

# Knob-type Selector Switch

**A22S/W** 

Install in 22-mm dia. or 25-mm dia. Panel Cutout

- Illuminated and Non-illuminated models
- Locking lever ensures easy mounting and removal of switch unit
- Increase wiring efficiency and decrease mounting depth with three-row mounting of switch unit contact blocks
- Finger-safe contact blocks
- Use optional 25-mm dia. ring to install in 25-mm dia. panel cutouts



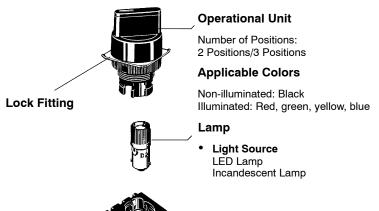




This product was manufactured at OMRON Izumo. OMRON Izumo has obtained approvals from international certification bodies for its quality system and environmental control system.

# Ordering Information

### **■** CONSTRUCTION

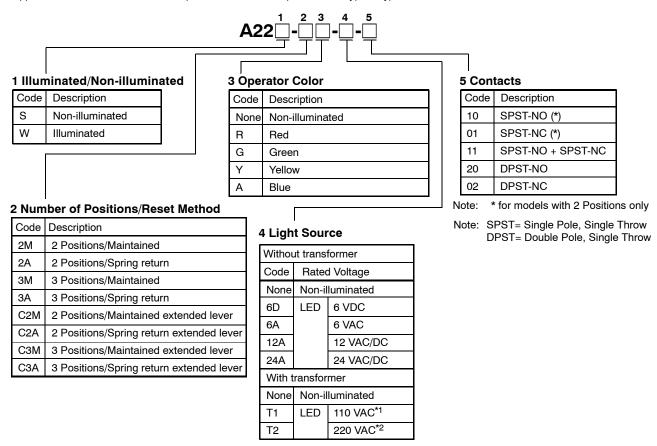


#### **Switch Unit**

- Contacts SPST-NO, SPST-NC, SPST-NO + SPST-NC, DPST-NO, DPST-NC
- Lighting Method
   Non-illuminated
   Illuminated (without transformer)
   Illuminated (with transformer)

### **■ PART NUMBER LEGEND**

Shipped as a set which includes the Operational Unit, LED (Illuminated Type only), and Switch Unit.



<sup>\*1)</sup> Operational voltage: 95 to 115 VAC \*2) Operational voltage: 190 to 230 VAC

Note: With transformer types, the LED lamp (24 VAC/DC) can be lit by directly applying 110 VAC/DC (220 VAC/DC) to the lamp terminal. The LED is a 24-VAC/DC type.

(Actual color of yellow selector switches more closely resembles amber than true yellow.)

