

# DIN Ready Solid State Relay

## HIGHLIGHTS

- INPUT: DC CONTROL (TTL or CMOS COMPATIBLE)
- OUTPUT: BACK-TO-BACK SCR
- OPTO ISOLATION 2500 VAC (4000 V optional)
- ZERO VOLTAGE TURN-ON or RANDOM TURN-ON
- BUILT IN SAFETY COVER
- REVERSE VOLTAGE PROTECTION FOR DC/AC RELAYS
- BUILT IN SNUBBER FOR HIGH DV/DT
- DIN MOUNT OR BACK PLATE MOUNTING
- LED INDICATOR SHOWING RELAY 'ON' STATUS



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

## ELECTRICAL SPECIFICATIONS

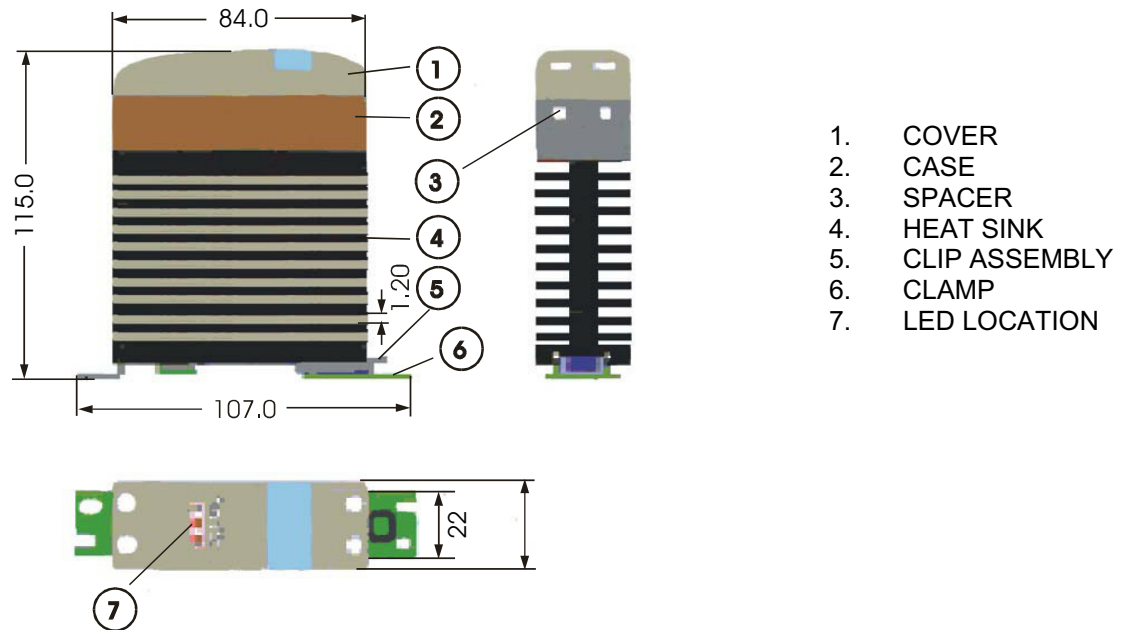
Parameter	Symbol	Type				Unit
		PSB DIN 30D 661000	PSB DIN 30D 661600	PSB DIN 30D 662500	PSB DIN 30D 664000	
<b>DC CONTROL</b>						
Control voltage range		4-32	4-32	4-32	4-32	Vdc
Control current range		8-30	8-30	8-30	8-30	mA
Pick-up voltage		3.0	3.0	3.0	3.0	Vdc
Drop-out voltage		1.0	1.0	1.0	1.0	Vdc
Input resistance		Current regulator				
<b>OUTPUT</b>						
Mains control voltage	$V_{RMS}$	48-660	48-660	48-660	48-660	Vac
Repetitive peak off state voltage	$V_{DRM}$	1200	1200	1200	1200	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	1.8	1.8	Vac
Off-state leakage current @ rated voltage	$I_{DRM}$	5	5	5	5	mA
Peak one cycle surge current (non-Rrep)	$I_{TSM}$	100	250	1000	1000	A
Holding current	$I_H$	75	120	250	250	mA
Critical rate of rise of off-state voltage	dv/dt	200	200	700	700	V/ $\mu$ s
Thermal resistance (junction to case)	$R_{thjc}$	1.8	1.3	0.43	0.43	K/W
Frequency range	f	47-63	47-63	47-63	47-63	Hz
Storage temperature	$T_o$	-30 to +100	-30 to +100	-30 to +100	-30 to +100	$^{\circ}$ C
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	$I^2t$	72	128	3700	5000	A <sup>2</sup> s

