

Single-Phase Socket

SSR with
Detachable
Heatsink

SRS1 Series



Features

- Dielectric strength : 2,500 VAC~
- Rated input voltage
 - SRS1-A: AC, DC, AC / DC
 - SRS1-B: AC
 - SRS1-C: AC, DC, AC / DC
- Socket type for easier installation and maintenance
 - SRS1-A: Autonics SK-G05 sockets
 - SRS1-B: General LY2 sockets
 - SRS1-C: General MY4 sockets
- Zero cross turn-on, random turn-on models available
- Input indicator (red)

Specifications

[Input]

Model	SRS1-A	SRS1-B	SRS1-C120 	SRS1-C1 
Rated input voltage range	4 - 24 VDC $\equiv$	4 - 30 VDC $\equiv$	4 - 30 VDC $\equiv$	4 - 24 VDC $\equiv$
Allowable input voltage range	4 - 26.4 VDC $\equiv$	4 - 32 VDC $\equiv$	4 - 32 VDC $\equiv$	4 - 26.4 VDC $\equiv$
Max. input current	15 mA (Random turn-on)	13 mA (Random turn-on)	13 mA (Random turn-on)	15 mA
Operating voltage	$\geq$ 4 VDC $\equiv$			
Releasing voltage	$\leq$ 1 VDC $\equiv$			

[Output (AC load)]

Model	SRS1-A			SRS1-B / SRS1-C		
	1202(R)	1203(R)	1205(R)	1202(R)-2	1203(R)-1	1205(R)-1
Rated input load range	24 - 240 VACrms~ (50 / 60 Hz)			90 - 240 VACrms~ (50 / 60 Hz)		
Allowable input load range	24 - 264 VACrms~ (50 / 60 Hz)			90 - 264 VACrms~ (50 / 60 Hz)		
Rated load current Resistive load (AC-51 ⁰¹⁾)	2 Arms	3 Arms	5 Arms	2 Arms	3 Arms	5 Arms
Min. load current	0.15 Arms	0.2 Arms		0.15 Arms		
Max. 1 cycle surge current (60 Hz)	126 A	250 A		126 A		250 A
Max. non-repetitive surge current (I ² t, t = 8.3 ms)	65 A ² s	400 A ² s		65 A ² s		220 A ² s
Peak voltage (non-repetitive)	600 V					
Leakage current (Ta = 25 °C)	≤ 2 mArms (240 VAC~ 50/60 Hz)					
Output ON voltage drop [Vpk] (Max. load current)	≤ 1.6 V					
Static off state dv/dt	500 V/μs					
Operating time	Zero cross turn-on: ≤ 0.5 cycle of load power + 1 ms Random turn-on: ≤ 1 ms					
Releasing time	≤ 0.5 cycle of load power + 1 ms					

01) AC-51 is utilization category at IEC60947-4-3.



View product detail

[Output (DC load)]

Model	SRS1-A1D101	SRS1-A1D102	SRS1-A1D201	SRS1-C1D102-1
Rated input load range	5 - 100 VDC $\equiv$		5 - 200 VDC $\equiv$	5 - 100 VDC $\equiv$
Allowable input load range	3 - 120 VDC $\equiv$		3 - 220 VDC $\equiv$	3 - 120 VDC $\equiv$
Rated load current Resistive load (AC-51 ⁰¹⁾)	1 Adc	2 Adc	1 Adc	2 Adc
Min. load current	10 mA			
Max. surge current (t=10 ms)	5 A	10 A	4 A	10 A
Leakage current (Ta = 25 °C)	$\leq 100 \mu\text{A}$			
Output ON voltage drop [Vpk] (Max. load current)	$\leq 1.1 \text{ V}$			
Static off state dv/dt	500 V/ μs			-
Operating time	$\leq 1 \text{ ms}$	$\leq 2 \text{ ms}$	$\leq 1 \text{ ms}$	$\leq 1 \text{ ms}$
Releasing time	$\leq 1 \text{ ms}$			

01) AC-51 is utilization category at IEC60947-4-3.

[Output (AC / DC load)]

Model	SRS1-A1X201	SRS1-C1X201-1
Rated input load range	5 - 240 VACrms $\sim$ (50 / 60 Hz) / 5 - 200 VDC $\equiv$	
Allowable input load range	3 - 264 VACrms $\sim$ (50 / 60 Hz) / 3 - 220 VDC $\equiv$	
Rated load current Resistive load (AC-51 ⁰¹⁾)	1 Arms / 1 Adc	
Min. load current	10 mA	
Max. surge current (t=10 ms)	4 A	
Leakage current (Ta = 25 °C)	$\leq 2 \text{ mArms}$	$\leq 2 \text{ mArms}$ (240 VAC $\sim$ 50 / 60 Hz)
Output ON voltage drop [Vpk] (Max. load current)	$\leq 2.2 \text{ V}$	
Static off state dv/dt	500 V/ μs	-
Operating time	$\leq 2 \text{ ms}$	
Releasing time	$\leq 1 \text{ ms}$	

01) AC-51 is utilization category at IEC60947-4-3.

[General specifications]

Dielectric strength (Vrms)	Input - output, input / output-case: 2500 VAC $\sim$ 50/60 Hz for 1 min
Insulation resistance	$\geq 100 \text{ M}\Omega$ (500 VDC $\equiv$ megger)
Indicator	Input indicator (red)
Ambient temperature ⁰¹⁾	-20 ~ 80 °C (SRS1-A: -20 ~ 70 °C), storage: -30 ~ 100 °C (no freezing or no condensation)
Ambient humidity	45 ~ 85 %RH, storage: 45 ~ 85 %RH (no freezing or condensation)
Protection	According to protection of the using socket
Approval	  

01) Refer to the 'SSR Derating Curve' because the capacity of the rated load current is differ depending on the ambient temperature.

Model	SRS1-A	SRS1-B	SRS1-C
Weight (packaged) ⁰¹⁾	$\leq 3 \text{ A}$: $\approx 17 \text{ g}$ ($\approx 270 \text{ g}$), 5 A : $\approx 28 \text{ g}$ ($\approx 380 \text{ g}$)	$\approx 30 \text{ g}$ ($\approx 400 \text{ g}$)	$\approx 30 \text{ g}$ ($\approx 400 \text{ g}$)

01) The weight is per 10 units with packing and the weight of parenthesis is per 1