

Item		Item description
Control performance	Brake Power consumption brake	The brake unit can be connected externally between P+ and P- when it is necessary
	DC brake	Optional start-up and stop, action frequency 0~15Hz, action current 0~100%, action time 0~30.0s
	Jog	JOG frequency range: 0.00-upper limiting frequency JOG acceleration/deceleration time: 0.0-6000.0s
	Multisection speed running	Multisection speed operation can be achieved by interior PLC or control terminal. As many as 15sections, which has their own acceleration and deceleration time. The interior PLC supports power down save.
	Interior PID controller	It realizes process-controlled closed loop control system easily.
	Automatic energy-saving operation	Optimize automatically V/F curve base on condition of loading, achieving energy-saving operation.
	Automatic voltage regulate(AVR)	It can keep constant output voltage automatically when the mains voltage changes.
	Automatic current limiting	The current is limited automatically during the running process so as to avoid frequent tripping due to overcurrent.
	carrier modulation	The carrier frequency is automatically adjusted based on the load features.
	Speed tracking restart	Make the rotating motor smooth start without shocking
Running function	Running order specified channel	Keypad setting, control terminal setting, communication setting, which can be changed by many ways.
	Running frequency specified channel	Main and complement setting realizing a main adjustment and fine tuning control. Digital setting, analog setting, impulse setting, pulse-width setting, communication setting and other settings can be switch freely
	Binding function	Running order channel and frequency specified channel can be bond arbitrarily, change synchronously
Input and Output character	Digital input terminal	8 digital input (DI) terminals, the max frequency is 1KHZ, one of which support up to 50KHZ. The digital terminal can be expanded to 14 terminals.
	Analog input terminal	2 analog input (AI) terminal, AI1 can choose 4~20mA or 0~10V as output, AI2 is differential input, 4~20mA or -10~10V input is available. The analog terminal can be expanded to 4 terminals
	Pulse output terminal	Impulse square wave signal output of 0~20KHZ, can realize output of physical quantity such as setting frequency, output frequency etc.
	Analog output terminal	2 analog signal output terminal, AO1 can be 4~20mA or 0~10V, AO2 can be 4~20mA or 0~10V; through them the inverter can realize output of physical quantity such as setting frequency, output frequency etc. And can be expanded to 4 channel output. This output analog terminal can be expanded to 4 terminals
Unique feature	Rapid current limiting	Limit inverter over current to the greatest degree, making it running reliably
	Monopulse control	Suitable for the inverter with one key that controls the inverter on or off, which is simple and reliable to operate.
	Fixed length control	Can realize fixed length control
	Timing control	Time range: 0.0-6500.0 minutes
	Virtual I/Os	5 groups virtual input, output IO, can realize simple logical control
Keypad	LED display	The parameters like setting frequency, output frequency, output voltage, output current can be displayed
	Lock the button	Lock all or part of the buttons.
Protection function		Motor short-circuit detection at power-on, input/output phase loss protection, overcurrent protection, overvoltage protection, undervoltage protection, overheat protection and overload protection, relay protection, terminal protection and non stop protection when power off.
Ambient	Use ambient	Indoor, free from direct sunlight, dust, corrosive gas, combustible gas, oil smoke, vapour, drip or salt.
	Altitude	Less than 1000 meters. (derate if higher than 1000meters, output current will be reduced by 10% of rated current for every 1000 meters increase)
	Ambient temperature	-10°C~+40°C (under ambient temperature 40°C~50°C, please reduce the volume or strengthen heat sink)
	Ambient humidity	Less than 95%RH, without condenses
	Vibration	Smaller than 5.9m/s ² (0.6g)
Structure	Storage temperature	-40°C ~+70°C
	Protection level	IP20
	Cooling mode	Forced air-cooling
Mounting mode		Wall hanging and cabinet standing



Exquisite technics gestate Surprise EN500



En500 multifunctional universal vector frequency inverter

Performance advantages

1. With Self-learning, speed tracking, And slip vector control function;
2. Compact, easy to install, And high cost performance;
3. Full-featured universal vector inverter, cabinet/wall-mounting type integration design;
4. Standard built-in reactor for type above 90kw (internal);
5. Abundant peripheral extension function: Bus, terminal, relay, analog extension;
6. Abundant users features: constant pressure water supply, traverse control, droop control, fixed length control and etc.
7. Abundant communication function: Free protocol, Modbus protocol, Extended CAN bus, Profibus and etc.

