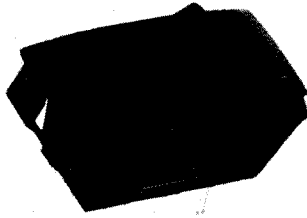


# 2000 Series: Maintained Action & Momentary Rocker Switches



**GRS-2012 Switch**

CW Type GRS-2011 - SPST and GRS-2012 - SPDT Maintained Action Rocker Switches and GRS-2011(B/C) Momentary Action Rocker Switches are designed to solve the switching problems of the user and styled to satisfy the designer. . . easy to mount, easy to terminate, and easy to actuate. Position may be identified by imprinting or hot stamping of rocker knob or housing in a legend of your choice. Other options include choice of electrical ratings, terminals, insulating barriers between terminals, and colors.

## OPERATING STANDARDS

**Endurance:** 100,000 cycles, no load minimum  
25,000 cycles at rated load minimum

**Temperature:** 105°C maximum

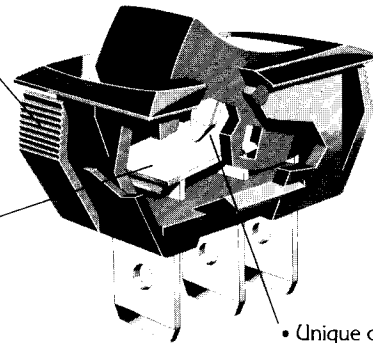
**High Voltage:** 2,500 V, 60 Hz for one minute between mounting surface and circuit connections (min.)

**Contact Resistance:** <0.01 Ω at 10 mA

**Relative Humidity:** Insulation resistance > 10<sup>3</sup> MΩ after 100 hour soak at 95% R.H. and 50°C and 1 hour dry in ambient room conditions

## FEATURES

- Easy self-locking panel mount—no mounting hardware required.
- Fully enclosed active switching elements.
- Light, yet positive detent action—virtually tease-proof.
- Heavy-duty switching.
- Choice of colors and markings.
- Unique combination sliding and rotating action ensures contact cleanliness.



**GRS-2012 Switch**

## MATERIALS

**Rocker Knob:** Nylon 94V-2

**Housing:** Nylon, 94V-2

**Terminal & Moving Contact:** Copper and/or copper alloy silver plated

## MOUNTING

No hardware or tools needed; self locks into one of three available panel openings pictured on page 9. Acceptable panel thickness range from .025" (.64 mm) to .180" (4.57 mm).

**CAUTION:** Burr direction must be away from the direction of insertion.

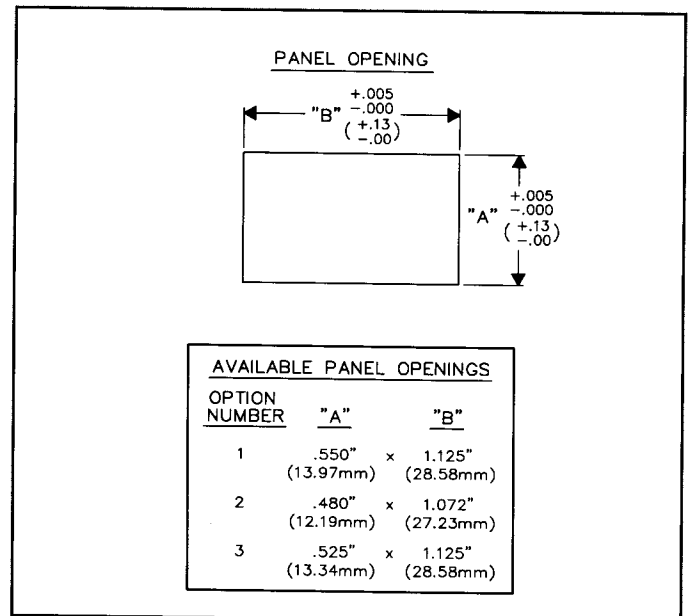
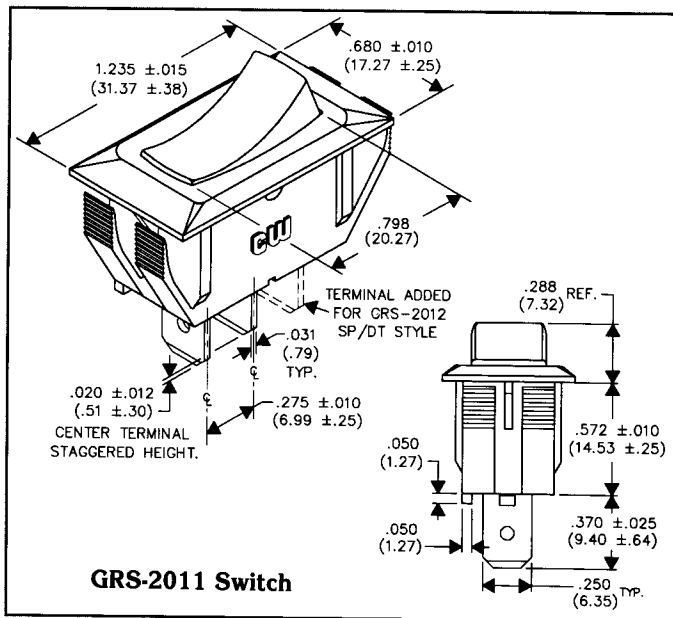
## TYPES AVAILABLE

