

UP TO 3 POSITIONS WITH 3 OPTIONAL, INDEPENDENT LED LIGHT POSITIONS

Used in the heavy equipment, marine, process control and instrumentation markets, the R2 rotary switch is an excellent replacement for rocker switches, offering improved visual position indication, additional lighting options and different styling opportunities on front panels. The R2 is a sealed, lighted rotary switch which snaps into a 1.475" x 0.875" industry standard rocker switch panel opening. The rotary knob snaps onto a shaft and can be installed by the panel builder for those desiring that flexibility. The R2 rotary switch provides up to three positions in all combinations of momentary and maintained action. It is capable of handling loads from logic level up to 20 amps resistive. Sealing is to IP68S via a shaft O-ring seal in front and a potted base in the back. Termination options include 0.250" faston or a snap-on modular connector. The R2 offers unique lighting options including up to three independent LED light positions which illuminate a lens on the rotary knob. This design provides more lighting options than traditional rocker switches, handles the full range of electrical loads and is robust enough to survive in the most demanding applications.



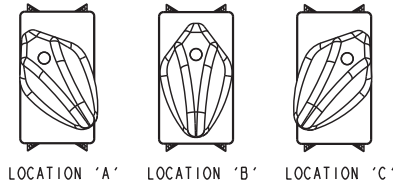
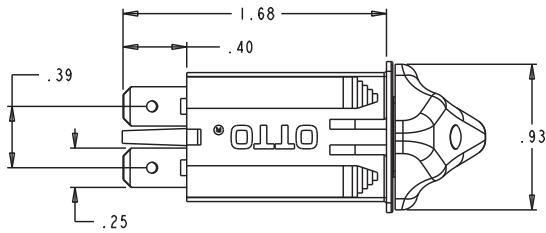
Features:

- **Sealed watertight per IP68S**
- **Snap-in panel mounting into industry standard 1.475" x 0.875" panel cutout**
- **Unique lighting options—up to three independent LED light positions**
- **Plastic or Soft Touch knob options available**
- **2 or 3 positions in all combinations of momentary & maintained action**
- **Termination can be used as 0.250" faston or with snap-on modular connector**

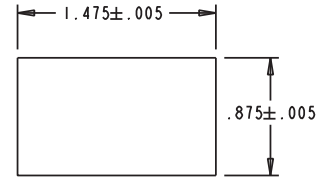
| Standard Characteristics/Ratings: | | |
|-----------------------------------|---|--------------------|
| ELECTRICAL RATINGS: | | |
| Load | Sea Level @ 12/28VDC | Sea Level @ 110VAC |
| Resistive | 20A | 16A |
| Inductive | 15A | 15A |
| Lamp | 4A | 4A |
| Motor | N/A | 0.5HP |
| DWV | 1050Vrms | |
| Low Level | 10mA @ 30mV | |
| Electrical Life: | 25,000 cycles at full load | |
| Lighting: | LED 2V, 6V, 12V, 24V (VDC) | |
| Mechanical Life: | 100,000 cycles | |
| Seal: | IP68S | |
| Operating Temp Range: | -40°C to +85°C | |
| MATERIALS: | | |
| Case: | Thermoplastic | |
| Knob: | Thermoplastic | |
| Lens: | Thermoplastic, clear | |
| Terminals: | Copper, silver plate, gold plate for low level | |
| Contacts: | Silver alloy, gold plate for low level | |
| Terminal Hardware: | R2 recommended Quick Connect terminals: AMP 60253-2 for 12-16 AWG AMP 42100-2 for 14-18 AWG | |
| Mounting Hardware: | None provided | |

ROTARY SWITCH

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LOCATION 'A' LOCATION 'B' LOCATION 'C'

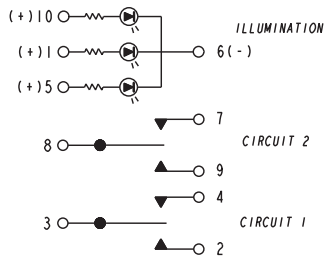


PANEL OPENING DETAIL

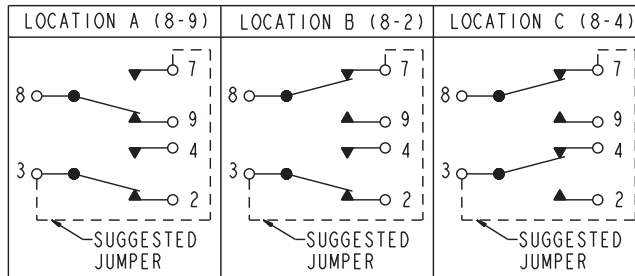
PANEL THICKNESS: .025 MIN. TO .187 MAX.

