

### Safety-considered Power Rocker Switch

- Low heat radiation with a Unique leaf spring mechanism.
- Positive-opening mechanism incorporated.
- AC operated Neon lamp illumination models available.
- Contact gap of 3 mm minimum.
- Variety of color models available
- UL and CSA standards approved. Conforms to EN standard.



RoHS Compliant

Caution  
Refer to Precautions

### List of Models

#### Non-illuminated Models

Contact Form					Quantity per box
Color of cases		White	Black	Gray	
Color of caps	White	A8A-201	A8A-201-1	-	50
	Red	A8A-202	A8A-202-1	A8A-202-2	
	Green	A8A-203	A8A-203-1	A8A-203-2	
	Blue	A8A-204	A8A-204-1	-	
	Yellow	A8A-205	A8A-205-1	-	
	Black	A8A-207	A8A-207-1	A8A-207-2	

#### Note: Marking of Non-illuminated Models

The cap of the above mentioned models is without marking.  
 Models with marking is with suffix "-□F" such as A8A-201-F and A8A-201-1F.  
 Models with marking is with suffix "-□D" such as A8A-201-D and A8A-201-1D.  
 Consult your Omron sales representative for details.

#### Illuminated Models

Contact Form							Quantity per box
Rated voltage		100 VAC			200 to 220 VAC		
Color of cases		White	Black	Gray	White	Black	Gray
Color of caps	Red	A8A-212	A8A-212-1	A8A-212-2	A8A-222	A8A-222-1	A8A-222-2
	Green	A8A-213	A8A-213-1	A8A-213-2	A8A-223	A8A-223-1	A8A-223-2
	Orange	A8A-216	A8A-216-1	A8A-216-2	A8A-226	A8A-226-1	A8A-226-2

#### Note: Marking of illuminated Models

The cap of the above mentioned models is without marking.  
 Models with marking is with suffix "-□A" such as A8A-212-A and A8A-212-1A.  
 Models with marking is with suffix "-□G" such as A8A-212-G and A8A-212-1G.  
 Consult your Omron sales representative for details.

## ■ Ratings

Rated load	Non-inductive		Inductive	
	Resistive load	Lamp load	Inductive load	Inductive motor load
125 VAC	16A	10A	16A	16A
250 VAC	16A	10A	8A	16A

- Note:**
- The above value shows steady current.
  - The inductive load has a power factor of 0.4 min (AC) and a time constant of 7 ms min (DC).
  - Lamp load has an inrush current of 10 times the steady current.
  - Motor load has an inrush current of 6 times the steady current.
  - The above ratings were tested under the following conditions:
    - Ambient temperature: 20±2 °C
    - Ambient humidity: 65±5 %RH
    - Switching frequency: 20 times/min.

## ■ Neon lamps

Models	Rated voltage	Rated current
A8A-21□-□	100 VAC	1.5 mA
A8A-22□-□	200 to 220 VAC	1.5 mA

- Note:**
- Life expectancy: 15,000 Hr min.
  - Lamp is not exchangeable.

## ■ Approved Safety Standards

### UL (UL508)

16A 125 VAC, 16A 250 VAC

### CSA (CSA C22.2 No.55)

16A 125 VAC, 16A 250 VAC

### VDE (EN61058-1)

16A 250 VAC

## ■ Characteristics

Permissible operating speed		1 to 500 mm/s
Permissible operating frequency	Mechanical	30 operations / min max.
	Electrical	20 operations / min max.
Insulation resistance		100 MΩ min. (at 500 VDC with insulation tester)
Contact resistance (initial value)		20 mΩ max. (6 to 8 VDC, 1 A, voltage drop method)
Dielectric strength	Between terminals of the same polarity	2.000 VAG, 50/60 Hz, for 1 min
	Between terminals of the different polarity	2.000 VAG, 50/60 Hz, for 1 min (See Note *)
	Between charged metal parts and the ground terminal	4.000 VAG, 50/60 Hz, for 1 min
Vibration resistance	Malfunction	10 to 55 Hz, 1.5-mm double amplitude
Shock resistance	Malfunction	300 m/s <sup>2</sup> max.
Durability	Mechanical	40,000 operations min.
	Electrical	20,000 operations min.
Weight		Non-illuminated: Approx 15g. Illuminated: Approx 16g.
Inrush current		100A max. (100 ms max.)
Ambient operating temperature		- 25 to +50 °C (with no icing or condensation)
Ambient operating humidity		45 to 85 %RH
Degree of protection		IEC IP40
Electric shock protection class		Class II
PTI (proof tracking index)		175
Pollution degree		2

