Rotaries

Touch

General Specifications

Electrical Capacity (Resistive Load)

Power Level: 9A @ 125V AC or 6A @ 250V AC

Other Ratings

Contact Resistance: 20 milliohms maximum

500 megohms minimum @ 500V DC **Insulation Resistance:**

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

Nominal Operating Force: Single Pole 4.50N; Double Pole 10.0N

> Angle of Throw: 33°

Materials & Finishes

Polycarbonate Rocker: Housing: **Polyamide**

Movable Contactor: Beryllium copper with silver plating

Movable Contacts: Silver alloy **Stationary Contacts:** Silver alloy

Switch Terminals: Brass with silver plating **Lamp Terminals:** Brass with silver plating

Environmental Data

-10°C through +50°C (+14°F through +122°F) **Operating Temp Range:**

> **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/s²) acceleration (tested in 6 right angled directions, with 5 shocks in each direction)

Installation

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

Standards & Certifications

File No. E44145

All models recognized at 9A @ 125V AC & 6A @ 250V AC.

cULus marking on case is standard.



Distinctive Characteristics

Full face, bright LED illumination in choice of red, amber, or green for visible status indication.

9-amp or 6-amp electrical capacity in compact body.

Interior shield prevents contamination of the rocker by carbon from arcing.

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

Single-break, snap-acting contact mechanism gives smooth actuation and audible feedback.

Quick-make, quick-break characteristic limits arcing and prolongs electrical life.

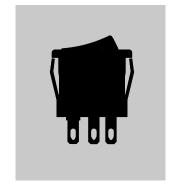
Stable stationary contact construction for high reliability.

Offset terminal alignment gives outstanding insulation resistance and dielectric strength.

Solder lug/.110" quick connect terminals can be used with connectors.



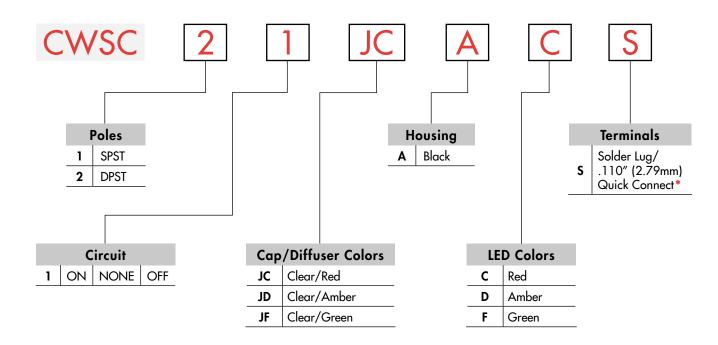
Actual Size



Slides

Touch

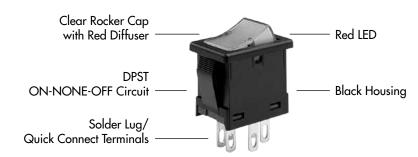
TYPICAL SWITCH ORDERING EXAMPLE



^{*} Wire harness & cable assemblies offered only in Americas

TYPICAL ORDERING EXAMPLE

CWSC21JCACS



IMPORTANT:



Switches are supplied with cULus marking on case. Specific models & ratings noted on General Specifications page.



Series CWSC

POLE & CIRCUITS												
		Rocker Position			Connected Terminals			Throw & Switch/Lamp Schematics				
Pole	Model	Down	Center	Up	Down	Center	Up	Notes: Terminal numbers and polarity are actually on the switch.				
SP	CWSC11	ON	NONE	OFF	1-1a	OPEN	OPEN	SPST (+10 (+10 (-1) (-1) (-1) (-1) (-1)				
DP	CWSC21	ON	NONE	OFF	1-1a 2-2a	OPEN	OPEN	DPST 1 (COM) 2 0 (+)0 (+)0 (-)				

CAP TYPES & COLORS

Rocker Cap/Diffuser

Caps are factory assembled and are not available separately.



Cap/Diffuser Colors Available



Clear/Red



Clear/Amber



Clear/Green

HOUSING



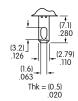
Black Housing with Snap-in Mounting

On Off (I O) symbols are molded on the bezel.



TERMINALS

Solder Lug/ .110" (2.79mm) Quick Connect



LED SPECIFICATIONS & COLORS

The LED is factory assembled and not available separately. LED circuit is isolated and requires an external power source. Polarity marks are on the bottom of the switch.

The electrical specifications shown are determined at a basic temperature of 25°C.

If the source voltage exceeds the rated voltage, a ballast resistor is required. The resistor value can be calculated by using the formula in the Supplement.

(+)O (-)	Colors:	C Red	D Amber	F Green		
Forward Peak Current	I _{FM}	30mA	30mA	30mA		
Typical Forward Current	I _F	20mA	20mA	20mA		
Forward Voltage	V _F	1.95V	2.0V	2.1V		
Reverse Peak Voltage	V_{RM}	5V	5V	5V		
Current Reduction Rate above 25°C	$\Delta I_{_{\rm F}}$	0.41mA/°C	0.29mA/°C	0.39mA/°C		
Ambient Temperature Range		−10°C ~ +50°C				



B25 www.nkk.com

Rockers

Keylocks Programmable Illuminated PB Pushbuttons

Slides

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Touch

Indicators

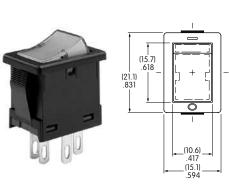
Supplement | Accessories

Slides

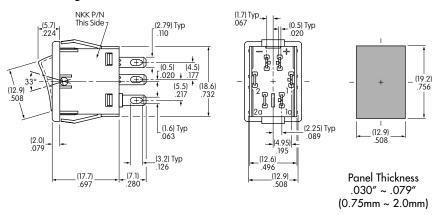
Touch

TYPICAL SWITCH DIMENSIONS

LED Illuminated



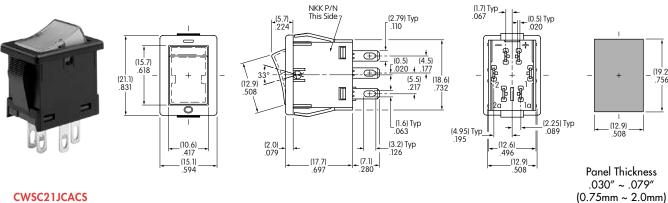
Single Pole



CWSC11JCACS

LED Illuminated

Double Pole



CWSC21JCACS