## OmROח

## Selector Switches <br> A22NS/A22NW

## 22-mm Selector Switches

## Universal Design.



## Emphasis on Color Coding,

 Workability, and Safety.
## Easy to Use

- You can connect up to three Contact Blocks in one stage for multistage expansion.
- Screw terminal structure is compatible with round crimp terminals.


## Safety

- Easy-to-operate lock lever for secure locking.
- Easy-mounting Contact Blocks provide finger protection.
- Different colors of Contact Blocks (NO: blue, NC: orange) help prevent wiring errors.


## Product Lineup

- Meets global safety standards.
- Available in metal and plastic bezels.
- Many color variations.
- Standard-feature degree of protection: IP66, NEMA 4X, and NEMA 13.


## Operation Unit Colors



[^0]A22NS/A22NW

## List of Models

Plastic Switches
Non-lighted
Two Positions
Brushed Metal Switches
Metal Switches
Non-lighted
Two Positions

[^1]Please refer to the subassemblies section for additional options.
Please refer to the specifications section for examples of linked contact block options.

## Model Number Structure

Model Number Legend
Model Numbers for Sets

Shipped as a set that includes the Operation Unit, LED Lamp, Mounting Collar, and Contact Block. For information on combinations, refer to Ordering Information on pages 6 to 8 .


| (1) Type |  |
| :---: | :---: |
| Code | Type |
| $S$ | Non-lighted |
| $W$ | Lighted |

(5) Degree of Protection

| Code | Protection |
| :---: | :---: |
| A | IP66, NEMA 4X, NEMA13 |

## (6) Contacts

(2) Number of Positions and Bezel Material

| Code | No. of positions | Bezel material |
| :---: | :---: | :---: |
| 2B | 2 | Plastic |
| 2M | 2 | Brushed metal |
| 2R | 2 | Metal |
| 3B | 3 | Plastic |
| 3M | 3 | Brushed metal |
| 3R | 3 | Metal |

(3) Reset Method

| Code | Reset method |  |  |
| :---: | :---: | :---: | :---: |
| M | Manual | Two-position <br> manual |  |
|  | Three-position <br> manual |  |  |

(4) Operation Unit Transparency and Color and (8) LED Lamp Color

| Lighted/ nonlighted | Code <br> (4) | Code <br> (8) | Transparancy | Operation Unit color | LED Lamp color |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nonlighted | NR | N | Opaque | Red | --- |
|  | NG |  | Opaque | Green |  |
|  | NY |  | Opaque | Yellow |  |
|  | NW |  | Opaque | White |  |
|  | NA |  | Opaque | Blue |  |
|  | NB |  | Opaque | Black |  |
| Lighted | TR | R | Transparent | Red | Red |
|  | TG | G | Transparent | Green | Green |
|  | TY | Y | Transparent | Yellow | Yellow |
|  | TW | W | Transparent | White | White |
|  | TA | A | Transparent | Blue | Blue |
|  | TO | O | Transparent | Orange | Orange |
|  | TW | Y | Transparent | White* | Yellow |

* The color is opaque white when the Switch is lit.

| Code | Description |
| :---: | :---: |
| $G$ | General purpose |

## (7) Contact Configuration

| Code |  |  | Non-lighted |  |  |  |  | Lighted |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Switch position |  |  | No. of positions |  | Switch position |  |  | No. of positions |  |
|  | NO | NC | (1) | (2) | (3) | Two positions | Three positions | (1) | (2) | (3) | Two positions | Three positions |
| 100 | 1 | 0 | NO | --- | --- | Yes |  | NO | Lighting Unit | --- | Yes |  |
| 002 | 0 | 1 | --- | --- | NC | Yes |  | --- | Lighting Unit | NC | Yes |  |
| 101 | 2 | 0 | NO | --- | NO | Yes | Yes | NO | Lighting Unit | NO | Yes | Yes |
| 102 | 1 | 1 | NO | --- | NC | Yes | Yes | NO | Lighting Unit | NC | Yes | Yes |
| 201 | 1 | 1 | NC | --- | NO |  | Yes | NC | Lighting Unit | NO |  | Yes |
| 202 | 0 | 2 | NC | --- | NC | Yes | Yes | NC | Lighting Unit | NC | Yes | Yes |
| 110 | 2 | 0 | NO | NO | --- |  | Yes |  |  |  |  |  |
| 210 | 1 | 1 | NC | NO | --- |  | Yes |  |  |  |  |  |
| 011 | 2 | 0 | --- | NO | NO |  | Yes |  |  |  |  |  |
| 012 | 1 | 1 | --- | NO | NC |  | Yes |  |  |  |  |  |
| 120 | 1 | 1 | NO | NC | --- |  | Yes |  |  |  |  |  |
| 220 | 0 | 2 | NC | NC | --- |  | Yes |  |  |  |  |  |
| 021 | 1 | 1 | --- | NC | NO |  | Yes |  |  |  |  |  |
| 022 | 0 | 2 | --- | NC | NC |  | Yes |  |  |  |  |  |

Note: 1. NO (blue): Normally open, NC (orange): Normally closed. 2. Refer to the following figure for the Unit positions.

