

SEALED, ILLUMINATED ROCKER SWITCHES

K3
SEALED
ROCKERS

ATTRACTIVE & RUGGED FOR WET & DUSTY ENVIRONMENTS

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
- 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 | |
| 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

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 |

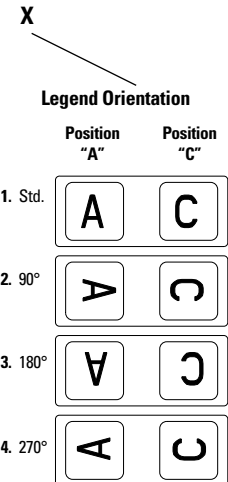
NOTE: It is not recommended to use green LEDs with translucent white lenses. This will reduce light intensity. Use clear lenses with green LEDs for maximum light intensity.

- 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, find the two digit code and enter the code in the appropriate position(s).

- 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.

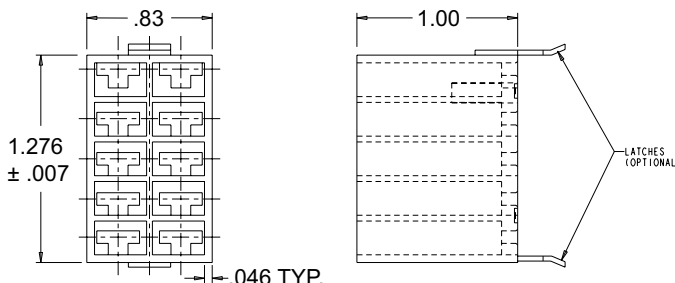


STOP HERE for lighted switches without legends.

Example: K3AAIFNH-44

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 160.

• K3 panel plugs available as shown on page 160.

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

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



TERMINAL LOCATIONS AS VIEWED FROM BOTTOM OF SWITCH (CASE REMOVED FOR CLARITY)
CONTACT MADE IN OPPOSITE DIRECTION OF ROCKER TRAVEL



| | | | | |
|---|--|--|--|--|
| | | | | |
| <p>GENERAL SCHEMATIC INFORMATION</p> <p>○ INDICATES MAINTAIN ACTION (FIXED POSITION) ▼ INDICATES MOMENTARY ACTION (AUTOMATIC RETURN POSITION)</p> <p>FOR OTHER LIGHTING SCHEMATICS REPLACE FOLLOWING SYMBOLS:</p> <p> INCANDESCENT (REPLACE RESISTOR & LED) NEON (REPLACE LED)</p> | | | | |
| | | | | |
| | | | | |

SNAP-IN PANEL MOUNTING

Standard Legends Per SAE Specifications

| STANDARD LEGENDS PER SAE SPECIFICATIONS | | | | | | | | |
|---|---|-------------------------|----|---|---------------------------------|----|---|----------------------------------|
| A1 |  | ANCHOR | K2 |  | UNLOCK | P5 |  | BILGE BLOWER |
| B1 |  | BATTERY | L1 |  | LIGHT | R1 |  | LIFT |
| B2 |  | ELECTRIC POWER | L2 |  | MASTER LIGHTING SWITCH | R2 |  | LOWER |
| C1 |  | AC/COOLING SYSTEMS | L3 |  | HEADLIGHTS | R3 |  | UP |
| C2 |  | DEHUMIDIFIER | L4 |  | HEADLIGHTS-LOW / DIPPED BEAM | R4 |  | DOWN |
| C3 |  | HEATER/INTERIOR HEATING | L5 |  | HEADLIGHTS-HIGH / UPPER BEAM | R5 |  | RIGHT |
| D1 |  | WINDSHIELD DEFROSTER | L6 |  | PARKING LIGHT | R6 |  | LEFT |
| D2 |  | REAR WINDOW DEFROSTER | L7 |  | WORK LAMP | R7 | FWD | FORWARD |
| D3 |  | MIRROR DEFROSTER | L8 |  | WORK LAMP | R8 | REV | REVERSE |
| E1 |  | ENGINE/START | L9 |  | INTERIOR DOME LIGHT | S1 |  | RADIO |
| E2 |  | ENGINE/STOP | M1 |  | BEACON | S2 |  | MUTE |
| E3 | | ON/START | M2 |  | HAZARD/POSITION LIGHTS | T1 |  | FAST |
| E4 | ○ | OFF/STOP | M3 |  | CLEARANCE LIGHTS | T2 |  | SLOW |
| E5 | ON | ON | M4 |  | SIDE MARKER LIGHT | T3 |  | TRIM TAB / TRIMMING OPERATION |
| E6 | OFF | OFF | M5 |  | RUNNING LIGHTS (UNDER POWER) | T4 |  | TRANSMISSION |
| E7 |  | ENGINE ELECTRIC PREHEAT | M6 |  | ANCHOR LIGHT | V1 |  | VENTILATING / AC FAN |
| E8 |  | ENGINE-GAS INJECTION | M7 |  | RUNNING/ANCHOR LIGHTS | W1 |  | WINDSHIELD WIPER |
| F1 |  | FRONT FOG LIGHTS | M8 |  | SEARCH LIGHT | W2 |  | WINDSHIELD-WASHER |
| F2 |  | REAR FOG LIGHTS | M9 |  | LEFT TURN SIGNAL | W3 |  | WINDSHIELD-WASHER/WIPER |
| G1 |  | FUEL | MA |  | RIGHT TURN SIGNAL | W4 |  | REAR WINDOW WIPER |
| H1 |  | HORN | P1 |  | BILGE PUMP #1 | W5 |  | REAR WINDOW-WASHER |
| H2 |  | HORN REAR | P2 |  | BILGE PUMP #2 | W6 |  | REAR WINDOW-WASHER/WIPER |
| K1 |  | LOCK | P3 |  | BILGE PUMP #3 | ZZ | | NO LEGEND |
| | | | P4 |  | BILGE PUMP | | | |

For legends not shown, please consult an OTTO representative.