

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 3 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 @ 125VAC
Resistive	20A	16A
Inductive	15A	15A
Lamp	4A	4A
Motor	0.5HP @ 110VAC	
DWV	1000Vrms except across light terminals	
Logic Level	10mA @ 5VDC, max D.C. logic level ratings (void if logic level load(s) exceeded at any time)	

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

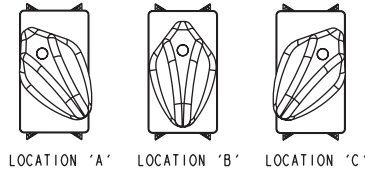
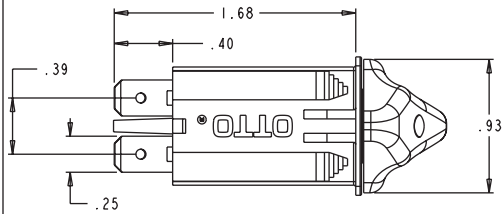
MATERIALS:

Case:	Thermoplastic
Knob:	Thermoplastic
Lens:	Thermoplastic, clear
Terminals:	Copper, silver plate, gold plate for logic level
Contacts:	Silver alloy, gold plate for logic 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

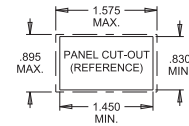
ROTARY SWITCH

R2
LIGHTED
ROTARY

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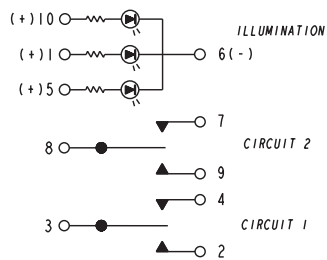


PANEL THICKNESS RANGE OF .025 - .105 A GASKET IS RECOMMENDED
PANEL THICKNESS RANGE OF .105 - .187 W/O GASKET
PANEL OPENING: MIN. TYP. MAX.
WIDTH .830 .863 .895
LENGTH 1.450 1.513 1.575

