



Zero crossing AC SSR



- » Single phase 2 input ranges: 3-32VDC and 90-250VAC.
- » Maximum load current (AC1 at 25° C): 25, 60, 80, 100A.
- » Operational ratings: 40 - 440 VAC.
- » Frequency range: 50- 60 Hz.
- » Maximum non-repetitive peak voltage: 930 Vp.
- » LED indicator.
- » Clip on protective cover for greater safety (IP 20).

References

Control voltage	Operational voltage	Operational current	Reference	Reference heat sink
3 - 32 VDC	40 - 440 VAC	25 A	RS1A0P032DC440025Z	RSH-061
		60 A	RS1A0P032DC440060Z	RSH-038
		80 A	RS1A0P032DC440080Z	RSH-038
		100 A	RS1A0P032DC440100Z	RSH-039
90 - 250 VAC	40 - 440 VAC	25 A	RS1A0P250AC440025Z	RSH-061
		60 A	RS1A0P250AC440060Z	RSH-038
		80 A	RS1A0P250AC440080Z	RSH-038
		100 A	RS1A0P250AC440100Z	RSH-039

Over 10 A load a heat sink must be used. The use of a heat sink will make the lifetime of the relay up to four times longer, even when using it with load currents lower than 10 A.

General specifications

Dielectric insulation (between input & output)	2,500 VAC
Operating temperature	-25 °C to 70 °C
Storage temperature	-35 °C to 85 °C
Rth junction to case	2,5° C/W (25 A) 0,65° C/W (60 A) 0,5° C/W (80 A) 0,3° C/W (100 A)
Ambient humidity	Operating: up to 85 %
CE marking	Yes

Input specifications

	VDC input	VAC input
Control voltage range	3 - 32 VDC	90 - 250 VAC
Input current (max)	10/16 mA @= 5 V/24 V	29 mA @= 220 VAC
Pick-up voltage	1,9 VDC	70 VAC
Drop-out voltage	1,9 VDC	70 VAC
Maximum reverse voltage	32 VDC	-
Max. response time pick-up	½ cycle	1 cycle
Max. response time drop-out	½ cycle	2 cycles

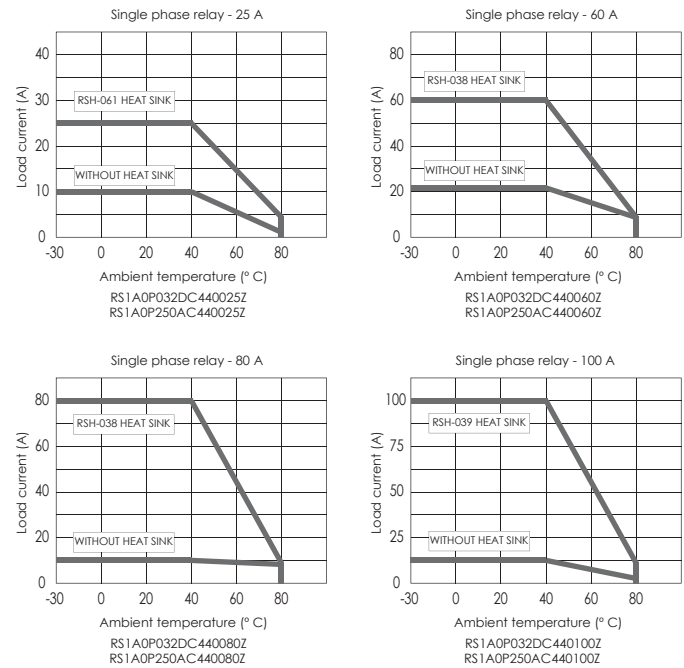
Output specifications

Maximum load current (AC51 @ Ta = 25° C)	25, 60, 80, 100 A
(AC53a @ Ta = 25° C)	5, 15, 18, 20 A
Load voltage range	40 - 440 VAC
Frequency range	50 - 60 Hz
Max. non-repetitive peak voltage	930 Vp
Max. non-repetitive peak current (t=10ms)	350 Ap / 25 A 910 Ap / 80 A 630 Ap / 60 A 1100 Ap / 100 A
Maximum off state leakage current	10 mArms
Minimum off state dv / dt	200 V / useg
Maximum on state voltage	<1,6 VAC
Minimum load current	0,1 Arms
I²t (10 ms) (orientative data)	625 A²s (25 A) 4.225 A²s (80 A) 2.025 A²s (60A) 6.050 A²s (100A)

