

## LS600 Series Inverter



### Features

- 1.Space vector: Space vector control of voltage, Voltage Automatic compensation.  
Low loss of output, high efficiency for energy saving.
- 2.Silent design: Modulated IGBT, high carrier, high speed brake, and long life.
- 3.High precision: High speed operation of DSP, high precision and low error.
- 4.Smooth current: Close to sine wave, smooth running of motor, no vibration and safety in operation.
- 5.Small size: Space saving design for compact design.
- 6.Interface: Equipped with RS-232 interface for automatic on-line operation with computer.
- 7.Two-way model: Digital analogy can make two-way or single way operation simultaneously.

# Standard Specification

Control system	<b>Control model</b>	Space vector PWM adjusting control
	<b>Overload limited</b>	Nominal output AMP.150%, 0.1~20 Sec.
	<b>Signal of frequency setting</b>	DC0~5V , DC0~10V(10kΩ) , 4~20mA(250Ω) , 0~20mA(250Ω)
	<b>Time for speed Acc/Dec</b>	Individual setting: 0.1~210 sec.
	<b>Torque for braking</b>	About 20%(Plus braking resistance up to 150% built-in braking chip)
	<b>V/F Curve</b>	Automatic torque compensation or compensation by any V/F curve setting.
	<b>N<sup>2</sup>reduction Progressively curve line</b>	17 lines for usage of great inertia and high starting turning moment.
	<b>Automatic Compensation curve</b>	Code selection "0" , the parameter have 18 lines for 20% compensation selection.
	<b>Instantaneous Over Current</b>	Speed Acc. Setting by motion current, Dec. protection setting by voltage.
	<b>Range of frequency control</b>	0.5~240Hz
	<b>Frequency precision</b>	Digital Command:0.1%(-10~40℃) , Analog command:0.5%(25℃±10℃)
Protection function	<b>Instantaneous</b>	When over 200%, machine will stop immediately for protection. OC1:Acc. over current, OC2: Rated speed over current, OC3: Dec. over current.
	<b>Overload</b>	About 150% nominal current, output stopped in 0.1 to 20 sec.
	<b>Over-voltage or Low-voltage</b>	Main & return DC lines voltage above 400V or under 200V(1 phase 170V)output stopped. Main & return DC lines voltage above 800V or under 400V, output stopped, OU1: Acc. over voltage, OU2: rated speed over voltage, OU3: Dec. over voltage.
	<b>Instantaneous power break</b>	Stop over 15ms
	<b>Ventilation over-heat</b>	Protected by thermo-switch
	<b>Charging indicating</b>	Main & return DC lines voltage above 50V, charging lamp is on light

Rotation system	Input	<b>Rotation</b>	Clock & anti-clock rotation or individual command
		<b>External effect</b>	Warning signal for abnormal external effect to stop operation
		<b>Recovery</b>	Upon removal of protection action signal
		<b>Multi-function input</b>	8 point control (2x, 3x Jog speed signal. Speed search, free run, DC0~5V, DC0~10V, 4~20mA, 0~20mA input.)
	Output	<b>Multi-function output</b>	3 point(When running low speed, output frequency $\geq$ setting value)
		<b>Abnormal contact</b>	Abnormal output contact, alarm relay output, 1a/1b max Ax250V/3A
		<b>Collector output</b>	Crystal open collector output terminals. DC max 24V/150mA, AC max 250V/150mA
		<b>Analog output</b>	0~10VDC/1mA analog output terminal.
	Display	<b>Abnormal LED display</b>	Abnormal function display for RUN/STOP,FWD/REV
<b>Digital operator</b>		Setting for frequency, output frequency, direction of rotation, abnormal cell output.	
Environment	<b>Location</b>	Indoor, no corrosive gas or liquid and free from dust	
	<b>Ambient Temp.</b>	-10°C~50°C (No Freezing)	
	<b>Storage Temp.</b>	-15°C~50°C (Avoiding high temperature to damage capacitor in ,main line)	
	<b>Humidity</b>	Below dew point, up to 90% RH	
	<b>Vibration</b>	Below 0.5G	

