



# 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:** 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/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

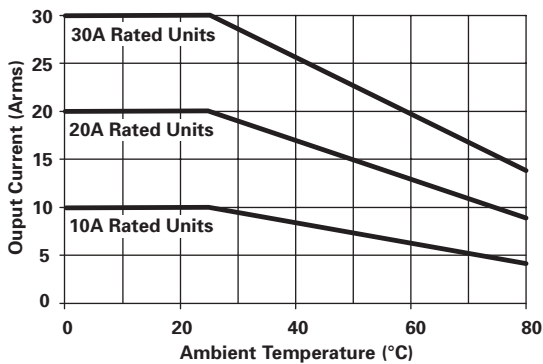
| Parameter                                 | Conditions | AC Control Units                 | DC Control Units |
|---|------------|----------------------------------|------------------|
| Control Voltage Range $V_{IN}$            | @ 25°C     | 90 - 280 Vrms                    | 4.0 - 32 VDC     |
| 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)**

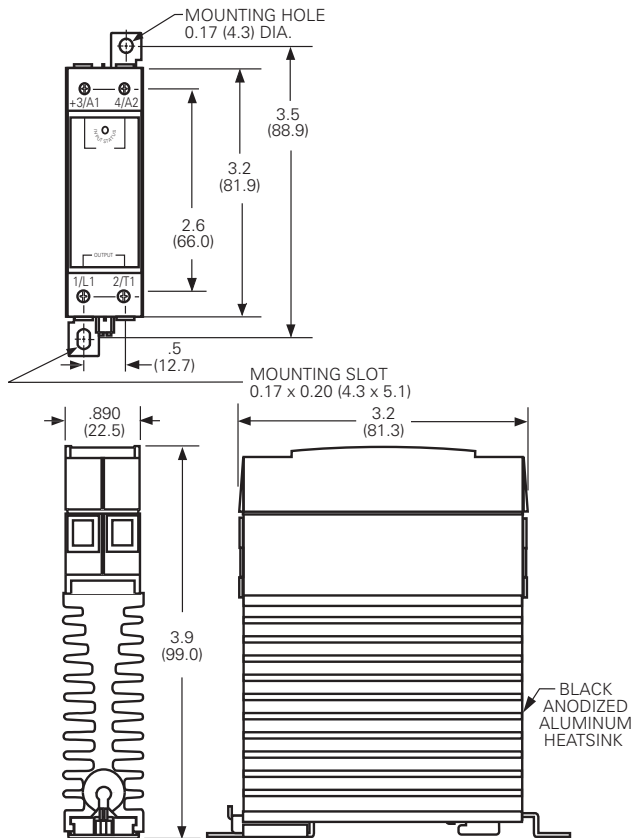
| Parameter                          | Conditions                    | Units               | 10A Rated Units                                   | 20A Rated Units | 30A Rated Units |
|------------------------------------|-------------------------------|---------------------|---|-----------------|-----------------|
| Load Voltage Range $V_L$           | $f = 47-63$ Hz.               | V rms               | 48-660  | 48-660          | 48-660          |
| Repetitive Blocking Voltage (Min.) |                               | V peak              | $\pm 1200$  | $\pm 1200$      | $\pm 1200$      |
| 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/ $\mu$ 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 <sup>2</sup> 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)**



**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.

Tyco Electronics reserves the right to make any adjustments to the information contained herein at any time without notice. Tyco Electronics expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose.

The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult Tyco Electronics for the latest dimensions and design specifications.

## Данный компонент на территории Российской Федерации

### Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9