By Industry
Fan
Blender
Pump
Crusher
Compressor
Conveyor belt
Pulping machine
Etc.

SAFESAVE

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SAFESAVE

SJR3 SERIES

MOTOR SOFT STARTER

Selection Guide

1. Easy to control

2. Long life

3. Liquid crystal display

4. No need for control circuitry

5. Space saving

6. Labor saving

PRODUCT OVERVIEW

SJR3–2000 series is the latest soft starter developed by our factory. It expands new functions such as literal display, industrial communication and various protections based on the products of SJR2 series. This product will be the upgrading and replacement of SJR2 series eventually.It shares the same technical framework with SJR3–3000.

Complete protection function

*Soft start overheating protection
*Inputting phase protection
*Output phase deficiency protection
*Three phase unbalance protection
*Over-current protection during the start
*Overload protection during the operation
*Low voltage protection for the power supply
*Overvoltage protection for the power supply
*Short circuit protection for the load

Multiple start and stop modes

*Current-limit starting mode of start
*Voltage slope start
*Jump mode of start
*Ramp current start
*Double closed loop start of
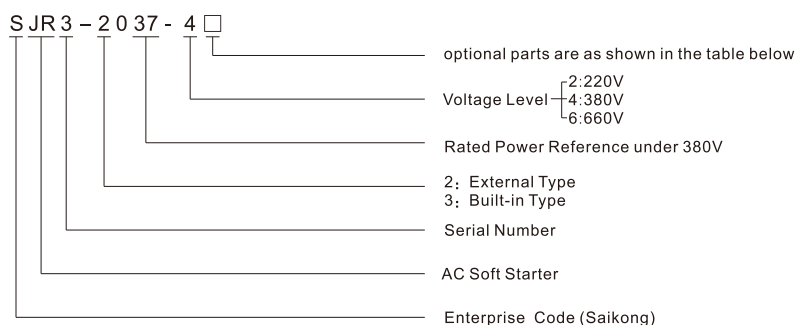 voltage current limit
*Soft stop
*Free cessation

Multiple control support

*Programmable relay output
*Programmable fault relay output
*4~20mA DC analog output
*Input / output of RS485 communication

Function names	Setting range	Illustrations
Starting voltage	30%-80%	40% the voltage when voltage ramp mode is effective.
Soft starting time	2–60s	Current limit mode is invalid.
Soft stop time	2–60s	Free stop when set to 0.
Starting delay	0–999s	Adopts countdown for starting delay mode.. Start when it is set to 0.
Program delay	0–999s	Operating relay output (03, 04 terminals). Close immediately when the set is 0.
Interval delay	0–999s	Overheating is also delayed. The state indicator flashes in the delay period.
Starting current limit	50–500%	The current limit mode is effective, and the maximum value in voltage ramp mode is 400%
Maximum working current	50–200%	Percentage of the motor' rated current .
Faceplate display means		English display
Under voltage protection	40%–90%	Activate protection when it is lower than the set value.
Over voltage protection	100%–140%	Activate protection when it is higher than the set value.
Starting mode	00–05	00 current limit ; 01 voltage; 02 snap-through + current limit; 03 snap-through + voltage;04 current ramp ; 05 double closed loop ; 06 prohibited
Output protection permit	00–04	00 Junior ; 01 light load ; 02 standard ; 03heavy load ; 04 senior
Operation control means	00–06	set to 0 for keyboard operation. Further information, refer to manufacture instructions.
Bypass delay	00–40s	
Parameter modification permit	00–02	00：prohibited to modify any parameter；01：part modification is allowed ；02： Total modification is allowed。
Communication address	00–64	For communication between multi soft starters and host computer
Programming output	00–19	Run relay output (03, 04 terminals) setting. Further information, refer to manufacture instructions.
Soft stop current limit	20%–100%	Further information, refer to manufacture instructions.
Unbalance permit , Phase loss permit	00–03	00 imbalance off + phase-loss off; 01 imbalance off + phase-loss permit; 02 imbalance permit +phase-loss off;03 imbalance permit + phase-loss permit

Model Description

SJR 3 – 2 0 37 - 4 □

optional parts are as shown in the table below

Voltage Level ┬ 2:220V
             ├ 4:380V
             └ 6:660V

Rated Power Reference under 380V

2：External Type
3：Built-in Type

Serial Number

AC Soft Starter

Enterprise Code (Saikong)

