

Rocker Switch

A8A

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 | | 2 F -4 F - | | Quantity per box | |
|----------------|--------|--------------------------|-----------|------------------|----|
| Color of cases | | White | Black | Gray | |
| Color of caps | White | A8A-201 | A8A-201-1 | - | |
| | Red | A8A-202 | A8A-202-1 | A8A-202-2 | |
| | Green | A8A-203 | A8A-203-1 | A8A-203-2 | 50 |
| | Blue | A8A-204 | A8A-204-1 | - | 50 |
| | Yellow | A8A-205 | A8A-205-1 | - | |
| | Black | A8A-207 | A8A-207-1 | A8A-207-2 | |

Note: Marking of Non-illuminated Models

Consult your Omron sales representative for details.

Illuminated Models

| Co | ntact Form | 2 | | | | | Quantity per box | |
|---------------|-------------|---------|-----------|-----------|---------|----------------|------------------|----|
| Rat | ted voltage | | 100 VAC | | | 200 to 220 VAC | | |
| Cole | or of cases | White | Black | Gray | White | Black | Gray | |
| | Red | A8A-212 | A8A-212-1 | A8A-212-2 | A8A-222 | A8A-222-1 | A8A-222-2 | |
| Color of caps | Green | A8A-213 | A8A-213-1 | A8A-213-2 | A8A-223 | A8A-223-1 | A8A-223-2 | 50 |
| | 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 omarking is with suffix "-_A" such as A8A-212-A and A8A-212-1A. Models with omarking is with suffix "-_G" such as A8A-212-G and A8A-212-IG.

Consult your Omron sales representative for details.

■Ratings

| | Non-in | ductive | Inductive | | |
|------------|---------------------------|---------|-------------------|----------------------|--|
| Rated load | Rated load Resistive load | | Inductive load | Inductive motor load | |
| 125 VAC | 16A | 10A | 16A | 16A | |
| 250 VAC | 16A | 10A | 8A | 16A | |

Note: 1. 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).
- 3. Lamp load has an inrush current of 10 times the steady current.
- 4. Motor load has an inrush current of 6 times the steady current.
- **5.** The above ratings were tested under the following conditions:
 - (1) Ambient temperature: 20±2 °C
 - (2) Ambient humidity: 65±5 %RH
 - (3) 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: 1. Life expectancy: 15,000 Hr min.

2. 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

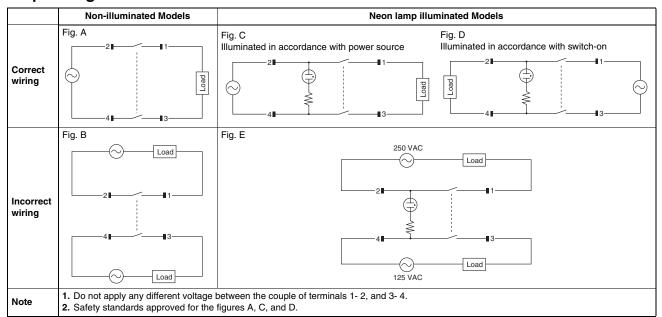
■Characteristics

| Permissible operating speed | | 1 to 500 mm/s | | |
|------------------------------------|---|---|--|--|
| Permissible operating | Mechanical | 30 operations / min max. | | |
| frequency | 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) | | |
| | Between terminals of the same polarity | 2.000 VAG, 50/60 Hz, for 1 min | | |
| Dielectric strength | 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 ² max. | | |
| Durability | Mechanical | 40,000 operations min. | | |
| Durability | 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



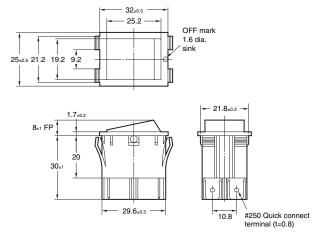
■Dimensions (Unit: mm) A8A





■Operating Characteristics

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

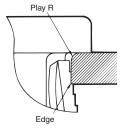


Note: Unless otherwise specified, a tolerance of ± 0.4 mm applies to all dimensions.

■Panel Cutout



Note: Recommended panel thickness: 1.0 to 3.0 mm.

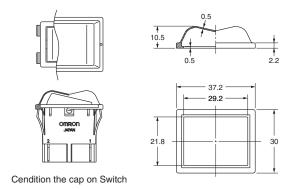


When processing the panel, be sure that the Play R is on the switch operation side. Be sure that the Edge is on the reverse side of panel when processing.

■Optional Accessories (Sold separately)

Rubber cap for high dustproof.

A8A RUBBER CAP



■Precautions

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

Contact: www.omron.com/ecb

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

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.