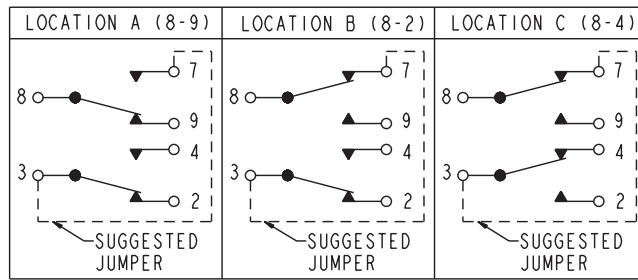


KNOB LOCATION DETAILS

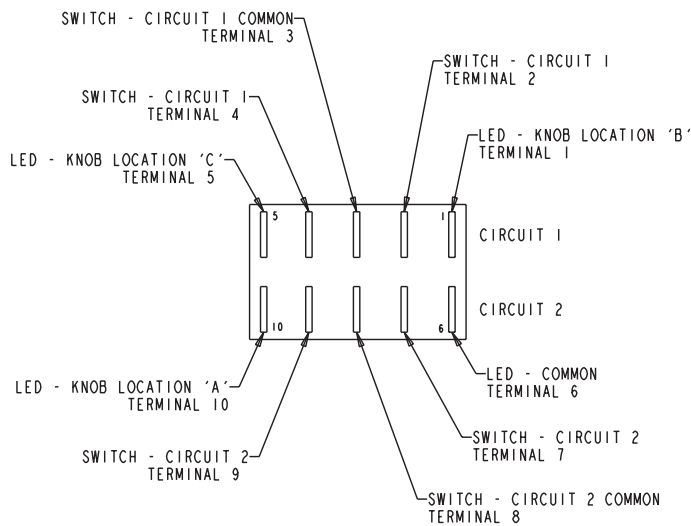
ELECTRICAL SCHEMATICS



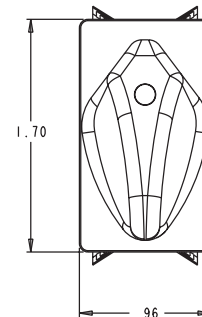
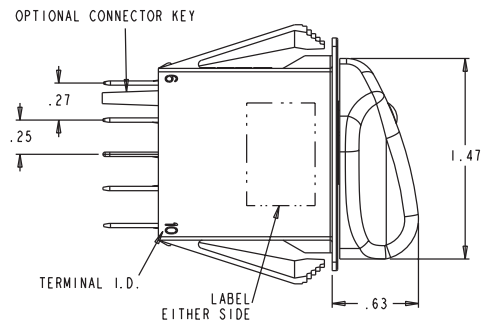
GENERIC SWITCH SCHEMATIC
USE TERMINALS AS APPLICABLE
TO PART NUMBER



SPIT 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



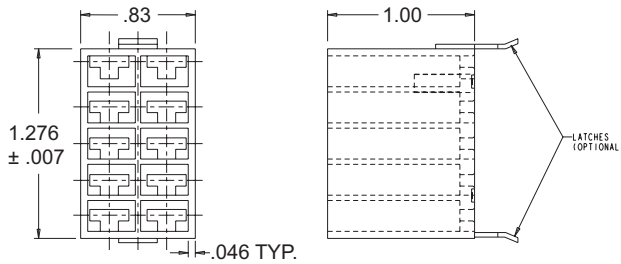
• R2 panel plugs available as shown in Panel Plugs (PP) section.

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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		
A. Without Terminal Barriers, With Connector Keying Pin, Standard Rating	A. Black Plastic	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"
B. Without Terminal Barriers ,Without Connector Keying Pin, Standard Rating	Soft Touch	2-Position Switch, Knob Locations A/B			2-Position Switch, Knob Locations A/B			N. NONE (Single Pole)				N. NONE 1. Red 2. Green 3. Amber	N. NONE 1. Red 2. Green 3. Amber	N. NONE 1. Red 2. Green 3. Amber
C. Without Terminal Barriers, With Connector Keying Pin, Logic Level Rating	C. White Plastic	2-Position Switch, Knob Locations A/B			2-Position Switch, Knob Locations A/B			2-Position Switch, Knob Locations A/B						
D. Without Terminal Barriers ,Without Connector Keying Pin, Standard Rating	D. White Soft	11. Maintain	Maintain	N/A	1. 3-2	OFF	N/A	1. 8-9	OFF	N/A				
	E. Red Plastic	12. Maintain	Momentary	N/A	2. OFF	3-4	N/A	2. OFF	8-7	N/A				
	F. Red Soft	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			2-Position Switch, Knob Locations A/C			2-Position Switch, Knob Locations A/B						
		21. Maintain	N/A	Maintain	1. 3-2	N/A	OFF	1. 8-9	N/A	OFF				
		22. Maintain	N/A	Momentary	2. OFF	N/A	3-4	2. OFF	N/A	8-7				
		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 A/C						
		31. N/A	Maintain	Maintain	1. N/A	3-2	OFF	1. N/A	8-9	OFF				
		32. N/A	Maintain	Momentary	2. N/A	OFF	3-4	2. N/A	OFF	8-7				
		33. N/A	Momentary	Maintain	3. N/A	3-2	3-4	3. N/A	8-9	8-7				
		3-Position Switch, Knob Locations A/B/C			3-Position Switch			3-Position Switch, Knob Locations B/C						
		44. Maintain	Maintain	Maintain	4. OFF	3-4	3-4	4. N/A	8-9	OFF				
		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				

*See appendix for complete voltage/ratings table



R2 Connector

P/N C801775-2A Without Latches

P/N C801775-2B With Latches

Recommended Quick Connect Terminals

AMP C60253-2 for 12-16 AWG

AMP C42100-2 for 14-18 AWG

Panel Seal Gasket

P/N C807109-25-1

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[OTTO:](#)

