

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 and panel sealed with an optional panel gasket.

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.

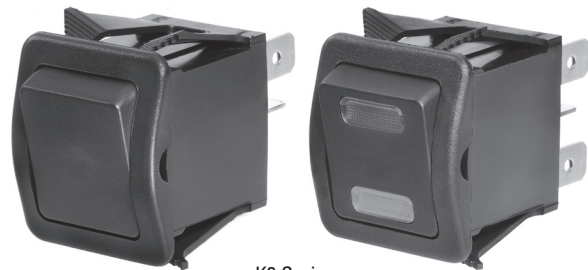
Mounting is simple and quick; snaps into panel from the front. The OTTO snap-in design supports a variety of panel thicknesses with just one cutout size.

A choice of models are offered to handle high power levels 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.



K1 Series
Single Pole



K2 Series
Single & Double Pole



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
- 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 one-piece connector
- Optional panel gasket available
- RoHS compliant

Standard Characteristics/Ratings:

ELECTRICAL RATINGS:

| Load | Sea Level @ 28VDC | Sea Level @ 125/250 VAC, 60/400Hz | Cycles |
|-------------|--|-----------------------------------|--------|
| Resistive | 16A | 5A | 25,000 |
| Resistive | 10A | N/A | 50,000 |
| Inductive | 7A | 2A | 25,000 |
| 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: See Rating Chart

LIGHTING:

| Light Source | Rating (see 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:

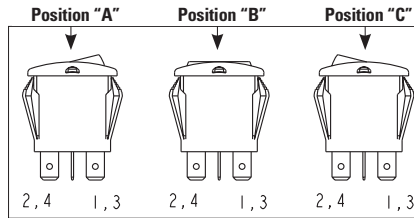
| | |
|---------------------------|--|
| Case: | Thermoplastic |
| Button: | Thermoplastic |
| Base: | Thermoplastic |
| Terminals/Contact: | Brass, silver alloy with silver plate, gold flash for logic level |
| Terminal Hardware: | Screws and lockwashers provided when applicable K1/K2 series recommended Quick Connect terminals: AMP 60253-2 for 12-16 AWG AMP 42100-2 for 14-18 AWG |
| Mounting Hardware: | None provided |

SEALED, ILLUMINATED ROCKER SWITCHES

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

K1 PART NUMBER CODE

| <p>K1</p> <p>Terminal Style/ Switch Rating</p> <p>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</p> | <p>Actuator Color/Style</p> <p>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</p> | <p>Switch Action/Circuit</p> <table border="1"> <thead> <tr> <th></th> <th>Position "A"</th> <th>Position "B"</th> <th>Position "C"</th> <th>Circuit</th> </tr> </thead> <tbody> <tr> <td>A.</td> <td>1-C</td> <td>NONE</td> <td>OFF</td> <td>SPST</td> </tr> <tr> <td>B.</td> <td>1-C</td> <td>NONE</td> <td>2-C</td> <td>SPDT</td> </tr> <tr> <td>C.</td> <td>(1-C)</td> <td>NONE</td> <td>OFF</td> <td>SPST</td> </tr> <tr> <td>D.</td> <td>(1-C)</td> <td>NONE</td> <td>2-C</td> <td>SPDT</td> </tr> <tr> <td>E.</td> <td>(1-C)</td> <td>OFF</td> <td>(2-C)</td> <td>SPDT</td> </tr> <tr> <td>F.</td> <td>1-C</td> <td>OFF</td> <td>2-C</td> <td>SPDT</td> </tr> <tr> <td>G.</td> <td>(1-C)</td> <td>OFF</td> <td>2-C</td> <td>SPDT</td> </tr> <tr> <td>H.</td> <td>OFF</td> <td>NONE</td> <td>2-C</td> <td>SPST</td> </tr> </tbody> </table> <p>NOTE: () denotes momentary action.</p> | | 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 | <p>Light Type*</p> <p>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</p> |
|---|---|---|--------------|--------------|--------------|--------------|---------|----|-----|------|-----|------|----|-----|------|-----|------|----|-------|------|-----|------|----|-------|------|-----|------|----|-------|-----|-------|------|----|-----|-----|-----|------|----|-------|-----|-----|------|----|-----|------|-----|------|---|
| | 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