TYPE	CIRCUIT	ELECTRICAL RATING†	LISTING AGENCY††
<b>Maintained Action</b> GRS-2011-8, -13, -16	SPST	-8: 8 A @ 125 VAC / 4 A @ 250 VAC 3 A @ 277 VAC	UL / CSA
GRS-2012-8, -13, -16	SPDT	-13: 13 A @ 125 VAC / 10 A @ 250 VAC 1/2 HP 125 - 250 VAC* 5 A @ 14 V (T)* 6 A @ 125 V (L)*	UL / CSA
<b>Momentary Action</b> GRS-2011B-8, -13	SPST (Normally Open)	-16: 16 A @ 125 VAC / 12 A @ 250 VAC 3/4 HP @ 125 - 250 VAC 10 A @ 14 V (T) 12 (6) A @ 250-(VDE)	UL / CSA / VDE
GRS-2011C-8, -13	SPST (Normally Closed)		
GRS-2012A-8, -13	SPDT Momentary		

\*Does not apply to GRS-2011(B/C)-13 & 2012A-13 versions.

†Additional ratings may be available, consult factory.

††Due to ongoing advancements, additional agency certifications may be available, consult factory.



## OPTIONAL FEATURES

### TERMINATION:

Standard switches have .250" (6.35 mm) blade terminals for solderless connection. For easier hand soldering, specify optional terminal G-20-164 having a .156" (3.96 mm) diameter hole in a .250" (6.35 mm) wide solder tab.

### INSULATING BARRIERS:

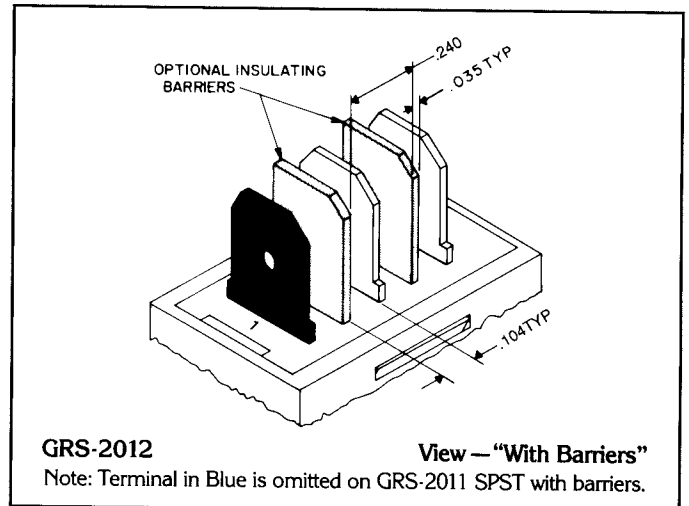
Standard switch construction is without barriers. Optional molded insulating barriers between terminals, as shown at right, permit the use of uninsulated solderless connectors. Specify your switch "with barriers" if needed.

### COLORS:

Our standard switch includes black housing and rocker knob. Knobs and housings can be molded in many colors. Contact us if you have unusual color needs.

### SPECIAL MARKINGS:

Printing on the knob or housing indicating message appropriate to the application ("ON - OFF," "HI - LO," "I/O," etc.), is available. Check factory.



## HOW TO ORDER

**Step 1:** Select type (see chart) that satisfies your maximum current requirements, either SPST or SPDT and maintained or momentary action.

**Step 2:** Select desired panel opening option number from chart above.

**Step 3:** Standard switch includes blade terminal and needs no added identification. If needed, specify optional solder terminal "G-20-164."

**Step 4:** Standard switch construction is without barriers. If needed specify "with barriers" for insulating barriers between terminals.

**Step 5:** Standard switch is all black. For special housing or knob color, or markings, contact factory for part number designation.