<u>R2BB4477B132</u>	<u>R2BB4649C123</u>	<u>R2AA465NNNNN</u>	<u>R2AB2122C1N3</u>	<u>R2BB3133NNNN</u>	<u>R2AB4467NNNN</u>
<u>R2DA4474NNNN</u>	<u>R2BB3122CNN1</u>	<u>R2BB4449C123</u>	<u>R2CB4477DN32</u>	<u>R2BA445NNNNN</u>	<u>R2BB2122C1N2</u>
<u>R2BA4474NNNN</u>	<u>R2BB213NC2N2</u>	<u>R2BB4455C132</u>	<u>R2BD3133NNNN</u>	<u>R2AA4455C123</u>	<u>R2AA4455D123</u>
<u>R2AA445NC1N1</u>	<u>R2AA4649CN23</u>	<u>R2AB445NNNNN</u>	<u>R2AC4497NNNN</u>	<u>R2BA2122NNNN</u>	<u>R2BA444NCN22</u>
<u>R2BA4455D132</u>	<u>R2BA4455C2N2</u>	<u>R2BB2133NNNN</u>	<u>R2BB312NCNN2</u>	<u>R2AA2133D2NN</u>	<u>R2AA4649CN1N</u>
<u>R2AA4649D222</u>	<u>R2AA212NNNNN</u>	<u>R2AA2222NNNN</u>	<u>R2AA4444CN32</u>	<u>R2AB2233D2NN</u>	<u>R2AB223NNNNN</u>
<u>R2AB312NNNNN</u>	<u>R2AB4455C2N2</u>	<u>R2AB4474DN21</u>	<u>R2AB4555NNNN</u>	<u>R2AA111NC21N</u>	<u>R2AA1122CN1N</u>
<u>R2AA2122C1N3</u>	<u>R2AA4455B123</u>	<u>R2AA4474CN22</u>	<u>R2AA4555NNNN</u>	<u>R2DA4555DN3N</u>	<u>R2AA4444NNNN</u>
<u>R2AB4545NNNN</u>	<u>R2AB4649CN13</u>	<u>R2AB4649NNNN</u>	<u>R2AB465NC232</u>	<u>R2CA4677NNNN</u>	<u>R2AB4555C232</u>
<u>R2BB445NC2N1</u>	<u>R2BB4477D231</u>	<u>R2BB4555C111</u>	<u>R2BB455NC322</u>	<u>R2BA2112NNNN</u>	<u>R2BA4674NNNN</u>
<u>R2BB4449C132</u>	<u>R2BB4455C1N2</u>	<u>R2BB455NC2N2</u>	<u>R2BC4555NNNN</u>	<u>R2AA4449DN12</u>	<u>R2AA4449NNNN</u>
<u>R2AB211NC2N2</u>	<u>R2AB312NCN32</u>	<u>R2AB4455C123</u>	<u>R2AB4677CN1N</u>	<u>R2BB4477NNNN</u>	<u>R2BB455NC1N2</u>
<u>R2CA4477NNNN</u>	<u>R2AA2133C1N2</u>	<u>R2AA2212NNNN</u>	<u>R2AA2122NNNN</u>	<u>R2AB4477NNNN</u>	<u>R2AB4555C123</u>
<u>R2AB4649DN21</u>	<u>R2BB322NCNN3</u>	<u>R2BB4455D231</u>	<u>R2BB4477C321</u>	<u>R2AB2222C1N3</u>	<u>R2AB3133NNNN</u>
<u>R2AB4456C232</u>	<u>R2AB4458C2N2</u>	<u>R2AB445NC312</u>	<u>R2AB445ND123</u>	<u>R2AA4489NNNN</u>	<u>R2AA4589D222</u>
<u>R2AA4649NNNN</u>	<u>R2AA4655C222</u>	<u>R2AB2122NNNN</u>	<u>R2AB2133NNNN</u>	<u>R2BA1222CN3N</u>	<u>R2BA312NCNN3</u>
<u>R2BA4555NNNN</u>	<u>R2BB4455C313</u>	<u>R2AA4477D223</u>	<u>R2AA4489C2N1</u>		