## **■ KNOB-TYPE SELECTOR SWITCH**

## Non-illuminated

| Appearance                | Positions   | Operating method | Contacts          | Operator color | Part number |
|---------------------------|-------------|------------------|-------------------|----------------|-------------|
| Knob-type selector switch | 2 positions | Maintained       | SPST-NO           | Black          | A22S-2M-10  |
| _                         |             |                  | SPST-NC           | 1              | A22S-2M-01  |
|                           |             |                  | SPST-NO + SPST-NC | 1              | A22S-2M-11  |
| - Coloco (1)              |             |                  | DPST-NO           |                | A22S-2M-20  |
|                           |             |                  | DPST-NC           | 1              | A22S-2M-02  |
|                           |             | Spring return    | SPST-NO           |                | A22S-2A-10  |
|                           |             | \^               | SPST-NC           |                | A22S-2A-01  |
|                           |             |                  | SPST-NO + SPST-NC | 1              | A22S-2A-11  |
|                           |             |                  | DPST-NO           | 1              | A22S-2A-20  |
|                           |             |                  | DPST-NC           |                | A22S-2A-02  |
|                           | 3 positions | Maintained       | SPST-NO + SPST-NC |                | A22S-3M-11  |
|                           |             |                  | DPST-NO           | 1              | A22S-3M-20  |
|                           |             |                  | DPST-NC           | 1              | A22S-3M-02  |
|                           |             | Spring return    | SPST-NO + SPST-NC |                | A22S-3A-11  |
|                           |             | <b>→</b>         | DPST-NO           |                | A22S-3A-20  |
|                           |             |                  | DPST-NC           | 1              | A22S-3A-02  |
| Extended lever knob-type  | 2 positions | Maintained       | SPST-NO           | Black          | A22S-C2M-10 |
| selector switch           |             |                  | SPST-NC           |                | A22S-C2M-01 |
|                           |             | Ĭ                | SPST-NO + SPST-NC |                | A22S-C2M-11 |
|                           |             |                  | DPST-NO           |                | A22S-C2M-20 |
|                           |             |                  | DPST-NC           |                | A22S-C2M-02 |
|                           |             | Spring return    | SPST-NO           |                | A22S-C2A-10 |
|                           |             |                  | SPST-NC           |                | A22S-C2A-01 |
|                           |             | \ \              | SPST-NO + SPST-NC |                | A22S-C2A-11 |
|                           |             |                  | DPST-NO           |                | A22S-C2A-20 |
|                           |             |                  | DPST-NC           |                | A22S-C2A-02 |
|                           | 3 positions | Maintained       | SPST-NO + SPST-NC |                | A22S-C3M-11 |
|                           |             |                  | DPST-NO           |                | A22S-C3M-20 |
|                           |             |                  | DPST-NC           |                | A22S-C3M-02 |
|                           |             | Spring return    | SPST-NO + SPST-NC |                | A22S-C3A-11 |
|                           |             |                  | DPST-NO           |                | A22S-C3A-20 |
|                           |             |                  | DPST-NC           |                | A22S-C3A-02 |

## **Illuminated (Without Transformer)**

| Appearance                | Positions   | Operating method | Contacts             | Rated voltage | Operator color                        | Part number     |
|---------------------------|-------------|------------------|----------------------|---------------|---------------------------------------|-----------------|
| Knob-type selector switch | 2 positions | Maintained       | SPST-NO              | 6 VDC         | Insert one of                         | A22W-2M□-6D-10  |
| LED lighting              |             |                  |                      | 6 VAC         | the following letters into the box □. | A22W-2M□-6A-10  |
| (without transformer)     |             |                  | SPST-NC              | 12 VAC/DC     |                                       | A22W-2M□-12A-10 |
|                           |             |                  |                      | 24 VAC/DC     |                                       | A22W-2M□-24A-10 |
|                           |             |                  |                      | 6 VDC         | Y (yellow)                            | A22W-2M□-6D-01  |
|                           |             |                  |                      | 6 VAC         | G (green)<br>A (blue)                 | A22W-2M□-6A-01  |
|                           |             |                  |                      | 12 VAC/DC     |                                       | A22W-2M□-12A-01 |
|                           |             |                  |                      | 24 VAC/DC     | 1                                     | A22W-2M□-24A-01 |
|                           |             |                  | SPST-NO +            | 6 VDC         |                                       | A22W-2M□-6D-11  |
|                           |             |                  | SPST-NC              | 6 VAC         |                                       | A22W-2M□-6A-11  |
|                           |             |                  |                      | 12 VAC/DC     |                                       | A22W-2M□-12A-11 |
|                           |             |                  |                      | 24 VAC/DC     |                                       | A22W-2M□-24A-11 |
|                           |             |                  | DPST-NO              | 6 VDC         |                                       | A22W-2M□-6D-20  |
|                           |             |                  |                      | 6 VAC         | 1                                     | A22W-2M□-6A-20  |
|                           |             |                  |                      | 12 VAC/DC     | 1                                     | A22W-2M□-12A-20 |
|                           |             |                  |                      | 24 VAC/DC     |                                       | A22W-2M□-24A-20 |
|                           |             |                  | DPST-NC              | 6 VDC         |                                       | A22W-2M□-6D-02  |
|                           |             |                  |                      | 6 VAC         |                                       | A22W-2M□-6A-02  |
|                           |             | Spring return    |                      | 12 VAC/DC     |                                       | A22W-2M□-12A-02 |
|                           |             |                  |                      | 24 VAC/DC     |                                       | A22W-2M□-24A-02 |
|                           |             |                  | SPST-NO              | 6 VDC         |                                       | A22W-2A□-6D-10  |
|                           |             |                  |                      | 6 VAC         |                                       | A22W-2A□-6A-10  |
|                           |             |                  |                      | 12 VAC/DC     |                                       | A22W-2A□-12A-10 |
|                           |             |                  |                      | 24 VAC/DC     |                                       | A22W-2A□-24A-10 |
|                           |             |                  | SPST-NC              | 6 VDC         |                                       | A22W-2A□-6D-01  |
|                           |             |                  |                      | 6 VAC         |                                       | A22W-2A□-6A-01  |
|                           |             |                  |                      | 12 VAC/DC     |                                       | A22W-2A□-12A-01 |
|                           |             |                  |                      | 24 VAC/DC     |                                       | A22W-2A -24A-01 |
|                           |             |                  | SPST-NO +<br>SPST-NC | 6 VDC         |                                       | A22W-2A□-6D-11  |
|                           |             |                  |                      | 6 VAC         |                                       | A22W-2A□-6A-11  |
|                           |             |                  |                      | 12 VAC/DC     |                                       | A22W-2A□-12A-11 |
|                           |             |                  |                      | 24 VAC/DC     |                                       | A22W-2A -24A-11 |
|                           |             |                  | DPST-NO              | 6 VDC         |                                       | A22W-2A□-6D-20  |
|                           |             |                  |                      | 6 VAC         |                                       | A22W-2A□-6A-20  |
|                           |             |                  |                      | 12 VAC/DC     |                                       | A22W-2A□-12A-20 |
|                           |             |                  |                      | 24 VAC/DC     |                                       | A22W-2A□-24A-20 |
|                           |             |                  | DPST-NC              | 6 VDC         |                                       | A22W-2A□-6D-02  |
|                           |             |                  |                      | 6 VAC         |                                       | A22W-2A□-6A-02  |
|                           |             |                  |                      | 12 VAC/DC     |                                       | A22W-2A□-12A-02 |
|                           |             |                  |                      | 24 VAC/DC     |                                       | A22W-2A -24A-02 |

