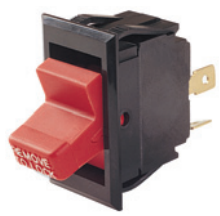
Snap Switch

High Capacity Switch

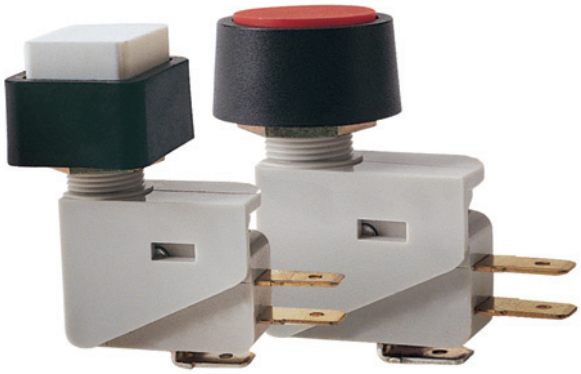
Panel Board Switch

Keylock

Locking Rocker



Snap Switch Pushbutton Actuator



Contents

Product Description

These non-illuminated pushbutton actuators complement our S Series snap switch line. The actuators are available in three different non-illuminated versions. The line is complete with attractive colored pushbutton caps for color coding applications.

Two of the series of superstructures are available with attractive mounting collars. They come in a variety of colors and act as a protective collar around the operating button to prevent accidental operation of the switch.

These superstructures are designed for installation in a 0.475 in (12.07 mm) diameter mounting hole. All series are supplied with a flat surface on the bushing to prevent rotation. In the series requiring the mounting collar, the collar itself is the facenut tightening the switch/superstructure assembly down to the panel.

Options

- NO and NC circuits
- Pad printed buttons
- Other colors available
- PC terminals available
- Round 0.700 in (17.78 mm) button, different heights

Catalog Number Selection

How To Order—Snap Switch Pushbutton Actuators

To determine complete catalog number, start with the appropriate base and add the appropriate code letters and/or numbers.

Example: **SA37BC B 2 5 -4 A1**

Base Prefix
SA37BC = Snap switch pushbutton actuator

Switch Type
E = High electrical
B = Long life

Terminals
1 = Screw
2 = Solder lug
3 = Quick connect (0.19 in)
4 = Quick connect (0.25 in)
5 = Short solder lug

Superstructure Style
2 = Round 0.70 in (17.78 mm) dia.
5 = Rectangular 0.77 x 0.61 in (19.43 x 15.37 mm)
4 = Round 0.55 in (13.97 mm) dia. ①

Pushbutton Color
-2 = Red
-4 = Blue
-5 = Yellow
-6 = Green
-9 = Black
-10 = White
-11 = Gray
-12 = Orange

Pushbutton Shroud Color

Round Button Shroud
A1 = White
A5 = Gray
A6 = Black

Rectangular Shroud
B1 = White
B5 = Gray
B6 = Black

Note

① Not available with decorative shroud.

Technical Data and Specifications

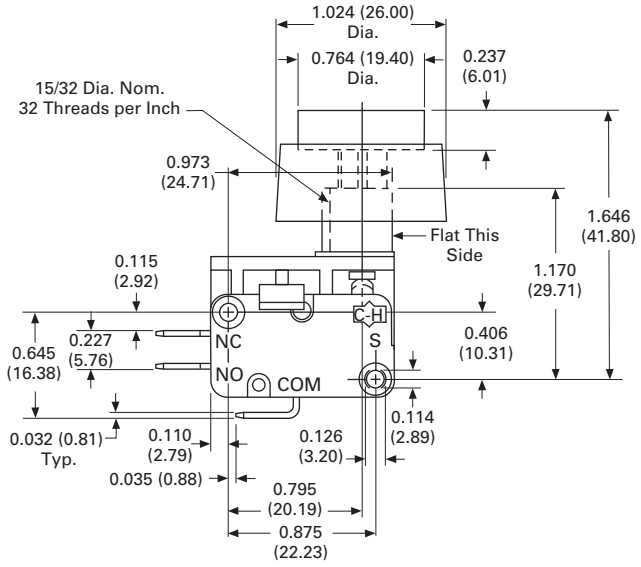
Snap Switch Pushbutton Actuators—High Electrical and Long Life

