM Note 6), SVC-IM Note 7), SVC-PM Note 8): 0~400				
	Output voltage	[V]	3-phase 380~480				
Input Rating	Input Voltage	[V]	3-phase 380~480, -15%~+10%				
	Input frequency	[Hz]	50/60 ±5%				
	Rated Current	HD [A]	56.7	70.1	85.1	103.5	146.5
		ND [A]	70.1	85.1	100.7	136.8	162.9
Weight (kg)			18.6	18.7	28.3	41.2	41.9

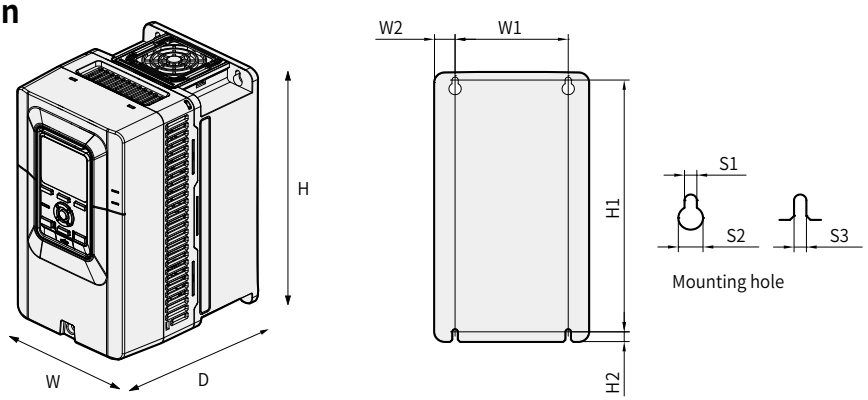
Note 1) The motor capacity is based on a standard 4-pole motor.
Note 2) The rated output current is limited based on the carrier frequency (DRV-27 Carrier Frequency) settings.
Note 3) V/F slip compensation control mode
Note 4) V/F sensored (encorder) control(only available when the induction motor type is selected)
Note 5) Sensorless vector-induction motor control
Note 6) Sensorless vector-permanent magnet motor control
Note 7) Sensored vector-induction motor control
Note 8) Sensored vector-permanent magnet motor control

400V Class (90-220kW)

Model: LSLV□□□□S300-4			0900	1100	1320	1600	1850	2200
Applied Motor Note 1)	Heavy Duty (HD)	[HP]	125	150	200	250	300	350
		[kW]	90	110	132	160	185	220
	Normal Duty (ND)	[HP]	150	200	250	300	350	400
		[kW]	110	132	160	185	220	250
Output Rating	Rated capacity	HD [kVA]	139	170	201	248	282	324
		ND [kVA]	170	201	248	282	329	367
	Rated Current Note 2) (380 - 460 V)	HD [A]	183	223	264	325	370	425
		ND [A]	223	264	325	370	432	481
	Rated Current Note 2) (460~480V)	HD [A]	164.7	200.7	237.6	292.5	333	382.5
		ND [A]	200.7	237.6	292.5	333	388.8	432.9
	Output frequency	[Hz]	V/F, V/F-SC Note 3): 0.01~590					
			V/F-PG Note 4): 0~400					
			SLVC-IM Note 5), SLVC-PM Note 6), SVC-IM Note 7), SVC-PM Note 8): 0~400					
	Output voltage	[V]	3-phase 380~480					
Input Rating	Input Voltage	[V]	3-phase 380~480, -15%~+10%					
	Input frequency	[Hz]	50/60 ±5%					
	Rated Current	HD [A]	178.4	217.4	258.9	318.7	367.0	428.8
		ND [A]	217.4	257.4	318.7	362.8	428.5	485.3
Weight (kg)			58	58	77	78	120.5	121.5

Note 1) The motor capacity is based on a standard 4-pole motor.
Note 2) The rated output current is limited based on the carrier frequency (DRV-27 Carrier Frequency) settings.
Note 3) V/F slip compensation control mode
Note 4) V/F sensored (encorder) control(only available when the induction motor type is selected)
Note 5) Sensorless vector-induction motor control
Note 6) Sensorless vector-permanent magnet motor control
Note 7) Sensored vector-induction motor control
Note 8) Sensored vector-permanent magnet motor control

