

SEALED, ILLUMINATED ROCKER SWITCHES

K3
SEALED
ROCKERS

ATTRACTIVE & RUGGED FOR WET & DUSTY ENVIRONMENTS

Sealed to IP68S and IP69K, the OTTO K3 rocker switch is a quality, precision switch designed to comply with standards established for appliance, marine (ignition protection) and off-road vehicles along with other demanding applications where rugged rocker switches are required.

K3 sealed rocker switches snap into industry-standard panel cutouts. Choose illuminated and printed legends, thru-panel drain option and switching compatibility from low level to 20 amps.

The K3 offers a choice of LED, incandescent and neon illumination. Legends can be stamped onto a non-illuminated button, stamped onto an illuminated lens or laser etched into the lens and backlit.

Available in standard and low level contact ratings, the K3 rockers will fit a wide range of applications. Expect a minimum of 25,000 cycles at a full rated load of 20 amps resistive or 15 amps inductive. 100,000 cycles mechanical. A full complement of switch operation is available including momentary and maintained action in 2 or 3-position switches in SPST, SPDT, SPTT, DPST and DPDT circuit arrangements.

OTTO can provide custom colors upon request. Value-added assemblies with wire leads are also available. Please consult the factory for assistance.

Features:

- Sealed watertight per IP68S and IP69K
- Snap-in panel mounting into industry standard panel cutout
- Optional panel seal gasket
- Thru-panel drain option
- LED, neon & incandescent lighting
- 0.250" Quick Connect terminals
- Optional one-piece connector
- Optional terminal barriers
- Low level up to 20 amp switch
- Configurable Single Pole Triple Throw (SPTT) with external jumpers
- RoHS/WEEE/Reach compliant



| Standard Characteristics/Ratings: | | |
|-----------------------------------|--|--------------------------|
| ELECTRICAL RATINGS: | | |
| Load | Sea Level @ 12/28VDC | Sea Level @ 125VAC, 60Hz |
| Resistive | 20A | 16A |
| Inductive | 15A | 15A |
| Lamp | 5A | 5A |
| Motor | 0.5HP @ 110VAC | |
| DWV | 1050Vrms except across light terminals | |
| Low Level | 10mA @ 30mV | |
| Electrical Life: | 25,000 cycles | |
| LIGHTING: | | |
| Light Source | Rating | |
| 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: | -40°C to +85°C | |
| MATERIALS: | | |
| Case: | Thermoplastic, black | |
| Button: | Thermoplastic | |
| Terminals/Contact: | Brass, silver alloy with silver plate, gold flash for low level | |
| Terminal Hardware: | K3 series recommended Quick Connect terminals: AMP 60253-2 for 12-16 AWG AMP 42100-2 for 14-18 AWG | |
| Mounting Hardware: | None provided | |

ROCKER SWITCHES

SEALED, ILLUMINATED ROCKER SWITCHES

K3 SERIES PART NUMBER CODE

Part Number Code Continued Below

- K3** **X** **X**
- Base Options**
- A. With Keying Pin Only
 - Standard Rating
 - Silver Plate
 - B. Without Barriers or Pin
 - Standard Rating
 - Silver Plate
 - C. With Terminal Barriers Only
 - Standard Rating
 - Silver Plate
 - D. With Keying Pin Only
 - Low Level Rating
 - Gold Plate
 - E. Without Barriers or Pin
 - Low Level Rating
 - Gold Plate
 - F. With Terminal Barriers Only
 - Low Level Rating
 - Gold Plate
 - G. With Keying Pin Only
 - Standard Rating
 - No Plate
 - H. Without Barriers or Pin
 - Standard Rating
 - No Plate
 - J. With Terminal Barriers Only
 - Standard Rating
 - No Plate

Case Style/Button Color

- A. Case With Drain Holes
Button Color: Black
 - B. Case Without Drain Holes
Button Color: Black
 - C. Case With Drain Holes
Button Color: Red
 - D. Case Without Drain Holes
Button Color: Red
 - E. Case With Drain Holes
Button Color: White
 - F. Case Without Drain Holes
Button Color: White
- NOTE: Switch case is black for all options below:
1. Case With Drain Holes
Button Not Included
 2. Case Without Drain Holes
Button Not Included

