



PRODUCT PROFILE

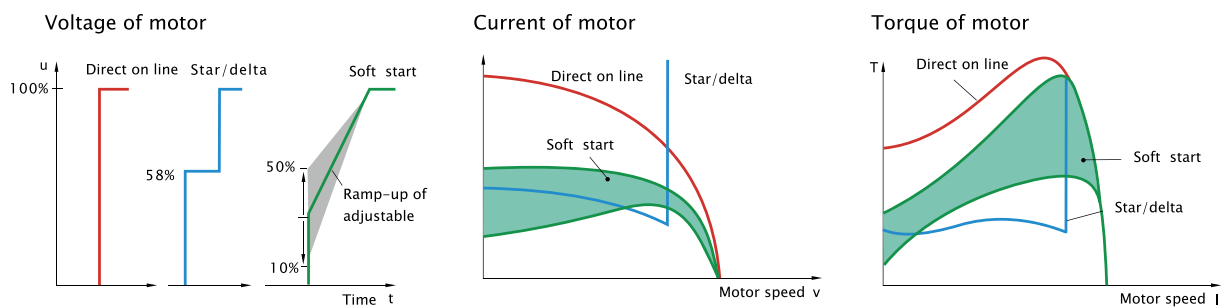
SST-S2 is a new intelligent motor soft starter which researched and developed on the basis of original HPS2S, HPS2D/DH with the most advanced digital processor which can adjust voltage and limit the electric current. The unique intelligent electronic circuit offers perfect control and protective function: Start linearly with higher speed, starting and stopping control of the pump, preset run at a low speed (rotating and overturning adjustment in short time of electro-controlling type). Presetable dual start-stop parameter switch freely, can monitor the load state and realize automatically run with energy-saving or light load mode. The protective function of electrical machinery insulating testing, and the protection of short circuit, phase loss and the electronic. RS485 with communication interface use modbus/profibus protocol that generally realize the longrange control and monitoring. Can be extensively used in textile industry, metallurgy industry, petrochemical industry, water treatment, shipping industry, medicine, food processing industry, mine industry, and mechanical equipment industry, etc.



FUNCTION

Feature

- Multinational language supported, LCD display, set up the parameter in button type
- RS485 with communication interface modbus/profibus protocol
- Can programme set the signal relay
- Super strong perfect control and protective function
- Can be run online continuously without bypass. High reliability



Performance comparison of direct-on-line, star-delta and soft-start at voltage, current and torque of the motor.



SST-S2 18...75



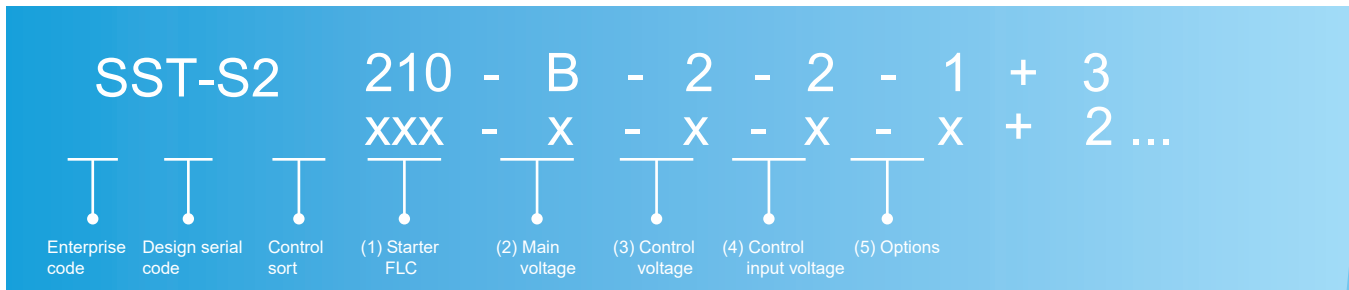
SST-S2 175...250



SST-S2 300...840



ORDERING INFORMATION



(1) Starter FLC: 17, 31, 44, 58, 72, 85, 105, 145, 170, 210, 250, 310, 390, 460, 580, 720, 820, 950

(2) Main Voltage 50/60Hz ±4Hz	Code name	Specify	For
	A	230VAC	220~240VAC
	B	400VAC	380~420VAC
	C	500VAC	480~520VAC
	D	690VAC	660~690VAC

(3) Control Supply Voltage (terminals 1-3) 50/60Hz ±4Hz	Code name	Specify	For
	1	110VAC	100-120VAC
	2	220VAC	200-240VAC

(4) Control Input Voltage (terminals 4-9) 50/60Hz ±4Hz	Code name	Specify	For
	1	115VAC	110~120VAC
	2	230VAC	220~240VAC

(5) Required Options For more than one option indicate, for example, 1+3 (Comm+Insulation)	Code	Introduction
	0	No options
	1	Communications RS-485 MODBUS
	2	Communications RS-485 PROFIBUS
	3	Insulation tester
	4	Analogue card-Thermistor in+Analogue out
	5	Harsh environment treatment (must be factory supplied)
	7	Remoted panel Mounting kit with MMI



