

# SEALED, ILLUMINATED ROCKER SWITCHES

LOW COST, SNAP-IN ROCKER FOR WET & DUSTY ENVIRONMENTS

The K series rockers are rugged, high performance sealed switches designed for use under severe conditions found in marine, appliance, heavy equipment and industrial control applications.

The K1 and K2 series are sealed to IP68S and IP69K with an optional panel gasket available.

The K1 series is offered in single pole configuration and the K2 series is available in both single and double pole configurations. Both series offer illuminated models. Illumination can be independent or dependent of the switch position or a combination of both. A choice of red, green, clear or amber colored lenses are offered in illuminated models. Illumination options include incandescent, LED or neon light sources.

Mounting is simple and quick; snaps into panel from the front. The OTTO snap-in design supports a variety of panel thicknesses with just one cutout size.

A choice of models are offered to handle power levels to 16 amps, 1/2 HP and logic level electronic switching applications.

Custom colors are available upon request. Value-added assemblies with wire leads are also available. Please contact our factory for assistance.



## Features:

- Sealed to IP68S and IP69K
- Fits industry standard panel openings for drop-in replacement of panel sealed & unsealed switches
- Snap-in feature accommodates a wide range of panel cutouts
- Switches up to 16 amps
- UV & solvent resistant
- Withstands extreme shock & vibration
- Custom legends available
- 2 & 3-position, momentary & maintained action
- Incandescent, LED & neon illumination with independent & dependent light source options
- UL recognized & CSA certified
- Ignition protected
- Optional panel gasket available
- RoHS/WEEE/Reach compliant

### Standard Characteristics/Ratings:

#### ELECTRICAL RATINGS:

Load	Sea Level @ 28VDC or 125/250VAC, 60Hz	Cycles
Resistive	16A	25,000
Resistive	10A	50,000
Inductive	10A	25,000
Lamp	5A	25,000
Motor	0.5HP	25,000
DVV	1000Vrms except across light terminals	
Logic Level	10-100mA @ 3-28V, max D.C. logic level ratings (void if logic level load(s) exceeded at any time)	

Electrical Life: See Rating Chart

#### LIGHTING:

Light Source	Rating (see page 166 or appendix for complete voltage/current ratings table)
Incandescent	(VDC) 6V, 12V, 24V
Neon	(VAC) 125V, 250V
LED	(VDC) 2V, 6V, 12V, 24V

Mechanical Life: 100,000 cycles

Seal: IP68S and IP69K

Operating Temp Range: -30°C to +85°C

#### MATERIALS:

Case: Thermoplastic

Button: Thermoplastic

Base: Thermoplastic

Terminals/Contact: Brass, silver alloy with silver plate, gold flash for logic level

Terminal Hardware: Screws and lockwashers provided when applicable  
K1/K2 series recommended Quick Connect terminals:  
AMP 60253-2 for 12-16 AWG  
AMP 42100-2 for 14-18 AWG

Mounting Hardware: None provided

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## K1 PART NUMBER CODE

K1

X

X

X

Part Number Code Continued Below

X

### Terminal Style/ Switch Rating

- A. Q.C./Std.
- B. Screw/Std.
- C. Solder/Std.
- D. Q.C./Logic Level
- E. Screw/Logic Level
- F. Solder/Logic Level
- G. PC Pin/Std.
- H. PC Pin/Logic Level

### Actuator Color/Style

- A. Red/Rocker
- B. Black/Rocker
- C. White/Rocker
- D. Red/Paddle
- E. Black/Paddle
- F. White/Paddle
- G. Red/Rocker Pinned
- H. Black/Rocker Pinned
- J. White/Rocker Pinned
- K. Red/Short Paddle Pinned
- L. Black/Short Paddle Pinned
- M. White/Short Paddle Pinned
- N. Red/Standard Paddle Pinned
- P. Black/Standard Paddle Pinned
- R. White/Standard Paddle Pinned
- T. Red/Short Paddle
- U. Black/Short Paddle
- V. White/Short Paddle

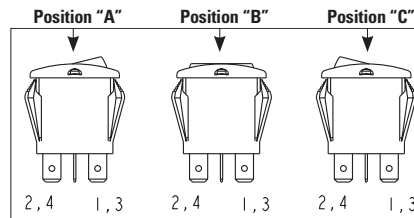
### Switch Action/Circuit

	Position "A"	Position "B"	Position "C"	Circuit
A.	1-C	NONE	OFF	SPST
B.	1-C	NONE	2-C	SPDT
C.	(1-C)	NONE	OFF	SPST
D.	(1-C)	NONE	2-C	SPDT
E.	(1-C)	OFF	(2-C)	SPDT
F.	1-C	OFF	2-C	SPDT
G.	(1-C)	OFF	2-C	SPDT
H.	OFF	NONE	2-C	SPST

NOTE: ( ) denotes momentary action.

