



### FEATURES

1. Incorporates a contact for low level circuit for the HDD protection circuit.
2. Power rocker switches for safety requirements.

All versions comply with ClassII  
EN61058-1 insulation grade.  
Insulation distance: 8mm Min.  
(power contact section)  
Contact gap: 3mm Min.  
(power contact section)

International Standard-approved  
Status  
UL/C-UL, TÜV

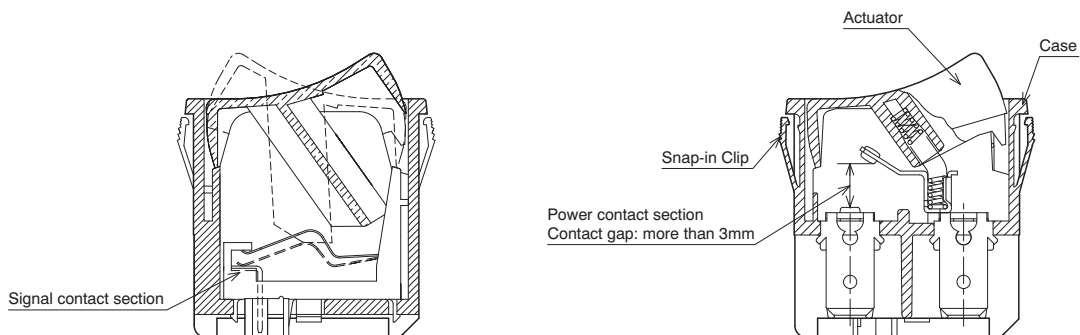
3. High inrush current resistance is ideal for office automation equipment.

4. Operation that only requires a light touch
5. Cadmium-free contact compatibility.

Type	Inrush current	Motor load* (EN61058-1) (pf = 0.6)	Contact rating	Expected life
AJ8S (J8S)	Power section	160A	4A 16A 250V AC	Min.10 <sup>4</sup>

\* The motor load is in accordance with EN61058-1.  
Inrush current can be switched up to the value of 6 times the indicated rating.

### CONSTRUCTION



# AJ8S (J8S)

## ORDERING INFORMATION

AJ **8** **S** **7** **0**    **C**

8: AJ8 switch

S: With a contact for low level current

Number of poles and Operation

7: 3-pole, single throw (ON-OFF)

(2 sets of power contact and a signal contact)

Terminal shape

0: .250 Quick-connect terminal

Actuator indication

0: No indication

1:  indication

2:  indication

Actuator color

Z: Dark gray

B: Black

Flange color

Nil: Dark gray

B: Black

C: Connection for low level contact connectors

Remarks: 1. They come with a stamp indicating international standards without your request.

2. The color of indication on the actuator is white.

## PRODUCT TYPES

### 1. Without indication on actuator (actuator color: dark gray)

Terminal	Number of pole	Operation	Ordering part number	
			Flange color: Dark gray	Flange color: Black
.250 Quick connect terminal	3 poles	ON – OFF	AJ8S700ZC	AJ8S700ZBC

### 2. With indication on actuator

#### 1) With indication (actuator color: dark gray)

Terminal	Number of pole	Operation	Ordering part number	
			Flange color: Dark gray	Flange color: Black
.250 Quick connect terminal	3 poles	ON – OFF	AJ8S701ZC	AJ8S701ZBC

### 3. With indication on actuator

#### 1) With indication (actuator color: dark gray)

Terminal	Number of pole	Operation	Ordering part number	
			Flange color: Dark gray	Flange color: Black
.250 Quick connect terminal	3 poles	ON – OFF	AJ8S702ZC	AJ8S702ZBC

Remarks: Standard actuator color is dark gray and black.

To order switches with a black actuator, replace the letter "Z" with "B" in the ordering part number above.

EX) AJ8S701ZC (actuator color: dark gray, flange color: dark gray)

→ AJ8S701BC (actuator color: black, flange color: dark gray)

## SPECIFICATIONS

### 1. Contact rating

Type		Inrush current	Motor load* EN61058-1 (power factor = 1)	Contact rating (Resistive load)	Expected life
AJ8S (J8S)	Power section	160A	16A	16A 250V AC	Min.10 <sup>4</sup>
	Signal section	-	10mA	10mA 5V DC	Min.10 <sup>4</sup>

Remark: The motor load is in accordance with EN61058-1. Inrush current can be switched up to the value of 6 times the indicated rating.

