

Single Phase Solid State Relays

HIGHLIGHTS

- INPUT: DC CONTROL (TTL or CMOS COMPATIBLE)
- OUTPUT: BACK-TO-BACK SCR (NO or NC CONFIGURATION)
- OPTO ISOLATION 2500 VAC (4000 V optional)
- ZERO VOLTAGE TURN-ON or RANDOM TURN-ON
- SAFETY COVER (optional)
- REVERSE VOLTAGE PROTECTION FOR DC/AC RELAYS
- BUILT IN SNUBBER
- CHASSIS MOUNTABLE
- LED INDICATOR SHOWING RELAY 'ON' STATUS
- Weight = 106 g

Series: 1 SJ/K



10 – 40 A

(J: Zero voltage turn-on; K: Random turn-on)

ELECTRICAL SPECIFICATIONS

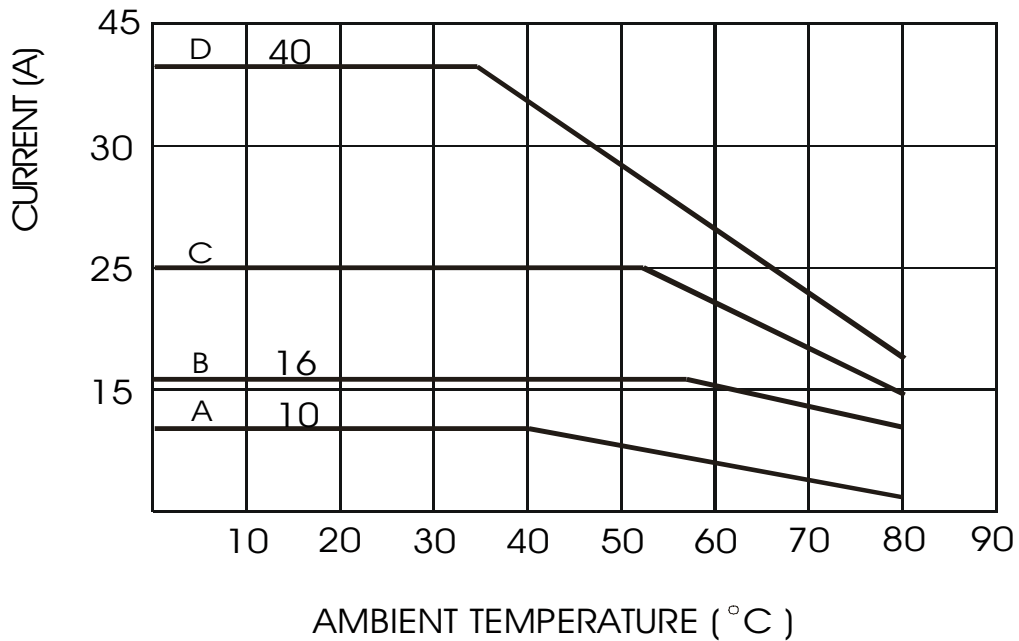
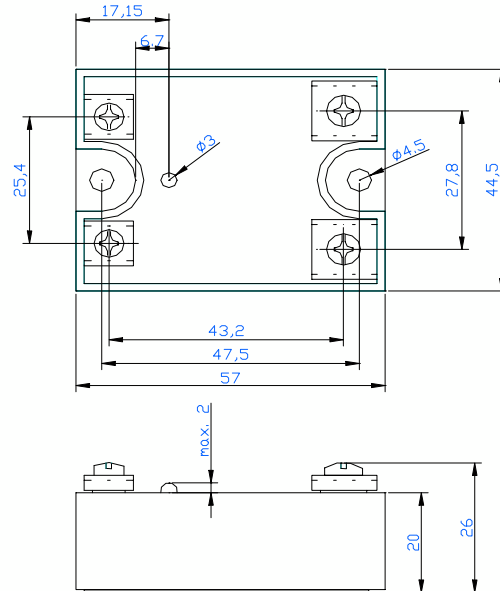
Parameter	Symbol	Type				Unit
		PSB 1 SJDA 241000	PSB 1 SJDA 241600	PSB 1 SJDA 242500	PSB 1 SJDA 244000	
DC CONTROL						
Control voltage range		4-32	4-32	4-32	4-32	Vdc
Control current range		8-30	8-30	8-30	8-30	mA
Pick-up voltage		4-0	4-0	4-0	4-0	Vdc
Drop-out voltage		1-0	1-0	1-0	1-0	Vdc
Input resistance		Current regulator				
OUTPUT						
Mains control voltage	V_{RMS}	24-240	24-240	24-240	24-240	Vac
Repetitive peak off state voltage	V_{DRM}	600	600	600	600	Vpk
RMS on-state current	I_T	10	16	25	40	A
Zero turn-on voltage		35	35	35	35	Vac
On-state voltage drop	V_{TM}	1.6	1.6	1.6	1.6	Vac
Off-state leakage current @ rated voltage	I_{DRM}	10	10	10	10	mA
Peak one cycle surge current (non-rep)	I_{TSM}	100	160	500	500	A
Holding current	I_H	50	70	120	250	mA
Critical rate of rise of off-state voltage	dv/dt	200	200	200	200	V/ μ s
Thermal resistance (junction to case)	R_{thjc}	2.0	1.6	1.0	0.85	K/W
Frequency range	f	47-63	47-63	47-63	47-63	Hz
Operating temperature	T_O	-30 to +80	-30 to +80	-30 to +80	-30 to +80	$^{\circ}$ C
Turn-on time	T-on	10	10	10	10	ms
Turn-off time	T-off	10	10	10	10	ms
Fusing current	I^2t	50	128	1250	1250	A ² s



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MECHANICAL SPECIFICATIONS

Dimensions in mm



EXTERNAL HEAT SINK THERMAL RESISTANCE:

$$A = 3,2 \text{ K/W}$$

$$B = 1,0 \text{ K/W}$$

$$C\&D = 0,5 \text{ KW}$$

VALID FOR SERIES: PSB 1 SJK (10 A - 40 A)