*See appendix for complete voltage/ratings table

K1 PART NUMBER CODE CONTINUED FROM ABOVE

| <p>K1 Continued</p> <p>Lens Color</p> <table border="0"> <tr> <th>Position "A"</th> <th>Position "C"</th> </tr> <tr> <td>A. No Lens</td> <td>A. No Lens</td> </tr> <tr> <td>B. Red</td> <td>B. Red</td> </tr> <tr> <td>C. Green</td> <td>C. Green</td> </tr> <tr> <td>D. Amber</td> <td>D. Amber</td> </tr> <tr> <td>E. Clear</td> <td>E. Clear</td> </tr> </table> | 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 | <p>Light/Circuit Location</p> <p>A. No Light</p> <p>B. Dependent Light ON in position "A" Wired to terms 1 & 3</p> <p>C. Dependent Light ON in position "C" Wired to terms 2 & 4</p> <p>D. Independent Light at position "A" Wired to terms 3 & 4</p> <p>E. Independent Light at position "C" Wired to terms 3 & 4</p> <p>F. Dependent Light ON in position "A" Wired to terms 1 & 3</p> <p>G. Dependent Light ON in position "C" Wired to terms 2 & 4</p> <p>H. Independent Light at position "A" Wired to terms 3 & 4</p> <p>I. Independent Light at position "C" Wired to terms 3 & 4</p> | <p>Legend & Orientation</p> <p>A. None</p> <p>B. Legend: ON (OFF), OFF (ON)</p> <p>C. Legend: ON (OFF), OFF (ON)</p> <p>D. Legend: ON (OFF), OFF (ON)</p> <p>E. Legend: ON (OFF), OFF (ON)</p> <p>F. Legend: ON (OFF), OFF (ON)</p> <p>G. Legend: ON (OFF), OFF (ON)</p> <p>H. Legend: ON (OFF), OFF (ON)</p> <p>J. Legend: ON (OFF), OFF (ON)</p> <p>K. Legend: ON (OFF), OFF (ON)</p> <p>L. Legend: ON (OFF), OFF (ON)</p> <p>M. Legend: ON (OFF), OFF (ON)</p> <p>N. Legend: ON (OFF), OFF (ON)</p> <p>P. Legend: ON (OFF), OFF (ON)</p> <p>R. Legend: ON (OFF), OFF (ON)</p> |
|---|--------------|--------------|------------|------------|--------|--------|----------|----------|----------|----------|----------|----------|---|---|
| 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 | | | | | | | | | | | | | |

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:

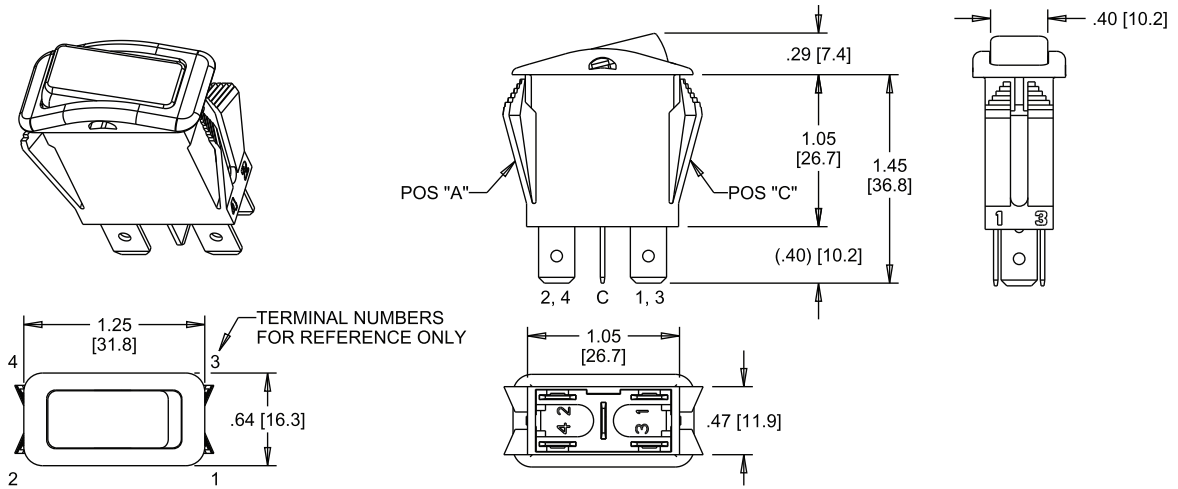
- LED anode (+) terminal number shown in **bold**.
- Light on OFF side must be independent.
- Contact factory for multiple light types in the same switch.

