# **Series SW**

### **GENERAL SPECIFICATIONS FOR SW3000s**

#### **Electrical Capacity (Resistive & Inductive Load)**

Power Level: Shown in the following tables

#### Other Rating

Contact Resistance:	10 milliohms maximum
Insulation Resistance:	1,000 megohms minimum @ 500V DC
<b>Dielectric Strength:</b>	2,000V AC minimum for 1 minute minimum
<b>Mechanical Life:</b>	30,000 operations minimum
Electrical Life:	10,000 operations minimum
<b>Angle of Throw (α):</b>	Shown on drawings or following tables

#### **Materials & Finishes**

Rocker:	Urea resin; all rockers are white.
Mounting Frame:	Steel with chromate plating over zinc plating
Case Cover/Insulator:	Phenolic resin
Case:	Melamine phenol
Movable Contactor Plate:	Copper with silver plating
Novable & Stationary Contacts:	Silver alloy plus copper with silver plating
Terminals:	Copper with tin plating

#### **Environmental Data**

Operating Temperature Range:	–10°C through +70°C (+14°F through +158°F)
Sealing:	Dustproof cover of silicone rubber on SW3006A, SW3007A, & SW3008A
Humidity:	90 ~ 95% humidity for 96 hours @ 40°C (104°F)
Vibration:	10 ~ 55Hz with peak-to-peak amplitude of 1.5mm traversing the frequency range & returning in 1 minute; 3 right angled directions for 2 hours
Shock:	50G (490m/s <sup>2</sup> ) acceleration (tested in 6 right angled directions, with 5 shocks in each direction)

#### Installation

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 Maximum Panel Thickness:
 Shown with following drawings

 Soldering Time & Temperature:
 Manual Soldering:
 See Profile A in Supplement section.

#### **Standards & Certifications**

UL:

### File No. E44145 - Recognized only when ordered with marking on switch. Add "/U" or "/CUL" to end of part number to order UL recognized switch. UL or cULus recognition designated beside part numbers on following pages. See Supplement section to find UL or cULus rating details.

### **CSA:** File No. 023535\_0\_000 - Certified only when ordered with marking on switch. Add "/C" to end of part number to order CSA certified switch. CSA certification designated beside part numbers on following pages.

See Supplement section to find CSA rating details.



Keylocks Programmable Illuminated PB Pushbuttons

Rotaries

Slides

Tactiles

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Touch

Supplement Accessories Indicators

# **Medium Capacity Rockers**

#### SINGLE POLE WITH SOLDER LUG \* UL & CSA recognized only when **Electrical Capacity** ordered with marking on switch **Rocker Position/Connected Terminals** (see General Specs) Resistive Inductive \* Approvals Center Down Up В α= AC 125V PF 0.6 Angle AC 125V DC 30V AC 250V *LR*。 Ð Model Pole of Throw SW3001A SPST ON NONE OFF 1-3 15A 15A 10A 24° 1 $\checkmark$ \_ 6A SW3002A 1 1 SPDT ON 2-3 NONE ON 2-1 15A 6A 15A 10A 24° SW3003A SPDT ON 2-3 OFF ON 2-1 / 10A 28° 1 15A 6A 15A 2 (COM) Throw & SPST SPDT Terminal numbers are Note: INTERNAL CONNECTION Schematics: actually on the switch. 3 • 1 (2.4) Dia Typ .094 M3 x ( (9.7) (0.8) Typ .031 (3.5) Dia Typ .138



(27.0)





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> (3.5) Dia Typ .138

> > (28.0) 1.102



Maximum Effective Panel Thickness:

SW3001A does not have terminal 2. .197" (5.0mm) for SW3001A & SW3002A models; .177" (4.5mm) for SW3003A models SW3001A

# DOUBLE POLE WITH SOLDER LUG

* UL, cULus & only when orde on switch (see	red wi	th mar	king	Rock	ker Positi	on/Connecte	d Terminals	( ) = Mc		-					
* Approvals			Down			Center	Up				Inductive	α =			
Model	<i>L</i> ₽。	c <b>AL</b> us	s (\$P	Pole	Ļ						AC 125V	AC 250V	DC 30V	AC 125V PF 0.6	Angle of Throw
SW3006A		$\checkmark$	$\checkmark$	DPDT	ON	2-3 5-6	NONE	ON	2-1	5-4	20A	10A	20A	10A	24°
SW3007A			$\checkmark$	DPDT	ON	2-3 5-6	OFF	ON	2-1	5-4	15A	6A	15A	10A	28°
SW3008A	-			DPDT	(ON)	2-3 5-6	OFF	(ON)	2-1	5-4	15A	6A	15A	10A	24°
Throw &					DPDT	2	2 (COM) 5	•					Note: Te	erminal numb	ers are =

• 4

Throw & Schematic:



(27.0) 1.063







actually on the switch.

