LS600

0.4kw~75kw

English version

SPACE VECTOR INVERTERS

Comply with:

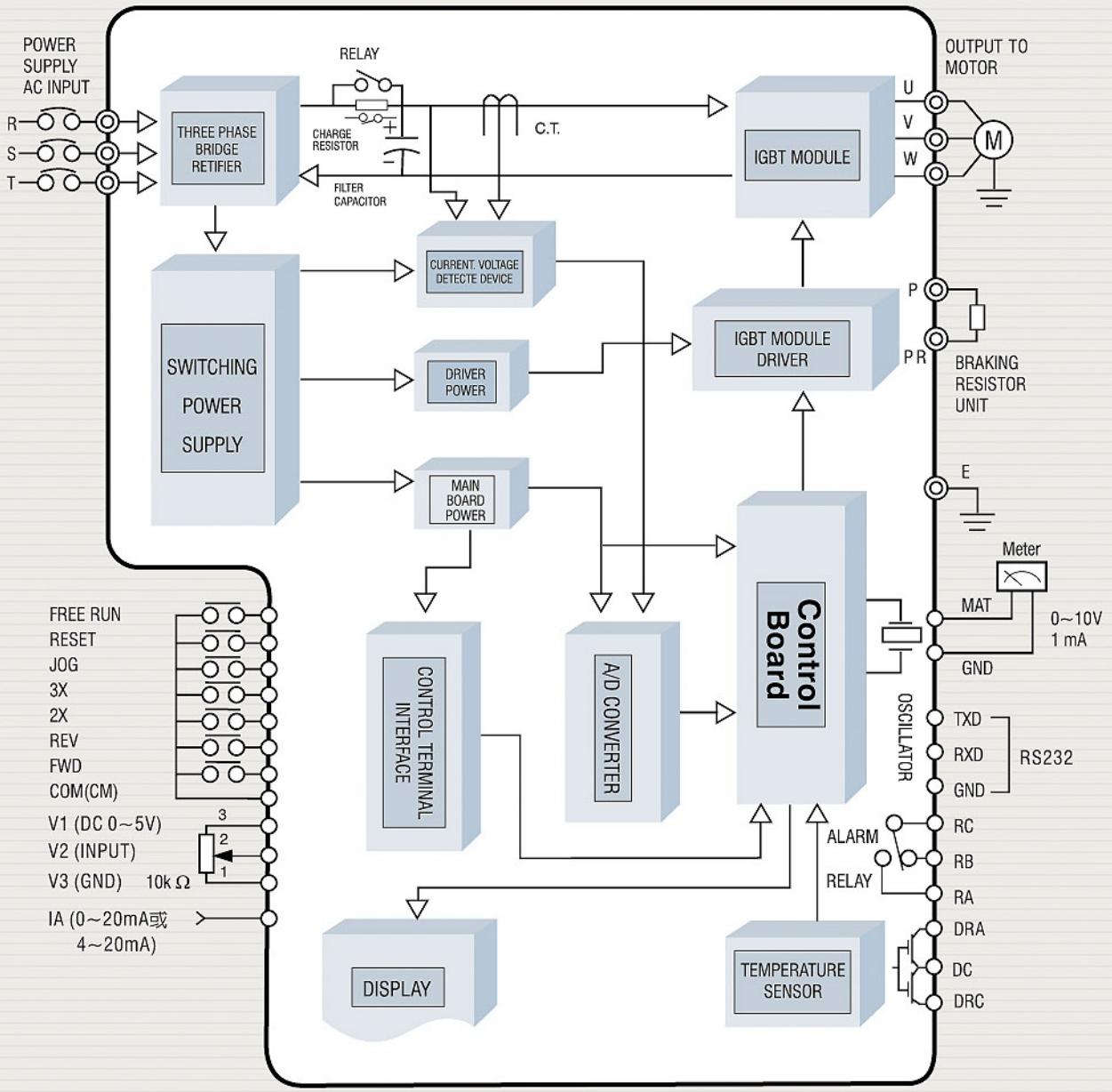
- Environmentally-friendly technology
- Power-saving technology
- Innovative technology

CE Approval

LS600

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.

BLOCK DIAGRAM OF INVERTERS



How to discriminate specifications ?

