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 & 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
Housing: Polyamide
Movable Contactor: Brass w/silver alloy plating
Movable Contacts: Silver
Stationary Contacts: Silver alloy
Base: Laminated thermosetting sheets
Contact Terminals: Copper with silver plating
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 & 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
Angle of Throw: 30°
Operating Temperature Range: –10°C ~ +70°C (+14°F ~ +158°F)

Materials & Finishes

Rocker: Polycarbonate
Housing: Polyamide
Movable Contactor: Beryllium copper w/silver alloy plating
Movable Contacts: Silver
Stationary Contacts: Silver alloy
Base: Laminated thermosetting sheets
Terminals: Brass with silver plating

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°C ~ +70°C (–13°F ~ +158°F)

Materials & Finishes

Rocker: Glass fiber reinforced polyamide
Housing: Polyamide
Movable Contactor: Phosphor bronze w/silver plating
Movable Contacts: Silver alloy
Base: LCP (Liquid Crystal Polymer)
Contact Terminals: Brass + silver with silver plating
Common Terminals: Brass with silver plating

Distinctive Characteristics

CWSA



Low cost molded rocker.

See-saw contact mechanism

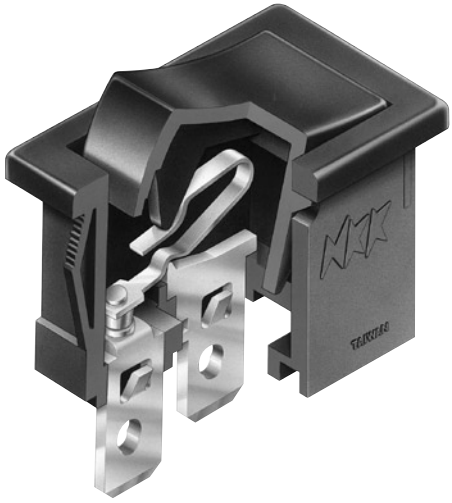
Stable stationary contact construction for high reliability.

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.

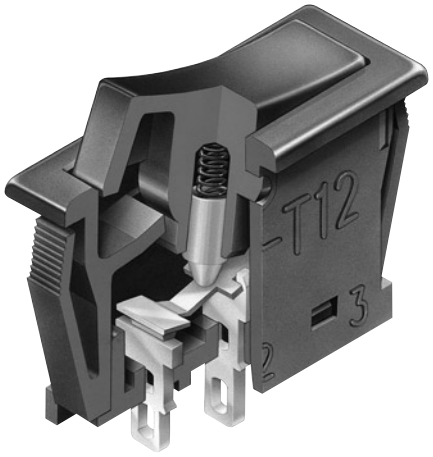
Stable stationary contact construction for high reliability.

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.

Model	Ratings @ AC	cULus File No.	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.

Model	Ratings @ AC	cULus File No.	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.

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

TYPICAL SWITCH ORDERING EXAMPLES

CWSA [1] [1] [A] [A] N [ ] [S]

Pole	
1	SPST & SPDT

Circuits			
1	ON	NONE	OFF
2	ON	NONE	ON

Cap Color	
A	Black

Housing	
A	Black

Inscription	
For SPST & SPDT	
No Code	None
For SPST	
1	Horizontal
2	Vertical
3	Dot Marking

Terminals	
S	Solder Lug*
H	Right Angle PC

* Wire harness & cable assemblies offered only in Americas

TYPICAL ORDERING EXAMPLE
CWSA11AANS



CWSB [2] [1] [A] [A] [2] [F]

Poles	
1	SPST
2	DPST

Circuit			
1	ON	NONE	OFF

Cap Color	
A	Black

Housing	
A	Black

Inscription	
No Code	None (SPST only)
1	Horizontal
2	Vertical
3	Dot Marking (SPST only)

Terminals	
F	Quick Connect*
H	Right Angle PC

* Wire harness & cable assemblies offered only in Americas

TYPICAL ORDERING EXAMPLE
CWSB21AA2F



CWT [1] [2] [A] [A] [S1]

Pole	
1	SPDT

Circuit			
2	ON	NONE	ON

Housing	
A	Black

Cap Color	
A	Black

Terminals	
S1	Solder Lug*

* Wire harness & cable assemblies offered only in Americas

TYPICAL ORDERING EXAMPLE
CWT12AAS1



INSCRIPTIONS

No Code — None

Not available in double pole.

