

# General Specifications

## CWSA

## Electrical Capacity

Power Level: For Resistive Load 6A @ 250V AC

## Other Ratings

Contact Resistance: 20 milliohms maximum

Insulation Resistance: 500 megohms minimum @ 500V DC

Dielectric Strength:

1,500V AC minimum between contacts for 1 minute minimum

3,000V AC minimum between contacts &amp; case for 1 minute minimum

30,000 operations minimum

Mechanical Life: 10,000 operations minimum with Resistive Load &amp; 6,000 operations with Inductive Load

Nominal Operating Force: 2.50N

Angle of Throw: 30°

Operating Temperature Range: -10°C ~ +70°C (+14°F ~ +158°F)

## Materials &amp; Finishes

Rocker: Polycarbonate

Stationary Contacts: Silver alloy

Housing: Polyamide

Base: Laminated thermosetting sheets

Movable Contactor: Brass w/silver alloy plating

Contact Terminals: Copper with silver plating

Movable Contacts: Silver

Common Terminals: Brass with silver plating

## CWSB

## Electrical Capacity

Power Level: For Resistive Load 6A @ 250V AC

## Other Ratings

Contact Resistance: 20 milliohms maximum

Insulation Resistance: 500 megohms minimum @ 500V DC

Dielectric Strength:

1,500V AC minimum between contacts for 1 minute minimum

3,000V AC minimum between contacts &amp; case for 1 minute minimum

30,000 operations minimum

Mechanical Life: 10,000 operations minimum with Resistive Load &amp; 6,000 operations with Inductive Load

Nominal Operating Force: 6.50N for single pole models; 10.0N for double pole models

Angle of Throw: 30°

Operating Temperature Range: -10°C ~ +70°C (+14°F ~ +158°F)

## Materials &amp; Finishes

Rocker: Polycarbonate

Stationary Contacts: Silver alloy

Housing: Polyamide

Base: Laminated thermosetting sheets

Movable Contactor: Beryllium copper w/silver alloy plating

Terminals: Brass with silver plating

Movable Contacts: Silver

## CWT

## Electrical Capacity

Power Level: For Resistive Load 6A @ 125V AC; 3A @ 250V AC; 4A @ 30V DC

## Other Ratings

Contact Resistance: 20 milliohms maximum

Insulation Resistance: 1,000 megohms minimum @ 500V DC

Dielectric Strength:

1,000V AC minimum between contacts for 1 minute minimum

1,500V AC minimum between contacts &amp; case for 1 minute minimum

50,000 operations minimum

25,000 operations minimum

Nominal Operating Force: 2.0N

Angle of Throw: 30°

Operating Temperature Range: -25°C ~ +70°C (-13°F ~ +158°F)

## Materials &amp; Finishes

Rocker: Glass fiber reinforced polyamide

Base: LCP (Liquid Crystal Polymer)

Housing: Polyamide

Contact Terminals: Brass + silver with silver plating

Movable Contactor: Phosphor bronze w/silver plating

Common Terminals: Brass with silver plating

Movable Contacts: Silver alloy

# Distinctive Characteristics

## CWSA

Low cost molded rocker.

See-saw contact mechanism

Stable stationary contact construction for high reliability.

Easily installed with snap-in mounting.

Large terminal hole dimensioned .067" x .098" (1.7mm x 2.5mm) simplifies wiring and soldering.

Wave Soldering (PC version): See Profile A in Supplement section.  
Manual Soldering: See Profile A in Supplement section.



## CWSB

Low cost molded rocker.

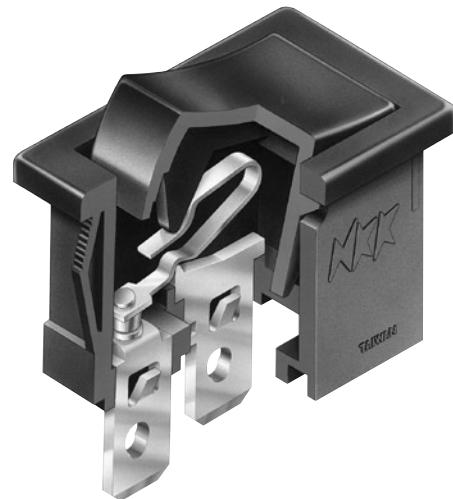
Snap-acting contact mechanism gives smooth actuation and audible feedback.