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

LS 600-2001 SM

- **Drive Model**
- **AC input power class**
  - 2 = 200~240V
  - 4 = 380~460V
- **Motor Applicable**
  - 0-5 =0.5HP
  - 001 =1.0HP
  - 002 =2.0HP
  - 003 =3.0HP
  - 005 =5.0HP
- **Single Phase**
- **Without isolate**

LS 600-2001 SN

- **Drive Model**
- **AC input power class**
  - 2 = 200~240V
  - 4 = 380~460V
- **Motor Applicable**
  - 0-5 =0.5HP
  - 001 =1.0HP
  - 002 =2.0HP
  - 003 =3.0HP
  - 005 =5.0HP
- **Single Phase**
- **with Isolate**

LS600-20-5 SM	LS600-20-5 N	LS600-2003	LS600-2007	LS600-2020	LS600-2040	LS600-2060
LS600-2001 SM	LS600-2001 N	LS600-2005	LS600-2010	LS600-2025	LS600-2050	LS600-2075
LS600-2002 SM	LS600-2002 N	LS600-4003	LS600-2015	LS600-2030	LS600-4040	LS600-4060
LS600-2003 SM	LS600-2003 N	LS600-4005	LS600-4007	LS600-4020	LS600-4050	LS600-4075
			LS600-4010	LS600-4025		LS600-4100
LS600-20-5 SN	LS600-40-5 N		LS600-4015	LS600-4030		
LS600-2001 SN	LS600-4001 N					
LS600-2002 SN	LS600-4002 N					
LS600-2003 SN	LS600-4003 N					

STANDARD SPECIFICATIONS

200V-240V Series

Model	LS600 -20-5 SM	LS600 -2001 SM	LS600 -2002 SM	LS600 -2003 SM	LS600 -20-5 SN	LS600 -2001 SN	LS600 -2002 SN	LS600 -2003 SN	LS600 -20-5 N	LS600 -2001 N	LS600 -2002 N	LS600 -2003 N	LS600 -2005	LS600 -2007	LS600 -2010	LS600 -2015	LS600 -2020	LS600 -2025	LS600 -2030	LS600 -2040
Max. Motor(kw)	0.4	0.75	1.5	2.2	0.4	0.75	1.5	2.2	0.4	0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22	30
Capacity (KVA)	1.2	1.7	2.8	4.2	1.2	1.7	2.8	4.2	1.2	1.7	2.8	4.2	6.1	9.1	12.2	17.5	23	29	34.7	44
Rated Current(A) of Inverters	3.0	4.5	7.5	11	3.0	4.5	7.5	11	3.0	4.5	7.5	11	16	24	33	46	61	76	90	115
Dimension Chart	A	A	A	A	A	A	A	A	A	A	A	A	B	C	C	C	D	D	D	E
Power Source: Rated voltage & Frequency	Single phase 200V / 208V / 220V 50Hz 200V / 208V / 220V / 240V 60Hz								Three phase 200V / 208V / 220V 50Hz 200V / 208V / 220V / 240V 60Hz											
Power Source: All voltage variance	± 10%																			

LS600 -2050	LS600 -2060	LS600 -2075
37	45	55
55	67	82
145	175	215
E	F	F

380V-460V Series

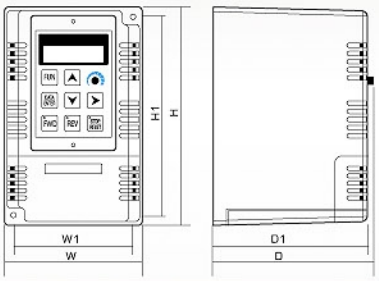
Model	LS800 -40-5N	LS600 -4001N	LS600 -4002N	LS600 -4003N	LS600 -4005	LS600 -4007	LS600 -4010	LS600 -4015	LS600 -4020	LS600 -4025	LS600 -4030	LS600 -4040	LS600 -4050	LS600 -4060	LS600 -4075	LS600 -4100
Max. Motor(kw)	0.4	0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22	30	37	45	55	75
Capacity (KVA)	1.4	2.0	3.2	4.2	7.0	9.5	13	18	23.5	29	33	46	53	68	84	110
Rated Current(A) of Inverters	1.8	3.2	4.5	7.0	9.0	12	17	23	30	38	43	58	70	85	110	150
Dimension Chart	A	A	A	A	B	C	C	C	D	D	D	E	E	F	F	F
Power Source: Rated voltage & Frequency	Three phase 380V /400V /415V / 440V / 460V / 50Hz, 60Hz															
Power Source: All voltage variance	± 10%															