• K1 panel plugs available as shown in Panel Plugs (PP) section.

SEALED, ILLUMINATED ROCKER SWITCHES

K1
SNAP-IN
ROCKERS

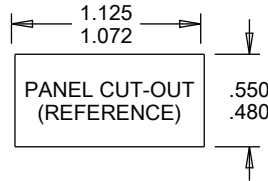
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PANEL THICKNESS AND MOUNTING OPENING GUIDELINES:

PANEL THICKNESS RANGE OF .025 - .105
(GASKET RECOMMENDED)

PANEL THICKNESS RANGE OF .105 - .187
(GASKET NOT REQUIRED)



OPTIONAL PANEL GASKET:

0.062" THICKNESS = P/N C807036-25-1

0.031" THICKNESS = P/N C807039-25-2

| P.C. PIN LAYOUT | | PADDLE STYLES | | |
|---|--------------------------|--------------------------------|-----------------------------------|----------------------------|
| | | SHORT PADDLE ROCKER | STANDARD PADDLE ROCKER | STANDARD ROCKER |
| TERMINAL STYLES (.032 [8.1] THICK) | | | | |
| SCREW | QUICK CONNECT | SOLDER | P.C. PIN | |

K1 AND T71 CONNECTOR PART NUMBER CODE

C405041 -

XX

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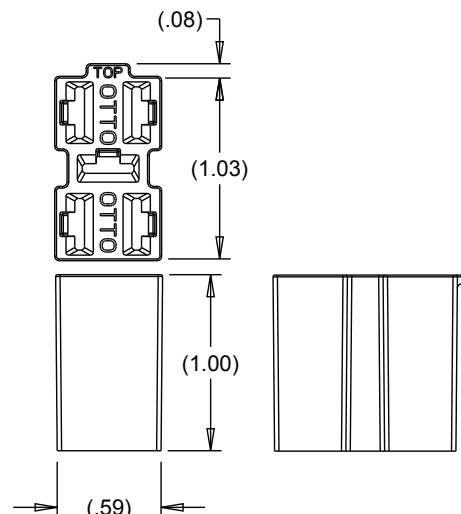
Connector Color

- 01. Red
- 02. Black
- 03. Orange*
- 04. Yellow*
- 05. Green*
- 06. Blue*
- 07. Violet*
- 08. Gray*
- 09. White

