Supplement | Accessories

General Specifications

CWSA Electrical Capacity

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

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 & case for 1 minute minimum

Mechanical Life: 30.000 operations minimum

Electrical Life: 10,000 operations minimum with Resistive Load & 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 & Finishes

Rocker: Polycarbonate **Stationary Contacts:** Silver alloy

Polyamide Laminated thermosetting sheets Housing: Base: Brass with silver alloy plating Copper with silver plating **Movable Contactor: Contact Terminals: Movable Contacts:** Silver alloy Brass with silver plating Common Terminals:

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

1,500V AC minimum between contacts for 1 minute minimum Dielectric Strength:

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

Mechanical Life: 30,000 operations minimum

Electrical Life: 10,000 operations minimum with Resistive Load & 6,000 operations with Inductive Load

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

Operating Temperature Range: $-10^{\circ}\text{C} \sim +70^{\circ}\text{C} (+14^{\circ}\text{F} \sim +158^{\circ}\text{F})$ Angle of Throw:

Materials & Finishes

Rocker: Polycarbonate **Stationary Contacts:** Silver alloy

Housing: Polyamide 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 & case for 1 minute minimum

Mechanical Life: 50,000 operations minimum Electrical Life: 25,000 operations minimum

Nominal Operating Force: 2.0N

> Angle of Throw: 30° Operating Temperature Range: $-25^{\circ}\text{C} \sim +70^{\circ}\text{C} (-13^{\circ}\text{F} \sim +158^{\circ}\text{F})$

Materials & Finishes

Rocker: Glass fiber reinforced polyamide 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



Rockers

Keylocks Programmable Illuminated PB Pushbuttons

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.



Supplement Accessories Indicators

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

CWT



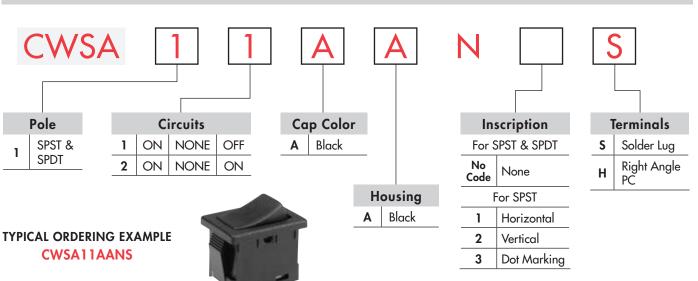
Specific CWT model listed below is qualified for Underwriters Laboratories Inc. recognition and Canadian Standards Association certification. cULus marking on case is standard as noted in following table.

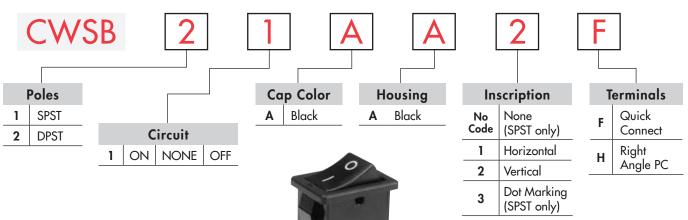
<u>Model</u>	Ratings @ AC	cULus File No.	Marking on Case
CWT12	6A @ 125V	E44145	Standard
	3A @ 250V		

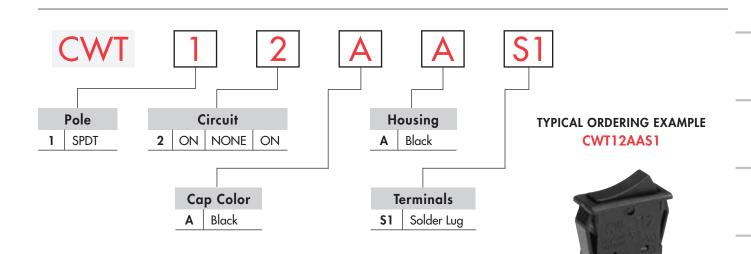


TYPICAL ORDERING EXAMPLE
CWSB21AA2F

TYPICAL SWITCH ORDERING EXAMPLES







Touch

Indicators

Supplement | Accessories

INSCRIPTIONS



None

Not available in double pole.