Description	High Electrical	Long Life
Number of poles	1 (one snap switch) momentary	1 (one snap switch) momentary
Electrical rating		
UL recognized and CSA certified	15A, 125–250 Vac 1/2 hp, 125–250 Vac 1/2A, 125 Vdc 1/4A, 250 Vdc	10A, 125–250 Vac 1/3 hp, 125–250 Vac 1/2A, 125 Vdc 1/4A, 250 Vdc
28 Vdc	Sea level: 10A, resistive or inductive 6A, motor load 50,000 ft: 10A, resistive/6A inductive	Sea level: 10A, resistive or 6A inductive 6A, motor load 3.6A, lamp load 50,000 ft: 10A, resistive/6A inductive
Operation characteristics		
Operation force	6 to 14 oz	8 oz max.
Release force	4 oz min.	2 oz min.
Pretravel	0.05 in (1.19 mm) max.	0.05 in (1.19 mm) max.
Differential travel	0.02 in (0.41 mm) max.	0.02 in (0.41 mm) max.
Overtravel	0.04 in (1.01 mm) min.	0.04 in (1.01 mm) min.
Mechanical life	150,000 operations min. with min. median of 1 million	1 million operations min. with min. median of 10 million
Operation position	0.58 in ± 0.02 in (14.7 mm ± 0.5 mm)	0.58 in ± 0.02 in (14.7 mm ± 0.5 mm)
Free position	0.64 in (16.2 mm) max.	0.64 in (16.2 mm) max.

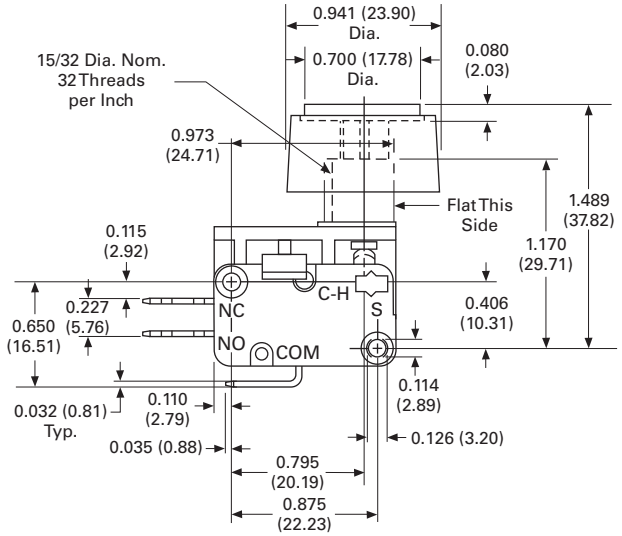
Dimensions

Approximate Dimensions in Inches (mm)

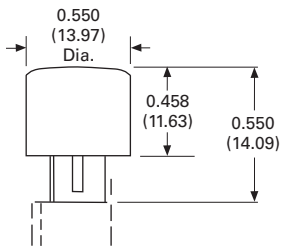
Rectangular Cap Style



Round Cap Style—0.70 in (17.78 mm)



Round Cap Style—0.55 in (14.0 mm)



Note: Switch base is the same as the 17.78 mm style.

High Capacity Switch

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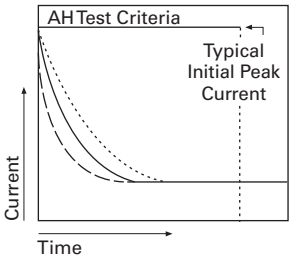
Contents

Product Overview

Capacitive loads will result in a current inrush far exceeding normal operating current. In fact, the typical capacitive load inrush current is potentially more damaging to a switch than a typical inductive load inrush. The major difference is that the capacitive load can reach maximum inrush sooner. Generally, peak inductive load current inrush occurs after any switch contact bounce has subsided.