Maximum Effective Panel Thickness:

.197" (5.0mm) for SW3006A & SW3008A models; .177" (4.5mm) for SW3007A models





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B121

# Series SW

Toggles

Rockers

Rotaries

Tilt Tactiles

Touch

Indicators

Accessories

Supplement

# **Series SW**

## **GENERAL SPECIFICATIONS FOR SW3800s**

Rockers B	Electrical Capacity (Resistive & In Power Level:	<b>rductive Load)</b> Shown in the following tables Note: See Supplement section for details of design for inductive DC loads.
able Illuminated PB Pushbuttons	Other Ratings Contact Resistance: Insulation Resistance: Dielectric Strength: Mechanical Life: Electrical Life: Angle of Throw: Nominal Operating Force:	10 milliohms maximum 1,000 megohms minimum @ 500V DC 2,000V AC minimum for 1 minute minimum 50,000 operations minimum 25,000 operations minimum Shown on following drawings 1,800 grams for SW3822 2,200 grams for SW3823 Off to On 800 grams for SW3823 On to Off
Keylocks Programmable	Materials & Finishes Rocker: Mounting Frame: Case Cover/Insulator: Case: Movable Contacts: Stationary Contacts: Terminals:	Urea resin; all rockers are white. Steel with chromate plating over zinc plating Phenolic resin Melamine phenol Copper with silver plating Silver alloy plus copper with silver plating Brass (terminal screws of brass with nickel plating)
Slides Rotaries	Environmental Data Operating Temperature Range: Humidity: Vibration: Shock:	<ul> <li>-10°C through +70°C (+14°F through +158°F)</li> <li>90 ~ 95% humidity for 96 hours @ 40°C (104°F)</li> <li>10 ~ 55Hz with peak-to-peak amplitude of 1.5mm traversing the frequency range &amp; returning in 1 minute; 3 right angled directions for 2 hours</li> <li>50G (490m/s<sup>2</sup>) acceleration (tested in 6 right angled directions, with 5 shocks in each direction)</li> </ul>
Tilt Tactiles	Standards & Certifications UL:	File No. E44145 - Recognized only when ordered with marking on switch. Add "/U" or "/CUL" to end of part number to order UL recognized switch. UL or cULus recognition designated beside part numbers on following pages. See Supplement section to find UL or cULus rating details.
Touch	CSA:	File No. 023535_0_000 - Certified only when ordered with marking on switch. Add "/C" to end of part number to order CSA certified switch. CSA certification designated beside part numbers on following pages. See Supplement section to find CSA rating details.
Indicators	Wirin	g for SW3821D with Electrical Capacity of DC400V 10A
Supplement Accessories	Connection - External Connection -	$\begin{array}{c} 2\\ 3\\ 3\\ \hline \\ $



