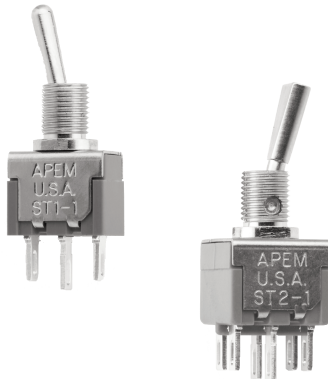


ST series

Miniature toggle switches

Distinctive features and specifications



- Dry circuit through power ratings.
- Ultra-rugged construction SPDT & DPDT models with numerous options.
- PC and panel mount models.

ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load :
 - gold over nickel plated brass contacts : 0.4VA - 20V Max.
 - coin silver contacts: 6A 125VAC, 3A 250VAC, 7A 30VDC
- Initial contact resistance: 3 milliohms max. at 3VDC, 0.1 Amp.
- Insulation resistance: 2,000 M Ω min. between terminals & case ground.
- Dielectric strength: 2,000 VAC for 1 minute between terminals & case ground.
- Electrical life: 100,000 cycles at full load for ST1-1 and ST2-1, all other models 40,000 cycles

MATERIALS

- Case : Diallylphthalate (DAP), color blue
- Actuator : Brass, bright nickel or chrome plated.
- Bushing: nickel plated brass
- Strap: stainless steel
- Contacts
 - B: Gold
 - Q: Coin silver
 - G: Gold over silver
- Terminal seal: epoxy

GENERAL SPECIFICATIONS

- Operating temperature : -30°C to +85°C

AGENCY APPROVAL



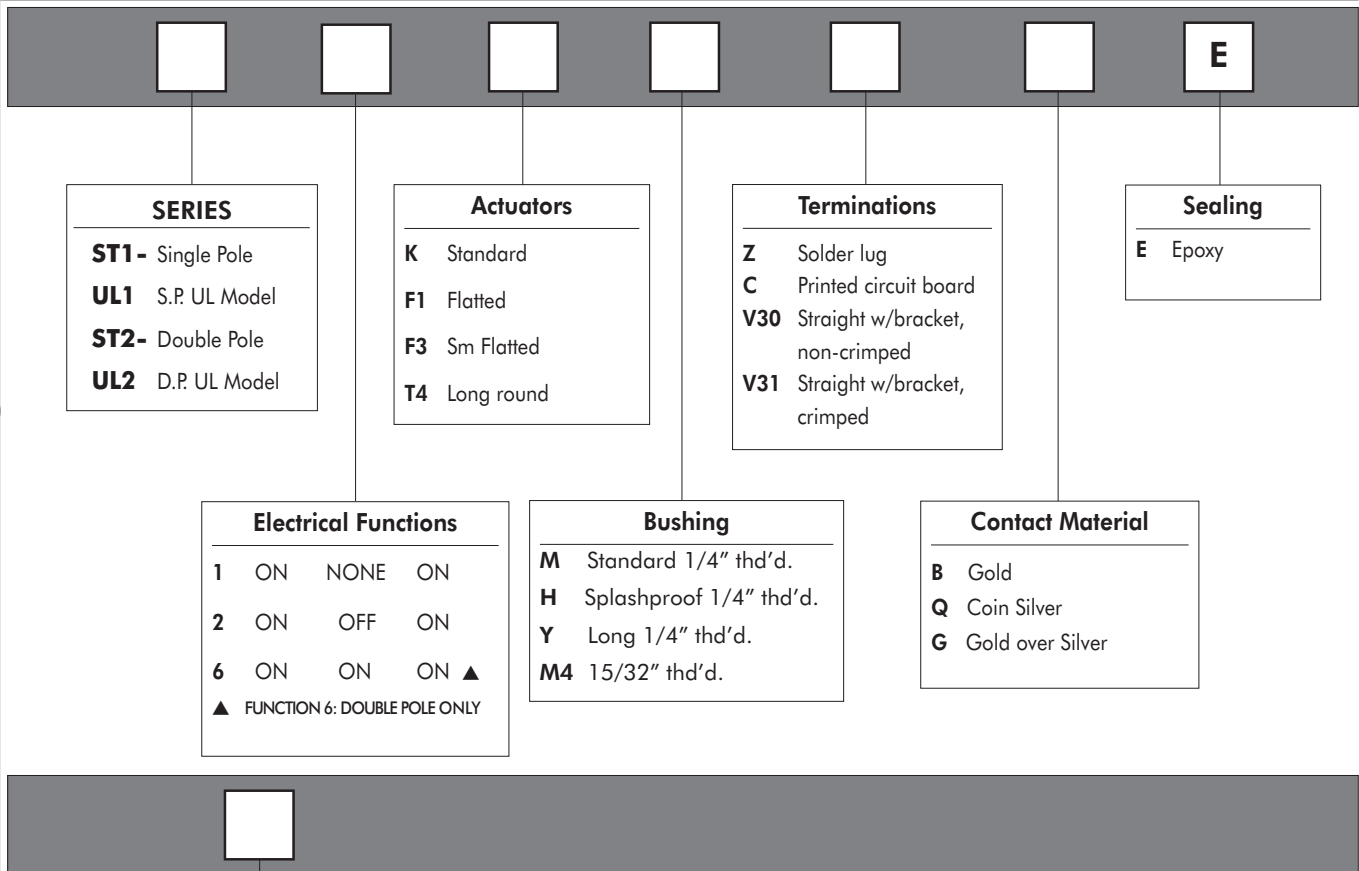
Availability: All models with coin silver contacts (Q) only.