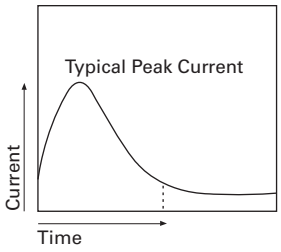
In a capacitive load, however, switch contact bounce could occur at the same time as maximum current inrush, increasing the possibility of arcing and of welding the switch contact. Eaton has addressed this problem with its high inrush switch.

Capacitive



By combining innovative design and quality materials, this switch is designed to carry the specified maximum inrush current for 10 milliseconds for a minimum of 20,000 ON/OFF cycles.

Inductive



Product Description

The heavy duty high capacity switch, Catalog Number 7818K1 is ideal for exceptionally high-power applications, for heavy-duty motor loads and for use in welding equipment or similar industrial applications.

Standards and Certifications

- UL to Standard 508, File E147754

Product Selection

High Capacity Switch

Description	Catalog Number
40A, 600 Vac 5 hp, 250 Vac	**7818K1**

Technical Data and Specifications

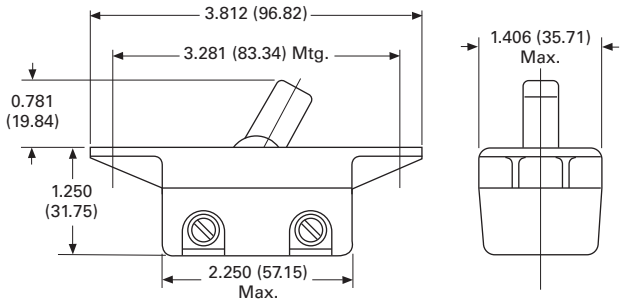
High Capacity Switches

Description	Specification
Rating	See Product Selection table; 40A, 600 Vac/5 hp, 250 Vac
Circuits	2PST, maintained
Contact mechanism	Quick-make/quick-break snap acting butt contact Make: 200A peak inrush at 125 Vac for 10 ms for 20,000 cycles minimum Break: 20A at 125 Vac for 20,000 cycles minimum
Contact material	10% silver cadmium oxide composite
Terminal types	Screw—brass (Catalog Number 11-6074-4) supplied. Furnish unassembled
Mounting means	Molded flush mounting bracket, high impact polycarbonate, 3.312 in (84.12 mm), center-to-center spacing and 2.375 in (60.33 mm) spacing for self-tapping screws
Lever	Nylon
Base	Molded thermoset material
Dielectric withstand	2200V rms minimum

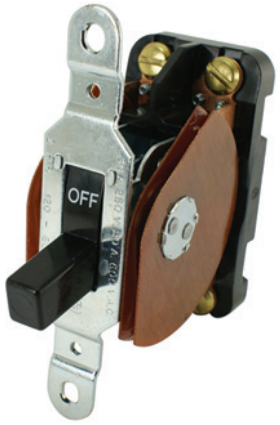
Dimensions

Approximate Dimensions in Inches (mm)

7818K1



Panel Board Switches



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Contents

Product Description

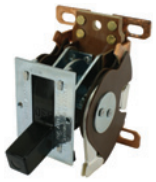
This group of two-position power toggle switches is used by manufacturers in a wide variety of applications that require dependability and long service, such as welding equipment, commercial floor polishers, battery chargers, food processors and panelboards.

Standards and Certifications

- UL Recognized
- CSA Certified as noted

Product Selection

8980K1



8980K5

8980K13

Panelboard Switches

Rating	Poles and Throw	Mounting	Terminals	Catalog Number
60A, 250 Vac/Vdc 2 hp, 125–250 Vac/Vdc ①	2PST	N/A	N/A	**8980K1** ②
30A, 250 Vac/Vdc 30A, 125V "T" 2 hp, 120–240 Vac	1P double break	Frame plate	Center bus	**8980K2**
	1P quad break	Frame plate	Center bus	**8980K3**
30A, 250 Vac/Vdc 20A, 600 Vac 2 hp, 120–600 Vac	2PST	Panel type strap	Screw	**8980K5**
30A, 250 Vac/Vdc 20A, 600 Vac 2 hp, 120–600 Vac Three-phase	3PST	Panel type	Screw	**8980K6**
20A, 120–240 Vac 2 hp, 240 Vac	2PST (NO)	Panel type strap	Screw	**8980K13** ②③
30A, 250 Vac/Vdc 2 hp, 120–240 Vac 1 hp, 480 Vac	2PST	Panel type strap	Screw	**8980K14** ④
30A, 250 Vac/Vdc 2 hp, 120–240 Vac	2PST	Panel type strap	Screw	**8980K16**