Stable stationary contact construction for high reliability.

Front panel, snap-in mounting for labor-saving installation.

Solder lug/quick connect terminals can be used with connectors.

Manual Soldering: See Profile B in Supplement section.



## CWT

Low cost molded rocker in compact, slim design.

See-saw contact mechanism

Outstanding insulation resistance and dielectric strength.

Dust proof construction protects contact area.

Stable stationary contact construction for high reliability.

Front panel, snap-in mounting for labor-saving installation.

Terminals are molded in and epoxy sealed to lock out flux, dust, and other contaminants.

Manual Soldering: See Profile A in Supplement section.



### STANDARDS & CERTIFICATIONS

#### CWSA



Specific CWSA models listed below are qualified for Underwriters Laboratories Inc. recognition and Canadian Standards Association certification. cULus marking on case is standard as noted in following table.

<u>Model</u>	<u>Ratings @ AC</u>	<u>cULus File No.</u>	<u>Marking on Case</u>
CWSA11	6A @ 250V	E44145	Standard
CWSA12	6A @ 250V	E44145	Standard

#### CWSB



Specific CWSB models listed below are qualified for Underwriters Laboratories Inc. recognition and Canadian Standards Association certification. cULus marking on case is standard as noted in following table.

<u>Model</u>	<u>Ratings @ AC</u>	<u>cULus File No.</u>	<u>Marking on Case</u>
CWSB11	6A @ 250V	E44145	Standard
CWSB21	6A @ 250V	E44145	Standard

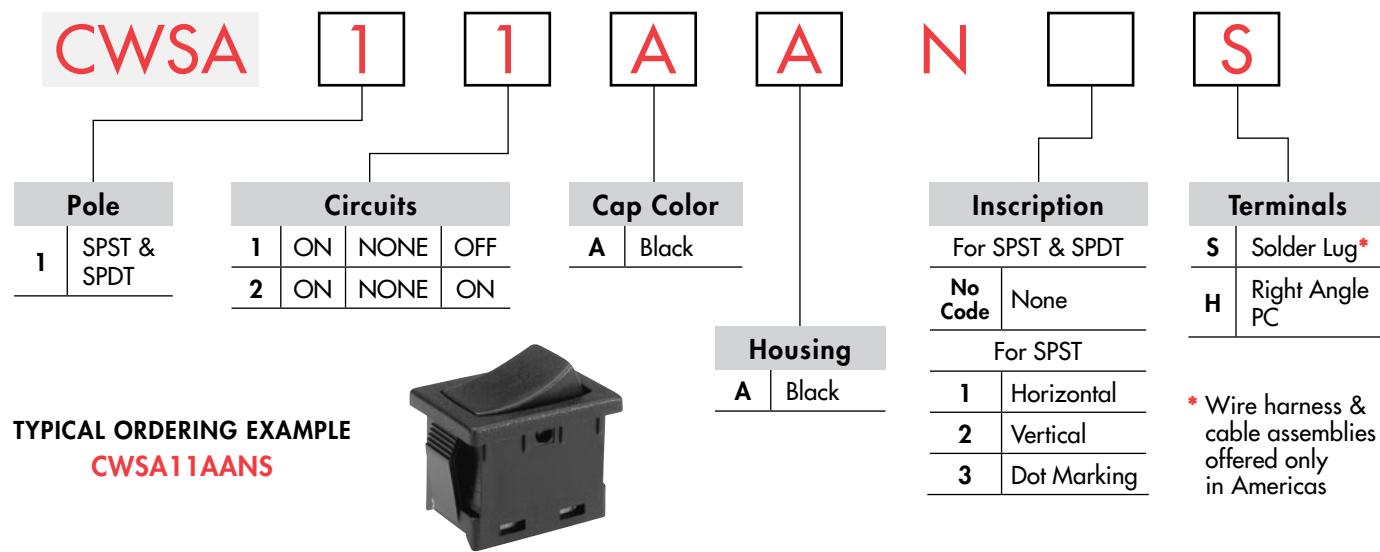
#### CWT



Specific CWT model listed below is qualified for Underwriters Laboratories Inc. recognition and Canadian Standards Association certification. cULus marking on case is standard as noted in following table.

