

Model RLY6 & 6A - Single Phase DIN Rail Mount Solid State Relay

- INTEGRATED HEAT SINK
- SOLID STATE SWITCHING
- SINGLE PHASE OUTPUT RATING: 30 A (RLY6) or 45 A (RLY6A)
- SWITCHING: 48 TO 660 VAC
- CONTROL SIGNAL: 4 TO 32 VDC
- ZERO VOLTAGE TURN-ON
- MOUNTS ON DIN RAIL OR DIRECTLY TO PANEL
- LED "ON" INDICATOR
- CAGE CLAMP TERMINATIONS





DESCRIPTION

The RLY60100 is a solid state relay that switches load currents up to 30 A; the RLY6A100 switches load currents up to 45 A. These units feature zero voltage turn-on to minimize radiated RFI when switching. A low level DC control signal of 4 to 32 VDC is all that is needed for the switching operation. These units provide a greatly increased operational life over mechanical relays by avoiding the usual relay contact problems such as: arcing, bouncing, and mechanical failure.

SAFETY SUMMARY

All safety related regulations, local codes and instructions that appear in the literature or on equipment must be observed to ensure personal safety and to prevent damage to either the instrument or equipment connected to it. If equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

Do not use this unit to directly command motors, valves, or other actuators not equipped with safeguards. To do so, can be potentially harmful to persons or equipment in the event of a fault to the unit.

 CAUTION: Risk Of Danger. Read complete instructions prior to installation and operation of the unit.	 CAUTION: Risk of electric shock.
---	--

ORDERING INFORMATION

MODEL NO.	DESCRIPTION	PART NUMBERS
RLY6	30 A Single Phase Solid State Relay, DIN Rail Mount	RLY60100
RLY6A	45 A Single Phase Solid State Relay, DIN Rail Mount	RLY6A100



Do not dispose of unit in trash - Recycle

SPECIFICATIONS

- CONTROL CIRCUIT VOLTAGE:** 4 to 32 VDC
- SWITCHING VOLTAGE:** 1 VDC turn-off; 4 VDC turn-on
- INPUT CURRENT:**
 RLY6: 8-12 mA
 RLY6A: 14-17 mA

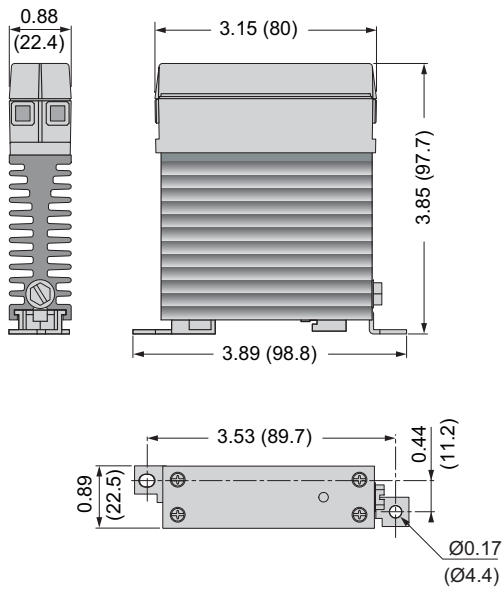
- MAXIMUM CAPACITANCE:** ≤ 8 pf for input/output
- INSULATION RESISTANCE:** 1000 M Ω at 500 VDC
- LOCAL SIGNALING:** Green LED indicates active input/output status.
- SOLID STATE OUTPUT TYPE:** Zero voltage switching SCR output
- CONTACT TYPE:** 1 NO
- OUTPUT VOLTAGE:** 48 to 660 VAC
 Allowable Frequency On Output: 47 – 63 Hz
- VOLTAGE DROP:**
 RLY6: 1.6 V on-state
 RLY6A: 1.7 V on-state
- TRANSIENT OVERVOLTAGE:** 1200 V
- LOAD CURRENT:**
 RLY6: 0.15-30 A
 RLY6A: 0.15-45 A
- SURGE CURRENT:**
 RLY6: ≤ 1200 A for 16.6 msec
 RLY6A: ≤ 625 A for 16.6 msec
- LEAKAGE CURRENT:** ≤ 1 mA off-state
- MAXIMUM I²T FOR FUSING:**
 RLY6: 6000 A².s for 8.3 msec
 RLY6A: 1620 A².s for 8.3 msec
- DV/Dt:** 500 V/ μ sec pff-state at maximum voltage
- RESPONSE TIME:** 0.5 cycle turn-off; 0.5 cycle turn-on
- OVERVOLTAGE CATEGORY:** III
- CONNECTIONS (terminals):**
 RLY6: 1 x 0.2 - 1 x 5.3 mm² (AWG 24-10) for output or input
 RLY6A: 1 x 0.2 - 1 x 8.4 mm² (AWG 24-8) for output
 1 x 0.2 - 1 x 3.3 mm² (AWG 24-12) for input
- TIGHTENING TORQUE:**
 Output: 12.0-15.0 lb-in (1.4-1.7 N.m)
 Input: 5.0-6.0 lb-in (0.6-0.7 N.m)
- MOUNTING SUPPORT:** Symmetrical DIN rail
- PRODUCT WEIGHT:**
 RLY6: 9.88 oz (0.28 kg)
 RLY6A: 16.79 oz (0.476 kg)