ALL ELECTRICAL PARAMETERS MEASURED @  $T_A = 25$  DEG C



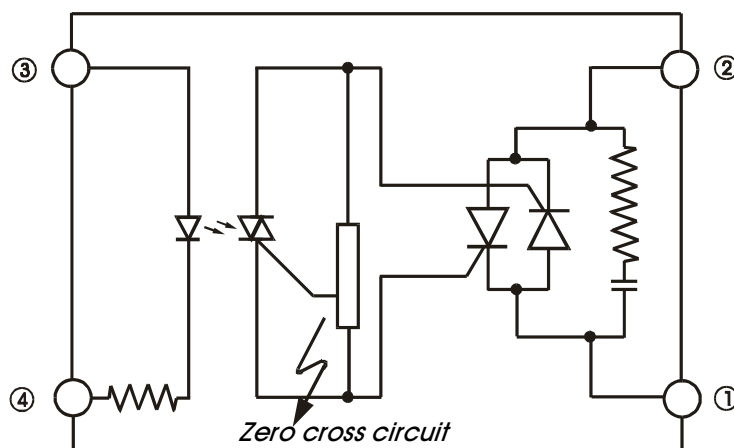
released, E 197669

# DIN Ready Solid State Relay



## Features of DIN Ready SSR

- AC SOLID STATE CONTRACTOR IN 30 mm HOUSING
- ZERO SWITCHING FOR HEATING AND MOTOR APPLICATIONS/RANDOM SWITCHING
- RATED OPERATIONAL CURRENT 10 A, 16 A & 25 A ( 40 A WITH FORCED COOLING
- RATED OPERATIONAL VOLTAGE 120/230 VAC, 400/480/660
- TRANSIENT OVER VOLTAGE PROTECTION (OPTICAL)
- LED INDICATOR SHOWING RELAY "ON" STATUS
- IP 20 PROTECTION
- DIN – RAIL AND BACK PLATE MOUNTABLE
- CONNECTING TERMINALS LAYOUT AS CONTRACTOR OR SSR STANDARD
- OPTO-ISOLATION > 400 V
- BUILT IN SNUBBER