● The List Of Rated Power For SJR3-2000 Series

Soft starter230V/400V/660V 50/60Hz		Rated Power of the Motor			Appearance
Soft Starter Model	Maximum current allowance (A) for class 10	220V	380V	660V	Refer to the below diagram
SJR3−2018	37	9 kW	18.5kW	30kW	R1
SJR3−2022	45	11kW	22kW	37kW	
SJR3−2030	60	15kW	30kW	45kW	
SJR3−2037	75	18.5kW	37kW	55kW	
SJR3−2045	90	22kW	45kW	75kW	
SJR3−2055	110	30kW	55kW	90kW	
SJR3−2075	150	37kW	75kW	115kW	
SJR3−2090	180	45kW	90kW	132kW	R2
SJR3−2115	230	55kW	115kW	160kW	
SJR3−2132	260	75kW	132kW	200kW	
SJR3−2160	320	90kW	160kW	250kW	
SJR3−2200	370	115kW	200kW	355kW	
SJR3−2250	500	132kW	250kW	400kW	R3
SJR3−2315	630	160kW	315kW	560kW	
SJR3−2400	800	200kW	400kW	−	
SJR3−2500	998	250kW	500kW	−	
SJR3−2630	1200	355kW	630kW	−	

● The List of Rated Power for SJR3-3000 Series

Soft starter230V/400V/660V 50/60Hz		Rated Power of the Motor			Appearance
Soft Starter Mode	Maximum current allowance (A) for class 10	220V	380V	660V	Refer to the below diagram
SJR3−3018	37	9kW	18.5kW	30kW	R1
SJR3−3022	45	11kW	22kW	37kW	
SJR3−3030	60	15kW	30kW	45kW	
SJR3−3037	75	18.5kW	37kW	55kW	
SJR3−3045	90	22kW	45kW	75kW	
SJR3−3055	110	30kW	55kW	90kW	
SJR3−3075	150	37kW	75kW	115kW	
SJR3−3090	180	45kW	90kW	132kW	R4
SJR3−3115	230	55kW	115kW	160kW	
SJR3−3132	260	75kW	132kW	200kW	
SJR3−3160	320	90kW	160kW	250kW	
SJR3−3200	370	115kW	200kW	355kW	

* The above values in the table are only reference for application with standard rated power load. When the load is heavy or special application requirements are needed, soft starter with a greater rated power is recommended.

|	
Three-phase power supply	Voltage(AC) 380V±15%　（220V and 660V optional）
Frequency	50Hz/60Hz
Applicable motor	Squirrel cage three-phase asynchronous motor
Starting frequency	When the motor is fully loaded, it shall not start more than 4 times per hour; Less than 10 times per hour with no or little load.
Protective class	IP20
Anti shock	Accorded with IEC68-2-27 : 15g, 11ms
Seismic capacity	Vibration intensity is 0.5G or less at an altitude less than 3000 meters.
Ambient temperature	The capacity needn't be reduced when the working temperature is between 0℃ C and 40℃ (At the temperature between 40℃ and 60℃, the current should be decreased 2% whenever the temperature is 1℃ higher.)
Storage temperature	−25℃~70℃
Ambient moisture	93% no condensation or drip, in line with IEC68-2-3
Maximum working	The capacity will not be reduced when the working height is less than 1000 meters (If is higher than 1000 meters, the current will be decreased 5% whenever it is 100 meters higher.)
Cooling means	Natural cold wind
Installation Angle	Vertical installation and the angle of tilt should be in the range of±10°.

| Application of mechanical type	load type	The executive ability of SJR3	Starting current %	Starting time (s)
Centrifugal pump	Standard load	Slow shutdown protection (to eliminate water hammer), under-load protection or protection against phase inversion.	300	5-15
Piston pump	Standard load	Run test. Control of no-lubrication run and pump rotation direction.	350	5-15
Fan	Standard load, heavy load if＞30S	Having detected overload or under load caused by blockage, it will provides braking torque. (click on fan to interrupt drive)	300	10-40
Shrink machine	Standard load	Motor protection, the motor can also provide special	300	5-10
Screw compressor	Standard load	Provides protection against phase reversal, and is used for automatic discharge of contact when the machine is stopped.	350	3-20
Centrifugal compressor	Standard load, heavy load if＞30S	Provides protection against phase reversal, and is used for automatic discharge of contact when the machine is stopped.	300	10-40
Piston compressor	Standard load	Provides protection against phase reversal, and is used for automatic discharge of contact when the machine is stopped.	350	5-10
the transmission belt / transmission machine	Standard load	The process control of fault detection or the under-load control of the circuit	350	3-10
Spiral crane	Standard load	Overload control of harsh environment detection	300	3-10
T- cable car	Standard load	Overload control of blockage detection	300	2-10
Elevator	Standard load	Overload control of blockage detection. Constant start of varying load.	400	5-10
Saw / band	Standard load	Fast stop brake	300－350	5-60
Crusher / Chip cutting machine	Heavy load	Control starting torque	400	3-10
Blender	Standard load	Current display, indication of product density	350	5-20
Mixer	Standard load	Current display	350	5-10
Lapping machine	Heavy load	The vibration is limited when the machine is stopped. Overload control of blockage detection.	450	5-60
Crushing machine	Standard load	The vibration is limited when the machine is stopped. Overload control of blockage detection.	400	10-40
Refining machine	Standard load	Control starting and stop torque.	300	5-30
Press	Heavy load	Increase working cycle brake	400	20-60
Tracting lift	Standard load	Overload control of blockage detection or under load control for the detection of breakpoints	400	2-10
Lifting screw	Standard load	Overload control of blockage detection or under load control for the detection of breakpoints	300	3-10
Tracting lift	Standard load	Overload control of blockage detection or under load control for the detection of breakpoints	400	2-10
Lifting screw	Standard load	Overload control of blockage detection or under load control for the detection of breakpoints	300	3-10

