



• Narrow (22.5mm), DIN mount design with integral heatsink.

• Finger-safe (IP20) screw clamp terminals for load and control.

• 3 - 32VDC, 4 - 32VDC or 90 - 280Vrms input control.

• 24-240VAC and 48-660VAC output types.

• Choice of 10, 20 or 30A rms inverse-parallel connected SCR output.

## **SSRK Series**

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

c 🔊 File E29244

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 ensure the product meets the requirements for a given application.

#### **Engineering Data**

Form: 1 Form A (SPST-NO). Duty: Continuous. Isolation: 4000V rms input-to-output-to-ground. Insulation Resistance: 109 Ohms, minimum, at 500VDC. Capacitance: 8.0 pf maximum (input to output). Temperature Range: Storage: -30°C to +100°C Operating: -30°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: 9.87 oz. (280g).

#### **Ordering Information**

• 4000V rms optical isolation.

Ground terminal.

• Green LED input status indicator.

Features

Part Number >	SRK	-600	Α	30
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	art Number >	art Number > SSR	art Number > Sonn -000	art Number > Sonn -000 A

SSRK-240A30 SSRK-240D20 SSRK-240D30 SSRK-600D30

## Input Specifications

SSRK-240A20

Parameter	Conditions	AC Control Unito	DC Control Units			
		AC Control Onits	240 V	600V		
Control Voltage Range VIN	@25°C	90 - 280 Vrms	3 -32 VDC	4 -32 VDC		
Must Operate Voltage VIN(OP) (Min.)	@25°C	90 Vrms	3 VDC	4 VDC		
Must release Voltage VIN(REL) (Min.)	@25°C	10 Vrms	1 VDC	1 VDC		
Input Current Range(Typ.)	@25°C	7.5mA @ 120 Vrms, 16mA @ 240 Vrms	18mA @ 5Vdc	9.5 - 30 mA		

Datasheets and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section.

SSRK-600A30

Datasheets and product data is subject to the terms of the disclaimer and all chapters of the 'Definitions' section, available at http://relays.te.com/definitions

Datasheets, product data, 'Definitions' section, application notes and all specifications are subject to change.



## SSRK Series (Continued)

## **SCR Output Modules**

Output Specifications (@ +25°C unless otherwise specified)

Parameter	Conditions	Nom. Line Voltage	Units	10A Rated Units	20A Rated Units	30A Rated Units
Load Voltage VL	f = 47 - 63Hz	240 V model	V rms	24 - 240	24 - 240	24 - 240
		600 V model	V rms	48 - 660	48 - 660	48 - 660
Repetitive Blocking Voltage (Min.)		240 V model	V peak	600	600	600
		600 V model	V peak	1200	1200	1200
Load Current I∟*		240 V & 600 V model	A rms	0.15 - 10	0.15 - 20	0.15 - 30
Single Cycle Surge Current (Min.)		240 V model	A peak	83	300	800
		600 V model	A peak	300	300	800
Leakage Current (Off-State) (Max.)	f = 60Hz VL = 600Vrms	240 V & 600 V model	mA rms	5	5	5
On-State Voltage Drop (Max.)	I∟=Max.	240 V model	V peak	1.8	1.8	1.8
		600 V model	V peak	1.6	1.6	1.8
Static dv / dt (Off-State) (Min.)		240 V model	V/µs	200	300	500
	VL=IVIAX.	600 V model	V/µs	300	300	500
Turn-On Time (Max.)	f COUT	240 V & 600 V model	ms	10 for DC Inpu	ut Models, 40 for AC	C Input Models
Turn-Off Time (Max.)	I = 00HZ.	240 V & 600 V model	ms	10 for DC Inpu	ut Models, 80 for AC	C Input Models
I²t Rating (Max.)	t = 8.3 ms	240 V model	A <sup>2</sup> s	41	510	3745
		600 V model	A <sup>2</sup> s	510	510	3745
Load Power Factor Rating (Min.)	I∟=Min.	240 V & 600 V model		0.5	0.5	0.5

\* See Derating curve

## **Electrical Characteristics (Thermal Derating Curves)**

## **Outline Dimensions**





DIMENSION IN mm

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Datasheets, product data, 'Definitions' section, application notes and all specifications are subject to change. 2

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TE Connectivity: SSRK-240D20