Hope Senlan Science & Technology Holding Corp., Ltd
Tel: 86-28-85968792 Fax: 86-28-85962488
Email: info@chinavvvf.com

SB150 Series Smart Frequency Inverter

0.4~1.5KW

- Product Characteristics

- High-performance optimized voltage space vector V/F algorithm with high efficiency, low noise, and low electromagnetic interference.
- Built-in braking unit, all inverters on one DC bus technical.
- High-performance bipolar PID with correction function is convenient for closed-loop control
- Motor sped search function allows smooth start for various loads such as centrifuges and dewatering machines anytime
- Strengthened Electromagnetic Compatibility (EMC)
- Built-in RS485 communication interface supporting RTU mode modbus protocol
- Overload Capacity: 150% of rated current, 1minute
- Small size, light weight, fans easy to replace.

- Common specifications for SB150 series

Item		Description
Input	Rated voltage and frequency	3-phase: 220v/380V，50/60Hz
	Allowable range	Voltage: 320～420V; voltage imbalance＜3%; frequency:47～63 Hz
output	Output voltage	3-phase, 0V～input voltage, with the error less than 5%.
	Output frequency range	V/F control: 0.00～650.00Hz Vector control: 0.00～200.00Hz
performance standard	Overload capacity	150% of rated current for 1 minute
	Frequency resolution	Digital reference: 0.01Hz Analog reference: 0.1% of max. frequency
	Output frequency precision	Analog reference: :±0.2% of max. frequency（25±10℃）Digital reference: 0.01Hz
Control	Communication	Built-in RS485 port, supporting Modbus protocol

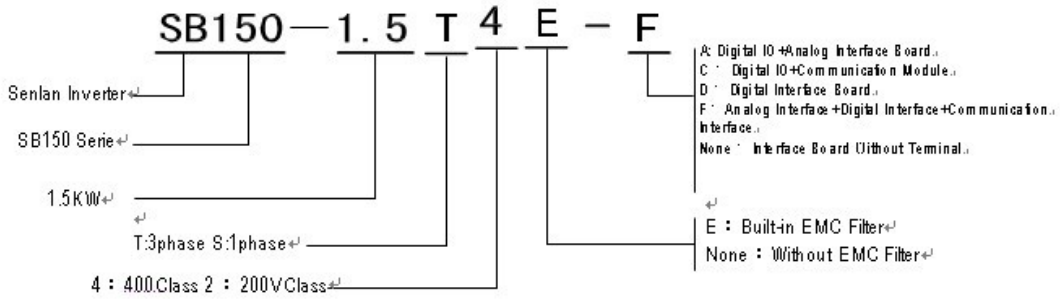
terminal	Analog input AI	2 channels AI（also used as digital input）,voltage or current type, positive or negative, with drop detection
	Analog output AO	1 channels AO, voltage or current type independent terminal to choose
	Digital input	5 channels of multi-function digital input(two of them are analog inputs), sampling period 1ms
	Digital output	1 channel of NPN multi-function digital output，1 channels of multi-function relay output
Software function	Motor control mode	Space vector V/F control, with auto torque boost and slip compensation
	Command source	Keypad, terminal and communication. They can be switched over by terminals
	Frequency reference source	Keypad (keys and POT), communication, UP/DOWN value, AI1, AI2 and PFI. Auxiliary frequency reference can be introduced for fine tuning
	V/F curve	Linear curve and two reduced-torque curves, with manual and auto torque boost
	Dynamic braking	Built-in braking unit and external braking resistor
	DC braking	Braking time: 0.0～60.0s Braking current: 0.0～100.0％ of rated current
	Accel/decel	Linear or S-curve acceleration/deceleration
	Jog	Jog frequency: 0.10～50.00Hz
	AVR	Keeps the output voltage constant automatically when the voltage of power grid fluctuates
	Auto carrier regulation	Carrier frequency is regulated automatically based on the load characteristic and ambient temperature
	Momentary power failure	Ensures uninterrupted operation by controlling the DC link voltage
	Process PID	process PID adjustor, can do 4 references, can disable terminals, and provide PID revise mode, sleep function (suit for water supply industry)
	Wobble	Ensures even winding of textiles
	Multistep frequency	7 multistep frequencies.，selected by digital input terminal.
	others	Smooth start, stall prevention, zero-speed delay, oscillation suppression, deadband compensation
Protection functions		Overcurrent, overvoltage, undervoltage, input/output phase loss, output short-circuit, overheating, motor overload, external fault, analog input disconnection, stall prevention, etc.
Options		Braking resistor、input/output reactor、EMI filter、Profibus-DP module、remote control box、LCD keypad etc.

Ambient	Service site	Altitude less than 1000 meters; indoor; no direct sunlight; free of dust, corrosive gases, inflammable gases, oil mist, water vapor, water drops, salt mist, etc.
	Temperature/humid	-10～＋40℃/20～90％RH, no condensation
	Storage temperature	-20～＋60℃
	Vibration	Less than 5.9m/s2（0.6g）
Structure	Protection degree	IP20
	Cooling method	Forced air cooling, with fan control

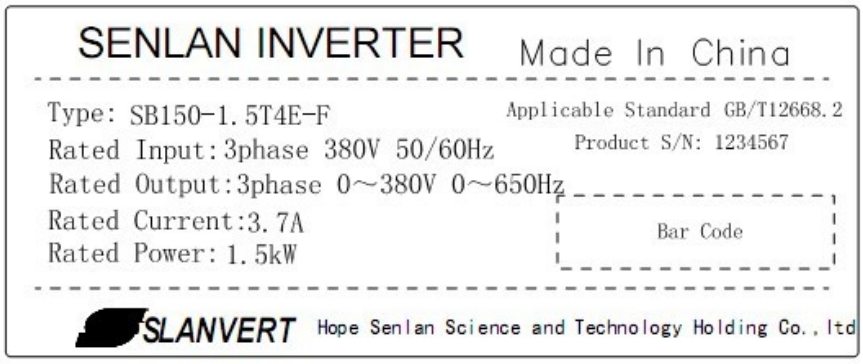
- Applicable domains

The products can be extensively applicable to Pharmaceutical, Food industry, Waving, Printing and Dying, Washing, Cable, Package, Machinery, Ceramic, Water Supply, Centrifuge, Conveyor Belt, Dehydrator and all kinds of OEM.

- Description of inverter type



- Nameplate description(take SB100-15/18.5T4 as an example):



- Specification for SB150 series

Model	Rated	Rated	Applicable motor

	capacity （kVA）	output current （A）	（kW）
1ph 220v			
SB150-0.4S2	**1.1**	**3.0**	**0.4**
SB150-0.75S2	**1.9**	**5.0**	**0.75**
SB150-1.1S2	**2.3**	**6.0**	**1.1**
3ph 220v			
SB150-0.4T2	**1.1**	**3.0**	**0.4**
SB150-0.75T2	**1.9**	**5.0**	**0.75**
SB150-1.5T2	**2.8**	**7.5**	**1.5**
3ph 380v			
SB150-0.4T4	**1.0**	**1.5**	**0.4**
SB150-0.75T4	**1.6**	**2.5**	**0.75**
SB150-1.5T4	**2.4**	**3.7**	**1.5**

- Outline drawings of SB150 models(can be DIN rail mounted):