Technical Data and Specifications

Panelboard Switches

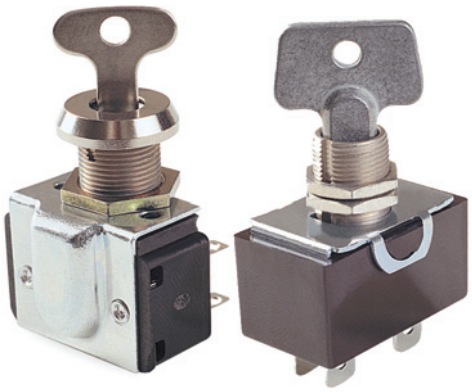
Description	Specification
Rating	10–60A; 120–600V See Product Selection table
Circuits	1PST, 2PST, 3PST 2 circuit, maintained Except for Catalog Number 8980K13, momentary
Contact mechanism	Quick-make/quick-break wiping action Except for Catalog Number 8980K13, quick-make/quick-break butt contact
Contact material	Movable—bronze; stationary—copper; Catalog Number 8980K13—silver
Terminal types	Screw or bus
Termination material	Copper
Mounting means	Two-hole mounting—panel type flush
Dielectric withstand	1000 volts rms minimum
Operating temperature range	0° to 150°F (–17.8° to 65.6°C)

Notes

① For appliance use only; 32A, 480 Vac, 25A, 600 Vac.
② CSA Certified.
③ Suitable for side or back wiring.
④ Binding screws assembled. For binding screws provided unassembled, order Catalog Number 8980K30.

Keylock Switches, General Purpose/Heavy Duty—AC/DC Rated

General Purpose and Heavy Duty Keylocks



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Product Description

General Purpose

These keylock switches provide reliable performance in a space-saving design. They all use quick-make/quick-break switching mechanisms, with wiping action blades for self-cleaning contacts.

Heavy Duty

These switches have a slow-make/slow-break switching mechanism with large butt type contacts. Their high current switching capability allows them to be used for locking switching circuits in power applications.

Features

Termination Types

General Purpose

Solder lugs—Brass silver-plated

Heavy Duty

- 7842 Series

Screw terminals—Brass designed to accept #7-32 x 3/16 binding head (Cat. No. **11-6085-2**) screws

Furnished unassembled

- 7846 Series

Quick connect terminals—Brass

Mounting Means

General Purpose

Threaded bushing—0.468 in (11.89 mm) dia.

Keyway—0.062–0.067 in wide x 0.035–0.370 deep (1.55–1.70 mm wide x 0.89–0.94 mm deep

Hardware supplied—1 hexnut (Cat. No. **15-192**) and 1 chamfered dress nut (Cat. No. **15-994-2**)

Furnished unassembled

Heavy Duty

- 7842 Series

Slotted bushing—0.468 in (11.89 mm) dia.

Hardware supplied—4 terminal screws (Cat. No. **11-6085-2**) and 1 hexnut (Cat. No. **15-2525-58**)

Furnished unassembled

- 7846 Series

Hardware supplied—2 hexnuts (Cat. No. **15-2525-59**)