Application industry

Applied to metalworking machinery, plastic machinery, various machine tool, printing, textile printing, papermaking, automatic machinery, urban municipal engineering, Heating Ventilation Air Conditioning, constant pressure water supply, sewage treatment and other industries. It also Can be equipped with food machinery, printing machinery, industrial air conditioner, textile machinery, water supply and the production reconstruction of plastic, chemical fiber, cement and ceramic etc. It is also widely demanded in the market of fan and pump devices about the industries of petrification, oil refining, thermoelectricity, water supply, heat supply and other industries.

Voltage degree: 3 phase 380V

Power range: 75kw~400kw

Application industry

Applied to metalworking machinery, plastic machinery, various machine tool, printing, textile printing, papermaking, automatic machinery, urban municipal engineering, Heating Ventilation Air Conditioning, constant pressure water supply, sewage treatment and other industries. It also equipped with food machinery, printing machinery, industrial air conditioner, textile machinery, water supply and the production reconstruction of plastic, chemical fiber, cement and ceramic etc. It is also widely demanded in the market of fun and pump devices about the industries of petrification, oil refining, thermoelectricity, water supply, heat supply and other industries.

Outer size

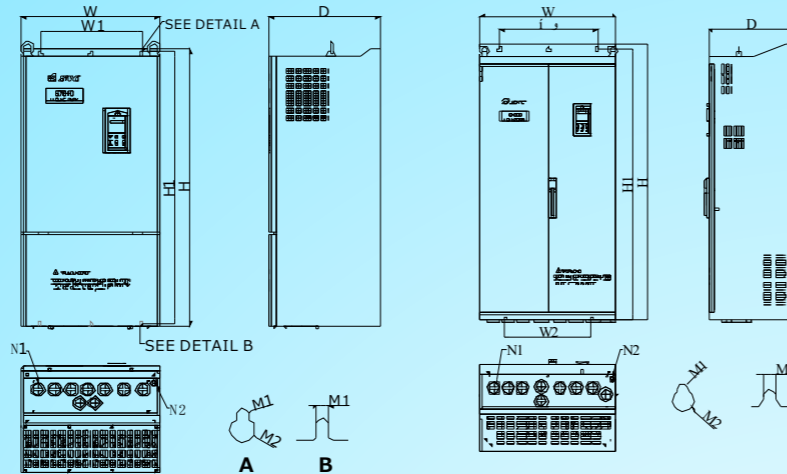


Fig.a

Fig.b

Mounting size and series type explanation

Inverter type	Rated output Current(A)	Adaptable motor(KW)	H (mm)	H1 (mm)	W (mm)	W1 (mm)	W2 (mm)	D (mm)	N1 (mm)	N2 (mm)	M1 (mm)	M2 (mm)	Fig.
EN500-4T0750G/0900P	150/176	75/90	570	546	340	237	-	320	-	-	Φ12	Φ18	Fig.a
EN500-4T0900G/1100P	176/210	90/110	570	546	340	237	-	320	-	-	Φ12	Φ18	