KNOB LOCATION DETAILS

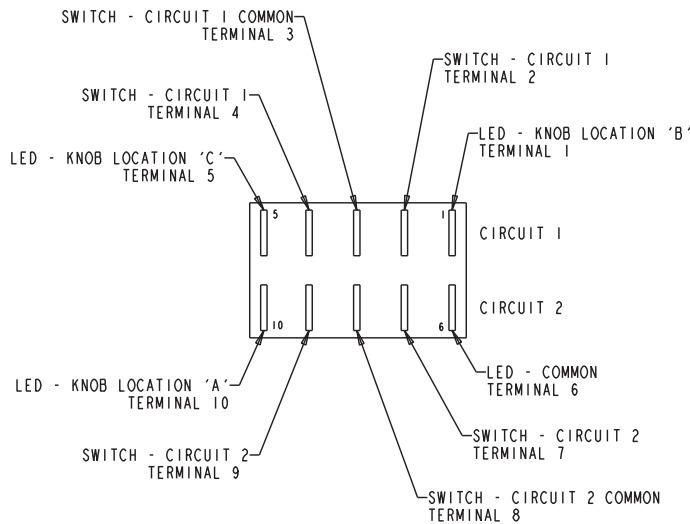
ELECTRICAL SCHEMATICS



GENERIC SWITCH SCHEMATIC
USE TERMINALS AS APPLICABLE
TO PART NUMBER

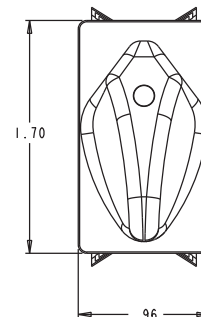
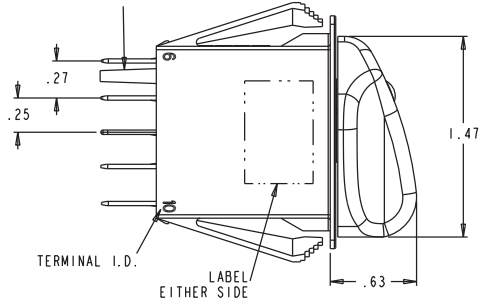


SPTT SCHEMATIC
USE R2XXXX77XXXX FOR (8-9), (8-2), (8-4)
USE R2XXXX74XXXX FOR (OFF), (8-2), (8-4)
USE R2XXXX67XXXX FOR (8-9), (8-2), (OFF)



