

Specifications

Input

Rated input voltage range	4 - 30 VDC≡	24 VACrms~ (50/60 Hz)	90 - 240 VACrms~ (50/60 Hz)
Allowable input voltage range	4 - 32 VDC≡	19 - 26.4 VACrms~ (50/60 Hz)	85 - 264 VACrms~ (50/60 Hz)
Max. input current	25 mA	15 mA	25 mA
Operating voltage	≥ 4 VDC≡	≥ 19 VACrms~	≥ 85 VACrms~
Releasing voltage	≤ 1 VDC≡	≤ 4 VACrms~	≤ 10 VACrms~
Operating time	Zero cross turn-on	≤ 0.5 cycle of load power+1 ms	≤ 1.5 cycle of load power+1 ms
	Random turn-on	≤ 1 ms	-
Releasing time	Zero cross turn-on	≤ 0.5 cycle of load power+1 ms	≤ 1.5 cycle of load power+1 ms
	Random turn-on	≤ 1 ms	-

Output

Rated load voltage range	24 - 240 VACrms~ (50/60 Hz)			
Allowable load voltage range	24 - 264 VACrms~ (50/60 Hz)			
Rated load current	Resistive load (AC-51) ⁰¹⁾			
	15 Arms	30 Arms	50 Arms	75 Arms
Min. load current	0.15 Arms	0.2 Arms	0.5 Arms	0.5 Arms
Max. 1 cycle surge current (60 Hz)	250 A	400 A	1000 A	1000 A
Max. non-repetitive surge current (I ² t, t = 8.3 ms)	340 A ² s	1000 A ² s	4000 A ² s	4000 A ² s
Peak voltage (non-repetitive)	600 V			
Leakage current (Ta = 25 °C)	≤ 10 mA Arms (240 VAC~/60 Hz)			
Output ON voltage drop [Vpk] (max. load current)	≤ 1.6 V			
Static off state dv/dt	500 V/μs			

Rated load voltage range	48 - 480 VACrms~ (50/60 Hz)				
Allowable load voltage range	48 - 528 VACrms~ (50/60 Hz)				
Rated load current	Resistive load (AC-51) ⁰¹⁾				
	15 Arms	30 Arms	40 Arms	50 Arms	75 Arms
Min. load current	0.5 Arms				
Max. 1 cycle surge current (60 Hz)	300 A	500 A	500 A	1000 A	1000 A
Max. non-repetitive surge current (I ² t, t = 8.3 ms)	350 A ² s	1000 A ² s	1000 A ² s	4000 A ² s	4000 A ² s
Peak voltage (non-repetitive)	1200 V (zero cross turn-on), 1000 A (random turn-on)				
Leakage current (Ta = 25 °C)	≤ 10 mA Arms (480 VAC~/60 Hz)				
Output ON voltage drop [Vpk] (max. load current)	≤ 1.6 V				
Static off state dv/dt	500 V/μs				

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

Alarm output (overheat prevention function)

Rated input voltage range	4 - 30 VDC≡	24 VACrms~ (50/60 Hz)	90 - 240 VACrms~ (50/60 Hz)
Load voltage	≤ 30 VDC≡	≤ 30 VDC≡	≤ 30 VDC≡
Load current	≤ 100 mA	≤ 50 mA	≤ 50 mA
Turn-off time	≤ 20 ms	≤ 40 ms	≤ 40 ms

• Overheat prevention function is when SSR internal temperature is overheated, the load output is cut off to prevent internal device damage and also the alarm indicator and alarm output turn ON.

General specifications

Dielectric strength (Vrms) : 24-240 VAC~	Rated load current 15 / 30 A - Between the charging part and the case : 2500 VAC~ 50/60 Hz for 1 min Rated load current 50 / 75 A - Between the charging part and the case : 4000 VAC~ 50/60 Hz for 1 min
Dielectric strength (Vrms) : 48-480 VAC~	Between the charging part and the case : 4000 VAC~ 50/60 Hz for 1 min
Insulation resistance	≥ 100 MΩ (500 VDC≡ megger) (input-output, input/output-case)
Indicator	Input indicator (green), alarm indicator (red)
Vibration	0.75 mm double amplitude at frequency of 10 to 55 Hz in each X, Y, Z direction for 1 hour
Vibration (malfunction)	0.5 mm double amplitude at frequency of 10 to 55 Hz in each X, Y, Z direction for 10 min
Shock	300 m/s ² (≈ 30 G) in each X, Y, Z direction for 3 times
Shock (malfunction)	100 m/s ² (≈ 10 G) in each X, Y, Z direction for 3 times
Ambient temperature ⁰¹⁾	-30 to 80 °C (in case of the rated input voltage 90 - 240 VAC~. -30 to 70 °C), storage: -30 to 100 °C (no freezing or condensation)
Ambient humidity	45 to 85%RH, storage: 45 to 85%RH (no freezing or condensation)
Input terminal connection / alarm output terminal connection	≥ 1 × 0.5 mm ² (1 × AWG 20), ≥ 1 × 1.5 mm ² (1 × AWG 16) or ≤ 2 × 1.5 mm ² (2 × AWG 16)
Output terminal connection ⁰²⁾	≥ 1 × 1.5 mm ² (1 × AWG 16), ≥ 1 × 16 mm ² (1 × AWG 6) or ≤ 2 × 6 mm ² (2 × AWG 10)
Input terminal fixed torque	0.75 to 0.95 N m
Output terminal fixed torque	1.6 to 2.2 N m
Approval	CE, RoHS, REACH, ENEC

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

02) Connect the wire met the capacity of the load current to the output terminal.