(This table continues on the next page.)

Ordering Information Table - continued from previous page

| Appearance                | Positions   | Operating method | Contacts             | Rated voltage | Operator color   | Part number       |                 |
|---------------------------|-------------|------------------|----------------------|---------------|--|-------------------|-----------------|
| Knob-type selector switch | 3 positions | Maintained       | SPST-NO +<br>SPST-NC | 6 VDC         | Insert one of the following letters into the box □.  R (red) | A22W-3M□-6D-11    |                 |
| LED lighting              |             | \ \\             |                      | 6 VAC         |  | A22W-3M□-6A-11    |                 |
| (without transformer)     |             |                  |                      | 12 VAC/DC     |  | A22W-3M□-12A-11   |                 |
|                           |             |                  |                      | 24 VAC/DC     |  | A22W-3M□-24A-11   |                 |
|                           |             |                  | DPST-NO              | 6 VDC         | Y (yellow)   | A22W-3M□-6D-20    |                 |
|                           |             |                  |                      | 6 VAC         | G (green)<br>A (blue)  | A22W-3M□-6A-20    |                 |
|                           |             |                  |                      | 12 VAC/DC     | - (Dide)   | A22W-3M□-12A-20   |                 |
|                           |             |                  |                      | 24 VAC/DC     |  | A22W-3M□-24A-20   |                 |
|                           |             |                  | DPST-NC              | 6 VDC         |  | A22W-3M□-6D-02    |                 |
|                           |             |                  |                      | 6 VAC         |  | A22W-3M□-6A-02    |                 |
|                           |             |                  |                      | 12 VAC/DC     |  | A22W-3M□-12A-02   |                 |
|                           |             |                  |                      | 24 VAC/DC     |  | A22W-3M□-24A-02   |                 |
| Knob-type selector switch | 3 positions | Spring return    | SPST-NO +            | 6 VDC         | Insert one of the following letters into                     | A22W-3A□-6D-11    |                 |
| LED lighting              |             | $\Diamond$       | SPST-NC              | 6 VAC         |  | A22W-3A□-6A-11    |                 |
| (without transformer)     |             |                  |                      | 12 VAC/DC     | the box .  | A22W-3A□-12A-11   |                 |
|                           |             |                  |                      | 24 VAC/DC     | R (red) Y (yellow) G (green) A (blue)                        | R (red) A22W-3A - | A22W-3A□-24A-11 |
|                           |             |                  | DPST-NO              | 6 VDC         |  | A22W-3A□-6D-20    |                 |
|                           |             |                  |                      | 6 VAC         |  | A22W-3A□-6A-20    |                 |
|                           |             |                  |                      | 12 VAC/DC     |  | A22W-3A□-12A-20   |                 |
|                           |             |                  |                      | 24 VAC/DC     |  | A22W-3A□-24A-20   |                 |
|                           |             |                  | DPST-NC              | 6 VDC         |  | A22W-3A□-6D-02    |                 |
|                           |             |                  |                      | 6 VAC         |  | A22W-3A□-6A-02    |                 |
|                           |             |                  |                      | 12 VAC/DC     |  | A22W-3A□-12A-02   |                 |
|                           |             |                  |                      | 24 VAC/DC     |  | A22W-3A□-24A-02   |                 |