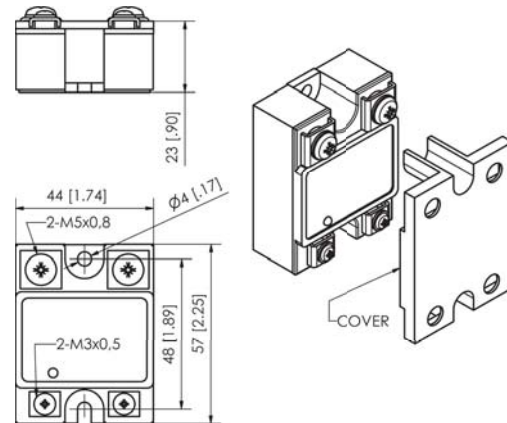
Housing specifications

Dimensions (L x W x H mm)	57 x 44 x 23
Weight	150 gr max.
Baseplate	Aluminum, nickel-plated
Control terminal (M3x6) torque	1,2 Nm
Power terminal (M5x9) torque	2,4 Nm

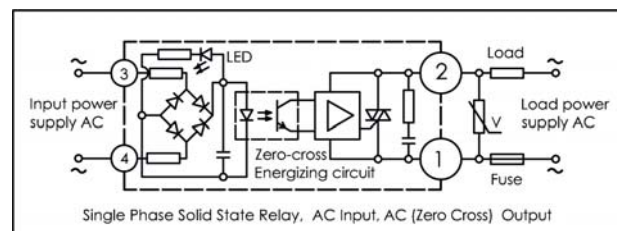
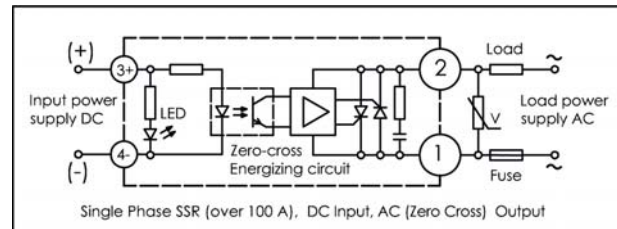
Load current vs. ambient temperature



Dimensions (mm-inch)



Diagrams





- » Two input ranges: 3-32 VDC and 90-280 VAC.
- » Maximum load current (AC1 at 25° C): 25, 60, 80, 100A.
- » Operational ratings: 40 - 480 VAC.
- » Frequency range: 50- 60 Hz.
- » Maximum non-repetitive peak voltage: 930 Vp.
- » LED indicator.
- » Clip on protective cover for greater safety (IP 20).

References

Control voltage	Operational voltage	Operational current	Reference	Reference heat sink
3 - 32 VDC	40 - 480VAC	25 A	RS1A0P032DC480025R	RSH-061
		60 A	RS1A0P032DC480060R	RSH-038
		80 A	RS1A0P032DC480080R	RSH-038
		100 A	RS1A0P032DC480100R	RSH-039
90 - 280 VAC		25 A	RS1A0P280AC480025R	RSH-061
		60 A	RS1A0P280AC480060R	RSH-038
		80 A	RS1A0P280AC480080R	RSH-038
		100 A	RS1A0P280AC480100R	RSH-039

Over 10 A load a heat sink must be used. The use of a heat sink will make the lifetime of the relay up to four times longer, even when using it with load currents lower than 10 A.