Marking: To order switches marked UL use "UL" prefix for series designation. For CSA marking, complete appropriate box on ordering format.

ST series

Miniature toggle switches

Overview



Agency approval

No approval

/CSA **CSA Approval**
(Q contact material only)

Note: for UL, Select UL1 or UL2 series above

ABOUT THIS SERIES

On the following pages, you will find successively :

- model structure of switches
- options in the same order as in above chart

Dimensions : first dimensions are in mm while inches are shown as bracketed numbers.



Sealing boots are available to protect the switches against dust and water. They are presented in section H



Mounting accessories : standard hardware supplied with all models with Ø 6,35 (1/4) threaded bushing : 2 - 5/16" hex nuts , 1 locking ring and 1 lockwasher.
Standard and special hardware available are presented in section I.



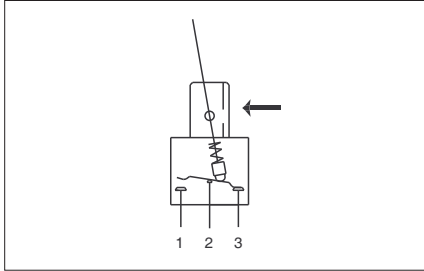
Packaging unit : 25 pieces for double pole
50 pieces for single pole



NOTICE : please note that not all combinations of above numbers are available. Refer to the following pages for further information.

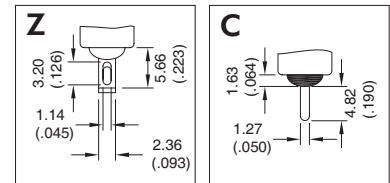
ST series

Miniature toggle switches



Terminations:

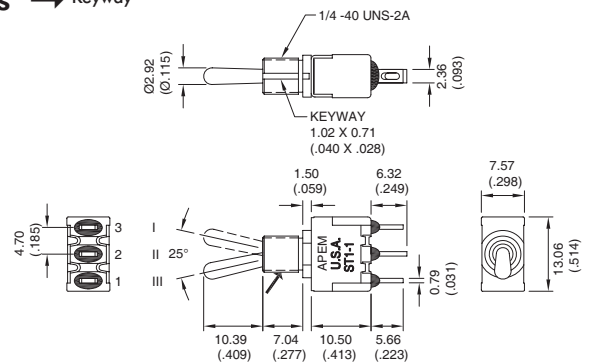
- Solder lug or straight PC terminals
- Epoxy sealed terminals standard



Single pole panel mount with solder lug terminals → Keyway



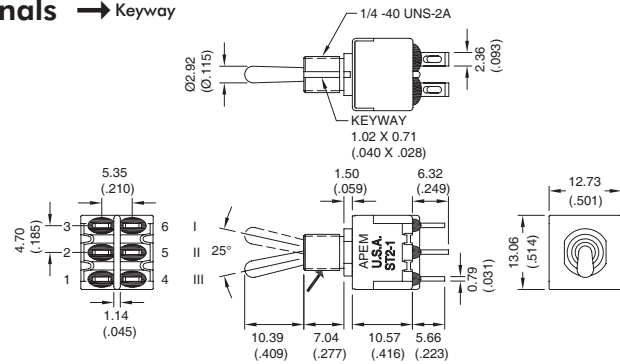
MODEL NO.	UL NO.	I	II	III
ST1-1KMZQE	UL11KMZQE	ON	-	ON
ST1-2KMZQE	UL12KMZQE	ON	OFF	ON