R1

R2/R3

R4
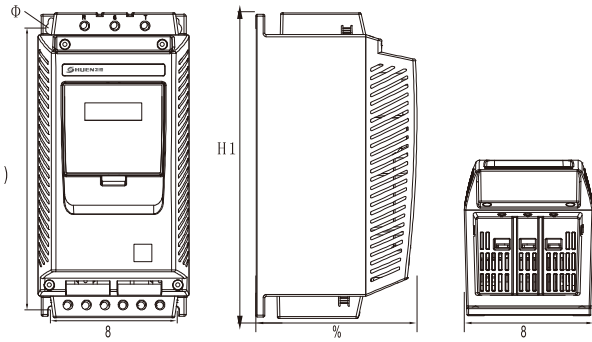
R1   R2
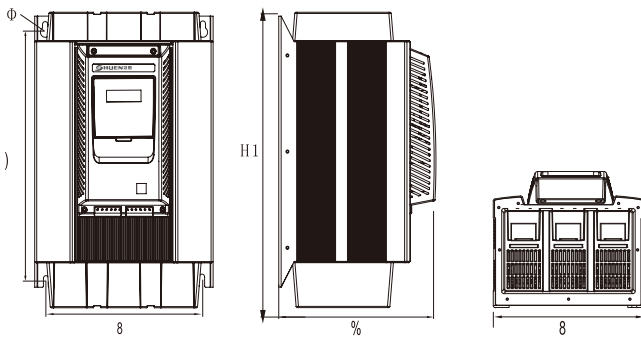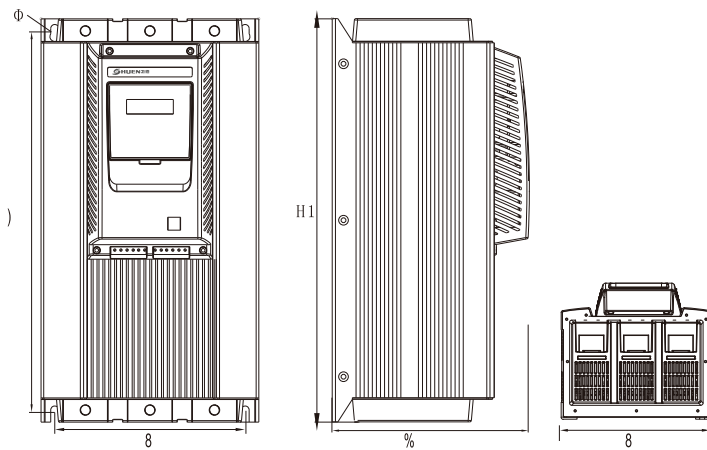
R3   R4
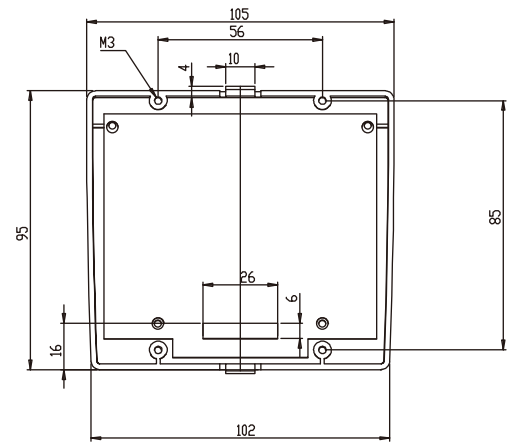
Specifications	Overall dimensions			Installation dimensions			Packing size			Weight (KG)
	H1	W1	D	H2	W2	Φ	H3	W3	D3	
R1	310	155	175	296	127	M6	38	23.5	27.5	5
R2	400	270	240	355	244	M8	65	39	38	20.5
R3	455	300	265	395	265	M8	57.5	43	39	31
R4	565	265	240	490	235	M8	65	40	38	27