## 2. Characteristics

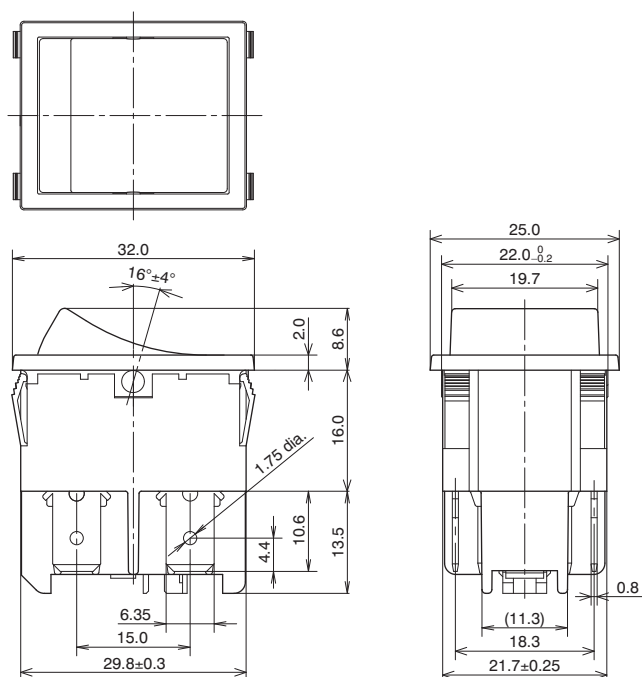
Item	Specifications	
Electrical life	Min. 10 <sup>4</sup> (at 7 cpm., at rated load)	
Mechanical life	Min. 5×10 <sup>4</sup> (at 20 cpm.)	
Initial contact resistance	Power contact	Max. 100mΩ (by voltage drop at 1A, 2 to 4V DC)
	Signal contact	Max. 1Ω (measured by a milliohm meter)
Initial breakdown voltage	Power contact	2,000 Vrms (detection current: 10mA)
	Signal contact	100 Vrms (detection current: 10mA)
Ambient temperature	-25°C to +85°C (not freezing below 0°C)	
Vibration resistance	10 to 55 Hz at single amplitude of 0.75mm	
Shock resistance	Functional	Min. 294m/s <sup>2</sup> {30G} (contact opening max. 1ms)
	Destructive	Min. 980m/s <sup>2</sup> {100G}
Terminal strength	.250 Quick-connect terminal Min. 98N{10kgf}/min. (pull & push direction)	
Actuator strength	39.2N{4kgf} for 1min. operating direction	
Initial operating force *Reference value	4.9N or less (max. 500gf or less)	
Flame retardancy	UL94V-0	
Tracking resistance	Min. 175	
Unit weight	Approx. 13g	
Contact material	AgSnO <sub>2</sub> alloy (power section), Cu alloy and Gold (Au) plating (Signal section)	

## DIMENSIONS

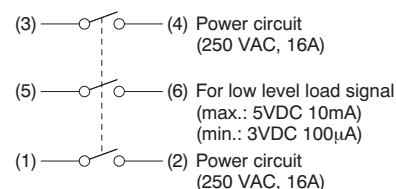
Interested in CAD data? You can obtain CAD data for all products with a **CAD Data** mark from [your local Panasonic Electric Works representative](#).

**CAD Data**

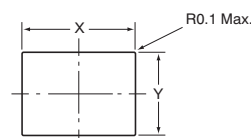
(unit: mm)



### Wiring diagram



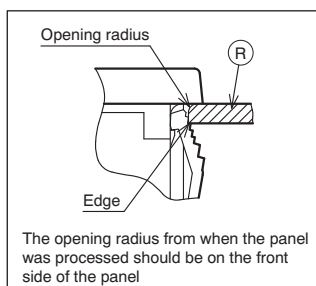
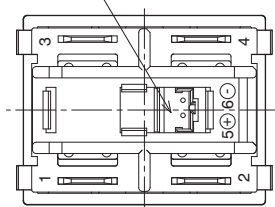
### Diagram of recommended locations for panel mounting holes



Panel thickness	X	Y
1 to less than 1.8	30.4 <sup>+0</sup> <sub>-0.1</sub>	22.0 <sup>+0</sup> <sub>-0.1</sub>
1.8 to 2.3	31.1 <sup>+0</sup> <sub>-0.1</sub>	22.0 <sup>+0</sup> <sub>-0.1</sub>

Remark: Contact us if you are considering using a panel of other than the recommended size and shape.

Suitable connector: CT connector



# AJ8S (J8S)

## NOTES

### 1. Switch mounting

Mount the switch with the hole cutting dimensions shown in the dimensions. Contact us if you are considering using a panel of other than the recommended size and shape.

### 2. Regarding fastening lead wires to terminals

1) When connecting the tab terminals, use a .250 Quick-connect and insert the terminals straight in. If they are skewed, the terminals will require excessive insertion force. In addition, there is some variation in the insertion force required for different receptacles from different manufacturers, so confirm how much force is needed under actual conditions. Do not solder wires onto tab terminals.

2) The terminals should be connected in such a way that they are not under constant stress from the connecting wires.

3) Terminal material is copper alloy which may discolor due to finger's oil or after a long time. But that discoloration does not effect actual performance.

### 3. Resistance to chemicals

To clean the switch unit, use a neutral detergent diluted with water. Do not use acidic or alkaline solvents as they may damage the switch. Furthermore, be careful not to get any of the detergent solution inside of the switch while cleaning it.

### 4. Environment

Avoid using and storing these switches in a location where they will be exposed to corrosive gases, silicon, or high dust levels, all of which can have an adverse effect on the contacts.

**5. Take care not to drop the product as it may impair performance.**

**6. For general precautions for operation switches, please visit our website.**

## REFERENCE

### 1. Outline of UL1054 test

Overload test:

20A 250V AC  
(power factor 0.75 to 0.8)  
50 operation

Endurance test:

16A 250V AC  
(power factor 0.75 to 0.8)  
10,000 operation

After testing, temperature rise of terminals should be less than 30°C and no abnormality should be observed in characteristics.

### 2. Outline of EN61058-1 test

After switching  $5 \times 10^3$  times on the above load condition at both  $85^{+5}^{\circ}\text{C}$  and  $25 \pm 10^{\circ}\text{C}$ , temperature rise of terminals should be less than 55°C and no abnormality should be observed in characteristics.