TERMINAL LOCATION AS VIEWED
FROM THE BOTTOM OF THE SWITCH

OPTIONAL CONNECTOR KEY

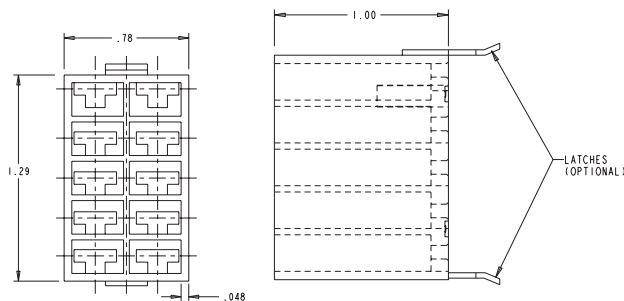


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R2 SERIES PART NUMBER CODE

| R2 | X | X | XX | X | X | X | X | X | X | X | | | | |
|---|----------------------------|--|-------------------------|-------------------------|--|-------------------------|-------------------------|--|-------------------------|-------------------------|---|-----------------------|-----------------|-----------------|
| Terminal Style/ Switch Rating | Knob Color & Texture | Switch Action | | | Switch Circuit 1 Terminals 2, 3, 4 | | | Switch Circuit 2 Terminals 7, 8, 9 | | | LED Light Source Voltage | Light Source Color | | |
| | | Knob Location "A" | Knob Location "B" | Knob Location "C" | Knob Location "A" | Knob Location "B" | Knob Location "C" | Knob Location "A" | Knob Location "B" | Knob Location "C" | N. None A. 2V B. 6V C. 12V D. 24V | Location "A" | Location "B" | Location "C" |
| A. Without Terminal Barriers With Connector Keying Pin/Std. Rating | A. Black Plastic | 2-Position Switch, Knob Locations A/B | | | 2-Position Switch, Knob Locations A/B | | | N. None (Single Pole) | | | | N. None | N. None | N. None |
| B. Without Terminal Barriers Without Connector Keying Pin/Std. Rating | B. Black Soft Touch | 11. Maintain | Maintain | N/A | 1. 3-2 | OFF | N/A | 1. 8-9 | OFF | N/A | | 1. Red | 1. Red | 1. Red |
| C. Without Terminal Barriers With Connector Keying Pin/Low Level Rating | C. White Plastic | 12. Maintain | Momentary | N/A | 2. OFF | 3-4 | N/A | 2. OFF | 8-7 | N/A | 2-Position Switch, Knob Locations A/B | 2. Green | 2. Green | 2. Green |
| D. Without Terminal Barriers Without Connector Keying Pin/Low Level Rating | D. White Soft Touch | 13. Momentary | Maintain | N/A | 3. 3-2 | 3-4 | N/A | 3. 8-9 | 8-7 | N/A | 2-Position Switch, Knob Locations A/C | 3. Amber | 3. Amber | 3. Amber |
| | | 2-Position Switch, Knob Locations A/C | | | 2-Position Switch, Knob Locations A/C | | | 2-Position Switch, Knob Locations A/C | | | | | | |
| | | 21. Maintain | N/A | Maintain | 1. 3-2 | N/A | OFF | 1. 8-9 | N/A | OFF | 2-Position Switch, Knob Locations A/C | | | |
| | | 22. Maintain | N/A | Momentary | 2. OFF | N/A | 3-4 | 2. OFF | N/A | 8-7 | 2-Position Switch, Knob Locations B/C | | | |
| | | 23. Momentary | N/A | Maintain | 3. 3-2 | N/A | 3-4 | 3. 8-9 | N/A | 8-7 | 2-Position Switch, Knob Locations B/C | | | |
| | | 2-Position Switch, Knob Locations B/C | | | 2-Position Switch, Knob Locations B/C | | | 2-Position Switch, Knob Locations B/C | | | | | | |
| | | 31. N/A | Maintain | Maintain | 1. N/A | 3-2 | OFF | 1. N/A | 8-9 | OFF | 3-Position Switch | | | |
| | | 32. N/A | Maintain | Momentary | 2. N/A | OFF | 3-4 | 2. N/A | OFF | 8-7 | 3-Position Switch | | | |
| | | 33. N/A | Momentary | Maintain | 3. N/A | 3-2 | 3-4 | 3. N/A | 8-9 | 8-7 | 3-Position Switch | | | |
| | | 3-Position Switch, Knob Locations A/B/C | | | 3-Position Switch | | | 3-Position Switch | | | | | | |
| | | 44. Maintain | Maintain | Maintain | 4. OFF | 3-4 | 3-4 | 4. OFF | 8-7 | 8-7 | | | | |
| | | 45. Momentary | Maintain | Momentary | 5. 3-2 | OFF | 3-4 | 5. 8-9 | OFF | 8-7 | | | | |
| | | 46. Maintain | Maintain | Momentary | 6. 3-2 | 3-2 | OFF | 6. 8-9 | 8-9 | OFF | | | | |
| | | 47. Momentary | Maintain | Maintain | 7. 3-2 | 3-2 | 3-4 | 7. 8-9 | 8-7 | 8-7 | | | | |
| | | | | | 8. 3-2 | OFF | OFF | 8. 8-9 | OFF | OFF | | | | |
| | | | | | 9. OFF | OFF | 3-4 | 9. OFF | OFF | 8-7 | | | | |



R2 Connector
P/N 801775-2A Without Latches
P/N 801775-2B With Latches

Recommended Quick Connect Terminals
AMP 60253-2 for 12-16 AWG
AMP 42100-2 for 14-18 AWG

Panel Seal Gasket
P/N 807109