

Miniature Rocker Switch

A8W

Panel Seal Rocker Switch for High Current Switching

- Miniature Rocker Switch can be switching 16A.
- Easy to mount by snap fitting.
- Dust & waterproof construction.
Panel seal (IP67).
- UL, cUL and TV-8 standard approved.
Conforms to EN standards.



RoHS Compliant (Refer to page 3 for details)

Caution
Refer to Precautions

NEW

Ordering Information

Contact configuration		SPST		DPST		Quantity per package
Color of caps and cases		Black	White	Black	White	
Marking on caps	I O	A8WS-1162	A8WS-2262	A8WD-1162	A8WD-2262	100
	— O	A8WS-1163	A8WS-2263	A8WD-1163	A8WD-2263	

Ratings

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

Note: 1. The inductive load has a power factor of 0.7 minimum (AC).
 2. The motor load has an impulse current 6 times the normal current.
 3. The above ratings were tested under the following conditions:
 (1) Ambient temperature: 20±2 °C
 (2) Ambient humidity: 65±5 %RH
 (3) Switching frequency: 7 times/min.

Operating Characteristics

No. of poles	1	2
OF (operating force)	12 N max.	23 N max.

Specifications

Permissible operating frequency	Mechanical	20 Operations / min max.
	Electrical	7 Operations / min max.
Insulation resistance		100 MΩ min. (500 VDC)
Dielectric strength		2000 VAC 50/60Hz, for 1min between terminals of the same polarity 4000 VAC 50/60Hz, for 1min between terminal and case ground.
Vibration resistance	Malfunction	10 to 55 Hz, 1.5-mm double amplitude
Shock resistance	Malfunction	1000 m/s ² max.
Life expectancy	Mechanical	50,000 Operations min.
	Electrical	10,000 Operations min.
Ambient operating temperature		- 25 to 55 °C humidity 60 %RH max. (With no icing or dewing)
Ambient operating humidity		25 to 85 %RH (for 15 to 35 °C)
Ambient storage temperature		- 40 to 85 °C (With no icing or dewing)
Ambient storage humidity		25 to 85 %RH
Weight		7.8 g (1 pole), 9.3 g (2 poles)

Approved Safety Standards

■UL, (UL1054/CSA C22.2 No. 55)

16A 125 VAC, 16A 250 VAC, TV-8

■DEMKO (EN61058-1)

16A 125 VAC, 16A 250 VAC

Note: Quick-connect Terminals are not in compliance with IEC standards.

Dimensions

(unit: mm)

A8WS-1162

A8WS-1163

A8WS-2262

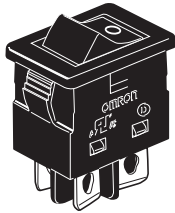
A8WS-2263

A8WD-1162

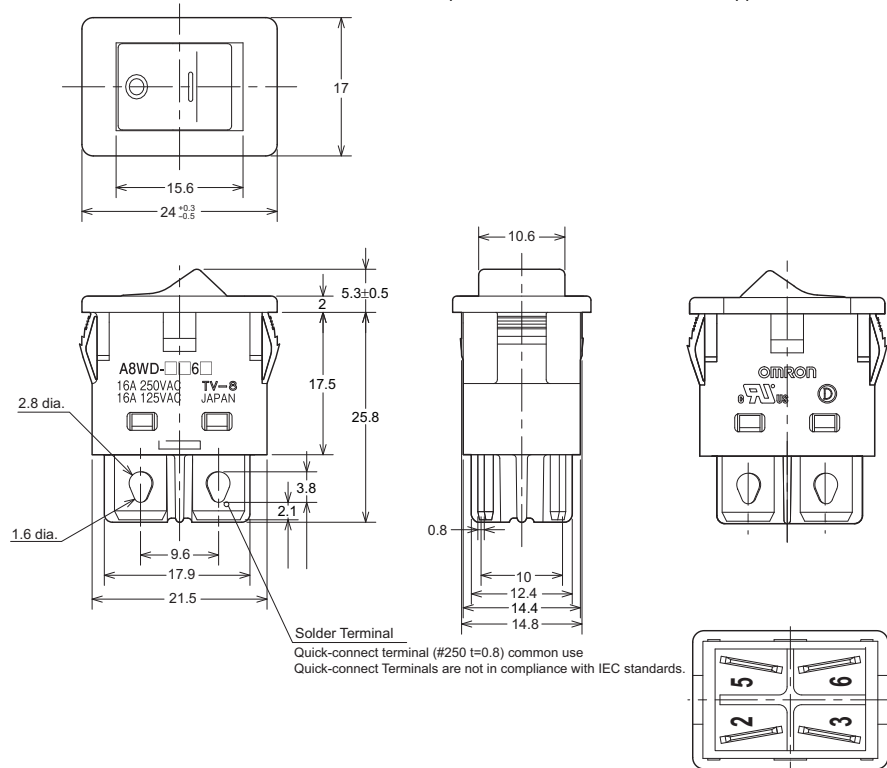
A8WD-1163

A8WD-2262

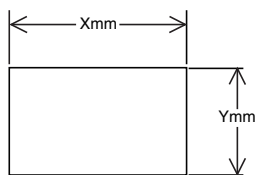
A8WD-2263



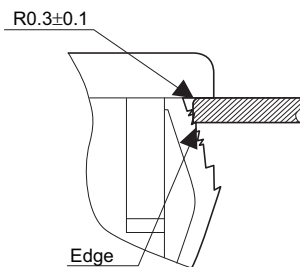
Note: Unless otherwise specified, a tolerance of ± 0.3 mm applies to all dimensions.