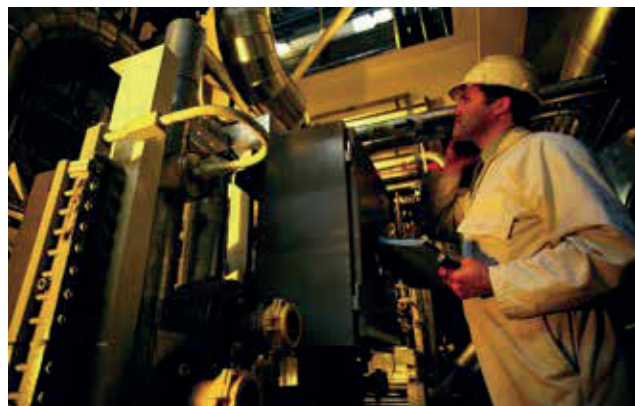
PARAMETERS

230-690V Motor Power

Motor Power (KW)				Size and Type of softstarter				
230V	400V	500V	690V		Main voltage	Control voltage	Control inputs	Functions Options
4	7.5	11	15	SST-S217	- X	- X	- X	- X + X...
7.5	15	18.5	25	SST-S231	- X	- X	- X	- X + X...
15	22	25	37	SST-S244	- X	- X	- X	- X + X...
18.5	30	37	55	SST-S258	- X	- X	- X	- X + X...
22	37	45	59	SST-S272	- X	- X	- X	- X + X...
25	45	55	75	SST-S285	- X	- X	- X	- X + X...
30	55	75	90	SST-S2105	- X	- X	- X	- X + X...
37	75	90	132	SST-S2145	- X	- X	- X	- X + X...
45	90	110	160	SST-S2170	- X	- X	- X	- X + X...
55	110	132	200	SST-S2210	- X	- X	- X	- X + X...
75	132	160	220	SST-S2250	- X	- X	- X	- X + X...
90	160	200	257	SST-S2310	- X	- X	- X	- X + X...
110	200	250	355	SST-S2390	- X	- X	- X	- X + X...
132	250	315	450	SST-S2460	- X	- X	- X	- X + X...
160	315	400	560	SST-S2580	- X	- X	- X	- X + X...
200	400	500	710	SST-S2720	- X	- X	- X	- X + X...
250	450	560	800	SST-S2820	- X	- X	- X	- X + X...
280	500	630	850	SST-S2950	- X	- X	- X	- X + X...

Purchasing guide

For normal duty applications, we recommend the same rated power SST-S2 soft starters. As pump compress or elevator, escalator conveyor belt(short)
 For heavy duty applications, we recommend one higher level SST-S2 soft starters.
 As centrifugal, fan,mill,mixer conveyor belt(long)





PARAMETERS

General information	
Supply voltage	Line to line 230V-690V (to be specified) 10%
Frequency	50/60Hz 4Hz (dual frequency)
Control Supply	110-120V of 220-240V (to be specified)
Control Inputs and Outputs	110-120V of 220-240V (to be specified)
Load	3 phase, 3 wire, squirrel cage induction motor
Operating temperature	0°C to 50°C
Storage temperature	-20 °Cto 70°C
Maximum starting time	30 seconds
Maximum starts per hour	4 starts per hour at 400% In, Up to60 starts per hour at lower load applications
Operating parameters	
Starter FLC	Starter Full Load Current 17~950 Amp
Motor FLA	Motor Full Load Ampere 50%-100% of starter FLC
Pump control curves	6 field selectable curves preventing over pressure during start and water hammer during stop
Pulse start duration	A pulse of 80% Un for adjustable time 0-1 second, to start high friction loads
Initial voltage	10%-50% Un*(can be extended to 80%Un)
Current limit	100%-400% of Motor FLA* (can be extended to 500%)
Ramp-up time	1-30 seconds (can be extended to 90s*)
Ramp-down time	1-30 seconds (can be extended to 90s*)
Dual adjustments	Secondary start stop characteristics for Initial voltage, current limit, acceleration time deceleration time and motor FLA.
Energy saving	Activated when motor is lightly loaded for extended periods of time
Slow speed torque	Maximum torque produced while motor is operating at 1/6 of nominal speed to a maximum of 30 seconds
Tacho and linear acceleration	12 selectable curves-defines gain control to improve the tacho feedback linearity
Starting from diesel generator	Special starting characteristics become operative via an internal dip switch. (contact terminal 8,for dual adjustment)