### Light Type\*

- A. No Light
- B. 6V Incandescent
- C. 12V Incandescent
- D. 24V Incandescent
- E. 125VAC Neon
- F. 250VAC Neon
- G. 2V Red LED
- H. 2V Green LED
- J. 2V Amber LED
- K. 6V Red LED
- L. 6V Green LED
- M. 6V Amber LED
- N. 12V Red LED
- P. 12V Green LED
- Q. 12V Amber LED
- R. 24V Red LED
- S. 24V Green LED
- T. 24V Amber LED



\*See page 168 or appendix for complete voltage/ratings table

## K1 PART NUMBER CODE CONTINUED FROM ABOVE

K1 Continued

X

X

X

X

### Lens Color

- | Position "A" | Position "C" |
|--------------|--------------|
| A. No Lens   | A. No Lens   |
| B. Red       | B. Red       |
| C. Green     | C. Green     |
| D. Amber     | D. Amber     |
| E. Clear     | E. Clear     |

### Light/Circuit Location

- A. No Light
- B. Dependent Light ON in position "A" Wired to terms 1 & 3
- C. Dependent Light ON in position "C" Wired to terms 2 & 4
- D. Independent Light at position "A" Wired to terms 3 & 4
- E. Independent Light at position "C" Wired to terms 3 & 4
- F. Dependent Light ON in position "A" Wired to terms 1 & 3
- G. Dependent Light ON in position "C" Wired to terms 2 & 4
- H. Independent Light ON in position "A" Wired to terms 3 & 4
- I. Independent Light ON in position "C" Wired to terms 3 & 4

### Legend & Orientation

- A. None
- B. Legend ON/OFF
- C. Legend ON/OFF
- D. Legend ON/OFF
- E. Legend ON/OFF
- F. Legend ON/OFF
- G. Legend ON/OFF
- H. Legend ON/OFF
- J. Legend ON/OFF
- K. Legend ON/OFF
- L. Legend ON/OFF
- M. Legend ON/OFF
- N. Legend ON/OFF
- P. Legend ON/OFF
- R. Legend ON/OFF

#### NOTES:

- No momentary switches with dependent lights.
- Neon lamps only to be coded with clear or amber lenses.
- LED lenses must be clear or same color as LED.
- No dependent light in OFF position.
- All legends printed on actuators without lens(es) will be white except actuator codes C, F, J, M & R.
- All legends printed on lenses will be white except on clear lens(es) will be black.

D = Dependent Light  
I = Independent Light

#### NOTES:

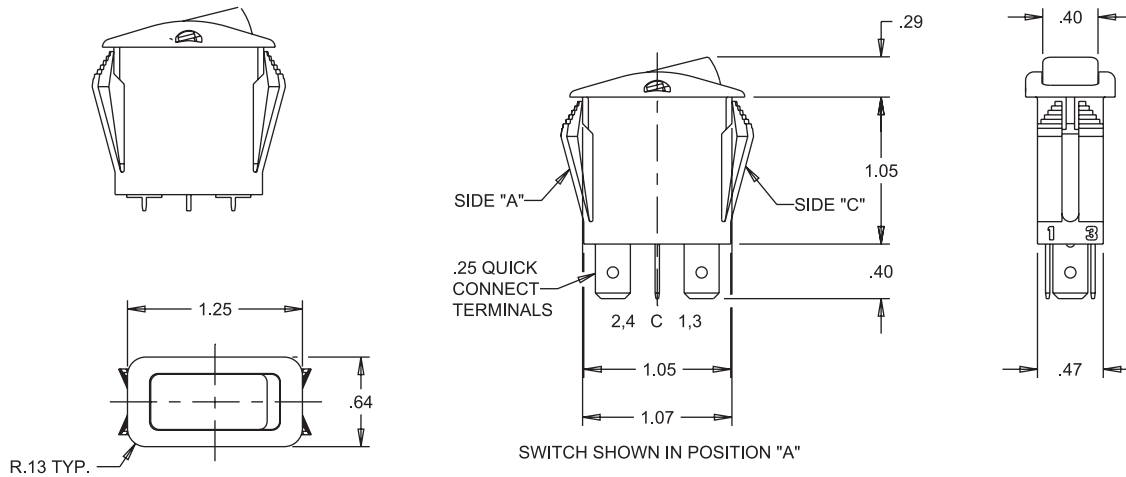
- LED anode (+) terminal number shown in **bold**.
- Light on OFF side must be independent.
- Contact factory for multiple light types in the same switch.

