

LS600

0.4kw~75kw

English version

SPACE VECTOR INVERTERS



Comply with:

-  Environmentally-friendly technology
-  Power-saving technology
-  Innovative technology

CE Approval



We have been a professional manufacturer in producing AC motor Speed Controller, high performance electronic clutch and other related accessories since 1985. With an extensive worldwide distribution network, our products are highly approved and recognized by customers throughout the market.

We have honorably received ISO 9001:2000 international quality certification in 2002. We are commitment to offer excellent and stable quality and performance on our products. We are also capable for any OEM or ODM cooperation by Customer's request.

We are grateful for your long-term support and look forward to expanding our business in the future.

LS600 Series Inverters

IGBT Space vector inverters

Voltage Range :
200V~240V 1P/3P
380V~460V 3P

Capacity Range :
0.4KW~75KW



LS800 Series — Flux vector inverters

VF, VF+PG feedback, Sensorless control,
Flux vector control
Voltage Range : 200V~240V 1P/3P
380V~460V 3P
Capacity Range : 0.4KW~225KW



ESD Series — DC Brush-less Servo Drive

Voltage Range : 200V~240V 1P/3P
Capacity Range : 0.4KW~5.5KW



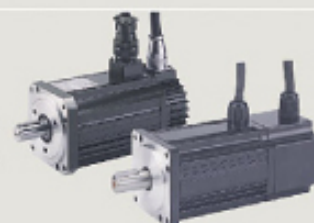
LS200A — Space vector inverter Analogic control

Voltage Range : 200V~240V 1P
Capacity Range : 0.4KW~1.5KW



ESM Series — DC Brush-less Motor

Voltage Range : 200V~240V 3P
Capacity Range : 0.4KW~5.5KW



LS100A — Space vector inverter Analogic control

Voltage Range : 200V~240V 1P
Capacity Range : 60W~200W



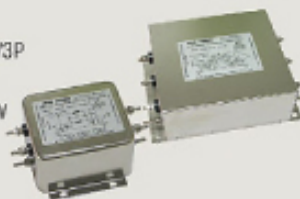
LSBR Series — Brake unit

Voltage Range : 200V~230V
380V~460V
Capacity Range : 0.4KW~300KW



EMC Filter

Voltage Range : 200V~260V 1P/3P
380V~460V 3P
Capacity Range : 0.4KW~225KW



LSBR Series — Brake resistors

Voltage Range : 100W~10KW
Resistance : 5Ω~500Ω



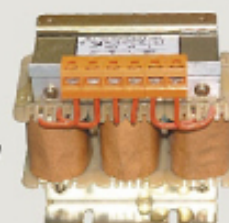
LS AC input reactor

Voltage Range : 200V~260V 1P/3P
380V~460V 3P
Capacity Range : 0.4KW~300KW



LS AC output reactor

Voltage Range : 200V~260V 3P
380V~460V 3P
Capacity Range : 0.4KW~300KW



LS DC Bus choke

Voltage Range : DC 200V~800V
Capacity Range : 0.4KW~300KW



LS — operate keypad with exterior cable



LS600 Model extension
cable with operate keypad



Exterior cable
with operation box



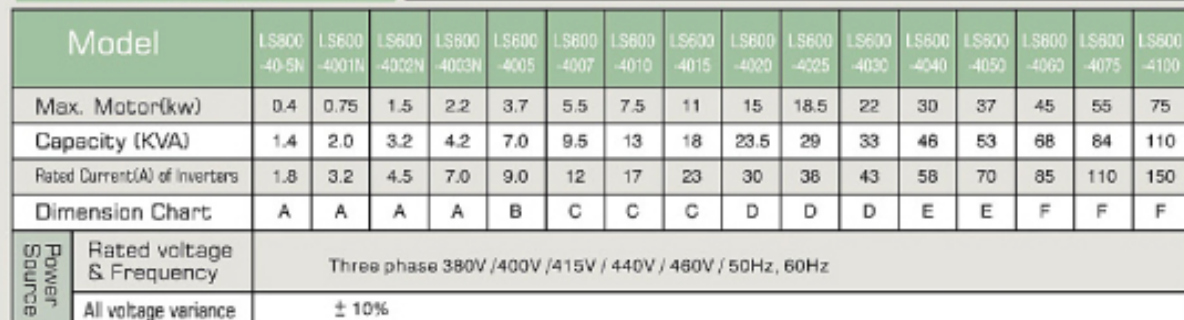
LS800 Model extension
cable with operate keypad