Switch Action/Circuit

| | Position "A" | Position "B" | Position "C" | Circuit |
|-----|--------------|--------------|--------------|---------|
| 1A. | 3-4 | NONE | OFF | SPST |
| 2A. | 3-4/8-9 | NONE | OFF | DPST |
| 1B. | 3-4 | NONE | 3-2 | SPDT |
| 2B. | 3-4/8-9 | NONE | 3-2/8-7 | DPDT |
| 1C. | (3-4) | NONE | OFF | SPST |
| 2C. | (3-4)/(8-9) | NONE | OFF | DPST |
| 1D. | (3-4) | NONE | 3-2 | SPDT |
| 2D. | (3-4)/(8-9) | NONE | 3-2/8-7 | DPDT |
| 1E. | (3-4) | OFF | (3-2) | SPDT |
| 2E. | (3-4)/(8-9) | OFF | (3-2)/(8-7) | DPDT |
| 1F. | 3-4 | OFF | 3-2 | SPDT |
| 2F. | 3-4/8-9 | OFF | 3-2/8-7 | DPDT |
| 1G. | (3-4) | OFF | 3-2 | SPDT |
| 2G. | (3-4)/(8-9) | OFF | 3-2/8-7 | DPDT |

Special Circuits

| | Position "A" | Position "B" | Position "C" | Special Circuits |
|-----|--------------|--------------|--------------|------------------|
| 1H. | 3-4/8-9 | 8-9 | OFF | ON/ON/OFF |
| 1J. | 3-4/8-9 | 8-9 | NONE | ON/ON/NONE |
| 1K. | (3-4)/(8-9) | 8-9 | OFF | (ON)/ON/OFF |
| 1L. | (3-4)/(8-9) | 8-9 | NONE | (ON)/ON/NONE |
| 1M. | 3-4/8-9 | 3-2/8-9 | 3-2/8-7 | ON/ON/ON |
| 1N. | (3-4)/(8-9) | 3-2/8-9 | 3-2/8-7 | (ON)/ON/ON |
| 1P. | (3-4)/(8-9) | 3-2/8-9 | (3-2)/(8-7) | (ON)/ON/(ON) |
| 2R. | 3-4/8-9 | OFF/8-9 | OFF/OFF | ON/OFF/OFF |
| 2S. | (3-4)/8-9 | OFF/8-9 | OFF/OFF | (ON)/OFF/OFF |

NOTE: () denotes momentary action.

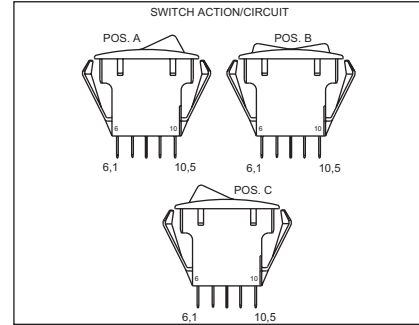
Light Source Type

- A. No Illumination
- 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

Light Circuit

| Circuit | Terminal Connections |
|----------------|----------------------|
| A. None | None |
| B. Dep. in "A" | 1(-) & 4(+) |
| C. Dep. in "C" | 2(+) & 5(-) |
| D. Ind. in "A" | 1(-) & 6(+) |
| E. Ind. in "C" | 5(-) & 10(+) |
| F. Dep. in "A" | 1(-) & 4(+) |
| J. Dep. in "C" | 2(+) & 5(-) |
| G. Dep. in "A" | 1(-) & 4(+) |
| L. Ind. in "A" | 5(-) & 10(+) |
| H. Ind. in "A" | 1(-) & 6(+) |
| Dep. in "C" | 2(+) & 5(-) |
| J. Ind. in "A" | 1(-) & 6(+) |
| Ind. in "C" | 5(-) & 10(+) |

NOTE: Polarity only applies to LED circuits.



K3 PART NUMBER CODE - CONTINUED FROM ABOVE

- Lens Color**
- | | |
|------------------------|------------------------|
| Position "A" | Position "C" |
| 1. Transparent Red | 1. Transparent Red |
| 2. Transparent Green | 2. Transparent Green |
| 3. Transparent Amber ① | 3. Transparent Amber ① |
| 4. Clear ① | 4. Clear ① |
| 5. Translucent White ② | 5. Translucent White ② |
| Z. No Lens ③ | Z. No Lens ③ |

NOTE: It is not recommended to use green LEDs with translucent white lenses. This will reduce light intensity. Use clear lenses with green LEDs for maximum light intensity.