General specifications

Dielectric insulation (between input & output)	2,500 VAC
Operating temperature	-30 °C to 80 °C
Storage temperature	-35 °C to 85 °C
Rth junction to case	2,5° C/W (25 A) 0,65° C/W (60 A) 0,5° C/W (80 A) 0,3° C/W (100 A)
Ambient humidity	Operating: up to 85 %
CE marking	Yes

Input specifications

	VDC input	VAC input
Control voltage range	3 - 32 VDC	90 - 280 VAC
Input current (max)	13/16 mA @= 5 V/24 V	29 mA @= 220 VAC
Pick-up voltage	1,9 VDC	70 VAC
Drop-out voltage	1,9 VDC	70 VAC
Maximum reverse voltage	32 VDC	-
Max. response time pick-up	1 ms	-
Max. response time drop-out	½ cycle	-

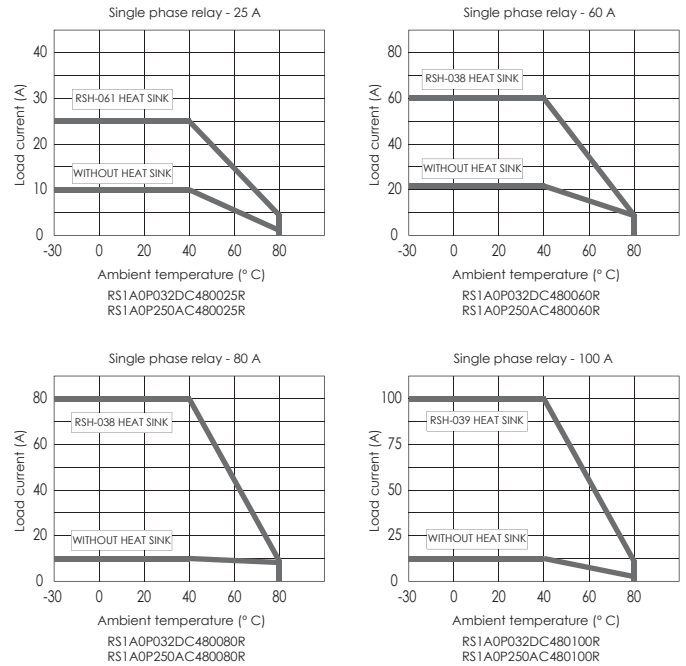
Output specifications

Maximum load current	(AC51 @ Ta = 25° C)	25, 60, 80, 100 A
	(AC53a @ Ta = 25° C)	5, 15, 18, 20 A
Load voltage range	40 - 480 VAC	
Frequency range	50 - 60 Hz	
Max. non-repetitive peak voltage	930 Vp	
Max. non-repetitive peak current (t=10ms)	350 Ap / 25 A	910 Ap / 80 A
	630 Ap / 60 A	1100 Ap / 100 A
Maximum off state leakage current	8 mArms	
Minimum off state dv / dt	200 V / µseg	
Maximum on state voltage	1,6 VAC	
Minimum load current	0,05 Arms	
I²t (10 ms) (orientative data)	625 A²s (25 A)	4.225 A²s (80 A)
	2.025 A²s (60A)	6.050 A²s (100A)

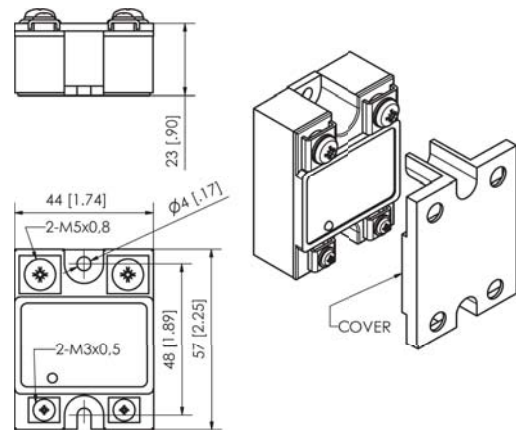
Housing specifications

Dimensions (L x W x H mm)	57 x 44 x 23
Weight	150 gr max.
Baseplate	Aluminum, nickel-plated
Control terminal (M3x6) torque	1,2 Nm
Power terminal (M5x9) torque	2,4 Nm

Load current vs. ambient temperature



Dimensions (mm-inch)



Diagrams