Space vector:	space vector control of voltage, voltage is equally distributed automatically with low loss of output and high efficiency for energy saving.
Silent design:	modulated IGBT, high carrier, high-speed change, and long life.
High precision:	high speed operation of DSP, high precision and low error.
Smooth current:	close to sine wave, smooth running of motor, no vibration and safety in operation.
Small size:	space saving design for compact design, portable silent type.
Interface:	equipped with RS-232 interface for automatic on-line operation with computer.
Two-way mode:	digital/analogy mode can apply two-way or single-way operations simultaneously.

The diagram illustrates the power supply and control system for an inverter. It shows the flow of power from a three-phase AC input through a rectifier, filter, and IGBT module to a motor. It also details the control system, including a switching power supply, current/voltage detection device, driver power, main board power, IGBT module driver, control board, A/D converter, control terminal interface, display, temperature sensor, and various relays and sensors. The motor output is connected to a braking resistor unit and a meter.

M : Without isolate, **N** : With isolate, Not show **M**、**N** all With isolate

2 = 200~240V
4 = 380~460V

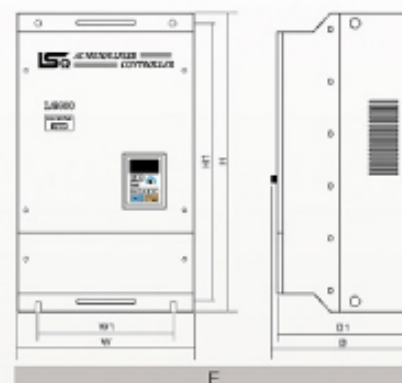
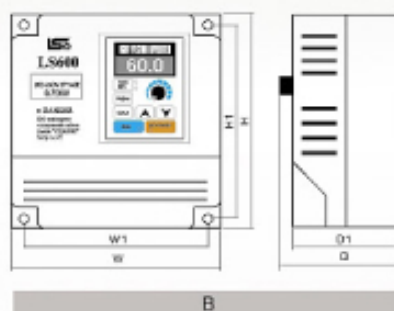
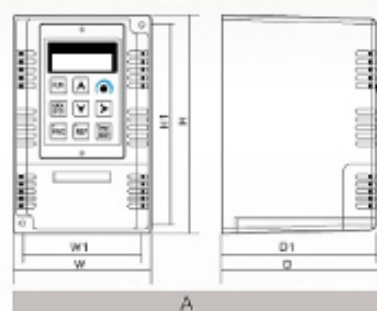