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

# Model Specifications

## LS600-2001







Model Number Of  
Space Vector Inverter

Input Voltage

Motor Applicable

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

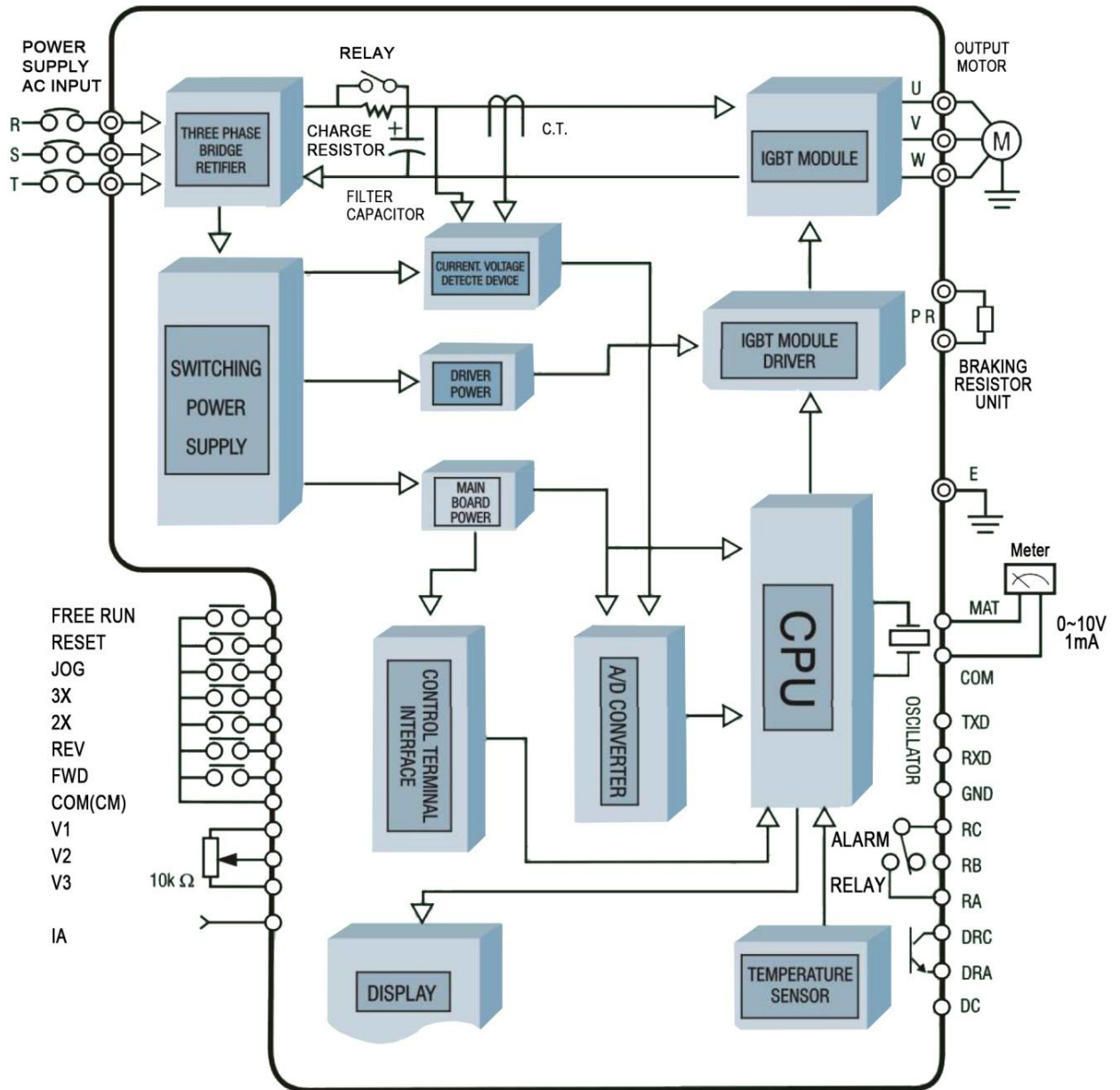
0-5=0.5HP  
001=1.0HP  
002=2.0HP  
003=3.0HP  
005=5.0HP

