

SAFESAVE

User Manual of SST Soft Starter



SAFESAVE is proud of soft-start experts!

Warning message



The product should be operated by qualified electricians as per safety specifications, including installation, pilot run and maintenance, etc;

The voltage used by the product is dangerous, which may cause serious injury or death of others. Prohibit touching terminal after electrifying the device or during operation. Although the device is switched off, voltage may still exist in output terminal;

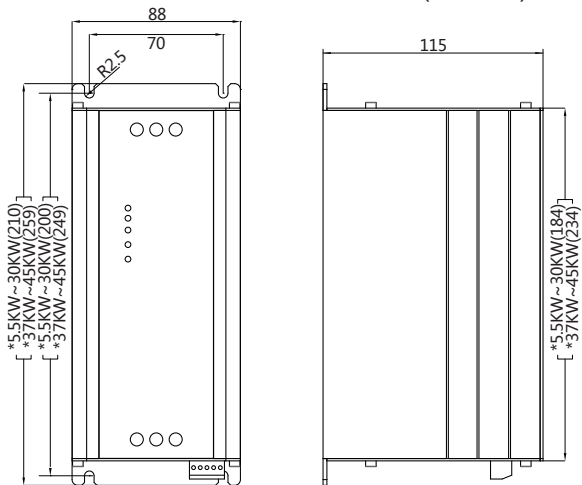
The product should be used under rated specification of product. Before use, please check the accuracy of various parameters such as power, motor and frequency of product or device.

The product has passed insulation test before leaving factory. Incorrect megger test may damage product or shorten product life.

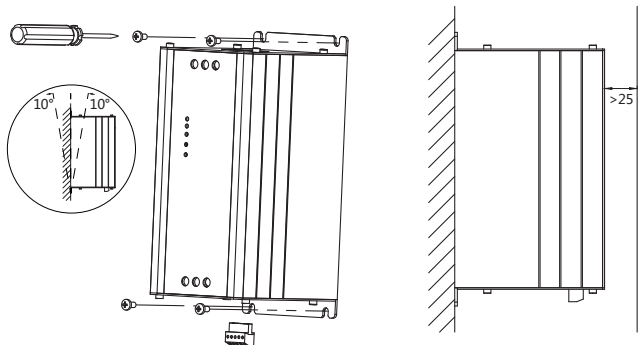
Electrical parameters

Standard	GB 14048.6-2008/IEC 60947-4-2 : 2002	
Rated operational voltage	200~415V(-15%+10%)	
Max. length between soft starter and cable	300m	
Permissible ambient environment	Operation	-25°C~+60°C (consider reducing capacity if > 40°C)
	Storage	-40°C~+70°C
Protection grade	IP20	
Rated power	50/60Hz	
Permissible installation height	5000m (start to reduce capacity for above 1000m)	
Starting frequency	≈20 times/hour (Class10 standard load)	

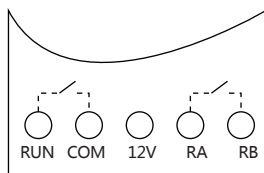
Product dimensions



Installation diagram of product



Terminal description



Terminal marking of major loop	Terminal name	Function description
L1, L2, L3	Mains input of major loop	Connect three-phase source
T1, T2, T3	Output connection of soft start	Connect three-phase motor

Terminal marking of control loop	Terminal name	Function description
RUN	Enable input	When closing run and com, start to operate When breaking run and com, motor slows down and halts
COM	Common port	run and common port at 12V
12V	Power terminal	Interior power output terminal at 12V, 300mA at maximum, prohibit overload
RA, RB	Indication of working status	Working status: relay output, normally open contact, close during operation, break if stall or fault, relay capacity 250V/AC 0.3A

Power meter

Model	230V/KW	400V/KW	Rated current A
SST-5R5	3	5.5	13
SST-7R5	4	7.5	17
SST-11	5.5	11	25
SST-15	7.5	15	32
SST-18	7.5	18.5	37
SST-22	11	22	45
SST-30	15	30	60
SST-37	18.5	37	75
SST-45	22	45	90