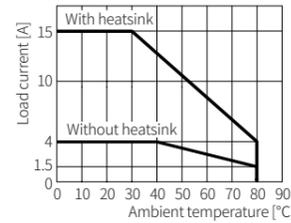
Detachable heatsink type	Weight (packaged)
	≈ 275 g (≈ 365 g)
Integrated heatsink type	15 / 30 / 40 A
	50 A
	75 A

	≈ 686 g (≈ 896 g)
	≈ 1268 g (≈ 1508 g)
	≈ 2064 g (≈ 2354 g)

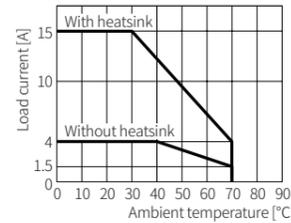
SSR Derating Curve

- The heatsink of the curves is dedicated for the SRH2/SRH3.
- Install SR2 / SR3 Series on the metal plate (min. 130 × 120 mm).
- Be aware that the ambient temperature and the derating curve is different by the rated input voltage when using the product.
- ⚠ When installing multiple SSRs, be sure to keep space between SSRs for heat radiation. When installing SSRs horizontally (input part and output part on the same height), be sure to supply less than 50 % of the rated load current.
- SSR derating curves obtained approval from the UL certification authority.

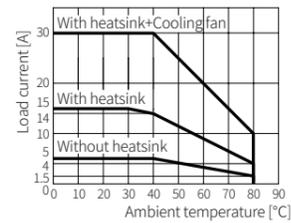
SR(H)2 / SR(H)3-1215



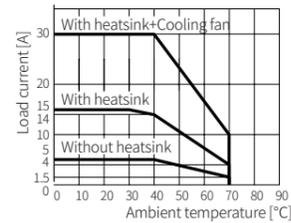
SR(H)2 / SR(H)3-4215



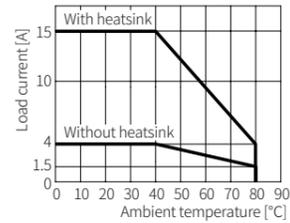
SR(H)2 / SR(H)3-1230



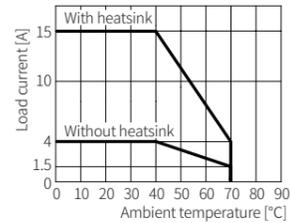
SR(H)2 / SR(H)3-4230



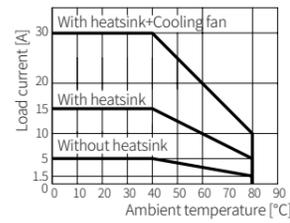
SR(H)2 / SR(H)3-1415 / 1415R / 2415



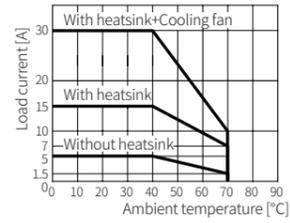
SR(H)2 / SR(H)3-4415



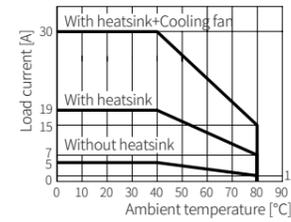
SR(H)2 / SR(H)3-1430 / 1430R / 2430



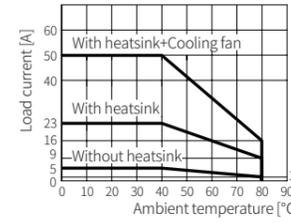
SR(H)2 / SR(H)3-4430



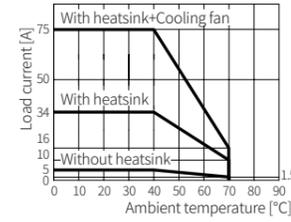
SR(H)2 / SR(H)3-1440 / 1440R / 2440



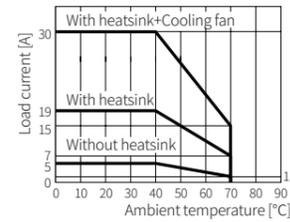
SR(H)2 / SR(H)3-1250 / 1450 / 1450R / 2450



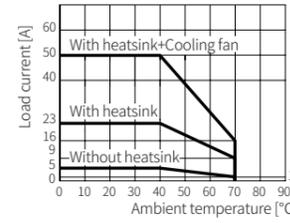
SR(H)2 / SR(H)3-4275 / 4475



SR(H)2 / SR(H)3-4440



SR(H)2 / SR(H)3-4250 / 4450



SR(H)2 / SR(H)3-1275 / 1475 / 1475R / 2475

