



SSRK series

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

File E29244

File LR246041

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.

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.
- 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.

Engineering Data

Form: 1 Form A (SPST-NO).

Duty: Continuous.

Isolation: 4,000V rms input-to-output-to-ground.

Insulation Resistance: 10⁹ 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/slotted 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 A 30

1. Basic Series: SSRK = Slim Solid State Relay with Integral Heatsink for DIN Rail Mounting

2. Line Voltage: 600 = 48 - 660 VAC

3. Input Type & Voltage: 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.

SSRK-600A10 SSRK-600A20 SSRK-600A30
SSRK-600D10 SSRK-600D20 SSRK-600D30

Input Specifications

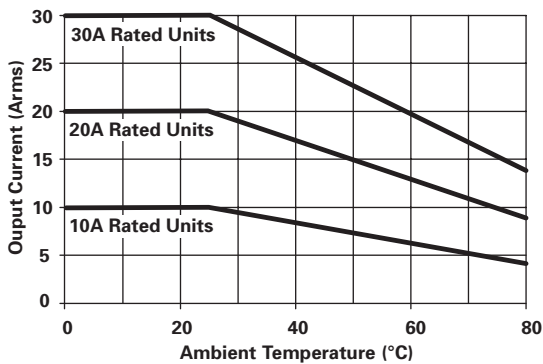
Parameter	Conditions	AC Control Units	DC Control Units
Control Voltage Range V_{IN}	@ 25°C	90 - 280 Vrms	4.0 - 32 VDC
Must Operate Voltage $V_{IN(OP)}$ (Min.)	@ 25°C	90 Vrms	4.0 VDC
Must Release Voltage $V_{IN(REL)}$ (Min.)	@ 25°C	10 Vrms	1.0 VDC
Input Current Range (Typ.)	@ 25°C	2 mA @ 120 Vrms, 4 mA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

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.)	$f = 60$ Hz. $V_L = 600$ Vrms	mA rms	1.0	1.0	1.0
On-State Voltage Drop (Max.)	$I_L = \text{Max.}$	V peak	1.6	1.6	1.6
Static dv/dt (Off-State) (Min.)	$V_L = \text{Max.}$	V/ μ s	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		
$I^2 t$ Rating (Max.)	$t = 8.3$ ms	A ² Sec.	60	260	1,620
Load Power Factor Rating (Min.)	$I_L = \text{Max.}$		0.5	0.5	0.5

*See Thermal Derating Curves.

Electrical Characteristics (Thermal Derating Curves)



Disclaimer

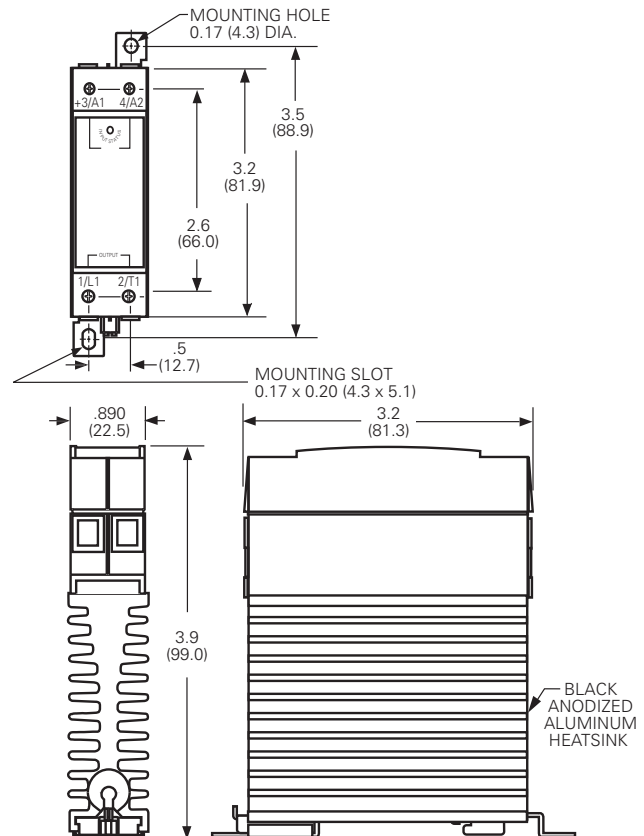
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Outline Dimensions



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