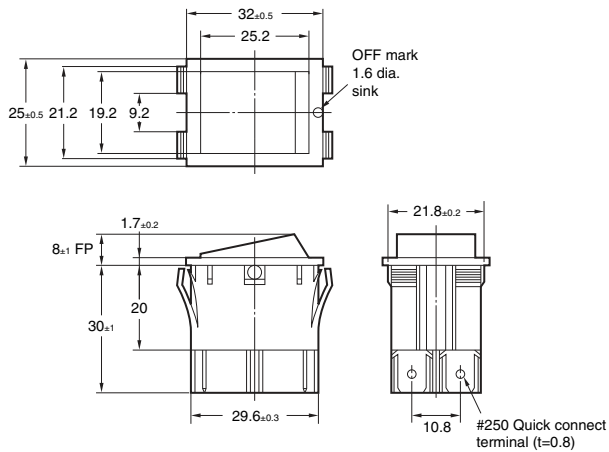
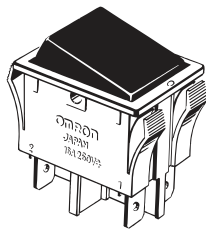
**Note:** For the condition in individual standard, contact your OMRON sales representative.

- \* Condition in the Neon lamp illuminated models are excluded.

**Operating Circuit**

	Non-illuminated Models	Neon lamp illuminated Models	
<b>Correct wiring</b>	<p>Fig. A</p>	<p>Fig. C Illuminated in accordance with power source</p>	<p>Fig. D Illuminated in accordance with switch-on</p>
<b>Incorrect wiring</b>	<p>Fig. B</p>	<p>Fig. E</p>	
<b>Note</b>	<p>1. Do not apply any different voltage between the couple of terminals 1- 2, and 3- 4. 2. Safety standards approved for the figures A, C, and D.</p>		

**Dimensions** (Unit: mm)  
**A8A**

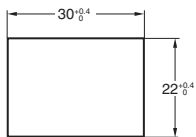


**Operating Characteristics**

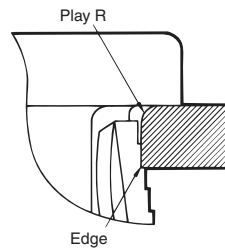
Operating force (OF) max.	19.6 N (2,000 gf)
Free Position (FP)	8±1 mm
Operating Position (OF)	5±1 mm

**Note:** Unless otherwise specified, a tolerance of ±0.4 mm applies to all dimensions.

**Panel Cutout**



**Note:** Recommended panel thickness:  
1.0 to 3.0 mm.

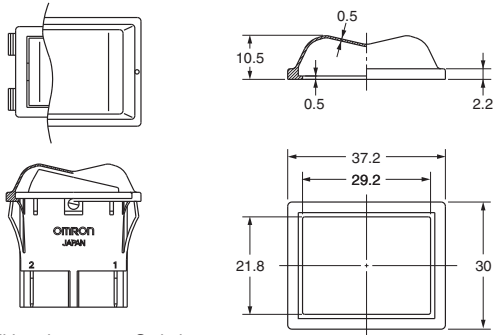


When processing the panel, be sure that the Play R is on the switch operation side.  
Be sure that the Edge is on the reverse side of panel when processing.

## ■Optional Accessories (Sold separately)

Rubber cap for high dustproof.

### A8A RUBBER CAP



Condition the cap on Switch

## ■Precautions

Be sure to read the Safety precautions common to all Rocker Switches for correct use.

- Application examples provided in this document are for reference only. In actual applications, confirm equipment functions and safety before using the product.
- Consult your OMRON representative before using the product under conditions which are not described in the manual or applying the product to nuclear control systems, railroad systems, aviation systems, vehicles, combustion systems, medical equipment, amusement machines, safety equipment, and other systems or equipment that may have a serious influence on lives and property if used improperly. Make sure that the ratings and performance characteristics of the product provide a margin of safety for the system or equipment, and be sure to provide the system or equipment with double safety mechanisms.

**Note: Do not use this document to operate the Unit.**