

# 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	
<b>DC CONTROL</b>						
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				
<b>OUTPUT</b>						
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/ $\mu$ 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	°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 <sup>2</sup> s

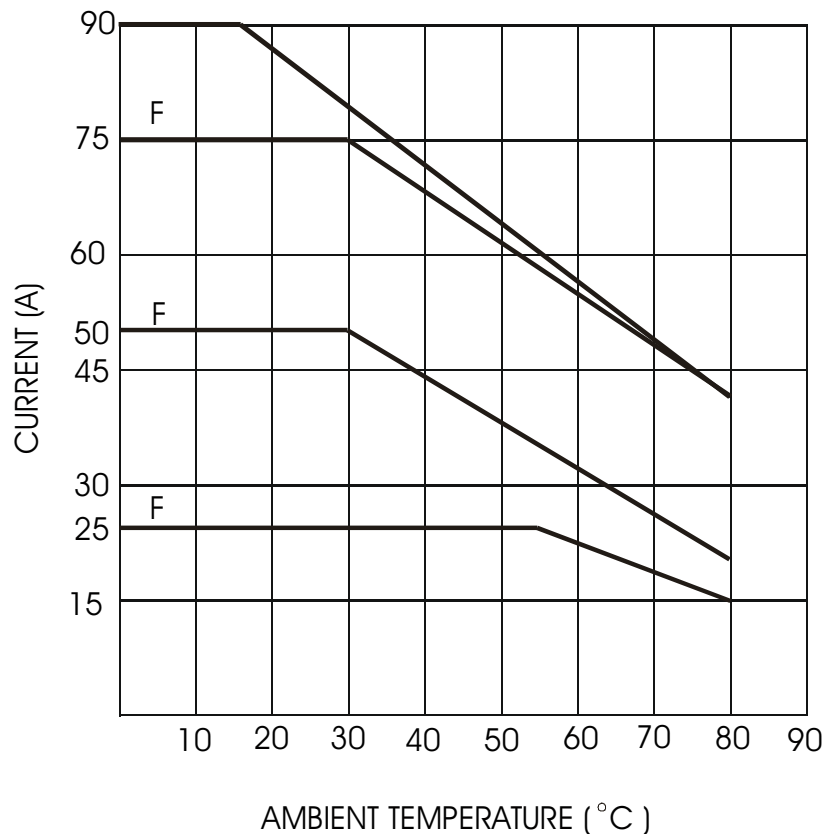
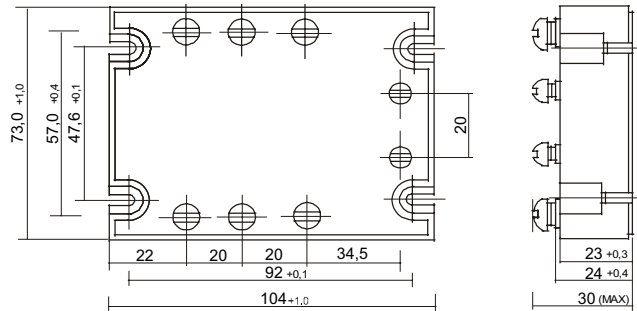


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## MECHANICAL SPECIFICATIONS

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