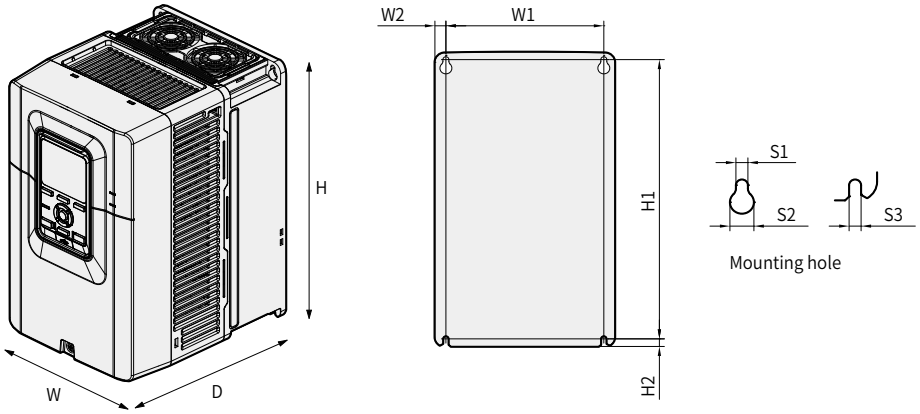
Product Dimension



200V 0.4 ~ 4kW / 400V 0.4 ~ 4kW

Unit: mm (inches)

Model	W	H	D	W1	W2	H1	H2	S1	S2	S3
LSLV0004S300-2 LSLV0008S300-2 LSLV0015S300-2 LSLV0022S300-2 LSLV0040S300-2 LSLV0004S300-4 LSLV0008S300-4 LSLV0015S300-4 LSLV0022S300-4 LSLV0040S300-4	150.0 (5.91)	276.0 (10.87)	192.0 (7.56)	110.0 (4.33)	20.0 (0.79)	258.0 (10.16)	10.0 (0.39)	6.0 (0.24)	12.0 (0.47)	6.0 (0.24)

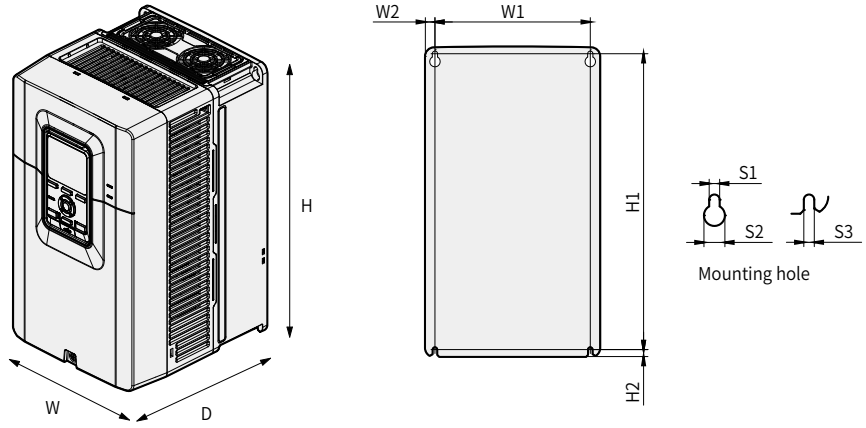


200V 5.5 ~ 7.5kW / 400V 5.5 ~ 7.5kW

Unit: mm (inches)

Model	W	H	D	W1	W2	H1	H2	S1	S2	S3
LSLV0055S300-2 LSLV0075S300-2 LSLV0055S300-4 LSLV0075S300-4	180.0 (7.09)	310.0 (12.20)	225.0 (8.86)	158.0 (6.22)	11.0 (0.43)	294.0 (11.57)	8.0 (0.31)	6.0 (0.24)	12.0 (0.47)	6.0 (0.24)