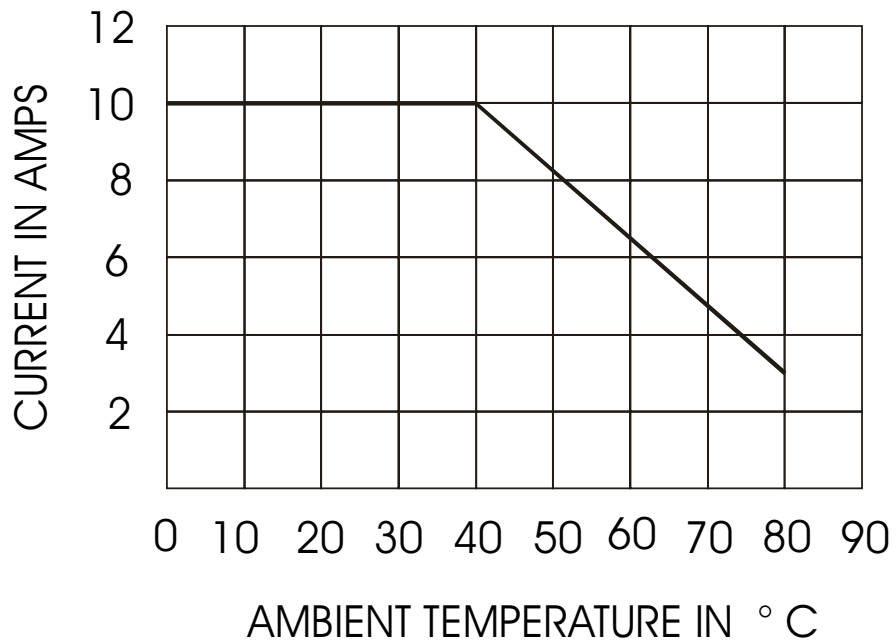


1 Output      3 Input (+)  
2 Output      4 Input (-)

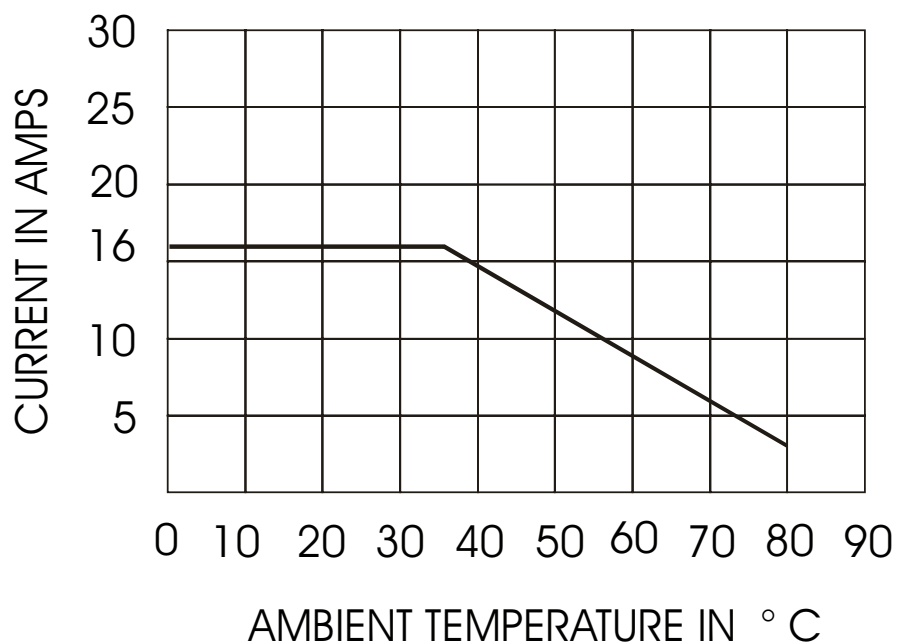
SCHMATIC OF J & K SERIES  
DC / AC RELAYS *DIN SSR's*

## DIN Ready Solid State Relay

### DERATING CURVE FOR 10 A DIN SSR

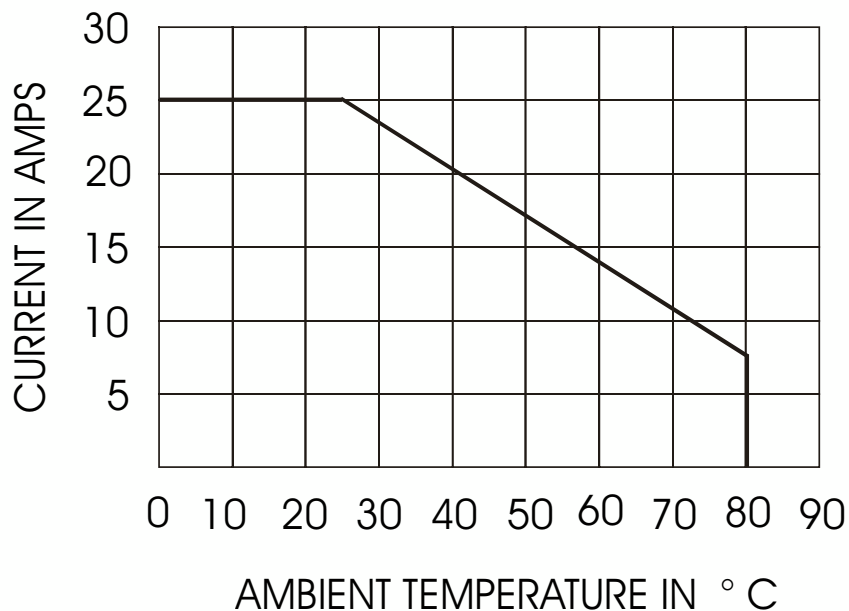


### DERATING CURVE FOR 16 A DIN SSR



## DIN Ready Solid State Relay

### DERATING CURVE FOR 25 A DIN SSR



### DERATING CURVE FOR 40 A DIN SSR