ENVIRONMENTAL SPECIFICATIONS

- DIELECTRIC STRENGTH:** 4 kVAC for input or output to case
 4 kVAC for input/output
- POLLUTION DEGREE:** 2
- STANDARDS:** UL 508, IEC 60950-1, CSA C22.2 No 14
- PRODUCT CERTIFICATIONS:** CSA File: 269719, UL File: E191578
- MARKING:** CE, CSA, UL
- IP DEGREE OF PROTECTION:** IP20
- AMBIENT AIR TEMPERATURE FOR OPERATION:** -40 to 80 °C
- AMBIENT AIR TEMPERATURE FOR STORAGE:** -40 to 125 °C

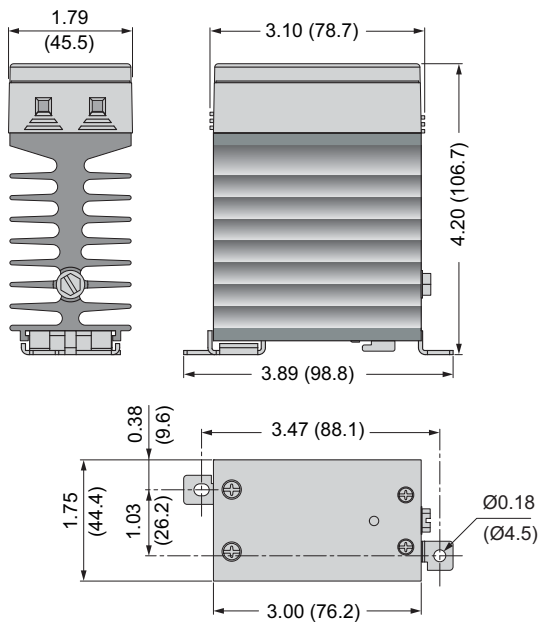
DIMENSIONS In inches (mm)

RLY60100



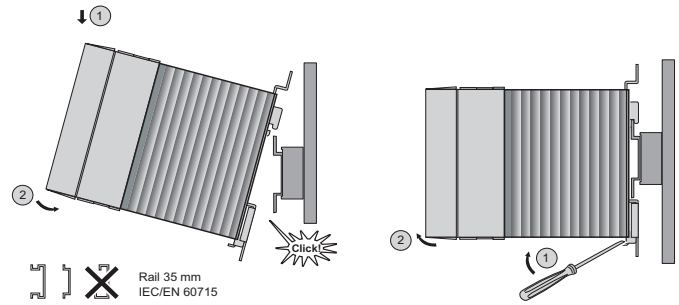
DIMENSIONS In inches (mm)

RLY6A100

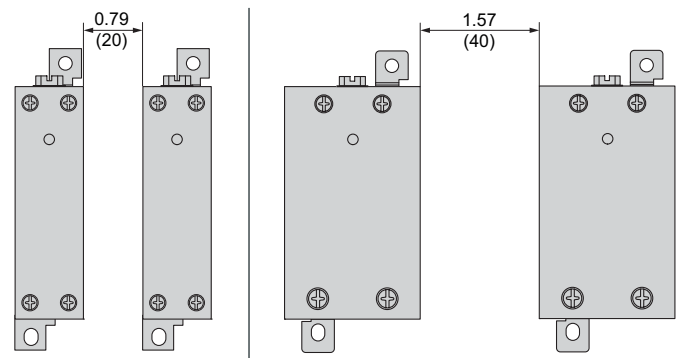


MOUNTING

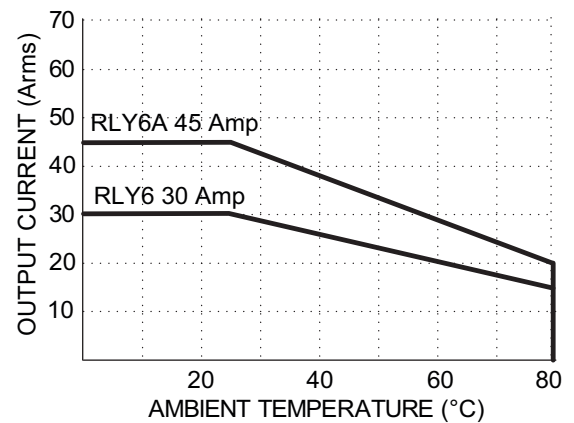
DIN Rail Mounting



Minimum Spacing



DERATING CURVE



WIRING