Panel Cutout



	Panel thickness (mm)	X (mm)	Y (mm)
Without rubber cap	1.0 to 1.9	22.3 ^{+0.1} ₀	14.8 ^{+0.1} ₀
	2.0 to 2.8	23.2 ^{+0.1} ₀	
With rubber cap	2.0 ⁰ _{-0.07}	22.4 ^{+0.1} ₀	

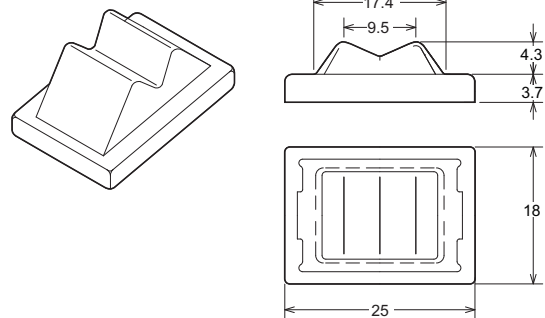


Be sure that play R or above-mentioned R is the operation side.

Optional Accessories

Rubber cap for high dustproof.

A8W-RUBBER CAP



Precautions

⚠ Caution

Do not wire the Switch or touch any terminal of the Switch While power is being supplied. Doing so may result in electric shock.

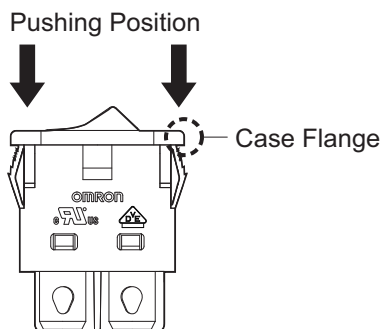


To increase the reliability of operation, test the Switch before actual operation.

Be sure that there is an enough insulation distance between any Switch terminal and metal part.

Mounting

- Turn OFF the power supply before mounting, removing or wiring the Switch, or before performing maintenance inspections. Failure to do so may result in electric shock.
- Easy to mount by snap fitting.
- Do not use panels other than ones with the designated thickness and dimensions. Remove all burrs from the cutout before installing the Switch. Otherwise, the Switch may malfunction.
- Do not impose excessive force on the Switch at the time of panelmounting. Otherwise the Switch may be damaged or deformed, and the Switch mechanism may malfunction as a result.



Wiring

- When soldering terminals manually, perform soldering within 4 s using a soldering iron (temperature at the tip of the soldering iron: 360 °C max). Do not apply excessive force to the terminals during soldering.
- Quick-connect Terminals (#250 t=0.8) are not in compliance with IEC standards. Suitable for use as solder connection.
- Be sure that the wires are thick enough for the load (current) to be applied.
- The performance of the Switch may be affected if the Switch is used for switching micro loads. Test the Switch under the actual operating conditions.

Environment for Storage and Use

- Do not use the Switch in places with sulfide gas, corrosive gas, sea breeze, oil spray, or direct sunlight. Otherwise, the Switch may malfunction.
- Do not use the Switch in places that are visibly dusty. Otherwise, the contacts may fail to operate correctly.

Handling

- Do not drop the Switch. Otherwise, the Switch may malfunction.
- Do not impose excessive force on the Switch. Otherwise, the Switch may deform.
- Use the Switch within the rated voltage and current ranges, otherwise the Switch may have a shortened life expectancy, radiate heat, burn out or malfunction.
- Do not impose force to operating part from an angle, otherwise the Switch may be damaged or deformed.

Dust & waterproof construction

Though panel sealed (IP67) at front, be caution the following points for actual use.

- Do not use Sealed Switches while submersed in water or in locations exposed to water.
- Do not use Sealed Switches in places that are visibly dusty. Otherwise, the Switch may malfunction.
- The seal is changed depending on the processing accuracy and the panel thickness, and it is in the panel the fear of the invasion of water. Test the Switch under the actual operating conditions.

RoHS Compliant

The "RoHS Compliant" designation indicates that the listed models do not contain the six hazardous substances covered by the RoHS Directive.

Reference: The following standards are used to determine compliance for the six substances.

Lead	: 1000 ppm max.
Mercury	: 1000 ppm max.
Cadmium	: 100 ppm max.
Hexavalent chromium	: 1000 ppm max.
PBB	: 1000 ppm max.
PBDE	: 1000 ppm max.

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.
To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

Cat. No. A177-E1-01 In the interest of product improvement, specifications are subject to change without notice.

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