PARAMETERS

Motor protection

Too many starts	Determines maximum number of starts allowable during Start Period Range 1-10 starts in start period 1-60 minutes
Start inhibit	Prevents starting for a variable period of 1-60 minutes after TOO MANY STARTS is indicated
Long start time (stall protection)	Starter trips if the full motor speed is not reached within the maximum start time of 1-30 seconds*
Electronic fuse (shear pin)	Trips starter in 1 cycle at 850% in during starting and 200%-850% in during running
Electronic overload (I t)	Adjustable between 75%-150% of motor FLA overload curve can be selected by setting trip time at 500% in, 1-10 seconds
Under current	Starter trips when current drops below 20%-90% I _n , time delay 1-40 seconds
Under voltage(**)	Starter trips when mains voltage drops below 120-600V, time delay 1-10 seconds
Over voltage	Starter trips when mains voltage increases above 150-750V, time delay 1-10 seconds
Phase loss, (under/over frequency**)	Starter trips when 1 or 2 phases fail and when frequency is 4Hz of nominal frequency
Phase sequence	Starter trips when phase sequence is incorrect
Long slow speed time	Starter trips if operating at slow speed longer than 30 seconds
Wrong connection	Prevents starting if the motor is incorrectly connected to the starter
Shorted SCR	Prevents starting when one or more SCRs are shorted
Heatsink over temperature	Starter trips when heatsink temperature rises above 85
External fault	Starter trips when an external contact closes for 2 seconds
Motor insulation (optional)	Alarm level setting 0.2-5M. Trips when motor insulation decreases below 0.2-5M setting. The thyristors must be protected against short circuit
Thyristor Protection	Metal Oxide Varistors(MOVs) and snubber circuits

Control

Analogue I/O	Input of motor overheat signal Output of analog signals of motor current
Displays	LCD in 4 selectable languages and 8 LEDs
Keypad	6 clearly defined keys for easy setting
Aux.contact-immediate	1 C/O, 8A, 250V A.C, 2000VA (delay 0-60 seconds)
Aux.contact-end of acceleration	1 C/O, 8A, 250V A.C, 2000VA (delay 0-120 seconds)
Fault contact	1 C/O, 8A, 250V A.C, 2000VA (selectable as trip or trip fail safe)
Insulation alarm contact (optional)	1 C/O, 8A, 250V A.C, 2000VA
Communication (optional)	RS 485 with Modbus/Profibus protocol for full control and supervision

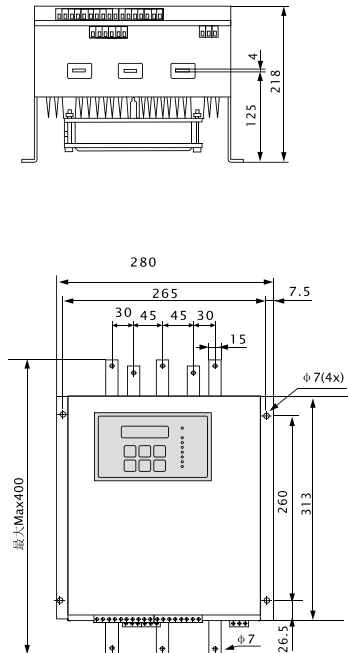
*Special settings (consult works)

**With optional Auto Reset

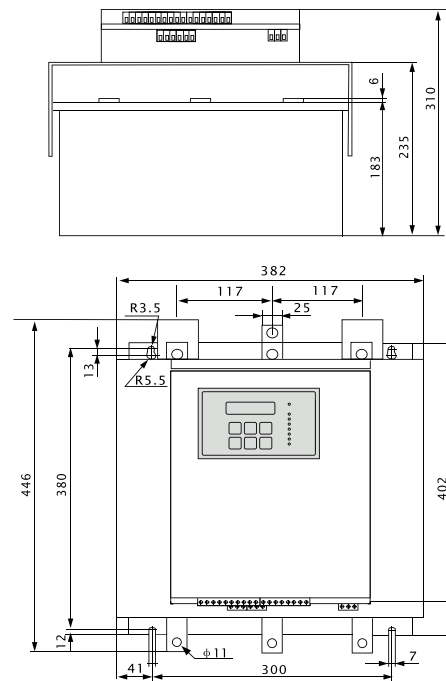


TECHNICAL INFORMATION

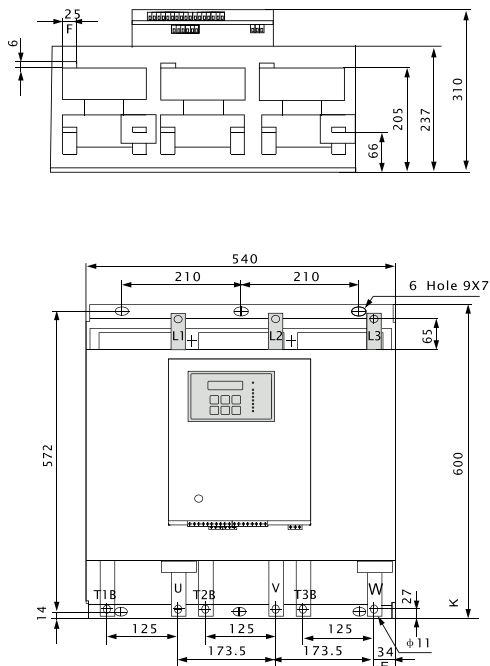
SST-S2 17-145



SST-S2 175-250



SST-S2 310-950



Note:

Model	Measurement		
	E	F	K
SST-S2 300...470	34	25	65
SST-S2 570...720	41.5	40	62.5
SST-S2 820...950	46.5	50	62.5

The tolerance of unmarked measurement should be according to GB/T1804-m