Product Selection

General Purpose Keylock AC/DC Switches

Rating	Poles and Throw	Circuit with Key in … (Keyway Down) LEFT Position	CENTER Position (Keyway)	RIGHT Position	Key Removal Position	Solder Lug Terminal Catalog Number
6A, 125 Vac/Vdc 3A, 250 Vac/Vdc	1PST	— —	OFF OFF	ON ON	CENTER CENTER and RIGHT	**8928K492** **8928K493**
6A, 125 Vac/Vdc 1A, 250 Vac/Vdc	1PDT	—	ON	ON	CENTER and RIGHT	**8928K494**
6A, 125 Vac/Vdc 1-1/2A, 250 Vdc	1PDT	—	ON	ON	CENTER	**8283K150**
6A, 125 Vac/Vdc 3A, 250 Vdc	2PST	— — ON	OFF ON OFF	ON OFF —	CENTER CENTER LEFT	**8370K150** **8370K151** **8370K152**
6A, 125 Vac/Vdc 3A, 250 Vac/Vdc	2PST	—	OFF	ON	CENTER and RIGHT	**8928K495**
6A, 125 Vac/Vdc 3A, 250 Vdc	2PDT	— —	ON ON	ON ON	CENTER CENTER and RIGHT	**8373K150** **8373K151**

Heavy Duty Keylock AC Rated Switches

Rating	Circuit	Action	Key Removal Position	Slotted Bushing Length Inches	Slotted Bushing Length mm	Type of Termination	Key Style	Catalog Number
7846 Type Series								
20A, 120 Vac 20A, 240 Vac 1-1/2 hp, 120 Vac 2 hp, 240 Vac	2PST	OFF-ON-OFF-ON	OFF	0.50	12.7	Quick Connect	**E (13-8173)**	**7846K1** ①

Note

① Not CSA Certified.

Accessories

Keys for Locking Switches

Additional keys may be ordered from the Key Selection table.

Key styles shown match those listed for specific switches in the Product Selection tables.

Key Selection

Where Used	Catalog Number
General purpose and heavy duty series	**13-5496**
Security locking bracket	**13-8171**
7846K1	**13-8173**

Rotary Keylock Brackets—Security Tumbler Type

This series of rotary keylock is designed for use in security applications. They provide a simple method of converting single- and two-pole toggle switches. For use with two- or three-position switches.

Key Selection

Where Used	Catalog Number
Key removable in counter-clockwise position	**8980P25**
Key removable in center position	**8980P6**
Key removable in clockwise position	**8980P27**
Key removable in either extreme position	**8980P28**

Technical Data and Specifications

Keylock Switches, General Purpose/Heavy Duty—AC/DC Rated

Description	General Purpose	Heavy Duty
Circuits	1PST, 1PDT, 2PST, 2PDT Maintained action	2PST, 2-circuit maintained
Contact mechanism	Quick-make/quick-break wiping action	Slow-make/slow-break butt contact
Contact material	Movable—Bronze silver-plated Stationary—Brass silver-plated	Movable—Silver cadmium oxide Stationary—Silver cadmium oxide

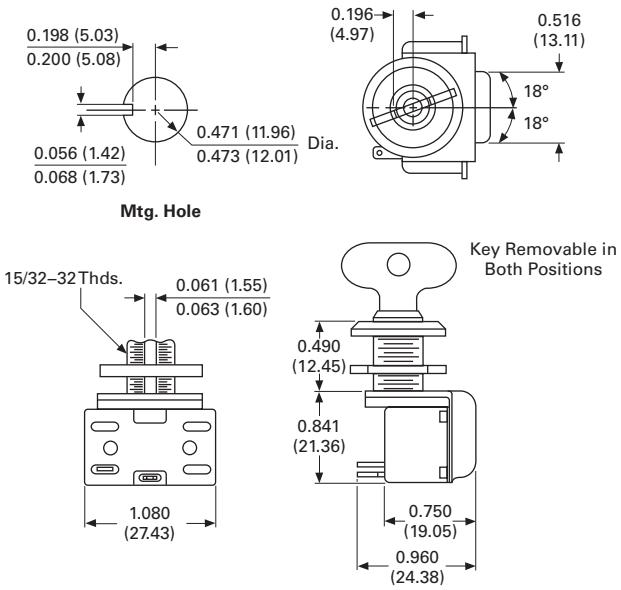
Rotary Keylock Brackets

Description	Specification
Bushing	7/8 in dia., 24 threads/inch
Mounting hardware and keys	
1 hexagon locknut	Cat. No. 15-2528-2
1 bright chrome plated dress nut	Cat. No. 15-2528-2 (furnished unassembled)
2 keys	Cat. No. 13-8171
Finish	
Lock bushing	Diecast zinc
Lock barrel and dress nut	Chrome plated brass
Keys	Brass

