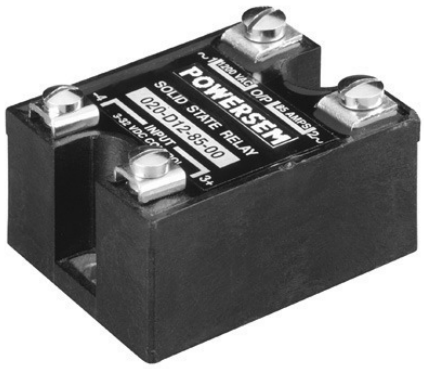
Single Phase Solid State Relays

HIGHLIGHTS

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

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

Series: 20 SJ/K



25 – 90 A

ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Type				Unit
		PSB 20 D 122500	PSB 20 D 125000	PSB 20 D 127500	PSB 20 D 129000	
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}	100-480	100-480	100-480	100-480	Vac
Repetitive peak off state voltage	V_{DRM}	1200-1600	1200-1600	1200-1600	1200-1600	Vpk
RMS on-state current	I_T	25	50	75	90	A
Zero turn-on voltage		35	35	35	35	Vac
On-state voltage drop	V_{TM}	1.6	2.0	2.0	2.0	Vac
Off-state leakage current @ rated voltage	I_{DRM}	10	10	10	10	mA
Peak one cycle surge current (non-rep)	I_{TSM}	400	500	1150	1350	A
Holding current	I_{HO}	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}	1.38	0.7	0.6	0.56	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	℃
Turn-on time	T-on	10	10	10	10	ms
Turn-off time	T-off	10	10	10	10	ms
Fusing current	I^2t	600	1250	5000	5000	A^2s

released, E 197669

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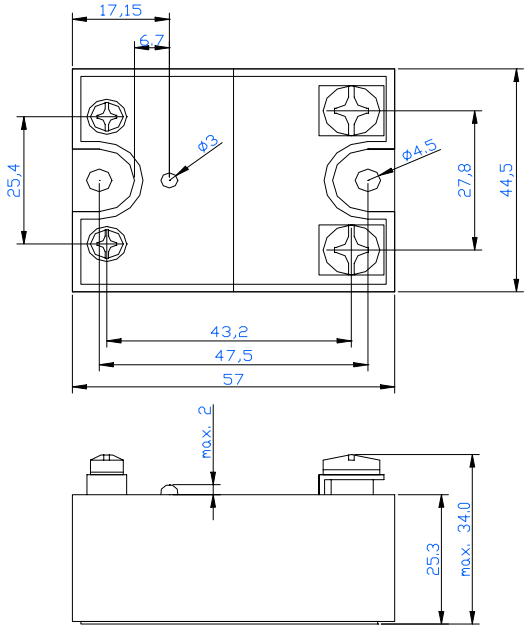
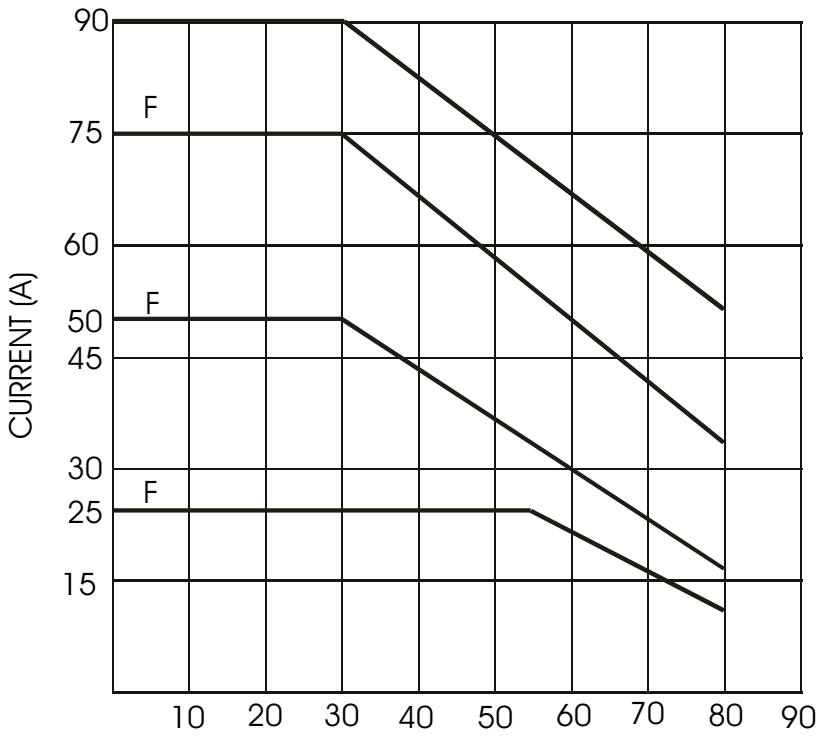
MECHANICAL SPECIFICATIONS

Dimensions in mm





EXTERNAL HEATSINK THERMAL RESISTANCE: 0,14 K/W

VALID FOR SERIES: PSB 20 SJK (25 - 90 A)

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