

Three Phase Solid State Relays

HIGHLIGHTS

- INPUT: DC CONTROL
- HIGH DV/DT
- OUTPUT: DIRECT COPPER BONDED BACK-TO-BACK SCR
- OPTO ISOLATION 2500 VAC (4000 V optional)
- VOLTAGE RANGE 100 TO 660 VAC
- LOAD CURRENT 3x25A / 50A / 75A / 90A
- REVERSE POLARITY PROTECTION FOR DC INPUT CONTROL
- Weight = 344 g

Series: 12 SJ/K



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

ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Type				Unit
		PSD 12 D 122500	PSD 12 D 125000	PSD 12 D 127500	PSD 12 D 129000	
DC CONTROL						
Control voltage range		4-32	4-32	4-32	4-32	Vdc
Control current range		8-80	8-80	8-80	8-80	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}	100-660	100-660	100-660	100-660	Vac
Repetitive peak off state voltage	V_{DRM}	800-1600	800-1600	800-1600	800-1600	Vpk
RMS on-state current (per phase)	I_T	25	50	75	90	A
Zero turn-on voltage		35	35	35	35	Vac
On-state voltage drop	V_{TM}	1.8	2.0	2.0	2.0	Vac
Off-state leakage current @ rated voltage	I_{DRM}	1	1	1	1	mA
Peak one cycle surge current (non-rep)	I_{TSM}	400	500	1150	1150	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/ μ s
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	$^{\circ}$ 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	600	1250	5000	5000	A ² s



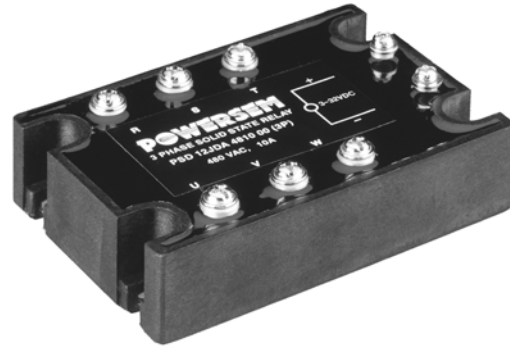
released, E 197669

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- INPUT: AC CONTROL
- OUTPUT: DIRECT COPPER BONDED BACK-TO-BACK SCR
- OPTO ISOLATION 2500 VAC (4000 V optional)
- VOLTAGE RANGE 100 TO 660 VAC
- LOAD CURRENT 3x25A / 50A / 75A / 90A
- HIGH DV/DT
- Weight = 344 g

Series: 12 SJ/K



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ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Type				Unit
		PSD 12 A 122528	PSD 12 A 125028	PSD 12 A 127528	PSD 12 A 129028	
AC CONTROL						
Control voltage range		90-280	90-280	90-280	90-280	Vac
Control current range		8-80	8-80	8-80	8-80	mA
Pick-up voltage		90	90	90	90	Vac
Drop-out voltage		10	10	10	10	Vac
Input resistance		Current regulator				
OUTPUT						
Mains control voltage	V_{RMS}	100-660	100-660	100-660	100-660	Vac
Repetitive peak off state voltage	V_{DRM}	800-1600	800-1600	800-1600	800-1600	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}	1	1	1	1	mA
Peak one cycle surge current (non-rep)	I_{TSM}	400	500	1150	1150	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/ μ s
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	$^{\circ}$ C
Turn-on time	T-on	40	40	40	40	ms
Turn-off time	T-off	80	80	80	80	ms
Fusing current	I^2t	600	1250	5000	5000	A ² s

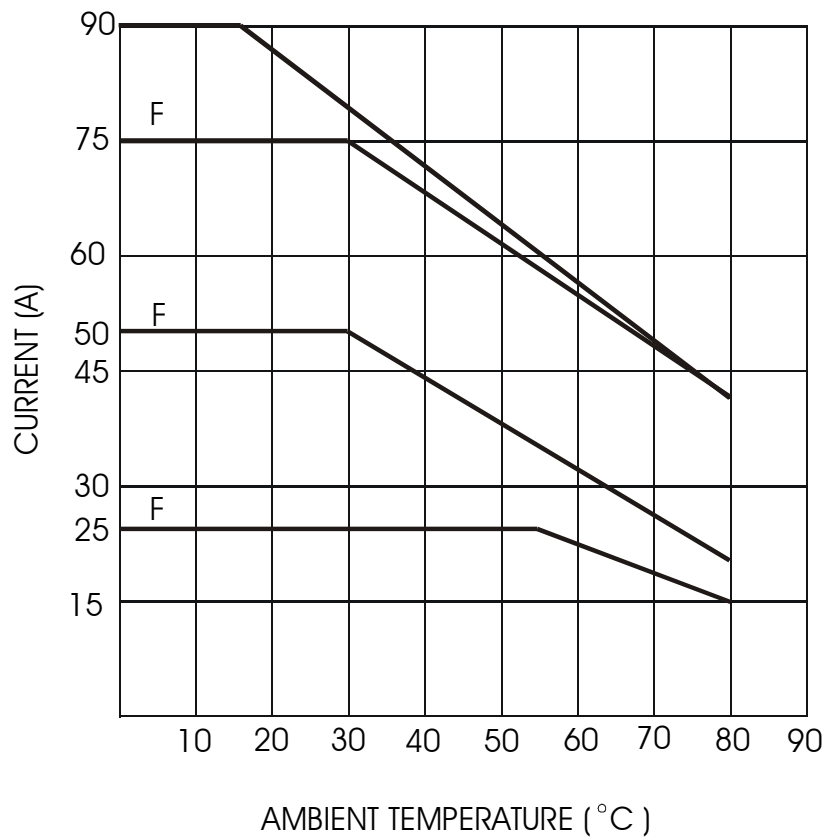
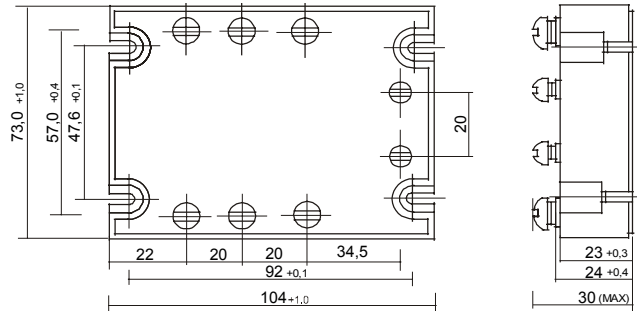


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MECHANICAL SPECIFICATIONS

Dimensions in mm

Three Phase Solid State Relay



HEAT SINK USED: 0,14 K/W

FAN USED: 70 CFM

VALIED FOR SERIES: PSD 12 SJK