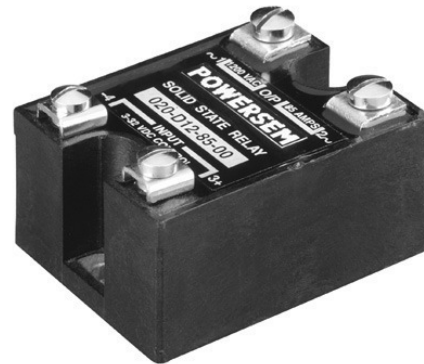


# Single Phase Solid State Relays

## HIGHLIGHTS

- INPUT: DC CONTROL
- OUTPUT: DIRECT COPPER BONDED BACK-TO-BACK SCR
- OPTO ISOLATION 2500 VAC (4000 V optional)
- ZERO VOLTAGE TURN-ON or RANDOM TURN-ON
- HIGH DV/DT
- SAFETY COVER (optional)
- REVERSE VOLTAGE PROTECTION FOR DC/AC RELAYS
- CHASSIS MOUNTABLE
- LED INDICATOR SHOWING RELAY 'ON' STATUS
- Weight = 106 g

Series: 20 SJ/K



125 – 205 A

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

## ELECTRICAL SPECIFICATIONS

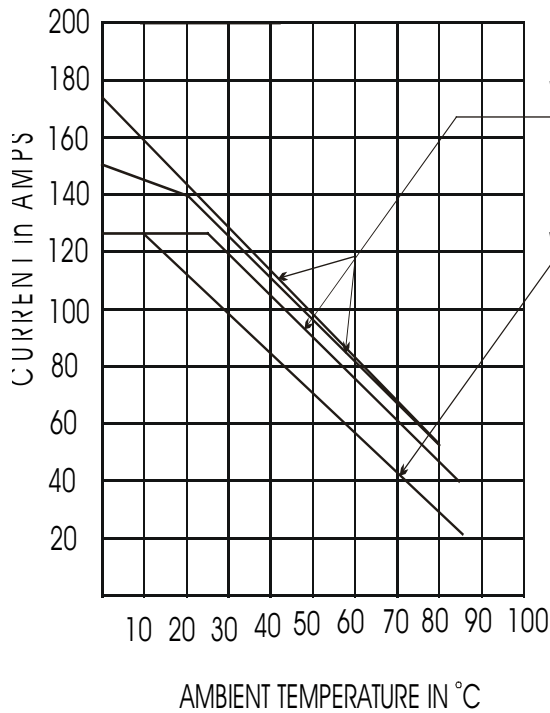
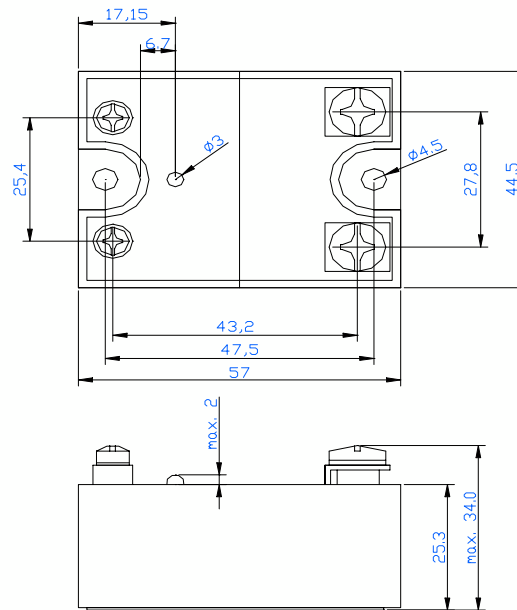
	Symbol	Type				Unit
		PSB 20 D 1212500	PSB 20 D 1215000	PSB 20 D 1217500	PSB 20 D 1220500	
<b>DC CONTROL</b>						
Control voltage range		4-32	4-32	4-32	4-32	Vdc
Control current range		18-30	18-30	18-30	18-30	mA
Pick-up voltage		4.0	4.0	4.0	4.0	Vdc
Input impedance		Current regulator				
Drop out voltage		1.0	1.0	1.0	1.0	Vdc
<b>OUTPUT</b>						
Main voltage range	$V_{RMS}$	48-660	48-660	48-660	48-660	Vac
Repetitive peak off state voltage	$V_{DRM}$	1200/1600	1200/1600	1200/1600	1200/1600	Vpk
Rated Load current	$I_T$	125	150	175	205	A
Zero turn-on voltage		35	35	35	35	Vac
Off-state leakage current @ rated voltage	$I_{DRM}$	1	1	1	1	mA
Peak one cycle surge current (non-rep)	$I_{TSM}$	1250	1350	1500	2250	A
Holding current	$I_H$	250	250	250	250	mA
Critical rate of rise of off-state voltage	dv/dt	1000	1000	1000	1000	V/μs
Thermal resistance (junction to case)	$R_{thjc}$	0.35	0.35	0.25	0.1	K/W
Frequency range	f	47-63	47-63	47-63	47-63	Hz
Operating temperature	To	-25 to +80	-25 to +80	-25 to +80	-25 to +80	°C
Turn-on time	T-on	10	10	10	10	ms
Turn-off time	T-off	10	10	10	10	ms
Fusing current @ 25°C (8.3ms)	$I_t^2$	5000	8000	15000	25000	A <sup>2</sup> s



# Single Phase Solid State Relays

## MECHANICAL SPECIFICATIONS

Dimensions in mm

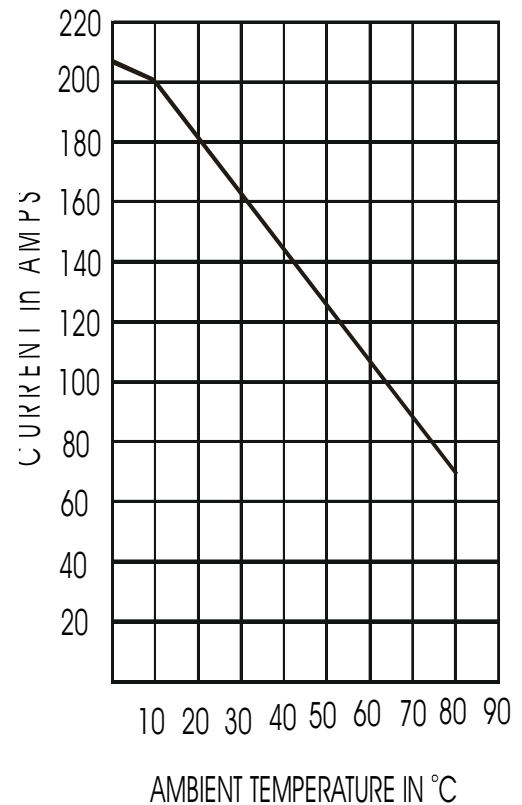


HEAT SINK USED: 0,14 kW

FAN USED: 70 CFM FOR 125 A

FAN USED: 100 CFM FOR 150 A - 175 A

VALID FOR SERIES: PSB 20 SJK ( 125 A - 175 A )



HEAT SINK USED: 0,1 kW

FAN USED: 100 CFM FOR 205 A