COMMON CHARACTERISTICS

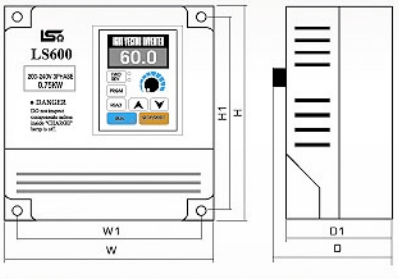
Control System	Control Model		Space Vector PWM adjusting control
	Overload Limited		Nominal Output AMP. 150%, 0.1~20 Sec.
	Signal of Frequency Setting		DC0~5V, DC0~10V(10kΩ), 4 ~20mA(250Ω), 0~20mA(250Ω)
	Time for Speed Acc./Dec.		Individual Setting: 0.1~210 sec.
	Torque for Braking		About 20%(Plus braking resistance up to 150% built-in braking chip)
	V/F Curve		Automatic torque compensation or compensation by any V/F curve setting.
	N^2reduction 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 ± 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		Voltge 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



A



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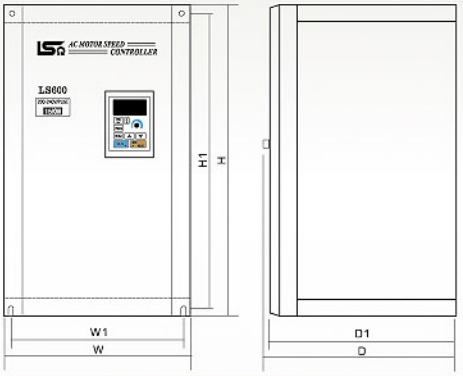

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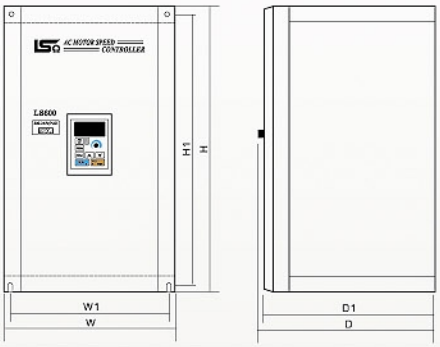

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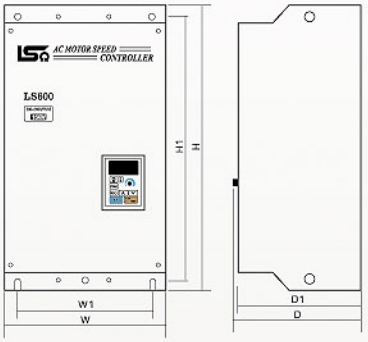

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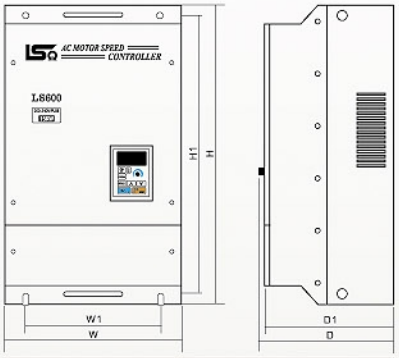

F

Model \ Size / Area		W	W1	H	H1	D	D1	Net Weight (Kg)	Gross Weight (Kg)	Measu-rement	Fix Screw
A	LS600-20-5SM LS600-2001SM 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	114.2	101	172.1	159	146	136	Approx. Weight 1.4	1.9	0.2	M4
B	LS600-20-5 LS600-2001 LS600-2002 LS600-4001 LS600-4002 LS600-20-5S LS600-2001S LS600-2002S	148	128	152	138	142	132	Approx. Weight 1.8	2.0	0.3	M4
	LS600-2003 LS600-2005 LS600-4003 LS600-4005	148	128	202	189	166	155	2.6	3.0	0.4	M4
C	LS600-7.5HP~15HP	188	173	304	284	178	170	2.3	2.7	0.3	M4
D	LS600-2007 LS600-2010 LS600-2015 LS600-4007 LS600-4010 LS600-4015	202	185	333	313	196	186	10.0	12	1.0	M6
	LS600-2020 LS600-2025 LS600-2030 LS600-4020 LS600-4025 LS600-4030	250	226	425	402	226	216	18.0	20.6	1.7	M6
E	LS600-2040 LS600-2050 LS600-4040 LS600-4050	290	236	562	535	215	205	21.0	26.4	3.0	M6
F	LS600-2060 LS600-2075 LS600-4060 LS600-4075 LS600-4100	356	236	670	645	285	275	41.0	47.4	4.9	M8

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