

Rocker Switch for High Current Switching

- Withstands inrush currents up to 100 A due to a unique switching mechanism
- Soft touch with firm switching action
- Easy to mount by snap fitting
- Contact gap of 3 mm minimum
- UL and cUL approved and conforms to EN standards.



Ordering Information

Switch		Part number							
Color of caps and cases (flanges)	Marking on caps	SPST				DPST			
		Quick-connect/solder terminals	PCB terminals	Right-angled PCB terminals	Left-angled PCB terminals	Quick-connect/solder terminals	PCB terminals	Right-angled PCB terminals	Left-angled PCB terminals
Black	Without markings	A8L-11-11N1	A8L-11-12N1	A8L-11-13N1	A8L-11-14N1	A8L-21-11N1	A8L-21-12N1	A8L-21-13N1	A8L-21-14N1
		A8L-11-11N2	A8L-11-12N2	A8L-11-13N2	A8L-11-14N2	A8L-21-11N2	A8L-21-12N2	A8L-21-13N2	A8L-21-14N2

Specifications

■ CHARACTERISTICS

Permissible operating frequency	Mechanical	20 operations/min max.
	Electrical	7 operations/min max.
Insulation resistance		100 MΩ min. (500 VDC)
Dielectric strength		2,000 VAC, 50/60 Hz, for 1 min between terminals of the same polarity 2,000 VAC, 50/60 Hz, for 1 min between terminals of the different polarity 4,000 VAC, 50/60 Hz, for 1 min between charged metal parts and the ground terminal
Vibration resistance	Malfunction	1 to 55 Hz, 1.5-mm double amplitude (malfunction time of 1 ms max.)
Shock resistance	Malfunction	300 m/s ² (malfunction time of 1 ms max.)
	Destruction	500 m/s ²
Life expectancy	Mechanical	50,000 operations min.
	Electrical	10,000 operations min.
Inrush current		100 A max.
Ambient temperature	Operating	-20°C to 55°C (-4°F to 131°F) with no icing
	Storage	-25°C to 60°C (-13°F to 140°F) with no icing
Ambient humidity	Operating	45% to 85%
	Storage	45% to 85%

■ OPERATING CHARACTERISTICS

No. of poles	1	2
Operate Force	220±120 gf	400±250 gf

■ RATINGS

Rated load	Non-inductive		Inductive	
	Resistive load	Lamp load	Inductive load	Inductive motor load
125 VAC	10 A	10 A	8 A	8 A
250 VAC	10 A	10 A	8 A	8 A

Note: 1. The non-inductive lamp load has an impulse current ten times the normal current.

2. The inductive load has a power factor of 0.4 minimum (AC).

3. The motor load has an impulse current 6 times the normal current.

The above ratings were tested under the following conditions:

1. Ambient temperature: 20±2°C (68±35.6°F)
2. Ambient humidity: 65%±5%
3. Switching frequency: 7 times/min

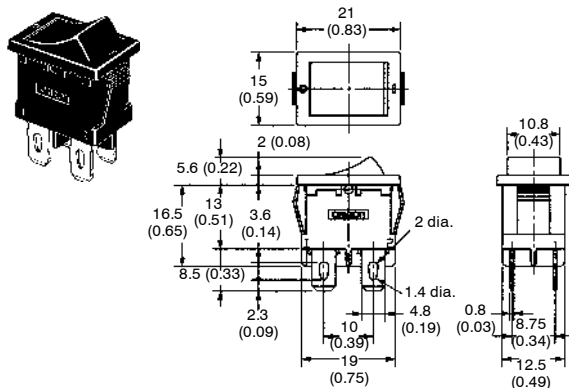
■ APPROVED SAFETY STANDARDS

UL, cUL (File No. E41515)	10 A, 125 VAC; 10 A, 250 VAC
EN61058-1 (AZCO certificate no. C9912501)	10 (8) A, 125 V~; 10 (8) A, 250 V~