EN500-4T1100G/1320P	210/253	110/132	650	628	400	297	-	340	-	-	Φ12	Φ18	
EN500-4T1320G/1600P	253/304	132/160	650	628	400	297	-	340	-	-	Φ12	Φ18	
EN500-4T1600G/2000P	304/380	160/200	980	953	480	370	-	400	Φ38	Φ19	Φ9	Φ18	
EN500-4T2000G/2200P	380/426	200/220	1030	1003	500	370	-	400	Φ38	Φ19	Φ9	Φ18	
EN500-4T2200G/2500P	426/474	220/250	1030	1003	500	370	-	400	Φ38	Φ19	Φ9	Φ18	Fig.b
EN500-4T2500G/2800P	474/520	250/280	1030	1003	500	370	-	400	Φ38	Φ19	Φ9	Φ18	
EN500-4T2800G/3150P	520/600	280/315	1368	1322	700	500	440	430	Φ52	Φ19	Φ12	Φ22	
EN500-4T3150G/3550P	600/650	315/355	1368	1322	700	500	440	430	Φ52	Φ19	Φ12	Φ22	
EN500-4T3550G/3750P	650/680	355/375	1518	1483	700	500	500	430	OB 77*47	Φ19	Φ12	Φ22	
EN500-4T3750G/4000P	680/750	375/400	1518	1483	700	500	500	430	OB 77*47	Φ19	Φ12	Φ22	
EN500-4T4000G/4500P	750/800	400/450	1518	1483	700	500	500	430	OB 77*47	Φ19	Φ12	Φ22	

Accessories base

Converter and base corresponding relational tables

Inverter type	Base type				
	Standard base	With input reactor	With output reactor	With DC reactor	
EN500-4T0750G/0900P	SP-BS-0900	SP-BS-0750-LI	SP-BS-0900-L0	SP-BS-0750-LD	
EN500-4T0900G/1100P		SP-BS-0900-LI	SP-BS-0900-L0	-	
EN500-4T1100G/1320P	SP-BS-1320	SP-BS-1100-LI	SP-BS-1100-L0	-	
EN500-4T1320G/1600P		SP-BS-1320-LI	SP-BS-1320-L0	-	
EN500-4T1600G/2000P	SP-BS-1600	SP-BS-1600-LI	SP-BS-1600-L0	-	
EN500-4T2000G/2200P	SP-BS-2200	SP-BS-2000-LI	SP-BS-2000-L0	-	
EN500-4T2200G/2500P		SP-BS-2200-LI	SP-BS-2200-L0	-	
EN500-4T2500G/2800P	SP-BS-4000	SP-BS-2500-LI	SP-BS-2500-L0	-	
EN500-4T2800G/3150P		SP-BS-2800-LI	SP-BS-2800-L0	-	
EN500-4T3150G/3550P		SP-BS-3150-LI	SP-BS-3150-L0	-	
EN500-4T3550G/3750P		SP-BS-4000-LI	SP-BS-4000-L0	-	
EN500-4T3750G/4000P		SP-BS-4000-LI	SP-BS-4000-L0	-	
EN500-4T4000G/4500P		SP-BS-4000-LI	SP-BS-4000-L0	-	