COMMON CHARACTERISTICS

Control System	Control Model	Space Vector PWM adjusting control	
	Overload Limited	Nominal Output AMP. 150%, 0.1~20 Sec.	
	Signal of Frequency Setting	DC0~5V, DC0~10V(10k Ω), 4 ~20mA(250 Ω), 0~20mA(250 Ω)	
	Time for Speed Acc./Dec.	Individual Setting: 0.1~210 sec.	
	Torque for Braking	About 20%(Plus braking resistance up to 150% built-in braking chip)	
	V/F Curve	Automatic torque compensation or compensation by any V/F curve setting.	
	N ² reduction Progressively Curve Line	17 lines for usage of great inertia and high torque starting.	
	Automatic Compensation Curve	Code selection "0", the parameter have 17 lines for 20% compensation selection.	
	Instantaneous Over Current	Speed Acc. Setting by motion current, Dec. protection setting by voltage	
	Range of Frequency Control	0.5~240Hz	
	Frequency Precision	Digital Command : 0.1 %(-10 ~40°C) Analog Command: 0.5%(25°C $\pm$ 10° C)	
Protection Function	Instantaneous Over Current	When over 200%, machine will stop immediately for protection. OC1 : Acc. Over current, OC2 : Rated Speed over current, OC3 : Dec. Over current.	
	Overload	Over 150% current, output stopped in 0.1 to 20 Sec any set.	
	Over-Voltage or Low-Voltage	DC Bus over voltage 400V or under 200V (1phase 170V) output stopped DC Bus over voltage 800V or under 400V, output stopped, OU1 : Acc. Over voltage, OU2 : Rated Speed over voltage, OU3 : Dec. Over voltage	
	Low Power Protect	Voltage less than DC 170V, in 15 ms stopping.	
	Over-heat	protected by thermo-switch, include heating sink and charge Resistor.	
	Charging Indicating	DC Bus over voltage over 50V, charging lamp is on light	
Rotation System	Input	Rotation	Clock & anti-clock rotation or individual command on VR and keypad
		External Effect	Warning signal for abnormal external effect to stop operation
		Recovery	Upon removal of protection action signal
		Signal Control	Eight point control(2x,3x Jog speed signal. speed search, free run, DC0~5V, DC0~10V, 4~20mA, 0~20mA input.)
	Output	Abnormal Contact	Abnormal output contacts, Alarm Relay output , 1a/1b Max. Ac250V/3A
		Collector output	Crystal open collector output terminals. DC MAX. 24V/150mA, AC MAX. 250V/150mA
		Analog output	0~10VDC/1mA analog output terminal.
	Display	LED Display	LED for RUN/STOP, FWD/REV
		Digital Operator	Setting for frequency, output frequency, direction of rotation, abnormal matter
Environment	Location	Indoor, no corrosive gas or liquid and free from dust	
	Ambient Temp.	-10°C~50°C (No Freezing)	
	Storage Temp.	-15°C~50°C (Avoiding high temperature to damage capacitor in main line)	
	Humidity	Below dew point, up to 90% RH	
	Vibration	Below 0.5G	

REMARK : Largest motor is standard three-phase, 4-pole induction motor

OUTSIDE DIMENSION CHART UNIT: m/m



Size \ Area			W	W1	H	H1	D	D1	Net Weight (Kg)	Gross Weight (Kg)	Measu- rement	Fix Screw
A	LS600-20-5SM	LS600-2001SM	114.2	101	172.1	159	146	136	Approx. Weight		0.2	M4
	LS600-2002SM	LS600-2003SM										
	LS600-20-5SN	LS600-2001SN										
	LS600-2002SN	LS600-2003SN										
	LS600-20-5N	LS600-2001N										
	LS600-2002N	LS600-2003N										
	LS600-40-5N	LS600-4001N										
	LS600-4002N	LS600-4003N										
B	LS600-20-5	LS600-2001	148	128	152	138	142	132	Approx. Weight		0.3	M4
	LS600-2002	LS600-4001										
	LS600-4002	LS600-20-5S										
	LS600-2001S	LS600-2002S										
	LS600-2003	LS600-2005	148	128	202	188	166	155	2.6	3.0	0.4	M4
	LS600-4003	LS600-4005										
C	LS600-7.5HP-15HP		188	173	304	284	178	170	2.3	2.7	0.3	M4
D	LS600-2007	LS600-2010	202	185	333	313	196	186	10.0	12	1.0	M6
	LS600-2015	LS600-4007										
	LS600-4010	LS600-4015										
	LS600-2020	LS600-2025	250	226	425	402	226	216	18.0	20.6	1.7	M6
	LS600-2030	LS600-4020										
	LS600-4025	LS600-4030										
E	LS600-2040	LS600-2050	290	236	562	535	215	205	21.0	26.4	3.0	M6
F	LS600-2060	LS600-2075	356	236	670	645	285	275	41.0	47.4	4.9	M8
	LS600-4060	LS600-4075										
	LS600-4100											