• K1 panel plugs available as shown on page 183.

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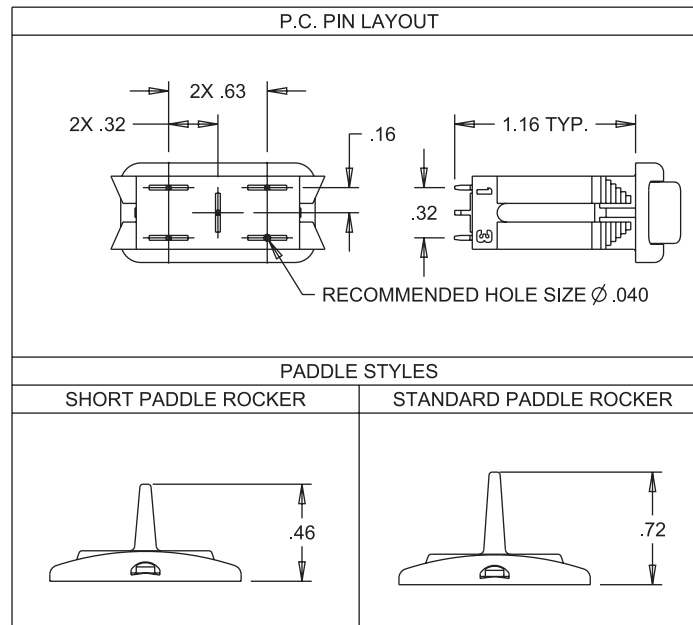
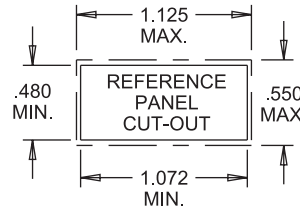
**K1**  
SNAP-IN  
ROCKERS

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**MOUNTING HOLE:**  
 PANEL THICKNESS RANGE OF .025 - .105 A GASKET IS RECOMMENDED,  
 0.031" THICKNESS = GASKET P/N 807039-2  
 0.062" THICKNESS = GASKET P/N 807039-1