<u>Model</u>	<u>Ratings @ AC</u>	<u>cULus File No.</u>	<u>Marking on Case</u>
CWT12	6A @ 125V 3A @ 250V	E44145	Standard

## TYPICAL SWITCH ORDERING EXAMPLES



Toggles

Rockers

Pushbuttons

Illuminated PB

Programmable

Keylocks

Rotaries

Slides

Tactiles

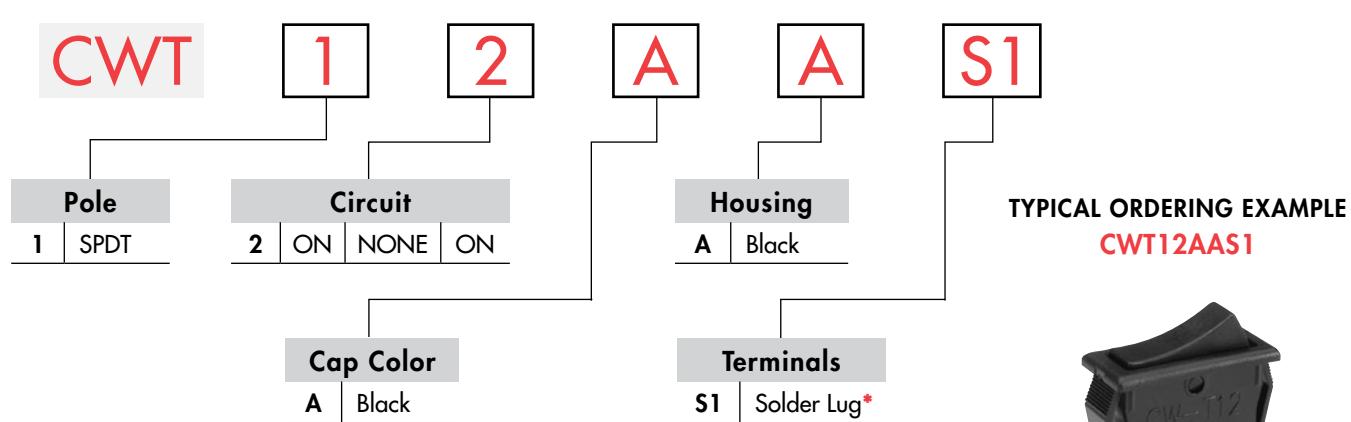
Tilt

Touch

Indicators

Accessories

Supplement



### INSCRIPTIONS

**No Code** **None**

Not available in double pole.



**1** **Horizontal Orientation**

Only On-None-Off models are available with the horizontal inscription.



**2** **Vertical Orientation**

Only On-None-Off models are available with the vertical inscription.



**3** **Dot Marking**

Only Single Pole On-None-Off models are available with the dot inscription.



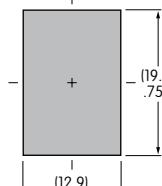
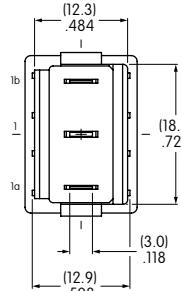
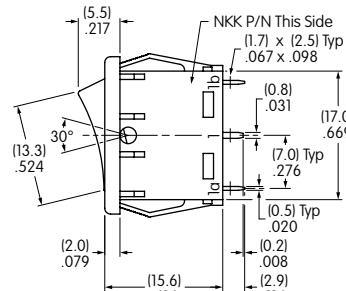
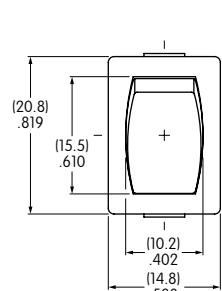
The IEC symbols for On-Off are supplied with Single Throw models only. Orientation of inscription must be selected. Inscription color is white ink on black.