LS600					
					
<b>LS600-20-5</b> <b>LS600-2001</b> <b>LS600-2002</b> <b>LS600-4001</b> <b>LS600-4002</b> <b>LS600-20-5S(1P)</b> <b>LS600-2001S(1P)</b> <b>LS600-2002S(1P)</b>	<b>LS600-2003</b> <b>LS600-2005</b> <b>LS600-4003</b> <b>LS600-4005</b>	<b>LS600-2007</b> <b>LS600-2010</b> <b>LS600-2015</b> <b>LS600-4007</b> <b>LS600-4010</b> <b>LS600-4015</b>	<b>LS600-2020</b> <b>LS600-2025</b> <b>LS600-4020</b> <b>LS600-4025</b> <b>LS600-4030</b>	<b>LS600-2030</b> <b>LS600-2040</b> <b>LS600-2050</b> <b>LS600-4040</b> <b>LS600-4050</b>	<b>LS600-2060</b> <b>LS600-2075</b> <b>LS600-4060</b> <b>LS600-4075</b>

200V~240V Series									
Model	LS600 -20-5S	LS600 -2001S	LS600 2002S	LS600 -20-5	LS600 -2001	LS600 -2002	LS600 -2003	LS600 -2005	LS600 -2007
Max. Motor capacity (kw)	0.4	0.75	1.5	0.4	0.75	1.5	2.2	3.7	5.5
Output capacity (KVA)	1.2	1.7	2.8	1.2	1.7	2.8	4.2	6.1	9.1
Rated current of inverter(A)	3.0	4.5	7.5	3.0	4.5	7.5	11	16	24
Power source	Nominal voltage & Freq.	Single phase 200/208/220V 50Hz 200/208/220/240V 60Hz			Three phase 200/208/220V 50Hz 200/208/220/240V 60Hz				
	Allow voltage variance	±10%							

200V~240V Series									
Model	LS600 -2010	LS600 -2015	LS600 -2020	LS600 -2025	LS600 -2030	LS600 -2040	LS600 -2050	LS600 -2060	LS600 -2075
Max. Motor capacity (kw)	7.5	11	15	18.5	22	30	37	45	55
Output capacity (KVA)	12.2	17.5	23	29	34.7	44	55	67	82
Rated current of inverter(A)	33	46	61	76	90	115	145	175	215
Power source	Nominal voltage & Freq.	Three phase 200/208/220V 50Hz 200/208/220/240V 60Hz							
	Allow voltage variance	±10%							
380V~460V Series									
Model	LS600 -4001	LS600 -4002	LS600 -4003	LS600 -4005	LS600 -4007	LS600 -4010	LS600 -4015		
Max. Motor capacity (kw)	0.75	1.5	2.2	3.7	5.5	7.5	11		
Output capacity (KVA)	2.0	3.2	4.2	7.0	9.5	13	18		
Rated current of inverter(A)	2.5	4.5	7.0	9.0	12	17	23		
Power source	Nominal voltage & Freq.	Three phase 380/400/415/440/460V 50/60Hz							
	Allow voltage variance	±10%							
Model	LS600 -4020	LS600 -4025	LS600 -4030	LS600 -4040	LS600 -4050	LS600 -4060	LS600 -4075		
Max. Motor capacity (kw)	15	18.5	22	30	37	45	55		
Output capacity (KVA)	23.5	29	33	46	53	68	84		
Rated current of inverter(A)	30	38	43	58	70	85	110		
Power source	Nominal voltage & Freq.	Three phase 380/400/415/440/460V 50/60Hz							
	Allow voltage variance	±10%							