1 — Horizontal Orientation

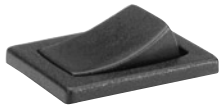
Only On-None-Off models are available with the horizontal inscription.

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.





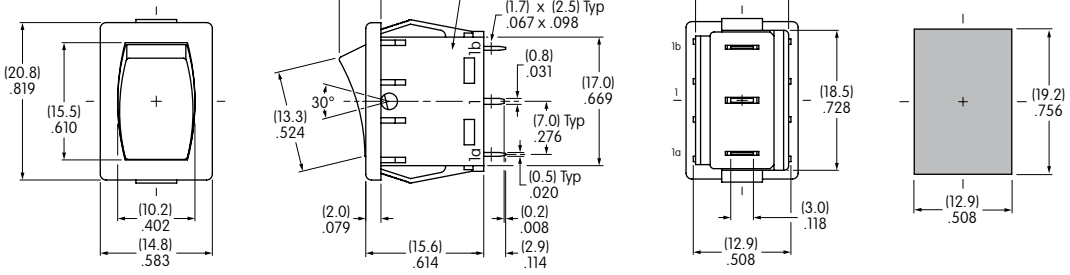

The IEC symbols for On-Off are supplied with Single Throw models only. Orientation of inscription must be selected. Inscription color is white ink on black.

TYPICAL SWITCH DIMENSIONS FOR CWSA

Solder Lug — Single Pole • No Inscription



CWSA12AANS



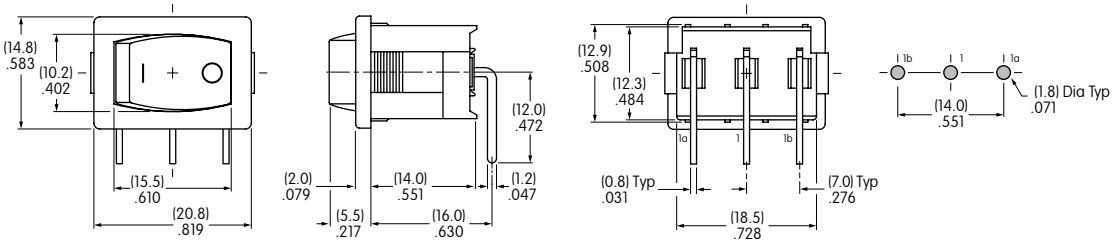
Terminal numbers are on side of switch body

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

Right Angle — Single Pole • Horizontal On-Off Inscription



CWSA11AAN1H



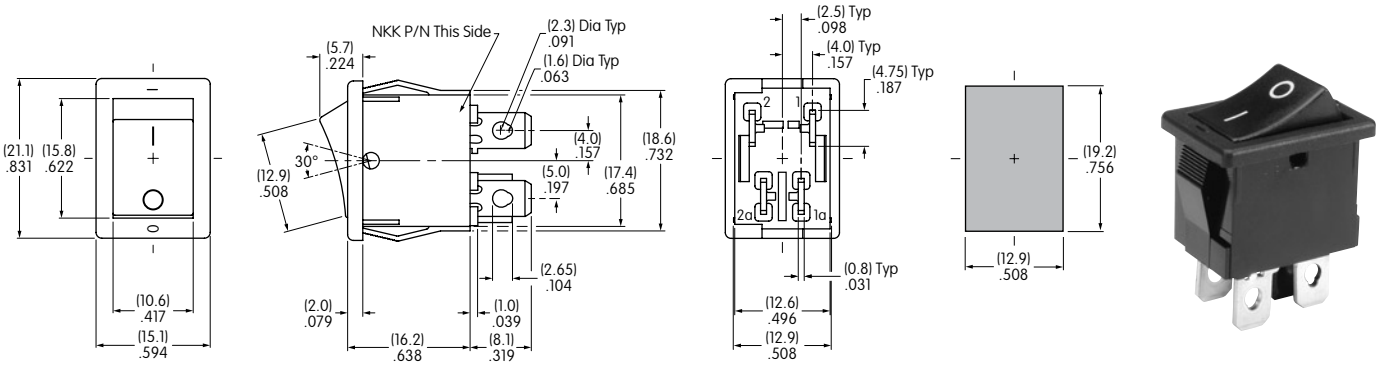
Single throw model does not have terminal 1b