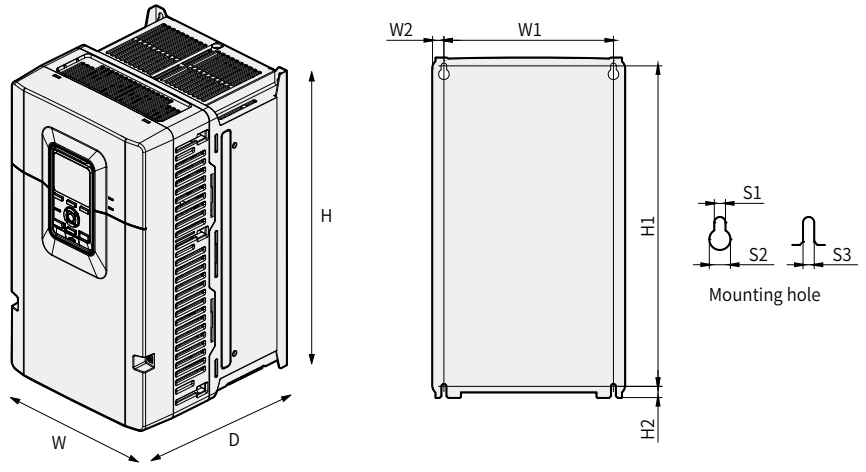
Product Dimension



200V 11.0kW / 400V 11 ~ 15kW

Unit: mm (inches)

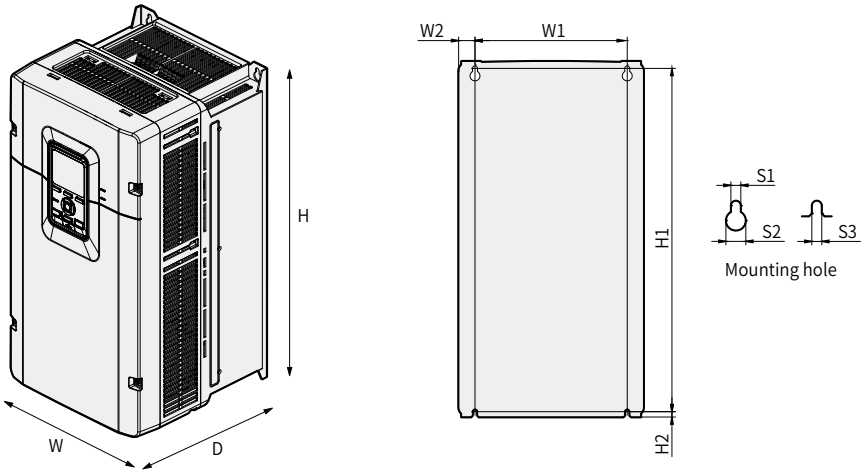
Model	W	H	D	W1	W2	H1	H2	S1	S2	S3
LSLV0110S300-2 LSLV0110S300-4 LSLV0150S300-4	200.0 (7.87)	355.0 (13.98)	225.0 (8.86)	178.0 (7.01)	11.0 (0.43)	339.0 (13.35)	8.0 (0.31)	6.0 (0.24)	12.0 (0.47)	6.0 (0.24)



200V 15 ~ 18.5kW / 400V 18.5 ~ 22kW

Unit: mm (inches)

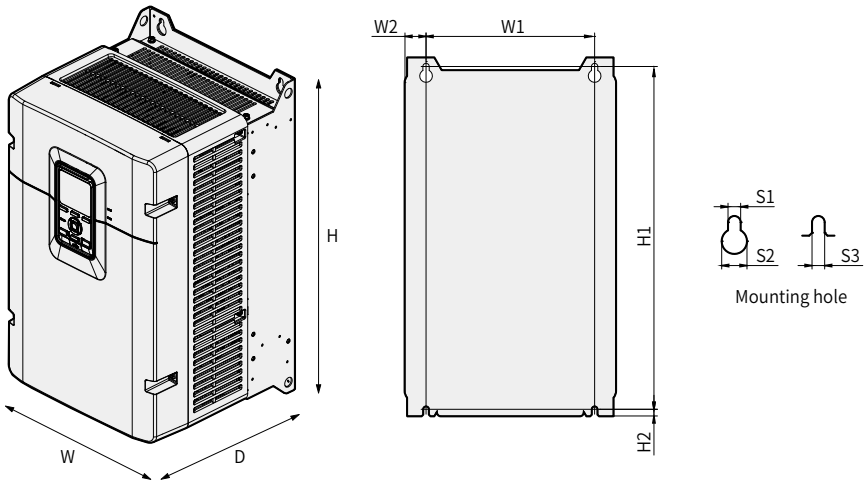
Model	W	H	D	W1	W2	H1	H2	S1	S2	S3
LSLV0150S300-2 LSLV0185S300-2 LSLV0185S300-4 LSLV0220S300-4	240.0 (9.45)	424.0 (16.69)	265.0 (10.43)	211.6 (8.33)	14.2 (0.56)	400.0 (15.75)	14.0 (0.55)	7.0 (0.28)	13.2 (0.52)	7.0 (0.28)