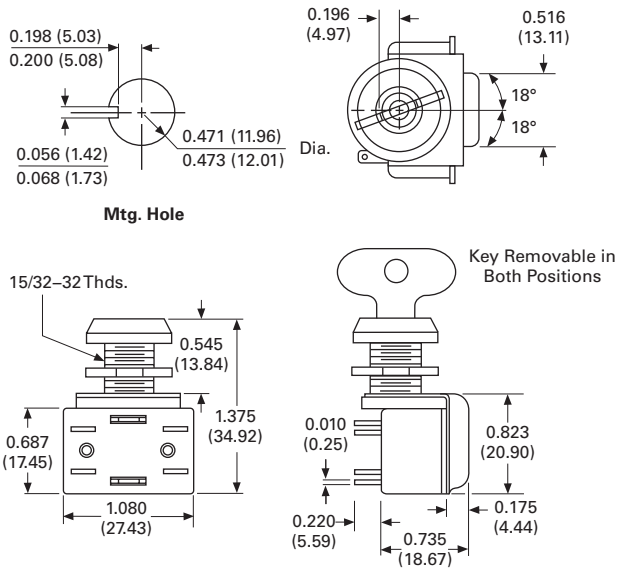
Dimensions

Approximate Dimensions in Inches (mm)

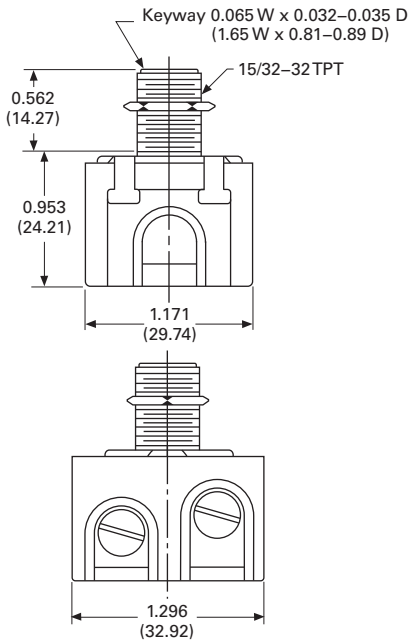
8928K493—1PST/1PDT



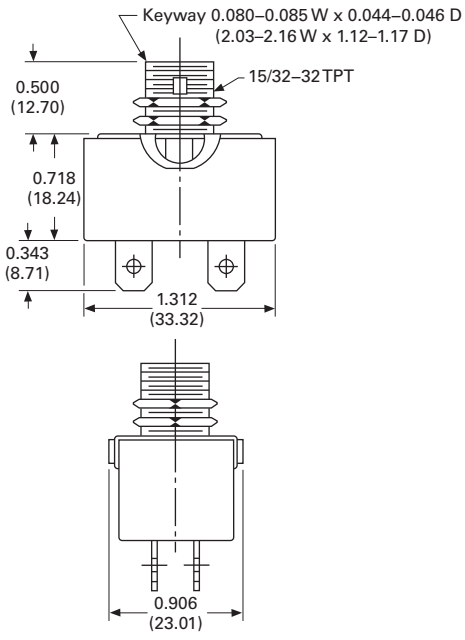
8373K151—2PST/2PDT



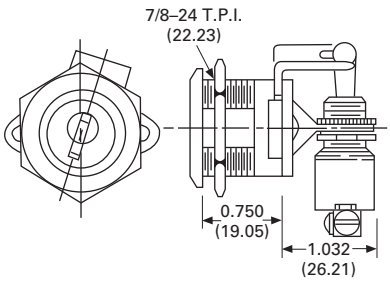
7842K2—2PST



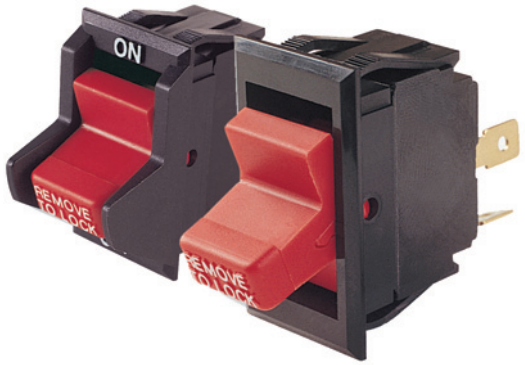
7846K1—2PST



8980P27



Locking Rockers



Contents

Product Description

This unique switch features a patented internal locking mechanism, which allows the switch to be locked in the OFF position to prevent unauthorized or accidental operation. The key to locking or unlocking the switch is a removable paddle rocker cap, which must be inserted in order to move the switch to the ON position. The switch can still be turned OFF.