Double pole panel mount with solder lug terminals → Keyway



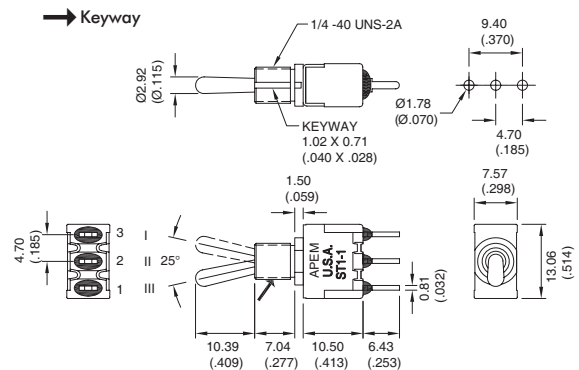
MODEL NO.	UL NO.	I	II	III
ST2-1KMZQE	UL21KMZQE	ON	-	ON
ST2-2KMZQE	UL22KMZQE	ON	OFF	ON
ST2-6KMZQE	UL26KMZQE	ON	ON	ON



Single pole straight PC terminals



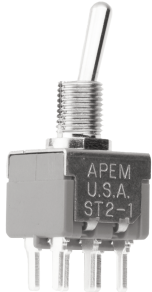
MODEL NO.	UL NO.	I	II	III
ST1-1KMCBE	UL11KMCQE	ON	-	ON
ST1-2KMCBE	UL12KMCQE	ON	OFF	ON



ST series

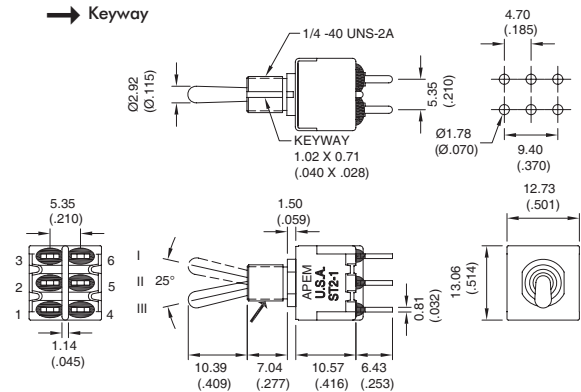
Miniature toggle switches

Double pole straight PC terminals



MODEL NO.	UL NO.	I	II	III
		1-2	1-2	2-3
		4-5	5-6	5-6
ST2-1KMCBE	UL21KMCQE	ON	-	ON
ST2-2KMCBE	UL22KMCQE	ON	OFF	ON
ST2-6KMCBE	UL26KMCQE	ON	ON	ON