Wiring diagram

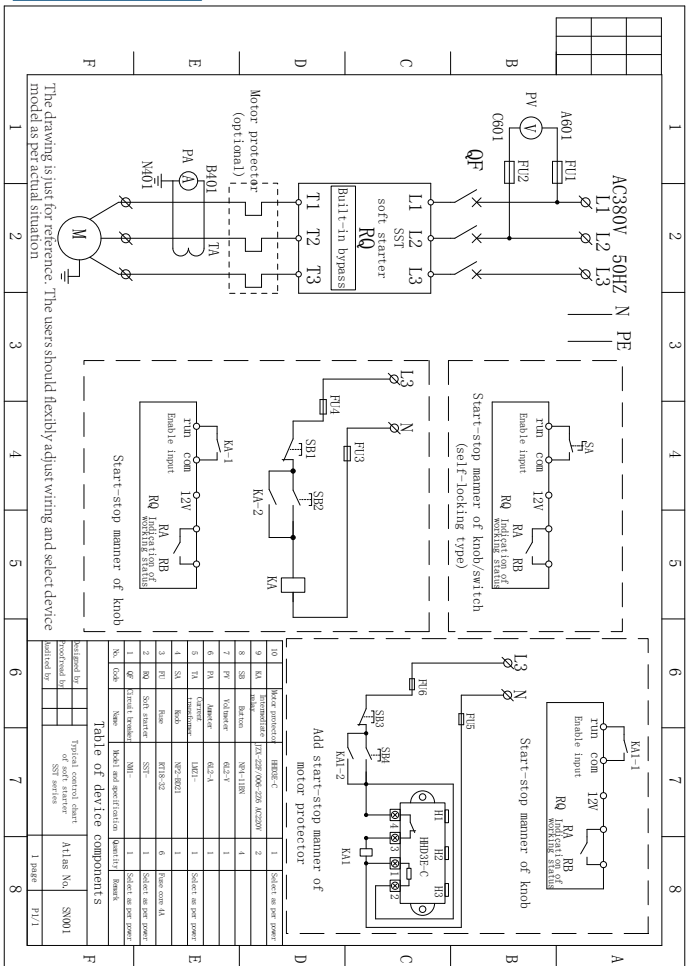


Table of device components

No.	Code	Name	Model and specification	Quantity	Remark
1	QF	Start breaker	NH-1	1	Select as per power
2	NO	Stop button	SST-	1	Select as per power
3	PI	Fuse	RT18-32	6	Fuse core 1A
4	SA	Emergency stop	WZ-2021	1	Select as per power
5	TA	Amper	6L2-4	1	Select as per power
6	PV	Voltage	6L2-9	1	
7	PV	Voltage	6L2-9	1	
8	SB	Button	NH-118N	4	
9	KA	Relay	JZC-22F/006-220/AC200V	2	Select as per power
10		Motor protector	HH03-C	1	Select as per power

Designed by: _____

Approved by: _____

Modified by: _____

Typical control chart of soft starter SST series

Atlas No. SN001

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PL/1

Parameter setting

Wiring steps

Cut off main power L1-L3 and check if LED light on panel brightens. If it brightens, please do not proceed follow-up steps

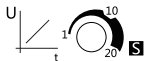
Output terminal connects with three-phase motor

Set time of starting slope, stopping slope and starting initial voltage through rotary switch

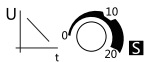
Plug in and observe ON light on panel brightens stably

Start-stop motor through RUN and COM terminals

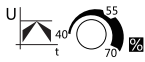
Panel parameters



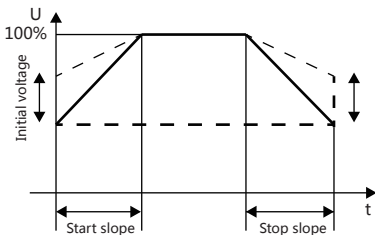
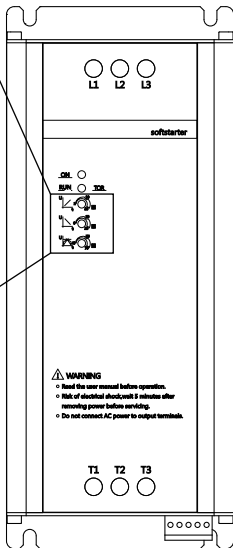
Knob of soft starting time: adjust soft starting time of soft starter and range is 1-20S. The longer the time setting, the more gentle the soft starting process, which is helpful to reduce the impact on power grid.



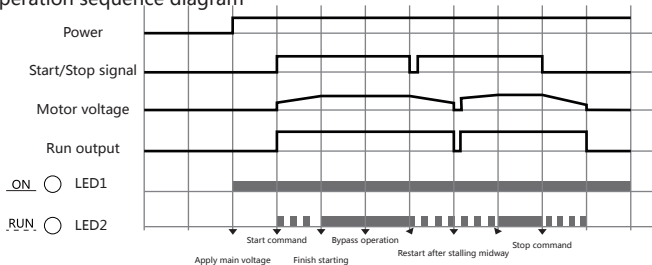
Knob of soft stopping time: adjust soft stopping time of soft starter and range is 0-20S. In some application occasions of water pump, soft stopping function can effectively avoid "water hammer effect" generated by the halt of water pump. When the knob is adjusted to be 0S, it indicates that the stalling way of motor is free stalling, which will stop output immediately after soft starting.



Knob of initial voltage: adjust initial voltage of soft starter and range is 40%~70%. When the motor starts, it needs to overcome the friction under stationary state. Properly increasing the initial voltage can obtain larger starting torque. The users should refer to actual load condition to coordinate starting and stopping time, thus obtaining the best effect of smooth starting.



Operation sequence diagram



Related information

User name

Phone number

Address

Product model

Serial No.

Purchasing way

Purchasing time

Maintenance site

Invoice No.

Terms of no maintenance, return & exchange

Within warranty period, the situations caused by below reasons are beyond warranty scope:

- (1)Product fault caused by users of violating the operation in User Manual;
- (2)Product damage during transportation or caused by external forces;
- (3)Product fault caused by users of repairing or remolding product arbitrarily without communication with manufacturer;
- (4)Product fault caused by users of using product beyond standard application range;
- (5)Product fault caused by users under poor service environment;
- (6)Product damage caused by force majeure factors such as earthquake, fire, lightning stroke, abnormal voltage or other natural disasters, etc;
- (7)Product marking such as nameplate, trademark and serial number are damaged or unidentified

Please keep product packaging after receiving the product in case of being required for return and exchange.

Please hand the user manual to
final users to reserve properly

SAFESAVE

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