The locking rocker is ideally suited for such markets as portable tools, computers, lawn and garden equipment, marine and construction.

Standards and Certifications

- UL Recognized
- CSA Certified
- RoHS Compliant ①

Note: Contact your local Eaton Sales Representative for selection information and optional features.

Product Selection

Locking Rocker Switch

Rating ②	Poles and Throw	Circuit with Rocker in … UP Position	CENTER Position	DOWN Position	Base Circuit (See Page V11-T5-13)	Catalog Number
Without Palm Guard Feature						
20A, 125 Vac 20A, 250 Vac 1 hp, 125 Vac 2 hp, 250 Vac	1PST	ON	NONE	OFF	A	**8166K27**
	1PDT	ON	NONE	ON	B	**8166K28**
	2PST	ON	NONE	OFF	C	**8166K25**
	2PDT	ON	NONE	ON	D	**8166K26**
With Palm Guard Feature						
20A, 125 Vac 20A, 250 Vac 1 hp, 125 Vac 2 hp, 250 Vac	1PST	ON	NONE	OFF	A	**8166K23**
	1PDT	ON	NONE	ON	B	**8166K24**
	2PST	ON	NONE	OFF	C	**8166K21**
	2PDT	ON	NONE	ON	D	**8166K22**

Notes

① Visit www.eaton.com/vcbu for the most up-to-date list of verified part numbers.

② Ratings listed for 125 Vac also apply at 28 Vdc. Also supplied with a 20A, 277 Vac rating as standard.

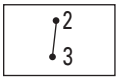
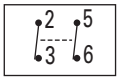
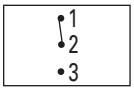
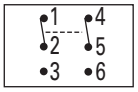
Technical Data and Specifications

Locking Rocker Switch

Description	Specification
Contact mechanism	Butt action contact mechanism designed specifically for use on AC and low voltage DC applications
Contact material	Movable—Silver-plated copper w/cad-oxide contact face button Stationary—Copper w/cad-oxide contact face button
Terminal types	0.25 in spade terminals are standard
Rocker material	Custom styled, red thermoplastic rocker key with "REMOVE TO LOCK" across the top of the key in raised letters
Dielectric	1000V rms minimum

Circuit Diagrams

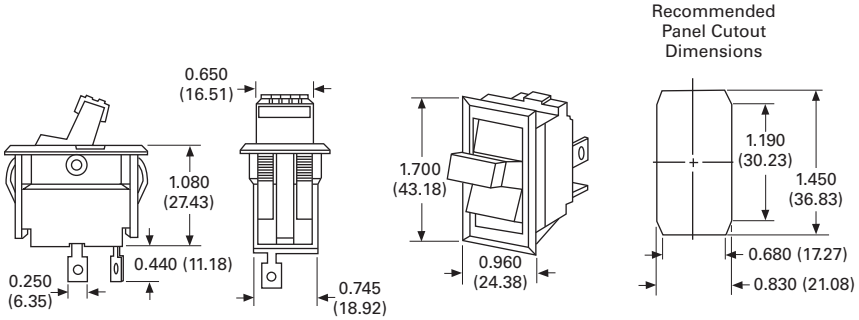
Locking Rocker Circuit Diagrams

Circuit Letter	Schematic	Circuit Letter	Schematic
A 1PST		**C** 2PST	
B 1PDT		**D** 2PDT	

Dimensions

Approximate Dimensions in Inches (mm)

Locking Rocker Switch without Palm Guard



Locking Rocker Switch with Palm Guard