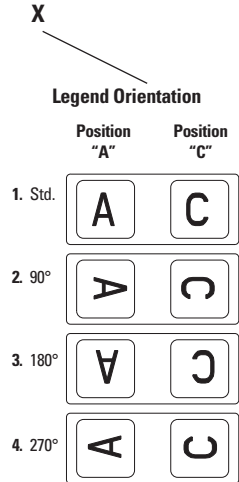
- ① Recommended for neon lamps.
- ② Special Order: Ultra bright green LED to be used with translucent white lenses.
- ③ Legend colors "B" & "D" are only available on lens color "Z".

- Legend Style**
- | | |
|---------------------|---------------------|
| Position "A" | Position "C" |
| ZZ. No Legend | ZZ. No Legend |
- NOTE: For all other legend options, refer to the legend table on page 164, find the two digit code and enter the code in the appropriate position(s).

STOP HERE for lighted switches without legends.

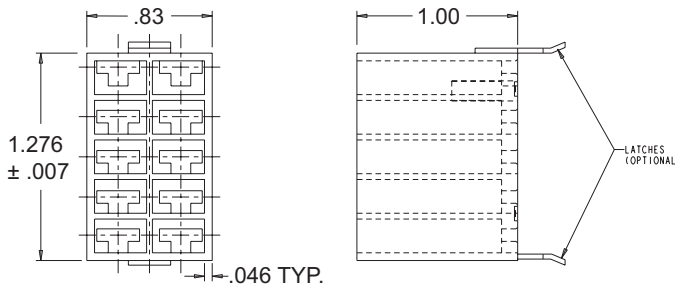
Example: K3AAIFNH-44

- Legend Color**
- | | |
|-------------------------------|-------------------------------|
| Position "A" | Position "C" |
| 1. Red | 1. Red |
| 2. Black | 2. Black |
| 9. White | 9. White |
| B. Backlight/Daylight White ④ | B. Backlight/Daylight White ④ |
| D. Backlight/Deadfront ④ | D. Backlight/Deadfront ④ |
| Z. No Legend | Z. No Legend |
- ④ For legend color "B" and "D", please use button color "A" & "B" and lens color "Z" for each position.



STOP HERE for unlighted switches without legends.

Example: K3AAIFAA



K3 Connector
P/N 801775-2A Without Latches
P/N 801775-2B With Latches

Panel Seal Gasket
P/N 807037

Order separately for use with switches without drain holes.

Panel Plug
See Panel Plug (PP) page 167.

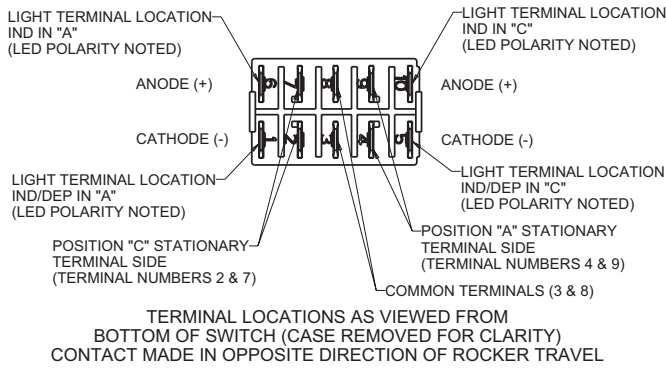
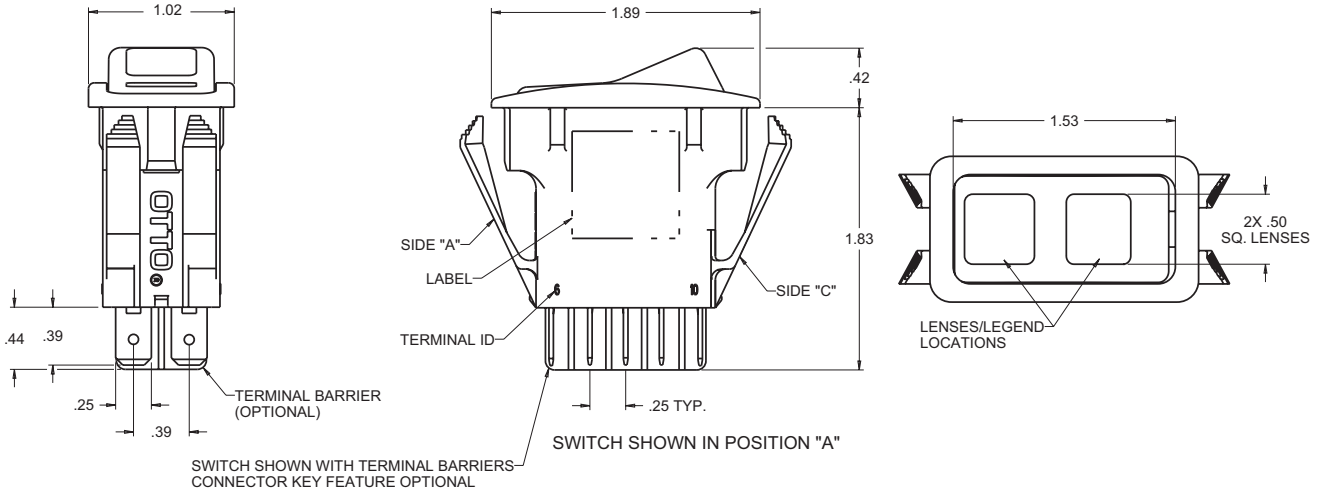
• K3 panel plugs available as shown on page 185.