200V 22kW / 400V 30~37kW

Unit: mm (inches)

Model	W	H	D	W1	W2	H1	H2	S1	S2	S3
LSLV0220S300-2 LSLV0300S300-4 LSLV0370S300-4	260.0 (10.24)	500.0 (19.69)	271.0 (10.67)	214.0 (8.43)	23.0 (0.91)	482.5 (19.00)	7.5 (0.30)	7.0 (0.28)	14.0 (0.55)	7.0 (0.28)

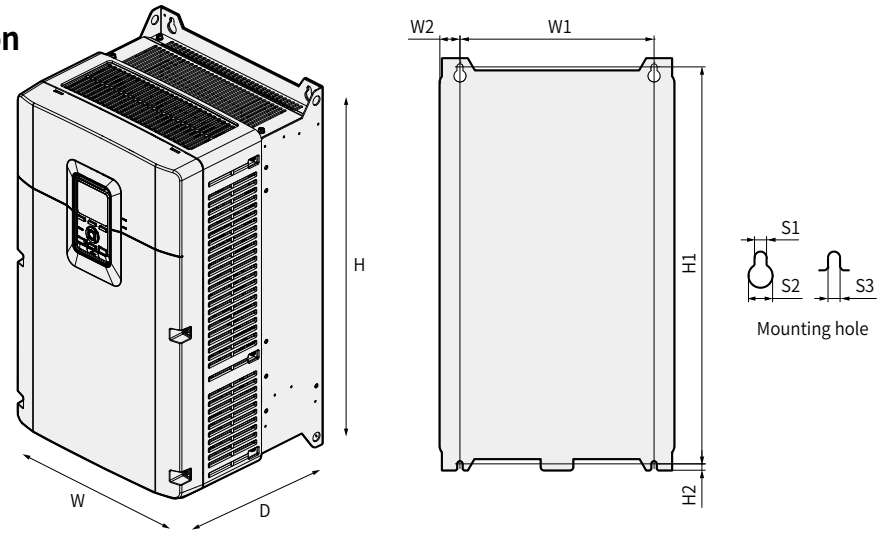


200V 30kW / 400V 45kW

Unit: mm (inches)

Model	W	H	D	W1	W2	H1	H2	S1	S2	S3
LSLV0300S300-2 LSLV0450S300-4	300.0 (11.81)	510.0 (20.08)	298.2 (11.74)	240.0 (9.45)	30.0 (1.18)	488.0 (19.21)	9.5 (0.37)	9.0 (0.35)	18.0 (0.71)	9.0 (0.35)