## Illuminated (With Transformer)

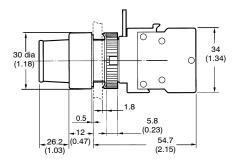
| Appearance                | Positions   | Operating method | Contacts                             | Rated voltage | Operator color                                      | Part number    |
|---------------------------|-------------|------------------|--------------------------------------|---------------|---|----------------|
| Knob-type selector switch | 2 positions | Maintained       | SPST-NO                              | 110 VAC       | Insert one of the following letters into the box □. | A22W-2M□-T1-10 |
| LED lighting              |             |                  |                                      | 220 VAC       |   | A22W-2M□-T2-10 |
| with transformer)         |             |                  | SPST-NC                              | 110 VAC       |   | A22W-2M□-T1-01 |
|                           |             |                  |                                      | 220 VAC       | R (red)   | A22W-2M□-T2-01 |
|                           |             |                  | SPST-NO +<br>SPST-NC                 | 110 VAC       | Y (yellow)  | A22W-2M□-T1-11 |
|                           |             |                  |                                      | 220 VAC       | G (green)<br>A (blue)                               | A22W-2M□-T2-11 |
|                           |             |                  | DPST-NO                              | 110 VAC       | 7 (5.00)  | A22W-2M□-T1-20 |
|                           |             |                  |                                      | 220 VAC       |   | A22W-2M□-T2-20 |
|                           |             |                  | DPST-NC                              | 110 VAC       |   | A22W-2M□-T1-02 |
| •                         |             |                  |                                      | 220 VAC       |   | A22W-2M□-T2-02 |
|                           |             | Spring return    | SPST-NO                              | 110 VAC       |   | A22W-2A□-T1-10 |
|                           |             |                  |                                      | 220 VAC       |   | A22W-2A□-T2-10 |
|                           |             |                  | SPST-NC                              | 110 VAC       |   | A22W-2A□-T1-01 |
|                           |             |                  |                                      | 220 VAC       |   | A22W-2A□-T2-01 |
|                           |             |                  | SPST-NO +<br>SPST-NC<br>DPST-NO      | 110 VAC       |   | A22W-2A□-T1-11 |
|                           |             |                  |                                      | 220 VAC       |   | A22W-2A□-T2-11 |
|                           |             |                  |                                      | 110 VAC       |   | A22W-2A□-T1-20 |
|                           |             |                  |                                      | 220 VAC       |   | A22W-2A□-T2-20 |
|                           |             |                  | DPST-NC                              | 110 VAC       |   | A22W-2A□-T1-02 |
|                           |             |                  |                                      | 220 VAC       |   | A22W-2A□-T2-02 |
|                           | 3 positions | Maintained       | SPST-NO +<br>SPST-NC                 | 110 VAC       |   | A22W-3M□-T1-11 |
|                           |             | $\downarrow$     |                                      | 220 VAC       |   | A22W-3M□-T2-11 |
|                           |             |                  | DPST-NO                              | 110 VAC       |   | A22W-3M□-T1-20 |
|                           |             |                  |                                      | 220 VAC       |   | A22W-3M□-T2-20 |
|                           |             |                  | DPST-NC                              | 110 VAC       |   | A22W-3M□-T1-02 |
|                           |             |                  |                                      | 220 VAC       |   | A22W-3M□-T2-02 |
|                           |             | Spring return    | ing return SPST-NO + SPST-NC DPST-NO | 110 VAC       |   | A22W-3A□-T1-11 |
|                           |             | <b>*</b>         |                                      | 220 VAC       |   | A22W-3A□-T2-11 |
|                           |             |                  |                                      | 110 VAC       |   | A22W-3A□-T1-20 |
|                           |             |                  |                                      | 220 VAC       | 1   | A22W-3A□-T2-20 |
|                           |             |                  | DPST-NC                              | 110 VAC       | 1   | A22W-3A□-T1-02 |
|                           |             |                  |                                      | 220 VAC       | 1   | A22W-3A□-T2-02 |