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

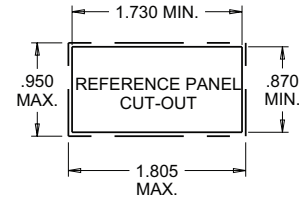
SEALED, ILLUMINATED ROCKER SWITCHES

SNAP-IN PANEL MOUNTING, ATTRACTIVE & RUGGED FOR WET & DUSTY ENVIRONMENTS

ROCKER SWITCHES



MOUNTING OPENING:
 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 .870 .937 .950
 LENGTH 1.730 1.768 1.805



| | | | | | |
|--|--|---|--|--|---|
| <p>K3..1M... POS "A" POS "B" POS "C" SPECIAL CIRCUIT - ON-ON-ON SCHEMATIC</p> | <p>K3..2A... DPST-ON-NONE-OFF SCHEMATIC</p> | <p>K3..2B... DPDT-ON-NONE-ON SCHEMATIC</p> | <p>K3..2C... DPST-(ON)-NONE-OFF SCHEMATIC</p> | <p>K3..2D... DPDT-(ON)-NONE-ON SCHEMATIC</p> | |
| <p>GENERAL SCHEMATIC INFORMATION</p> <ul style="list-style-type: none"> ○ INDICATES MAINTAIN ACTION (FIXED POSITION) ◄ INDICATES MOMENTARY ACTION (AUTOMATIC RETURN POSITION) <p>FOR OTHER LIGHTING SCHEMATICS REPLACE FOLLOWING SYMBOLS:</p> <ul style="list-style-type: none"> Ⓜ INCANDESCENT (REPLACE RESISTOR & LED) Ⓝ NEON (REPLACE LED) | <p>K3..2E... DPDT-(ON)-OFF-(ON) SCHEMATIC</p> | <p>K3..2F... DPDT-ON-OFF-ON SCHEMATIC</p> | <p>K3..26... DPDT-(ON)-OFF-ON SCHEMATIC</p> | <p>K3..2BND-Z DPDT-ON-NONE-ON SCHEMATIC W/INDEPENDENT LED IN "A"</p> | <p>K3..2BNC-Z DPDT-ON-NONE-ON SCHEMATIC W/DEPENDENT LED IN "C"</p> |
| <p>K3..2BND-Z DPDT-ON-NONE-ON SCHEMATIC W/INDEPENDENT LED IN "A"</p> | <p>K3..2BNE-Z DPDT-ON-NONE-ON SCHEMATIC W/INDEPENDENT LED IN "C"</p> | <p>K3..2BNF... DPDT-ON-NONE-ON SCHEMATIC W/INDEPENDENT LED IN "A" & "C"</p> | <p>K3..2BNG... DPDT-ON-NONE-ON SCHEMATIC W/INDEPENDENT LED IN "A" & DEPENDENT LED IN "C"</p> | <p>K3..2BNH... DPDT-ON-NONE-ON SCHEMATIC W/INDEPENDENT LED IN "A" & DEPENDENT LED IN "C"</p> | <p>K3..2BNJ... DPDT-ON-NONE-ON SCHEMATIC W/INDEPENDENT LED IN "A" & "C"</p> |