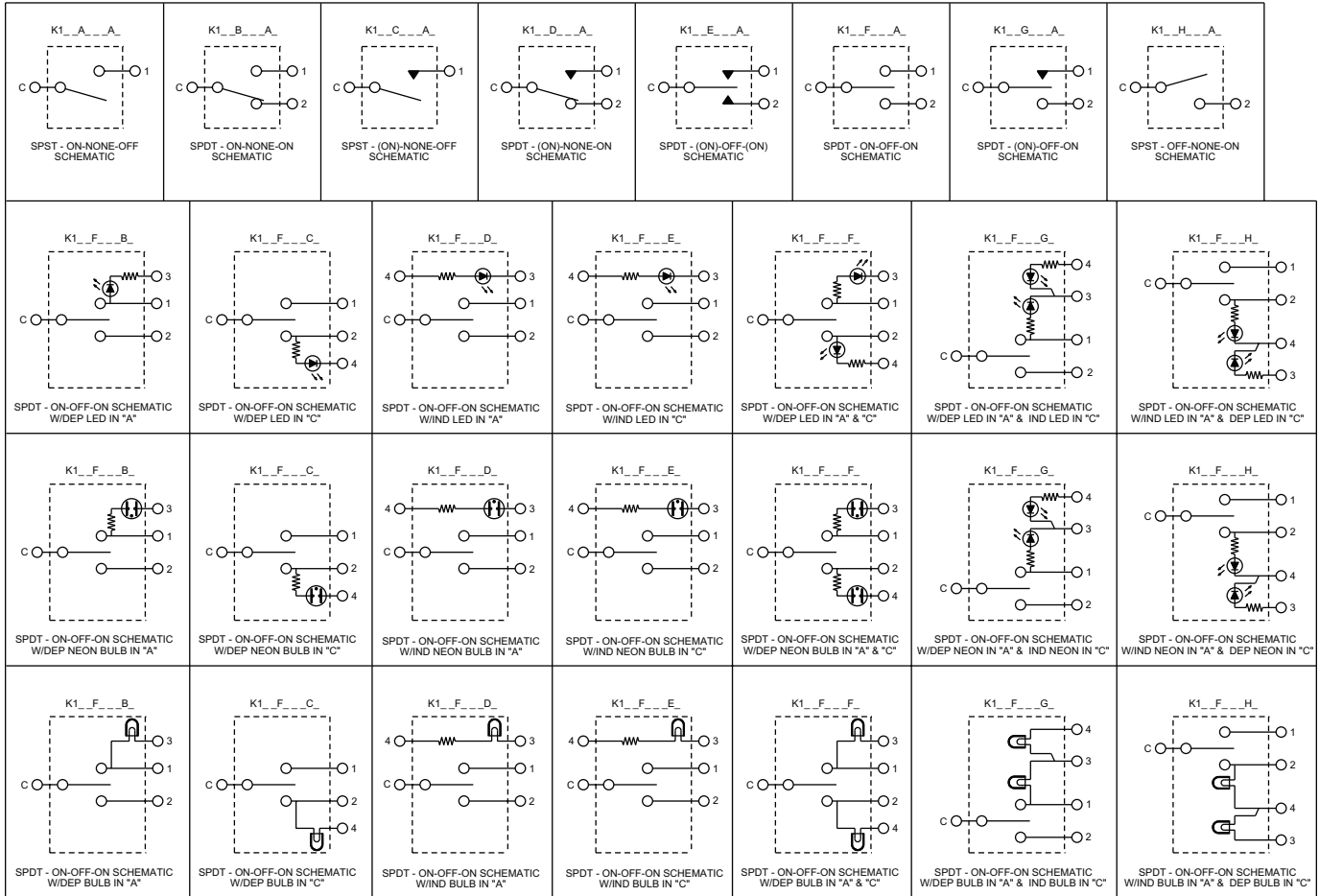
PANEL THICKNESS RANGE OF .105 - .187 W/O GASKET  
 PANEL OPENING: MIN. TYP. MAX.  
 WIDTH .480 .515 .550  
 LENGTH 1.072 1.099 1.125



**TERMINAL STYLES (.032 THICK)**

SCREW	QUICK CONNECT	SOLDER	P.C. PIN

## LOW COST, SNAP-IN ROCKER FOR WET & DUSTY ENVIRONMENTS



**GENERAL SCHEMATIC INFORMATION**

- INDICATES MAINTAIN ACTION (FIXED POSITION)
- ▼—○ INDICATES MOMENTARY ACTION (AUTOMATIC RETURN POSITION)

### K1, K2, K3P and K4 LIGHTING VOLTAGE/CURRENT COMPONENTS RATINGS

LIGHT SOURCE VOLTAGE CATEGORY	LIGHT SOURCE COLOR	FORWARD CURRENT	TYPICAL FORWARD/NOMINAL VOLTAGE	MAX. FORWARD VOLTAGE
6 VDC INCANDESCENT	WHITE	.2 AMPS	6 VDC	8 VDC
12 VDC INCANDESCENT	WHITE	.08 AMPS	12 VDC	14 VDC
24 VDC INCANDESCENT	WHITE	.04 AMPS	24 VDC	28 VDC
125 VAC NEON	AMBER	1.9 mA	125 VAC	125 VAC
250 VAC NEON	AMBER	1.9 mA	250 VAC	250 VAC
2 V LED PRODUCTS*	RED	20 mA	1.9 VDC	2.5 VDC
	GREEN	20 mA	2.15 VDC	2.5 VDC
	AMBER	20 mA	1.95 VDC	2.5 VDC
6 V LED PRODUCTS	SEE CHART	20 mA	6 VDC	8 VDC
12 V LED PRODUCTS	SEE CHART	20 mA	12 VDC	14 VDC
24 V LED PRODUCTS	SEE CHART	20 mA	24 VDC	28 VDC