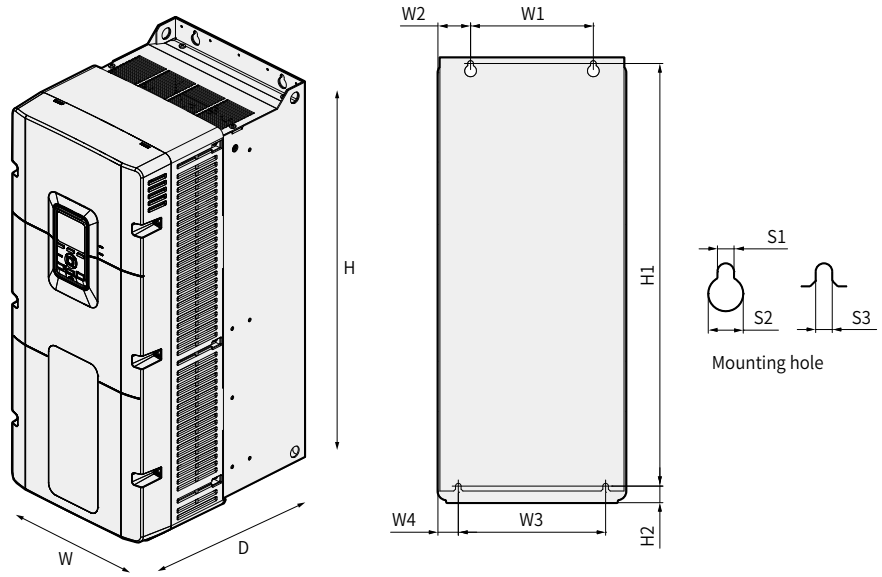
Product Dimension



200V 37 ~ 45kW / 400V 55 ~ 75kW

Unit: mm (inches)

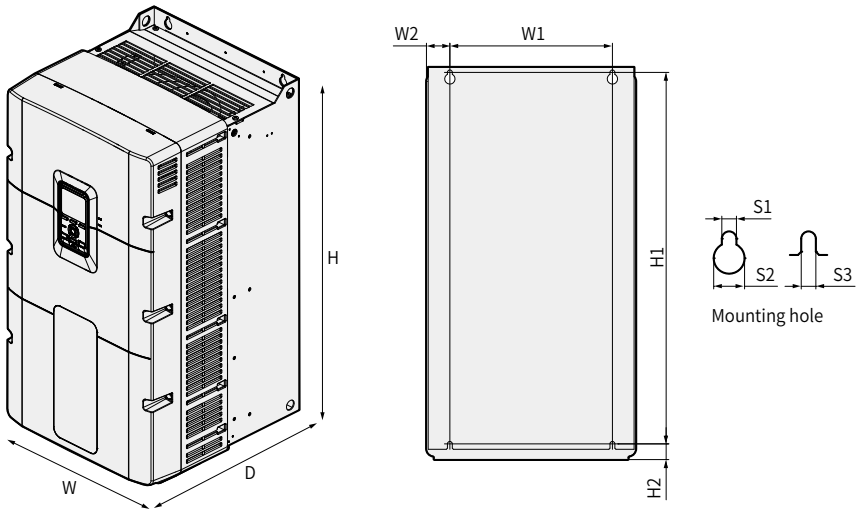
Model	W	H	D	W1	W2	H1	H2	S1	S2	S3
LSLV0370S300-2 LSLV0450S300-2 LSLV0550S300-4 LSLV0750S300-4	350.0 (13.78)	615.0 (24.21)	318.3 (12.53)	290.0 (11.42)	30.0 (1.18)	593.0 (23.35)	9.5 (0.37)	9.0 (0.35)	18.0 (0.71)	9.0 (0.35)



400V 90 ~ 110kW

Unit: mm (inches)

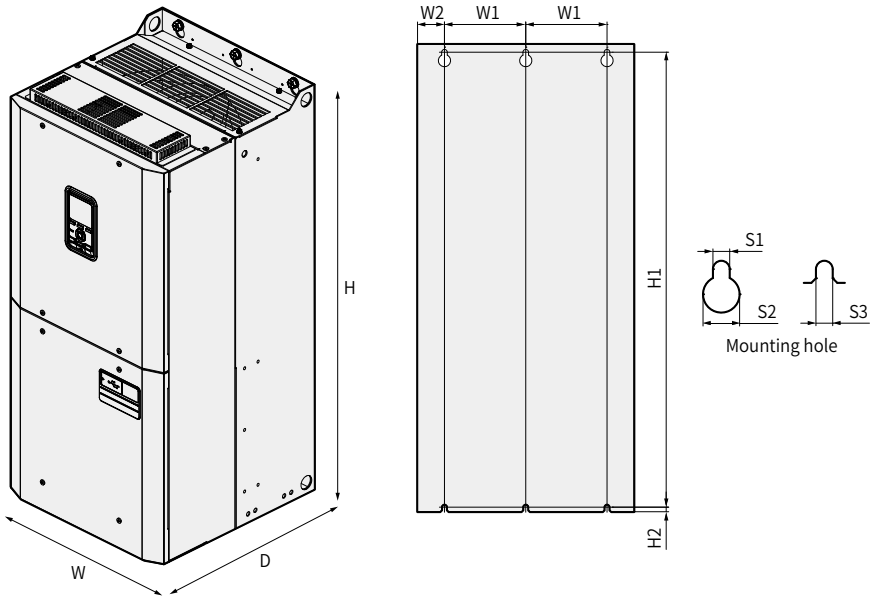
Model	W	H	D	W1	W2	W3	W4	H1	H2	S1	S2	S3
LSLV0900S300-4 LSLV1100S300-4	306.4 (12.06)	725.0 (28.54)	391.0 (15.39)	200.0 (7.87)	53.2 (2.09)	240.0 (9.45)	33.2 (1.31)	688.5 (27.11)	27.0 (1.06)	9.0 (0.35)	19.0 (0.75)	9.0 (0.35)