### TYPICAL SWITCH DIMENSIONS FOR CWSA

#### Solder Lug



#### Single Pole • No Inscription



Terminal numbers  
are on side  
of switch body

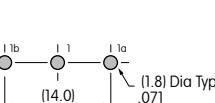
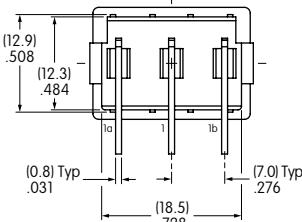
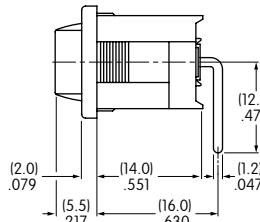
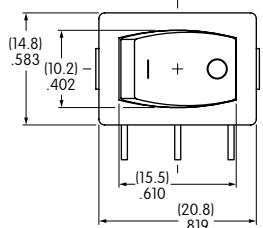
Panel Thickness  
.030" ~ .079"  
(0.75mm ~ 2.0mm)

**CWSA12AANS**

#### Right Angle



#### Single Pole • Horizontal On-Off Inscription



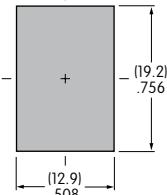
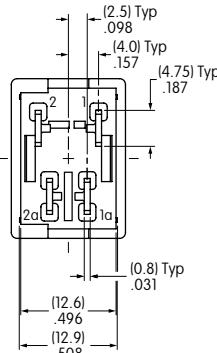
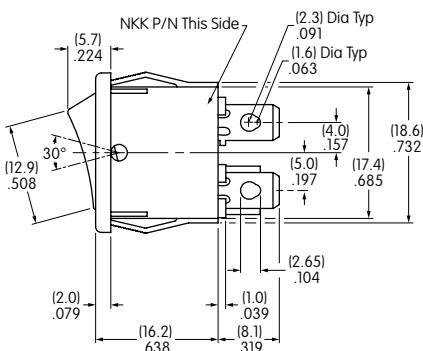
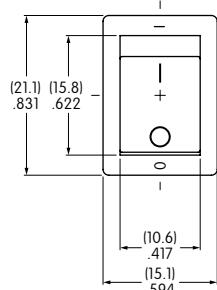
**CWSA11AAN1H**

Single throw model does  
not have terminal 1b

Terminal numbers are  
on side of switch body

## TYPICAL SWITCH DIMENSIONS FOR CWSB

## Double Pole • Vertical On-Off Inscription



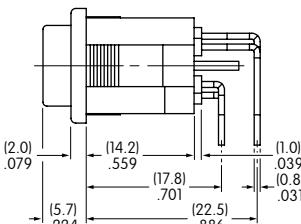
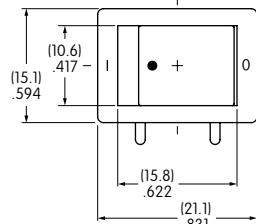
## Quick Connect



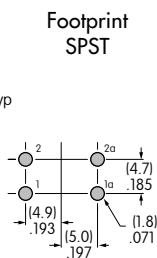
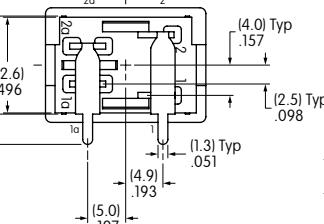
Panel Thickness  
.030" ~ .079"  
(0.75mm ~ 2.0mm)

**CWSB21AA2F**

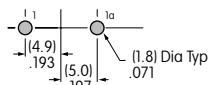
## Single Pole • Dot Inscription



Terminal numbers are  
on bottom of switch



## Right Angle



Footprint  
SPST

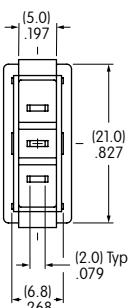
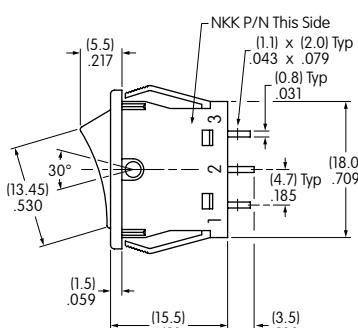
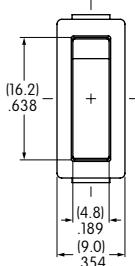


Footprint  
DPST

**CWSB11AA3H**

## TYPICAL SWITCH DIMENSIONS FOR CWT

## Single Pole • No Inscription



Terminal numbers  
are on side  
of switch body

Panel Thickness  
.030" ~ .079"  
(0.75mm ~ 2.0mm)

**CWT12AAS1**



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[CWSB11AA1F](#) [CWSB11AA3F](#) [CWSB11AA2F](#) [CWSB21AA2F](#) [CWSB21CACF](#) [CWSB21AA1F](#) [CWSB21FAFF](#)  
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