# Series SW

Toggles

Rockers

Keylocks Programmable Illuminated PB Pushbuttons

Rotaries

Slides

**Factiles** 

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Touch

Indicators

Supplement Accessories

							DC	OUBLE	PO	LE V	NITI	H SC	REW	LUC	3								
					Rocke	r Posi	tion/C	Connected	Termi	nals					Eİ	ectrical	Capac	ity					
	*Approvals				Down			Center		Up			Resistive Inductive										
Model	R	د <b>جلا</b> ً us	<b>(P</b>	Pole				-				AC 125V	AC 250V	DC 30V	DC 48V	DC 125V	DC 250V	DC 400V	AC 125V PF 0.6	AC 250V PF 0.6	В		
SW3821	~	$\checkmark$	$\checkmark$	DPST	ON	2-3	5-6	NONE	OFF	-	_	30A	30A	30A	-	1A	-	-	30A	15A			
SW3822	1	$\checkmark$	$\checkmark$	DPDT	ON	2-3	5-6	NONE	ON	2-1	5-4	30A	30A	30A	-	1A	-	-	30A	15A			
SW3823	1	$\checkmark$	$\checkmark$	DPDT	ON	2-3	5-6	OFF	ON	2-1	5-4	30A	30A	30A	-	1A	-	-	30A	15A			
SW3821D	1	1	$\checkmark$	DPST	ON	2-3	5-6	NONE	OFF	-	_	-	_	30A	30A	20A	15A	4A (10A)	-	_			
SW3822D	1	$\checkmark$	$\checkmark$	DPDT	ON	2-3	5-6	NONE	ON	2-1	5-4	_	-	30A	30A	20A	15A	4A	-	-			
SW3823D	1	$\checkmark$	$\checkmark$	DPDT	ON	2-3	5-6	OFF	ON	2-1	5-4	_	-	30A	30A	15A	-	-	—	_	_		
Throw & Schematic	s:		DI	PST 3		2 (CO)	M) .	5.9		DPDT	3 ●	<b>7</b> <sup>2</sup>	(COM) 1 6	5 •	• 4		Note:	Terminal r actually o					

\* UL/CUL & CSA for the following ratings: UL/CUL: 30A @ 30V DC, 15A @ 125V DC; CSA: 30A @ 30V DC, 15A @ 125V DC

\* UL, cULus & CSA recognized only when ordered with marking on switch (see General Specs)

( ) capacity is due to series wiring, see General Specifications page.



SW3821 & SW3821D do not have terminals 1 & 4.







Maximum Effective Panel Thickness .177" (4.5mm). Panel cutout shown below.

SW3822

### THREE POLE WITH SCREW LUG

					F	locke	r Posi	tion/C	Connected	Termir	nals	Electrical Capacity							
*Approvals				Down					Center	Up				Resi	Inductive				
Model	IR.	c <b>W</b> us	<b>SP</b>	Pole		Ţ								AC 125V	AC 250V	DC 30V	DC 125V	AC 125V PF 0.6	AC 250V PF 0.6
SW3831	/	$\checkmark$	<	3PST	ON	2-3	5-6	8-9	NONE	OFF		_		30A	30A	30A	1A	30A	15A
SW3832	~	$\checkmark$	$\checkmark$	3PDT	ON	2-3	5-6	8-9	NONE	ON	2-1	5-4	8-7	30A	30A	30A	1A	30A	15A
SW3833	~	$\checkmark$	$\checkmark$	3PDT	ON	2-3	5-6	8-9	OFF	ON	2-1	5-4	8-7	30A	30A	30A	1A	30A	15A
SW3831D	~	$\checkmark$	$\checkmark$	3PST	ON	2-3	5-6	8-9	NONE	OFF		_		-	-	30A	15A	-	_
SW3832D	~	$\checkmark$	$\checkmark$	3PDT	ON	2-3	5-6	8-9	NONE	ON	2-1	5-4	8-7	_	_	30A	15A	_	_
SW3833D	~	$\checkmark$	$\checkmark$	3PDT	ON	2-3	5-6	8-9	OFF	ON	2-1	5-4	8-7	_	-	30A	15A	-	_
Throw & Schematics	:	3PST		• <sup>2</sup>	6 •⁄	5 (COM) 8				3PDT 2 5					• 7	Note: Terminal numbers are actually on the switch.			

\* UL/CUL & CSA for the following ratings: UL/CUL: 30A @ 30V DC, 15A @ 125V DC; CSA: 30A @ 30V DC, 15A @ 125V DC \* UL, cULus & CSA recognized only when ordered with marking on switch (see General Specs)

(3.5) Dia Typ 138 (14.5) Typ .571 (13.2) .520 + + (1.0) M3 x 6 M4.5 x 6 Ŕ Ì (37.0) 1.457 (42.0) 1.654 (46.0) (46.0) (36.0) (12.0) .472 (56.0) 2.205 (\*) 0 ÷ | (43.0) 1.693 (22.0) (44.5) (23.0) SW3831 & SW3831D do not have terminals 1, 4 & 7. Maximum Effective Panel Thickness .177" (4.5mm)