Horizontal Orientation

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



Vertical Orientation

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



Dot Marking

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









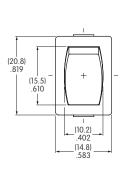
The IEC symbols for On-Off are supplied with Single Throw models only. Orientation of inscription must be selected. Inscription color is white ink on black.

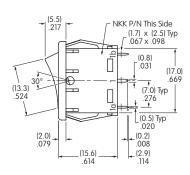
TYPICAL SWITCH DIMENSIONS FOR CWSA

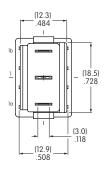
Solder Lug

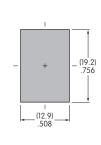
Single Pole • No Inscription











CWSA12AANS

Single throw model does not have terminal 1b

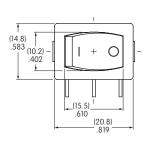
Terminal numbers are on side of switch body

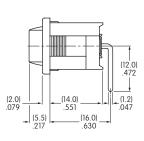
Panel Thickness .030" ~ .079" $(0.75 \text{mm} \sim 2.0 \text{mm})$

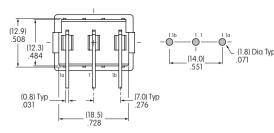
Right Angle

Single Pole • Horizontal On-Off Inscription









CWSA11AAN1H

Single throw model does not have terminal 1b

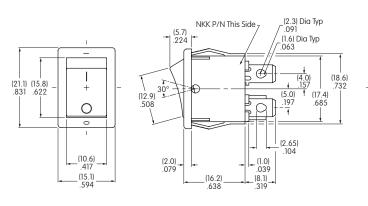
Terminal numbers are on side of switch body

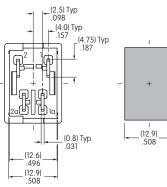


TYPICAL SWITCH DIMENSIONS FOR CWSB

Double Pole • Vertical On-Off Inscription

Quick Connect







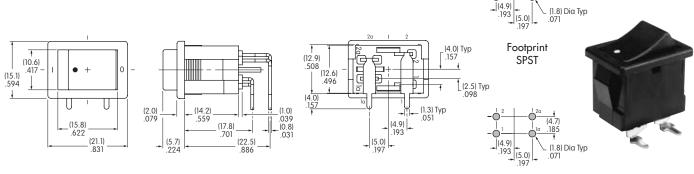
Terminal numbers are on bottom of switch

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

CWSB21AA2F

Single Pole • Dot Inscription





Terminal numbers are on bottom of switch

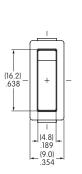
Footprint DPST

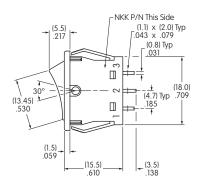
CWSB11AA3H

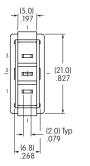
TYPICAL SWITCH DIMENSIONS FOR CWT

Single Pole • No Inscription

Solder Lug











Terminal numbers are on side of switch body

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

CWT12AAS1



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

NKK Switches:

CWSA12AANS CWT12AAS1 CWSA11AAN1S CWSA11AANS CWSA11AAN3S CWSA11AAN2S CWSB11AAF

CWSB11AA1F CWSB11AA3F CWSB11AA2F CWSB21AA2F CWSB21CACF CWSB21AA1F CWSB21DADF

CWSA11AANH CWSA11AAN1H CWSA11AAN2H CWSA12AANH CWSB11AAH CWSB11AA1H CWSB11AA3H

CWSB21AA1H CWT12AAS1/U CWT12AAS1/UC CWSB21AA2H CWSB21AA3F