→ Keyway

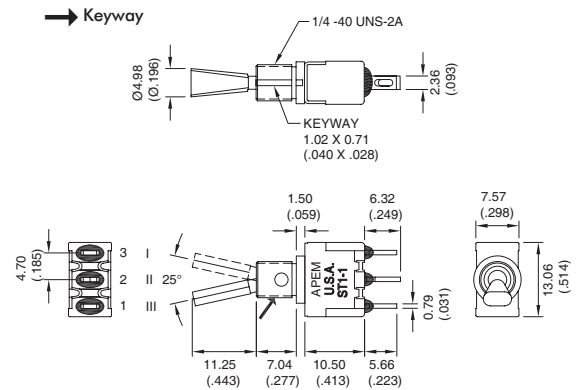


Single pole panel mount flatted actuator

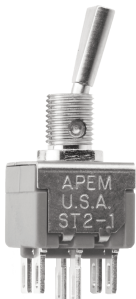


MODEL NO.	UL NO.	I	II	III
		1-2	1-2	2-3
ST1-1F1MZQE	UL11F1MZQE	ON	-	ON
ST1-2F1MZQE	UL12F1MZQE	ON	OFF	ON

→ Keyway

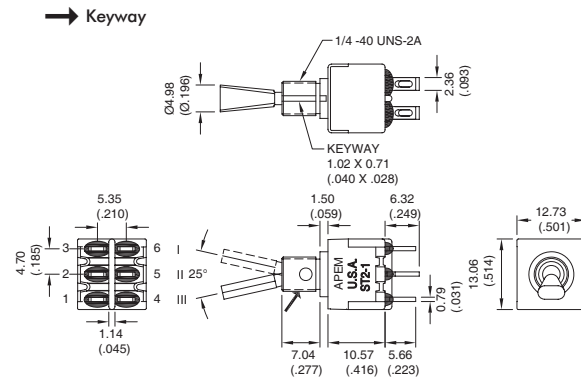


Double pole panel mount flatted actuator



MODEL NO.	UL NO.	I	II	III
		1-2	1-2	2-3
		4-5	5-6	5-6
ST2-1F1MZQE	UL21F1MZQE	ON	-	ON
ST2-2F1MZQE	UL22F1MZQE	ON	OFF	ON
ST2-6F1MZQE	UL26F1MZQE	ON	ON	ON

→ Keyway

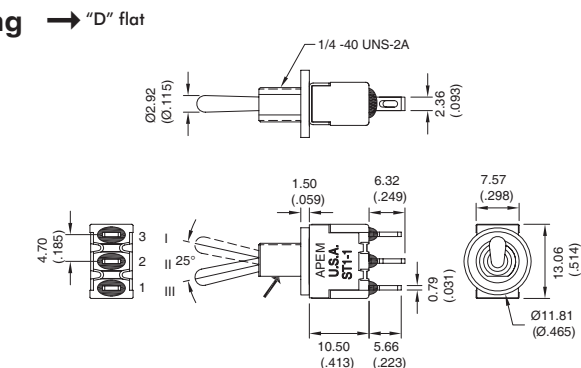


Single pole panel mount with splashproof bushing → "D" flat



MODEL NO.	UL NO.	I	II	III
		1-2		2-3
ST1-1KHZQE	UL11KHZQE	ON	-	ON
ST1-2KHZQE	UL12KHZQE	ON	OFF	ON

→ "D" flat



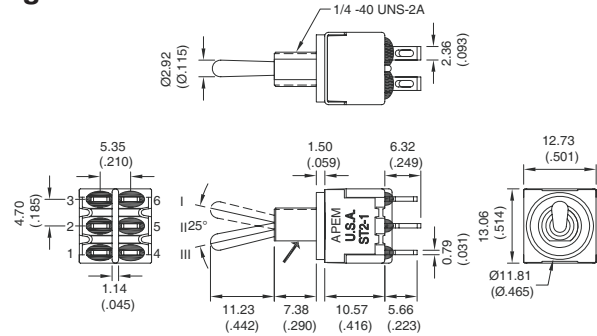
ST series

Miniature toggle switches

Double pole panel mount with splashproof bushing → "D" flat

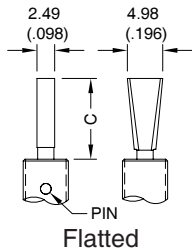


MODEL NO.	UL NO.	I	II	III
ST2-1KHZQE	UL21KHZQE	1-2	1-2	2-3
ST2-2KHZQE	UL22KHZQE	4-5	5-6	5-6
ST2-6KHZQE	UL26KHZQE	ON	-	ON
		ON	OFF	ON
		ON	ON	ON