Terminal numbers are on side of switch body

TYPICAL SWITCH DIMENSIONS FOR CWSB

Double Pole • Vertical On-Off Inscription

Quick Connect



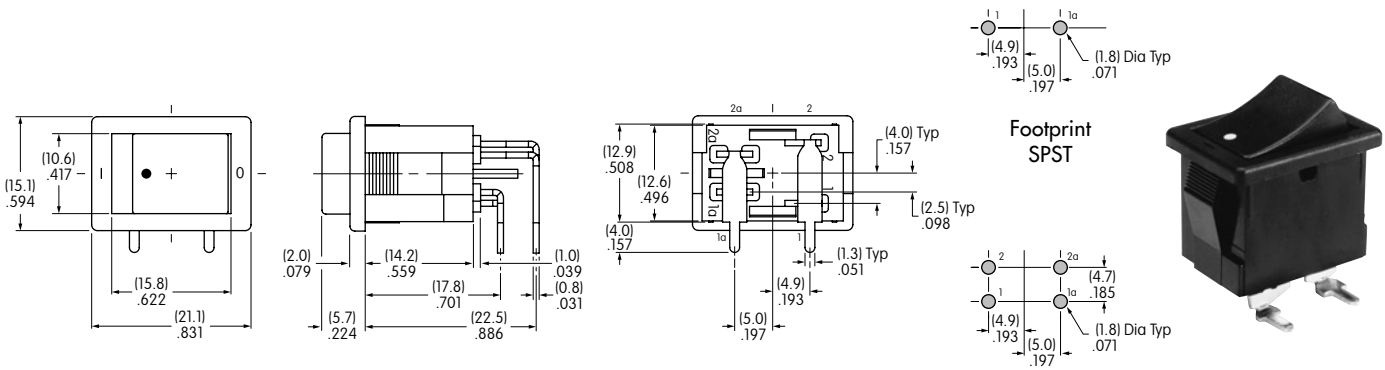
Terminal numbers are on bottom of switch

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

CWSB21AA2F

Single Pole • Dot Inscription

Right Angle



Footprint SPST

Footprint DPST

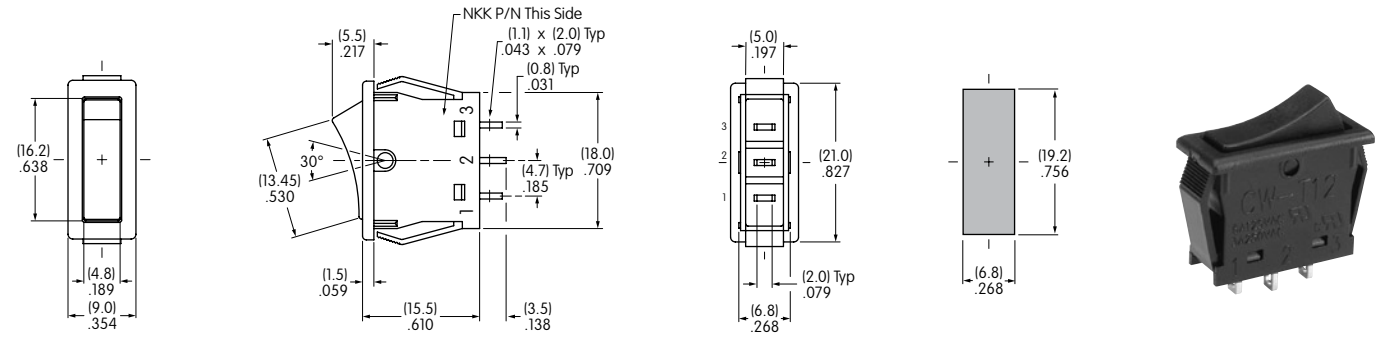
Terminal numbers are on bottom of switch

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