Base dimension

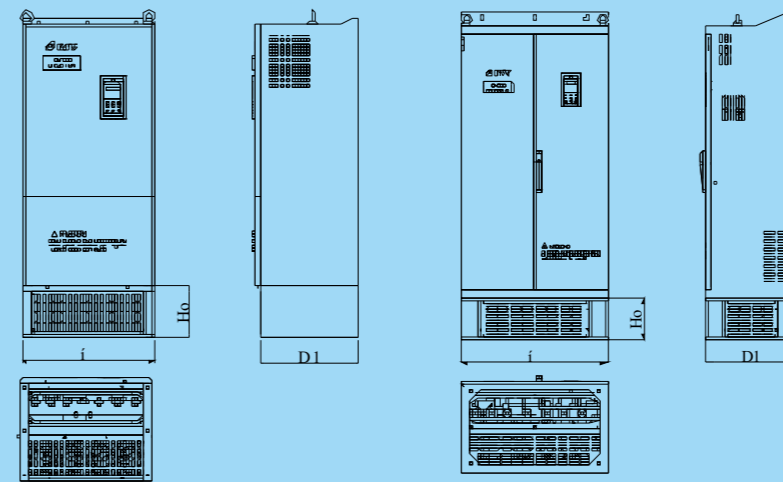


Fig.c

Fig.d

Base size

Base type	W (mm)	D1 (mm)	Ho (mm)	Fig.
SP-BS-0900	340	300	180	Fig.c
SP-BS-0750-LI				
SP-BS-0750-LD				
SP-BS-0900-LI	340	300	350	
SP-BS-0900-L0				
SP-BS-1320	400	320	180	
SP-BS-1100-LI				
SP-BS-1100-L0	400	320	380	
SP-BS-1320-LI				
SP-BS-1320-L0				
SP-BS-1600	480	380	180	Fig.d
SP-BS-1600-LI				
SP-BS-1600-L0	480	380	400	
SP-BS-2200	500	380	200	
SP-BS-2000-LI				
SP-BS-2000-L0	500	380	400	
SP-BS-2200-LI				
SP-BS-2200-L0				
SP-BS-4000	700	430	204	
SP-BS-2500-LI				
SP-BS-2500-L0				
SP-BS-2800-LI	700	430	400	
SP-BS-2800-L0				
SP-BS-3150-LI				
SP-BS-3150-L0				
SP-BS-4000-LI	700	430	450	
SP-BS-4000-L0				

Outer size of keypad and its fixing box(unit: mm)

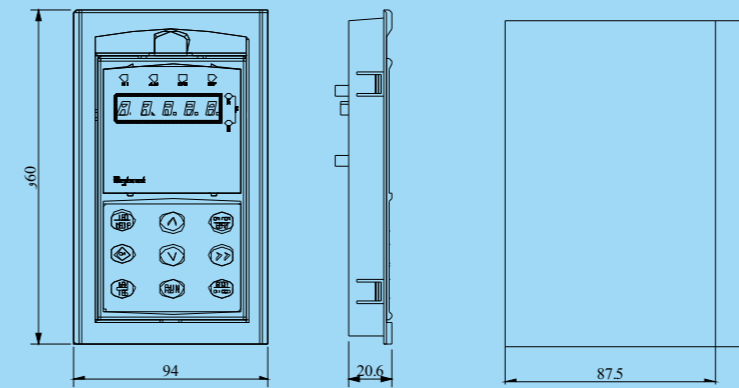


Fig.e Mounting size of KB25

Fig.f Hole size of KB25 keypad

Product technic index and spec.

Item	Item description		
Input	Rating volt., frequency	3 phase 380V:60Hz	
	Allowed volt. range	320~460V	
Output	Voltage	0~380V	
	Frequency	0~650Hz	
Control performance	overload capacity	Gtype:150% of rated current for 1 minute ; Ptype:120% of rated current for 1 minute.	
	Control mode	speed sensorless vector control, open loop V/F control	
Control performance	Speed regulation range	1:100	
	Start-up torque	150% of rated torque at 0.5Hz	
	Running speed stable state precision	≤ ±0.5% of rating synchronous speed	
	Frequency precision	Digital setting: max. frequency x ± 0.01% Analog setting: max. frequency x ± 0.5%	
	Frequency resolution	Analog setting	0.1% of max. frequency
		Digital setting	The precision less than 100HZ: 0.01Hz
	Exterior impulse	0.1% of max. frequency	
	Torque boost	Automatic torque boost, manual torque boost 0.1~12.0%	
	V/F curve(volt. frequency characteristic)	Set rating frequency randomly at range of 5~650Hz, can choose constant torque, degressive torque 1, degressive torque 2, degressive torque 3, user defined V/F curve in total 5 kinds of curve	
	acceleration and deceleration curves	2 modes: linear acceleration and deceleration and "S" acceleration and deceleration; 15 types of acceleration and deceleration time, the time unit is optional(0.01s, 0.1s, 1s), the max is 1000 minutes	