SB200 Series fan/pump frequency inverter

400v class 1.5~400kw

■ Products Characteristics

- High-performance optimized voltage space vector V/F algorithm with high efficiency, low noise and low electromagnetic interference.
- 1.5~22KW SB200 inverters are equipped with build-in braking unit.
- High-performance bipolar PID with correction function is convenient for closed-loop control.
- Motor speed search function allows smooth start for various loads such as centrifuges and dewatering machines anytime.
- Built-in software special for constant pressure water supply system enables one inverter to control two pumps simultaneously without adding extra expansion unit.
- English LCD control panel with friendly human-computer interface（Chinese LCD control panel available as well）.
- Real time clock timing control（easily set the inverter running-up and running-down time）

■ Common specifications

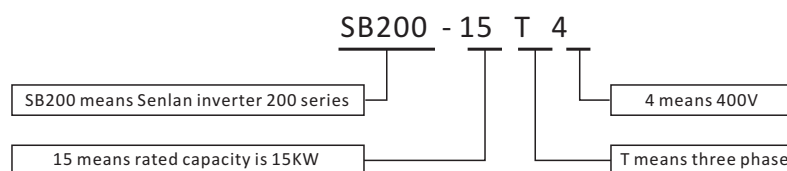|	Item	Description
Input	Rated Voltage/Frequency	3-phase, 380V; 50/60Hz
	Range	Voltage: 320-420V; voltage unbalance:<3％; frequency: 47-63Hz
Output	Output Voltage	3-phase; 0v-input voltage; error: below 5%
	Output Frequency	0.00-650.00Hz
	Overload Capacity	110% of rated current; 1 minute
	Frequency Resolution	Digital setting: 0.01Hz; analog setting: 0.1% of max frequency
	Output Frequency Accuracy	Analog setting: ±0.2％ of max frequency (25±10℃); digital setting: 0.01Hz (-10—+40℃)
	Command Execution Channel	Settings may be configured via the control panel, control terminal or communication port. Switching is enabled via the terminal
	Frequency Setting Channel	Control panel, communication port, UP/DOWN adjustment, AI1, AI2, AI3 or PFI
	Auxiliary Frequency Setting	Flexible auxiliary frequency micro-adjustment and frequency setting synthesis
	Torque Elevation	Auto/manual torque elevation
	V/F Curve	Customizable V/F curves, linear V/F curves and 5 torque reduction characteristic curves
	Jogging	Jogging frequency range: 0.10-50.00Hz; jogging acceleration/deceleration time: 0.1-60.0s
	Auto Energy Saving	Load-based auto V/F optimization, capable of auto energy saving
	AVR	When the grid voltage fluctuates within a specified range, the inverter can automatically maintain a constant output voltage
	Auto Carrier Regulation	Auto carrier regulation based on load characteristics and ambient temperature
	Random PWM	Tone adjustment for an operating motor
	Instantaneous Power Failure Solution	Uninterrupted operation via busbar voltage regulation in the event of an instantaneous power failure
	DC Braking	Braking time: 0.0-60.0s; braking current: 0.0-100.0％ of rated current
	PFI	Max input frequency: 50kHz
	PFO	Connector open circuit-type pulse square wave signal output; programmable
	Analog Input	3-channel analog signal input; options for voltage/current modes; capable of positive/negative input
	Analog Output	2-channel analog signal output; options for 0/4-20mA or 0/2-10V; programmable
	Digital Input	8-channel multifunctional digital input
	Digital Output	2-channel multifunctional collector open-circuit output; 5-channel multifunctional relay output
	Communication	Inbuilt RS48S communication interface supporting Modbus protocol and USS commands
Feature	Process Identification	Two PID parameter systems and multiple correction modes
	Water Supply Mode	Multiple water supply modes: fire water control, water injection control, clean water pool inspection, wastewater pool inspection, drainage pump control, sleeping, pump change at regular intervals and pump overhaul
	Custom Menu	30 user parameters can be customized
	Change of Parameter Display	Parameter display different from the factroy settings is supported
	KWH Meter	Convenient for adjustment of the optimized energy saving schemes
	Protection	Protection is available for overcurrent, overvoltage, undervoltage, input/output phase lack, output short-circuit, overheat, motor overload, external fault, analog input disconnection, stall prevention, etc.
	Options	Braking units, extension cords for control panel, remote control box, digital I/O extension boards, relay extension boards, control panel capable of parameter copying (SB-PU70E) and LCD- display control panel (SB-PU200)
Environment	Application	Indoors; an elevation below 1,000m; away from exposure to direct sunlight, dust, corrosive gases, combustible gases, oil mist, water vapor, drippings and saline mist
	Ambient Temperature/Humidity	-10－+40℃/<90％RH; no condensate or dew
	Storage Temperature	-20－+60℃
	Vibration	Below 5.9m/s2 (0.6g)
Structure	IP Rating	Ip20
	Cooling Mode	Force air cooling with fan control