## (9) LED Lamp Voltage



| Code | LED Lamp voltage |
| :---: | :---: |
| N | Non-lighted |
| A | 6 VAC/DC |
| B | 12 VAC/DC |
| C | $24 \mathrm{VAC} / \mathrm{DC}$ |
| D | $100 / 110 / 120$ VAC |
| E | $200 / 220 / 230 / 240$ VAC |

Note: Not all assembled configurations are possible.
Please refer to the subassemblies section for additional options.
Please refer to the specifications section for examples of linked contact block options.

[^2]A22NS/A22NW
Structure

## Contact Configuration Table Two Positions

| No. of outputs | Code | Contact configuration | Switch position | Contacts | Position |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 1 | 2 |
| 1 | 100 | SPST-NO | (1) | NO |  | ON |
|  |  |  | (2) | --- | --- | --- |
|  |  |  | (3) | --- | --- | --- |
| 1 | 002 | SPST-NC | (1) | --- | --- | --- |
|  |  |  | (2) | --- | --- | --- |
|  |  |  | (3) | NC | ON |  |
| 2 | 102 | SPST-NO/ <br> SPST-NC | (1) | NO |  | ON |
|  |  |  | (2) | --- | --- | --- |
|  |  |  | (3) | NC | ON |  |
| 2 | 101 | DPST-NO | (1) | NO |  | ON |
|  |  |  | (2) | --- | --- | --- |
|  |  |  | (3) | NO |  | ON |
| 2 | 202 | DPST-NC | (1) | NC | ON |  |
|  |  |  | (2) | --- | --- | --- |
|  |  |  | (3) | NC | ON |  |
| 3 | 111 | 3PST-NO | (1) | NO |  | ON |
|  |  |  | (2) | NO |  | ON |
|  |  |  | (3) | NO |  | ON |
| 3 | 222 | 3PST-NC | (1) | NC | ON |  |
|  |  |  | (2) | NC | ON |  |
|  |  |  | (3) | NC | ON |  |
| 3 | 122 | SPST-NO/ <br> DPST-NC | (1) | NO |  | ON |
|  |  |  | (2) | NC | ON |  |
|  |  |  | (3) | NC | ON |  |
| 3 | 112 | DPST-NO/ <br> SPST-NC | (1) | NO |  | ON |
|  |  |  | (2) | NO |  | ON |
|  |  |  | (3) | NC | ON |  |

Three Positions

| No. of outputs | Code | Contact configuration | Switch position | Contacts | Position |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 1 | 0 | 2 |
| 2 | 110 | DPST-NO | (1) | NO | ON |  |  |
|  |  |  | (2) | NO | ON |  | ON |
|  |  |  | (3) | --- | --- | --- | --- |
| 2 | 011 | DPST-NO | (1) | --- | --- | --- | --- |
|  |  |  | (2) | NO | ON |  | ON |
|  |  |  | (3) | NO |  |  | ON |
| 2 | 101 | DPST-NO | (1) | NO | ON |  |  |
|  |  |  | (2) | --- | --- | --- | --- |
|  |  |  | (3) | NO |  |  | ON |
| 2 | 220 | DPST-NC | (1) | NC |  | ON | ON |
|  |  |  | (2) | NC |  | ON |  |
|  |  |  | (3) | --- | --- | --- | --- |
| 2 | 022 | DPST-NC | (1) | --- | --- | --- | --- |
|  |  |  | (2) | NC |  | ON |  |
|  |  |  | (3) | NC | ON | ON |  |
| 2 | 202 | DPST-NC | (1) | NC |  | ON | ON |
|  |  |  | (2) | --- | --- | --- | --- |
|  |  |  | (3) | NC | ON | ON |  |

Note: Not all assembled configurations are possible.
Please refer to the subassemblies section for additional options.
Please refer to the specifications section for examples of linked contact block options.