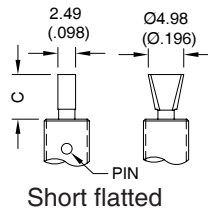


Actuator

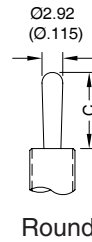
F1



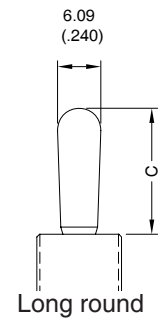
F3



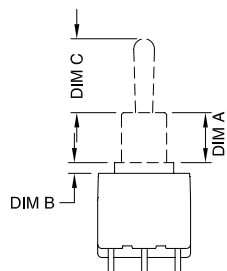
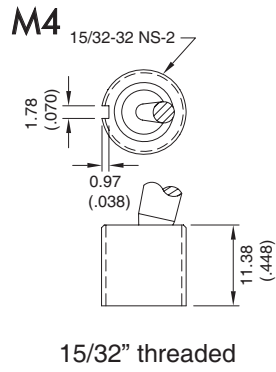
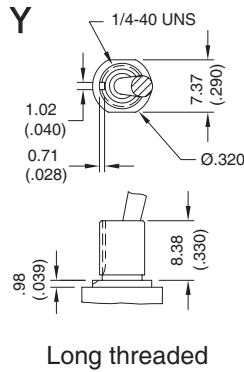
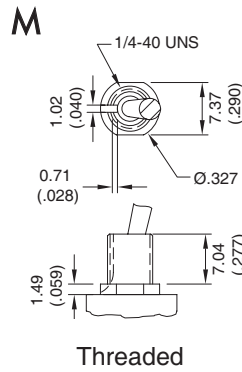
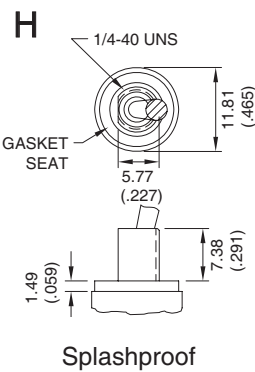
K



T4



Bushing options

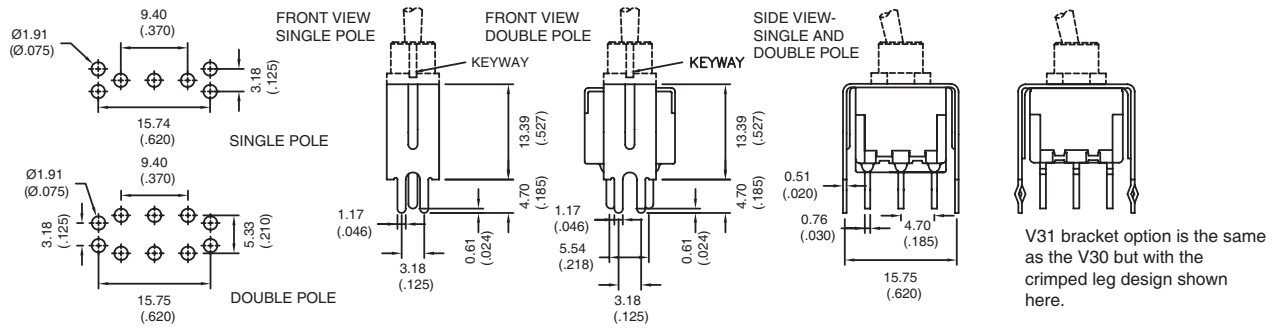


Bushing Option	Bushing Dims.		Actuator length Dim C			
	Dim A	Dim B	F1	F3	K	T4
H	7.37 (.290)	1.52 (.060)	N/A	N/A	10.41 (.410)	N/A
M	7.04 (.277)	1.52 (.060)	11.43 (.450)	6.35 (.250)	10.41 (.410)	N/A
Y	8.38 (.330)	1.02 (.040)	N/A	N/A	10.41 (.410)	N/A
M4	11.38 (.448)	-	N/A	N/A	N/A	17.45 (.687)