# **Dimensions**

Unit: mm (inch)

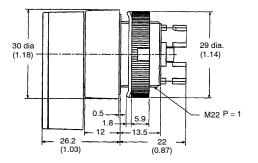
## **■** KNOB-TYPE SELECTOR SWITCH (ILLUMINATED/NON-ILLUMINATED)

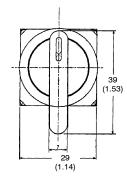




A22S-C3

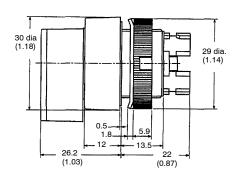


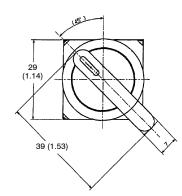




A22S-C2

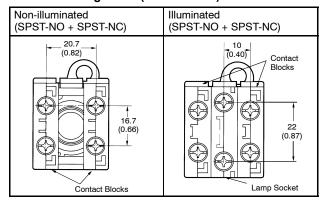






### **■ TERMINAL ARRANGEMENT**

#### **Terminal Arrangement (Bottom View)**



### **■ PANEL CUTOUT DIMENSIONS**



Note: When applying a coating such as paint to a panel, the dimensions should be those after the application of the coating.

A lock fitting is provided as a standard item.

## **■ TERMINAL CONNECTION**

| Туре                                  | Connection diagram |  |  |  |  |
|---------------------------------------|--------------------|--|--|--|--|
| Non-illuminated                       | Bottom view        |  |  |  |  |
|                                       | <b>①</b> ③         |  |  |  |  |
|                                       |                    |  |  |  |  |
|                                       | 0 0                |  |  |  |  |
| Illuminated<br>without<br>transformer | Bottom view        |  |  |  |  |
|                                       | ① (+) (3)          |  |  |  |  |
|                                       | 2 2 4              |  |  |  |  |
| Illuminated with                      | Bottom view        |  |  |  |  |
| transformer                           |                    |  |  |  |  |

Note: The above terminal connection diagrams are examples for SPST-NO + SPST-NC.

### **■ CONTACT CONFIGURATION**

#### 2-Position Type

| Knob position | SPST-NO        | SPST-NC  | SPST-NO +<br>SPST-NC | DPST-NO     | DPST-NC   |
|---------------|----------------|----------|----------------------|-------------|-----------|
| $\bigcirc$    | <del>-</del> - | <u> </u> | <del>-</del>         | <del></del> |           |
| $\bigcirc$    | 0 0            | • , •    | <del>0 0</del> • • • | 0 0 0 0     | • • • • • |

### 3-Position Type

| Knob position | SPST-NO + SPS | ST-NC    | DPST-NO     |             | DPST-NC      |              |
|---------------|---------------|----------|-------------|-------------|--------------|--------------|
| $\bigcirc$    | 0 0           | <u> </u> | 0 0         | <del></del> | <u>• , •</u> | <u> </u>     |
| 1             | <u> </u>      | <u> </u> | <del></del> | 0 0         | • •          | • • •        |
| $\bigcirc$    | 0 0           | • , •    | 0 0         | 0 0         | 9.1.0        | <u>• , •</u> |

Note: For additional specifications and information refer to the Common to all assemblies section at the end of this publication.

NOTE: DIMENSIONS SHOWN ARE IN MILLIMETERS. To convert millimeters to inches divide by 25.4.

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Specifications subject to change without notice.

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