200V 55 ~ 75kW / 400V 132 ~ 160kW

Unit: mm (inches)

Model	W	H	D	W1	W2	H1	H2	S1	S2	S3
LSLV0550S300-2 LSLV0750S300-2 LSLV1320S300-4 LSLV1600S300-4	386.4 (15.21)	724.0 (28.50)	401.0 (15.79)	300.0 (11.81)	43.2 (1.70)	685.5 (26.99)	29.0 (1.14)	9.0 (0.35)	19.0 (0.75)	9.0 (0.35)



400V 185 ~ 220kW

Unit: mm (inches)

Model	W	H	D	W1	W2	H1	H2	S1	S2	S3
LSLV1850S300-4 LSLV2200S300-4	426.0 (16.77)	920.0 (36.22)	440.9 (17.36)	160.0 (6.30)	53.0 (2.09)	895.5 (35.26)	9.0 (0.35)	11.0 (0.43)	24.0 (0.94)	11.0 (0.43)

Guide to LS Drive Options

The table below describes a list of options for various LS drives.
Please contact LS for further details on our drive options.

Series	Option Name
M100	M100 remote keypad
	Remote cable (1m, 2m, 3m, 5m)
G100/G100C	G100 remote keypad *
	Remote cable (1m, 2m, 3m, 5m)
	RAPIEnet+ (2port) (Ethernet IP, Modbus TCP, RAPIEnet)
	Profibus-DP
	CANopen
	G100 replacement remote keypad (Retrofit compatible)
S100	Modbus TCP
	PROFInet
	EtherCAT
	EtherNet/IP
	Profibus-DP
	CANopen
	RAPIEnet+ (2port) (Ethernet IP, Modbus TCP, RAPIEnet)
	Extension I/O
	S100 LCD keypad
	S100 remote keypad (LED)
	Remote cable (1m, 2m, 3m, 5m)
H100	Lonworks
	H100 remote keypad
	Remote cable (1m, 2m, 3m, 5m)
	RAPIEnet+
L100	Incremental Encoder
	EnDat Encoder
	SIN/COS Encoder
	Elevator I/O (ELIO)
	LCD keypad
	Remote cable

Series	Option Name
iS7	EtherNet IP/Modbus TCP(1Port)
	EtherNet IP/Modbus TCP(2Port)
	PROFINET
	CC-Link IE
	RAPIEnet
	RAPIEnet+ (2port) (Ethernet IP, Modbus TCP, RAPIEnet)
	DeviceNet
	Profibus-DP
	CANopen
	CC-Link
	Modbus RTU
	Fnet, Rnet
	Lonworks
	PLC
	Extension I/O
	Safety
	Synchronous control
	Position control
	Binary Input
	Encoder(5/12/15V)
	24V Encoder
	LCD Keypad
	Remote cable(2m, 3m)
S300	RAPIEnet+ (2port) (Ethernet IP, Modbus TCP, RAPIEnet, PROFINET)
	Remote Cable (2/3/5M)
	Expansion I/O
	Line Drive Encoder
	Open Collector Encoder
Common	Parameter Copy Unit
	Smart Copier

* G100/M100 remote keypads are compatible.

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