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■ Applicable domains

The products can be extensively applicable to Waving, Printing & Dying, Washing, Cable, Package, Machinery , constant pressure water supply, constant temperature control and all kinds of OEM

■ Description of inverter type

SB200 - 15 T 4

SB200 means Senlan inverter 200 series

15 means rated capacity is 15KW

4 means 400V

T means three phase

■ Specification

| Inverter model	Rated Capacity (KVA)	Turpo and Pump（110％ IN 1 minute for every 10 minutes）		General load（150％ Ihd 1 minute for every 10 minutes）	
		Rated output current（A）	Applicable motor（kW）	Rated output current（A）	Applicable motor（kW）
SB200-1.5T4	2.4	3.7	1.5	3	1.1
SB200-2.2T4	3.6	5.5	2.2	3.7	1.5
SB200-4T4	6.4	9.7	4	5.5	2.2
SB200-5.5T4	8.5	13	5.5	9.7	4
SB200-7.5T4	12	18	7.5	13	5.5
SB200-11T4	16	24	11	18	7.5
SB200-15T4	20	30	15	24	11
SB200-18.5T4	25	38	18.5	30	15
SB200-22T4	30	45	22	38	18.5
SB200-30T4	40	60	30	45	22
SB200-37T4	49	75	37	60	30
SB200-45T4	60	91	45	75	37
SB200-55T4	74	112	55	91	45

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		Rated output current（A）	Applicable motor（kW）	Rated output current（A）	Applicable motor（kW）
SB200-75T4	99	150	75	112	55
SB200-90T4	116	176	90	150	75
SB200-110T4	138	210	110	176	90
SB200-132T4	167	253	132	210	110
SB200-160T4	200	304	160	253	132
SB200-200T4	248	377	200	304	160
SB200-220T4	273	415	220	377	200
SB200-250T4	310	475	250	415	220
SB200-280T4	342	520	280	475	250
SB200-315T4	389	590	315	520	280
SB200-375T4	460	705	375	590	315
SB200-400T4	490	760	400	705	375

Outline Drawing of the Inverter Series (SB200-1.5T4—5.5T4) (Installable with a standard DIN Guide Rail)
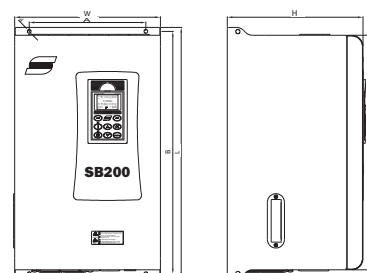
■ Outline dimensions and weights
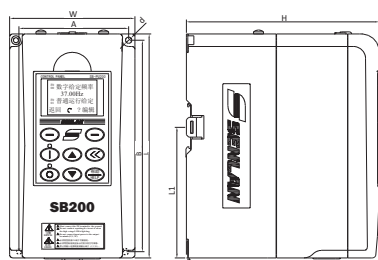
Outline Drawing of the Inverter Series
(SB200-1.5T4～5.5T4)
(Installable with a standard DIN Guide Rail)
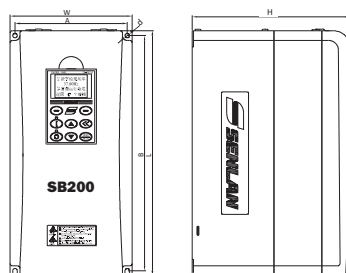
Outline Drawing of the Inverter Series
(SB200-7.5T4～22T4)

Outline Drawing of the Inverter Series
(SB200-30T4 and above)

Specification Number	W (mm)	L (mm)	L1 (mm)	H (mm)	A (mm)	B (mm)	D (mm)
SB200-1.5T4	100	180	105	157	87.5	170	4.5
SB200-2.2T4							
SB200-4T4	135	240	140	170	125	230	4.5
SB200-5.5T4							
SB200-7.5T4	150	300	—	195	138	288	5.5
SB200-11T4							
SB200-15T4	200	380	—	225	185	367	7
SB200-18.5T4							
SB200-22T4							
SB200-30T4	275	470	440	256	200	455	8
SB200-37T4							
SB200-45T4	280	570	520	290	200	550	10
SB200-55T4							

Specification Number	W (mm)	L (mm)	L1 (mm)	H (mm)	A (mm)	B (mm)	D (mm)
SB200-75T4	310	680	630	330	220	660	10
SB200-90T4							
SB200-110T4	350	800	750	330	220	780	12
SB200-132T4							
SB200-160T4	410	940	884	318	300	920	12
SB200-200T4							
SB200-220T4	500	1060	1000	355	320	1038	12
SB200-250T4							
SB200-280T4							
SB200-315T4	650	1180	1110	360	540	1152	13
SB200-375T4	650	1250	1180	360	540	1222	13
SB200-400T4							