



RoHS compliant

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 Class II 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

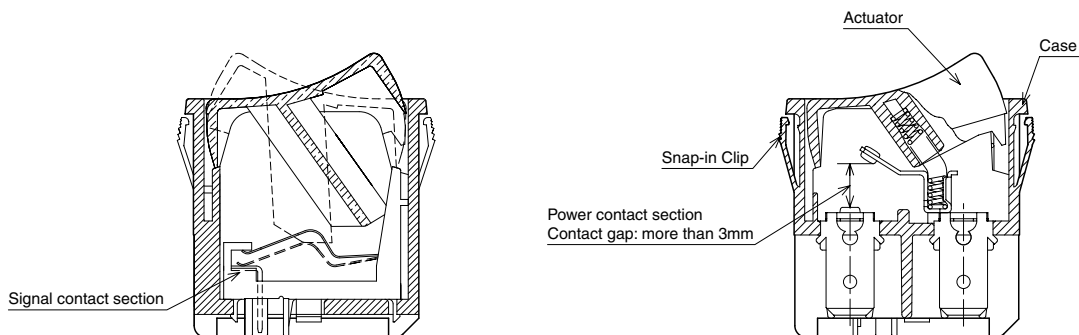
3. High inrush current resistance is ideal for office automation equipment.

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 ⁴ |

* 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

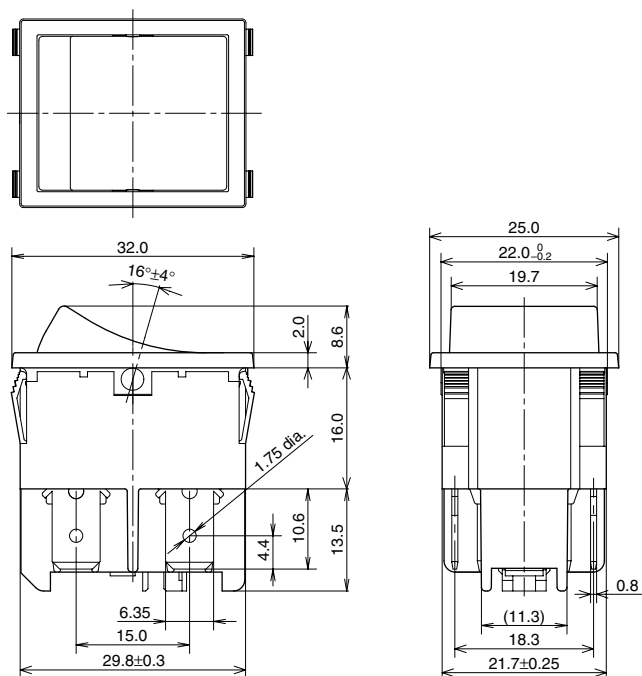
| Type | | Inrush current | Motor load* EN61058-1 (pf = 0.6) | Contact rating (Resistive load) | Expected life |
|------------|----------------|----------------|----------------------------------------|------------------------------------|---------------------|
| AJ8S (J8S) | Power section | 160A | 4A | 16A 250V AC | Min.10 ⁴ |
| | Signal section | — | — | 10mA 5V DC | Min.10 ⁴ |

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.

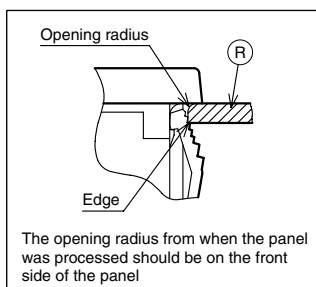
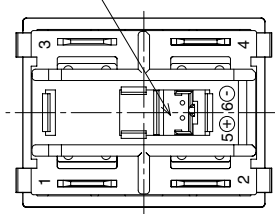
2. Characteristics

| Item | | Specifications |
|------------------------------------------|----------------|-------------------------------------------------------------------------------------------|
| Electrical life | | Min. 10 ⁴ (at 7 cpm., at rated load) |
| Mechanical life | | Min. 5×10 ⁴ (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 ² {30G} (Contact opening Max. 1ms) |
| | Destructive | Min. 980m/s ² {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 ₂ alloy (Power section), Cu alloy and Gold (Au) plating (Signal section) |

DIMENSIONS (Unit: mm)



Suitable connector: CT connector



Wiring diagram

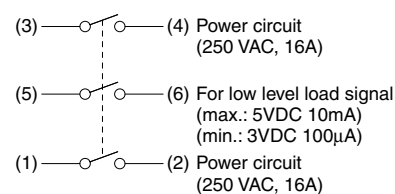
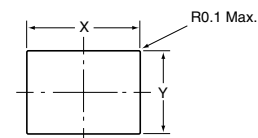


Diagram of recommended locations for panel mounting holes



| Panel thickness | X | Y |
|--------------------|--------------------------------------|--------------------------------------|
| 1 to less than 1.8 | 30.4 ^{-0.0} _{-0.1} | 22.0 ^{-0.1} _{-0.0} |
| 1.8 to 2.3 | 31.1 ^{-0.0} _{-0.1} | 22.0 ^{-0.1} _{-0.0} |

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

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