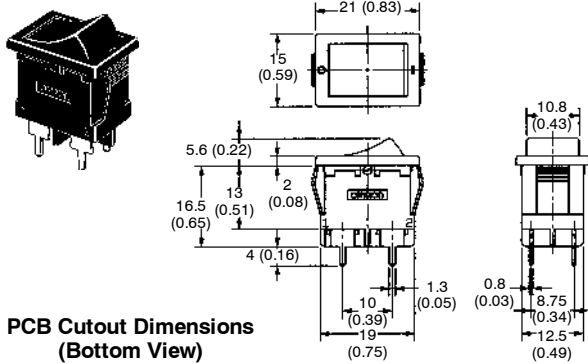
Dimensions

Unit: mm (inch)

■ A8L-11-11N1 A8L-11-11N2 A8L-21-11N1 A8L-21-11N2

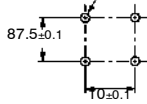


- A8L-11-12N1
- A8L-11-12N2
- A8L-21-12N1
- A8L-21-12N2

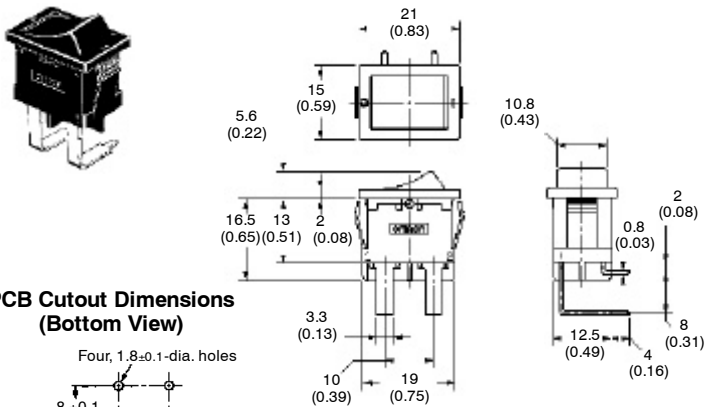


PCB Cutout Dimensions (Bottom View)

Four, 1.8±0.1-dia. holes

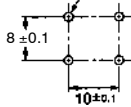


- A8L-11-13N1
- A8L-11-13N2
- A8L-21-13N1
- A8L-21-13N2



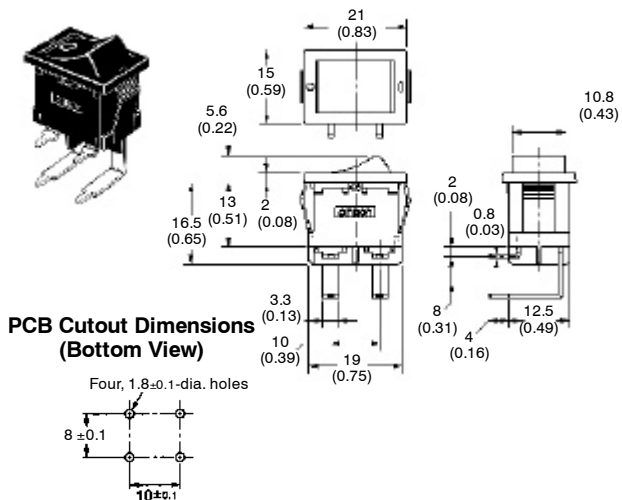
PCB Cutout Dimensions (Bottom View)

Four, 1.8±0.1-dia. holes

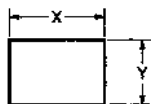


Unit: mm (inch)

- A8L-11-14N1
- A8L-11-14N2
- A8L-21-14N1
- A8L-21-14N2

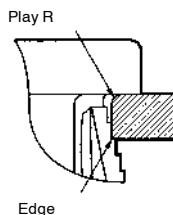


■ PANEL CUTOUT



Panel thickness (mm)	X (mm)	Y (mm)
0.75 to 1.25	19.2 ⁰ _{-0.1}	12.9 ^{+0.1} ₀
1.26 to 2.5	19.4 ^{+0.1} _{-0.3}	12.9 ^{+0.1} ₀

Note: Recommended panel material: SPCC
 Consult your OMRON representative when using a panel with a thickness other than those listed here.



Note: Be sure that play R is the operation side.