SystempaK (Analog/Single Case)
Monitor Switch Module
Model J-SSP 60

Introduction
The Monitor Switch Module (J-SSP 60) is a signal conversion module housed in a single case and issues an alarm contact output when an input signal exceeds the internal pre-set value by comparing the input with the pre-set value. Complete isolation is employed between the power, input, and output circuits.

Specification
- **Type**
  - One PV, two alarm outputs
- **Input signal**
  - 1 to 5V DC or 4 to 20mA DC
- **Input bias current**
  - -1µA or less (voltage)
- **Input impedance**
  - 250 Ω (current)
- **Output signal**
  - Dry contact SPST (two pairs for two-point alarm)
- **Output contact capacity**
  - 30V DC, 1A (resistive load)
  - 100V AC, 0.3A (resistive load)
- **Number of alarm points**
  - Two points
- **Alarm action (by jumper setting)**
  - Hi/Lo, Hi/HiHi, Lo/LoLo
- **Relay coil (by jumper setting)**
  - Normally de-energized or Normally energized
- **Relay contact (by jumper setting)**
  - Normally open or Normally close
- **Alarm setting range**
  - 0 to 100%FS
- **Dead band**
  - 0.25% or less
- **Setting accuracy**
  - ±0.25%FS
- **Insulation resistance**
  - 500V DC 100MΩ minimum
  - Between each terminal of; Input - Output - GND - DC Power supply
- **Withstand voltage**
  - 1000V AC 1 min.
  - Between each terminal of; Input - Output - GND - DC Power Supply
- **Power supply**
  - 24V DC ±15%
- **Current consumption**
  - 80mA max.
  - (at 24V DC) (two-point alarm)
- **Ambient temperature**
  - Normal operating conditions; 5 to 45 °C
  - Operating limit; -5 to 55 °C
- **Ambient humidity**
  - 0 to 90%RH
- **Mounting**
  - Panel, Wall, DIN rail mounting
- **Color of front mask**
  - Black
- **Weight**
  - 400g
- **Operating influence**
  - Supply voltage effect;
    - ± 0.1%FS/24V DC ±15%
  - Temperature effect;
    - ± 0.25%FS/10 °C
Theory of Operation

An input provides a high common noise rejection by the high impedance amplifier in the Input Buffer circuit, and the Filter circuit removes any AC noise, resulting in stable 1 to 5V DC signal. The Comparison Amplifier compares an input signal with the pre-set signal (1 to 5V DC) to actuate the relay. The Hysteresis circuit prevents chattering when restoring the Comparison Amplifier after its operation.

Model Number Table

<table>
<thead>
<tr>
<th>Basic Model Number</th>
<th>Selections</th>
<th>Options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>J-SSP60</td>
<td>I</td>
<td>II</td>
<td>Monitor Switch Module (Analog Type)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-1</td>
</tr>
</tbody>
</table>

Example: J-SSP60X-2X-0

Note) When ordering, specify the following alarm output type and Hi or Lo alarm setting value (%)

<table>
<thead>
<tr>
<th>Output type</th>
<th>Relay (at normal operation)</th>
<th>Output contact (at normal operation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>De-energized</td>
<td>Open</td>
</tr>
<tr>
<td>A</td>
<td>De-energized</td>
<td>Closed</td>
</tr>
<tr>
<td>B</td>
<td>Energized</td>
<td>Closed</td>
</tr>
<tr>
<td>C</td>
<td>Energized</td>
<td>Open</td>
</tr>
</tbody>
</table>
**Dimensions and Wirings**

2-M3 screws (top and bottom) for mounting brackets

**Sliding block**

**Cover (Note 2)**

---

**No.** | **Description**
---|---
1 | (Note 1)
2 | Input (-) (Note 1)
3 | Input (+)
4 | Output 1
5 | Output 1
6 | Output 2
7 | Output 2
8 | 24V (PS +)
9 | GND
10 | 0V (PS -)

**Note:**
1) 250 Ω resister is added for current input.
2) Do not remove the cover during operation.
3) Terminal screws: M3.5
4) Use the terminal cramp with insulation sheath.
Panel-mounting

- L-type mounting brackets (2, top and bottom)
- Panel

Panel-cutout

- 2-M4 screws
- Evenly-pitched
- Single mounting
- Multi-mounting (n: number of modules mounted)

DIN rail mounting

- DIN rail
- Sliding block
- 4 or more
- 2-M4 screws
- (for number of modules)

Wall-mounting (n: number of modules mounted)

- Rail
- End fittings
- DAS-4 [Toyo Giken made]
- ATO-29 [Toyo Giken made]

Recommended DIN rail and end fittings

- Wall or angle
- 27 or less
- 7.5 or more

Please read the "Terms and Conditions" from the following URL before ordering or use:
http://www.azbil.com/products/bi/order.html

Specifications are subject to change without notice.