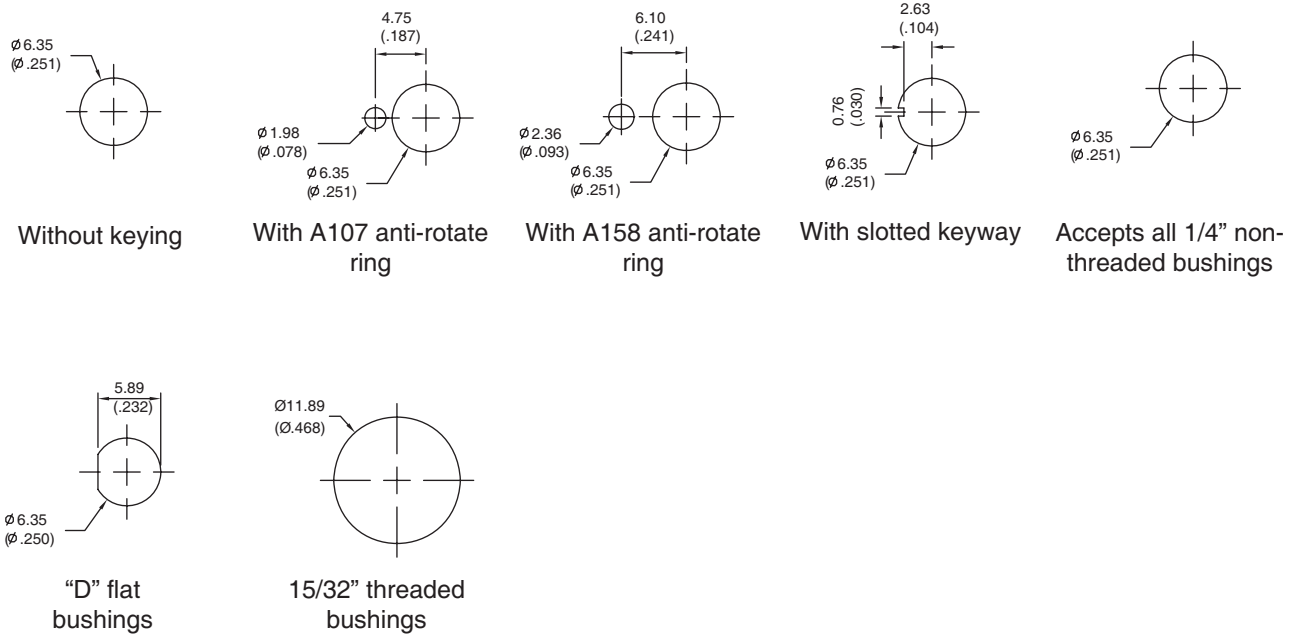
ST series

Miniature toggle switches

V30 bracket option

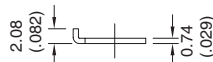
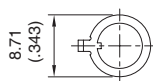


Panel cut-outs

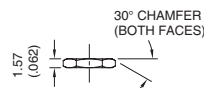
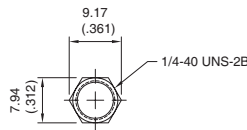


Hardware

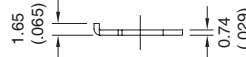
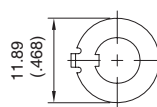
Anti-rotate ring A107
Nickel plated brass



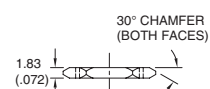
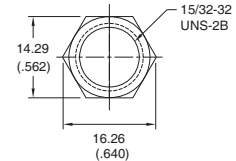
5/16" Hex nut A112
Nickel plated brass 1/4-40



Anti-rotate ring A158
Nickel plated brass



9/16" Hex nut A465
Nickel plated brass 15/32-32



ST series

Miniature toggle switches

Contact material specs.

- B** Dry circuit - gold over nickel over brass.
RATING: 0.4 Volt-Amps (VA) max. at 20 V max.
ELECTRIC LIFE: 100,000 cycles min. (ST1-1 & ST2-1 only - other models 40,000 cycles min.)
- Q** Power circuit - coin silver.
RATING: 6 Amps at 125 VAC, 3 Amps at 250 VAC or 7 Amps at 30 VDC (resistive loads).
ELECTRIC LIFE: 100,000 cycles min. (ST1-1 & ST2-1 only - other models 40,000 cycles min.)
- G** Dry circuit or power circuit - gold over nickel over coin silver.
RATINGS & ELECTRIC LIFE: Same as B & Q above - i.e. - can be used in either dry circuit or power circuit, however once used in power circuit, switch cannot be re-used in dry circuit. This option satisfies those customers who have both dry circuit and power circuit requirements, but prefer to inventory only one switch for both.

UL & CSA options



- UL** For power circuits - coin silver
RATING: 6 Amps at 125 VAC or 3 Amps at 250 VAC (75% power factor).
Underwriter Laboratories file no. E66367. Note - applicable only to terminations with coin silver contacts (Q option).
- CSA** For power circuits - coin silver
RATING: 6 Amps at 125 VAC or 3 Amps at 250 VAC (75% power factor). Canadian Standards Association file no. LR54592-1. Note - applicable only to terminations with coin silver contacts (Q option) as CSA recognizes switches for power applications only.
Note- Double pole switches with solder lug terminals are not CSA recognized .