# Block Diagram Of Inverter



# External Dimension

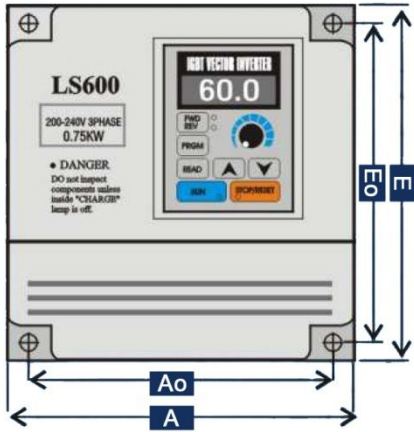


Diagram A

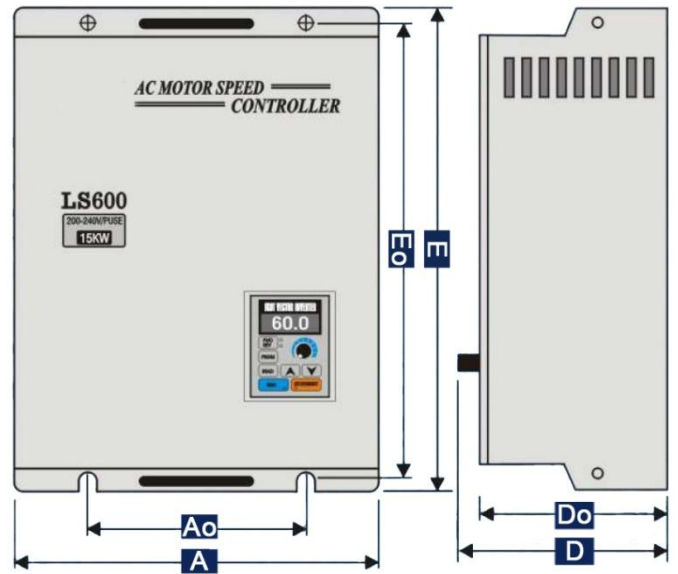
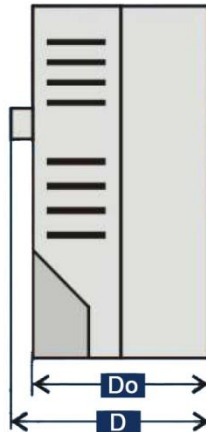


Diagram B

Model		Area	Area						Net weight (Kg)	Gross weight (Kg)	Measurement (Cu ft <sup>3</sup> )	Fix screw
			A	Ao	E	Eo	D	Do				
A	LS600-20-5	LS600-2001	146	128	150	138	160	153	1.8	2.0	0.3	M4
	LS600-2002	LS600-4001										
	LS600-4002	LS600-20-5S										
	LS600-2001S	LS600-2002S										
B	LS600-2003	LS600-2005	146	128	200	188	160	153	2.6	3.0	0.4	M4
	LS600-4003	LS600-4005										
	LS600-2007	LS600-2010	245	194	370	352	172	175	11.0	13.0	1.3	M6
	LS600-2015	LS600-4007										
	LS600-4010	LS600-4015										
	LS600-2020	LS600-2025	273	215	523	500	188	175	17.0	20.0	2.0	M6
	LS600-4020	LS600-4025										
	LS600-4030		290	239	560	535	215	203	21.0	25.0	2.7	M6
LS600-2030	LS600-2040											
LS600-4040	LS600-4050	354	236	670	645	285	273	42.0	47.0	5.0	M6	
LS600-2060	LS600-2075											
LS600-4060	LS600-4075											

UNIT: m/m

# Contact

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