# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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#### Features

- Narrow (22.5mm), DIN mount design with integral heatsink.
- Choice of 10, 20 or 30A rms inverse-parallel connected SCR output.
- 48 660VAC output.

Тусо

Electronics

- 4 -32VDC or 90 280Vrms input control.
- 4,000V rms optical isolation.
- Green LED input status indicator.
- Finger-safe (IP20) screw clamp terminals for load and control.
- Ground terminal.

### SSRK series

#### 10-30A DIN Mount Solid State Relay With Paired SCR Output, Integral Heatsink



Users should thoroughly review the technical data before selecting a product part number. It is recommended that users also seek out the pertinent approvals files of the agencies/laboratories and review them to confirm the product meets the requirements for a given application.

#### **Engineering Data**

Form: 1 Form A (SPST-NO). Duty: Continuous. Isolation: 4,000V rms input-to-output-to-ground. Insulation Resistance: 10<sup>9</sup> Ohms, minimum, at 500VDC. Capacitance: 8.0 pf maximum (input to output). Temperature Range: Storage: -40°C to +125°C Operating: -40°C to + 80°C Case and Mounting: Refer to outline dimension drawing. Termination: Load & Control: Finger safe (IP20) screw clamps accepting wire size up to #10 AWG (3 mm).

Ground: #10 screw with 5/16 in. hex/slottted head. Installation Spacing: Minimum 0.8 in (20 mm) space between units. Approximate Weight: 9.9 oz. (284 g).

#### Ordering Information

Sample Part Number	•	SSRK	-600	Α	30
1. Basic Series: SSRK = Slim Solid State Relay with Integral Heatsink for DIN Rail Mounting					
2. Line Voltage: 600 = 48 - 660 VAC			-		
<b>3. Input Type &amp; Voltage:</b> A = 90 - 280VAC D = 4 - 32VDC				-	
4. Maximum Switching Rating/Output: 10 = 10.0A rms   20 = 20.0A rms 30 = 30.0A rms					

Our authorized distributors are more likely to maintain the following items in stock for immediate delivery
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SSRK-600A10 SSRK-600D10

SSRK-600A20 SSRK-600A30 SSRK-600D20 SSRK-600D30

#### Input Specifications

Parameter	Conditions	AC Control Units	DC Control Units
Control Voltage Range VIN	@ 25°C	90 - 280 Vrms	4.0 - 32 VDC
Must Operate Voltage V <sub>IN(OP)</sub> (Min.)	@ 25°C	90 Vrms	4.0 VDC
Must Release Voltage V <sub>IN(REL)</sub> (Min.)	@ 25°C	10 Vrms	1.0 VDC
Input Current Range (Typ.)	@ 25°C	2 mA @ 120 Vrms, 4 mA @ 240 Vrms	8 - 12 mA

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Dimensions are in inches over (millimeters) unless otherwise specified. Dimensions are shown for reference purposes only. Specifications and availability subject to change. USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803

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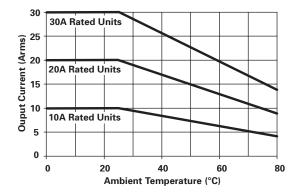
#### SSRK Series Solid State Relays

#### Output Specifications (@ 25° C, unless otherwise specified)

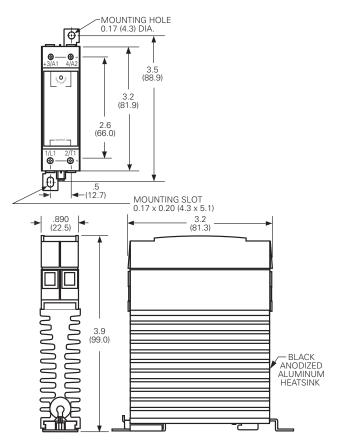
Parameter	Conditions	Units	10A Rated Units	20A Rated Units	30A Rated Units	
Load Voltage Range $V_L$	f = 47-63 Hz.	V rms	48-660	48-660	48-660	
Repetitive Blocking Voltage (Min.)		V peak	±1200	±1200	±1200	
Load Current Range I L*		A rms	0.15 - 10.0	0.15 - 20.0	0.15 - 30.0	
Single Cycle Surge Current (Min.)		A peak	120	250	625	
Leakage Current (Off-State) (Max.)	$f = 60 \text{ Hz. V}_{L} = 600 \text{Vrms}$	mA rms	1.0	1.0	1.0	
On-State Voltage Drop (Max.)	I <sub>L</sub> = Max.	V peak	1.6	1.6	1.6	
Static dv/dt (Off-State) (Min.)	V <sub>L</sub> = Max.	V/µs	500	500	500	
Turn-On Time (Max.)	f = 60 Hz.	ms	8.3 for DC Input Models, 10.0 for AC Input Models			
Turn-Off Time (Max.)	f = 60 Hz.	ms	8.3 for DC Input Models, 40.0 for AC Input Models			
l <sup>2</sup> t Rating (Max.)	t = 8.3 ms	A <sup>2</sup> Sec.	60	260	1,620	
Load Power Factor Rating (Min,)	I <sub>L</sub> = Max.		0.5	0.5	0.5	

\*See Thermal Derating Curves.

#### Electrical Characteristics (Thermal Derating Curves)



#### **Outline Dimensions**



Recommended Torque Range for Terminal Screws: 5 - 6 in lb (0.6 - 0.7 Nm).

#### Disclaimer

While Tyco Electronics has made every reasonable effort to ensure the accuracy of the information in this document, Tyco Electronics does not guarantee that it is error-free, nor does Tyco Electronics make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current.

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