* Contact Factory

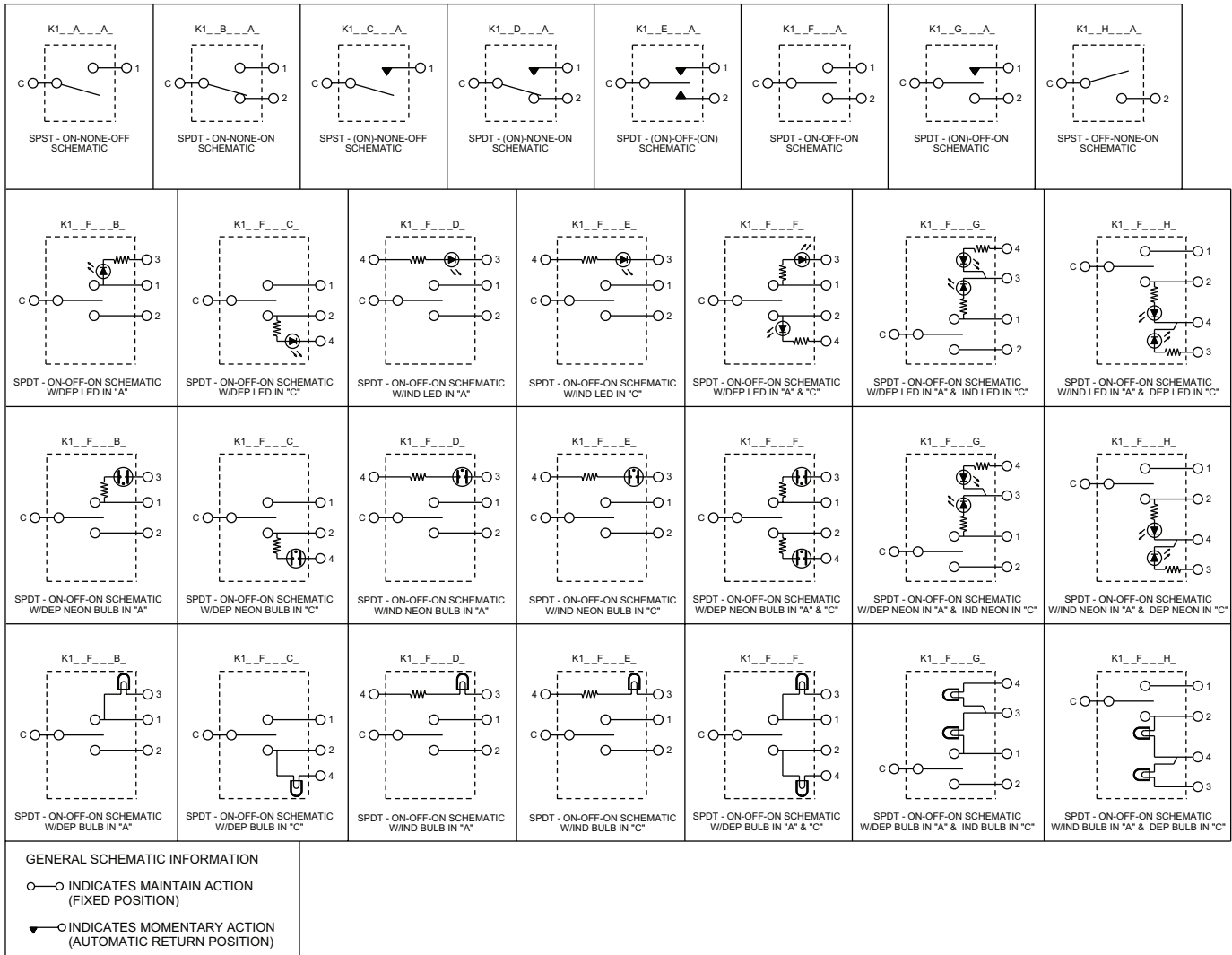
Packaging Quantity

- 0025 - 25 Pcs per Package
- 0050 - 50 Pcs per Package
- 0100 - 100 Pcs per Package



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

| LIGHT SOURCE VOLTAGE CATEGORY | LIGHT SOURCE COLOR | FORWARD CURRENT | TYPICAL FORWARD/NOMINAL VOLTAGE (DC) | MAX. FORWARD VOLTAGE (DC) |
|-------------------------------|--------------------|-----------------|--------------------------------------|---------------------------|
| 6VDC INCANDESCENT | WHITE | .2A | 6V | 8V |
| 12VDC INCANDESCENT | WHITE | .08A | 12V | 14V |
| 24VDC INCANDESCENT | WHITE | .04A | 24V | 28V |
| 125VAC NEON | AMBER | 1.9mA | 125V | 125V |
| 250VAC NEON | AMBER | 1.9mA | 250V | 250V |
| 2V LED* | RED | 20mA | 1.9V | 2.5V |
| | GREEN | 20mA | 2.15V | 2.5V |
| | AMBER | 20mA | 1.95V | 2.5V |
| | BLUE | 20mA | 3.5V | 4.0V |
| 6VDC LED | SEE CHART | 20mA | 6V | 8V |
| 12VDC LED | SEE CHART | 20mA | 12V | 14V |
| 24VDC LED | SEE CHART | 20mA | 24V | 28V |

* See Appendix for complete Voltage/Ratings Table.