| No. of outputs | Code | Contact configuration | Switch position | Contacts | Position |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 1 | 0 | 2 |
| 2 | 120 | SPST-NO/ SPST-NC | (1) | NO | ON |  |  |
|  |  |  | (2) | NC |  | ON |  |
|  |  |  | (3) | --- | --- | --- | --- |
| 2 | 102 | SPST-NO/ SPST-NC | (1) | NO | ON |  |  |
|  |  |  | (2) | --- | --- | --- | --- |
|  |  |  | (3) | NC | ON | ON |  |
| 2 | 210 | SPST-NO/ SPST-NC | (1) | NC |  | ON | ON |
|  |  |  | (2) | NO | ON |  | ON |
|  |  |  | (3) | --- | --- | --- | --- |
| 2 | 201 | SPST-NO/ SPST-NC | (1) | NC |  | ON | ON |
|  |  |  | (2) | --- | --- | --- | --- |
|  |  |  | (3) | NO |  |  | ON |
| 2 | 012 | SPST-NO/ SPST-NC | (1) | --- | --- | --- | --- |
|  |  |  | (2) | NO | ON |  | ON |
|  |  |  | (3) | NC | ON | ON |  |
| 2 | 021 | SPST-NO/ SPST-NC | (1) | --- | --- | --- | --- |
|  |  |  | (2) | NC |  | ON |  |
|  |  |  | (3) | NO |  |  | ON |
| 3 | 111 | 3PST-NO | (1) | NO | ON |  |  |
|  |  |  | (2) | NO | ON |  | ON |
|  |  |  | (3) | NO |  |  | ON |
| 3 | 222 | 3PST-NC | (1) | NC |  | ON | ON |
|  |  |  | (2) | NC |  | ON |  |
|  |  |  | (3) | NC | ON | ON |  |
| 3 | 122 | SPST-NO/ DPST-NC | (1) | NO | ON |  |  |
|  |  |  | (2) | NC |  | ON |  |
|  |  |  | (3) | NC | ON | ON |  |
| 3 | 212 | SPST-NO/ DPST-NC | (1) | NC |  | ON | ON |
|  |  |  | (2) | NO | ON |  | ON |
|  |  |  | (3) | NC | ON | ON |  |
| 3 | 221 | SPST-NO/ DPST-NC | (1) | NC |  | ON | ON |
|  |  |  | (2) | NC |  | ON |  |
|  |  |  | (3) | NO | ON |  | ON |
| 3 | 211 | DPST-NO/ SPST-NC | (1) | NC |  | ON | ON |
|  |  |  | (2) | NO | ON |  | ON |
|  |  |  | (3) | NO |  |  | ON |
| 3 | 121 | DPST-NO/ SPST-NC | (1) | NO | ON |  |  |
|  |  |  | (2) | NC |  | ON |  |
|  |  |  | (3) | NO |  |  | ON |
| 3 | 112 | DPST-NO/ <br> SPST-NC | (1) | NO | ON |  |  |
|  |  |  | (2) | NO | ON |  | ON |
|  |  |  | (3) | NC | ON | ON |  |

Operation Angle
Three Positions


Note: Some combinations are only available through subassemblies.
Please refer to the specifications section for more information.

## Ordering Information

Model Numbers for Sets -- - -Shipped as a set that includes the Operation Unit, LED Lamp, Mounting Collar, and Contact Block.
Non-lighted, Two-positon, Selector Switches

| Appearance | Bezel material | No. of outputs | Model | (3) <br> Reset method | (4)(4) <br> Operation Unit color | (7)(7)(7) Contact configuration |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plastic bezels | 2B | 1 | A22NS-2B(3)-(4)(4)A-G(7)(7)(7)-NN | M: Manual | NR: Opaque red NG: Opaque green NY: Opaque yellow NW: Opaque white NA: Opaque blue NB: Opaque black | $\begin{aligned} & 100 \\ & 002 \end{aligned}$ |
|  |  | 2 |  |  |  | $\begin{aligned} & 102 \\ & 101 \\ & 202 \end{aligned}$ |
| Brushed metal bezels | 2M | 1 | A22NS-2M(3)-(4)(4)A-G(7)(7)(7)-NN |  |  | $\begin{aligned} & 100 \\ & 002 \end{aligned}$ |
|  |  | 2 |  |  |  | $\begin{aligned} & 102 \\ & 101 \\ & 202 \end{aligned}$ |
| Metal bezels | 2R | 1 | A22NS-2R(3)-(4)(4)A-G(7)(7)(7)-NN |  |  | $\begin{aligned} & 100 \\ & 002 \end{aligned}$ |
|  |  | 2 |  |  |  | $\begin{aligned} & 102 \\ & 101 \\ & 202 \end{aligned}$ |

Note: Not all assembled configurations are possible.
Please refer to the subassemblies section for additional options
Please refer to the specifications section for examples of linked contact block options.

## Non-lighted, Three-positon, Selector Switches

| Appearance | Bezel material | No. of outputs | Model | (3) <br> Reset method | (4)(4) <br> Operation Unit color | (7)(7)(7) Contact configuration |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plastic bezels | 3B | 2 | A22NS-3B(3)-(4)(4)A-G(7)(7)(7)-NN |  |  | $\begin{aligned} & \hline 110 \\ & 011 \\ & 101 \\ & 220 \\ & 022 \\ & 202 \\ & 120 \\ & 102 \\ & 210 \\ & 201 \\ & 012 \\ & 021 \end{aligned}$ |
| Brushed metal bezels |  | 2 | A22NS-3(3)-(4)(4)A-G(7)(7)(7)-NN | M: Manual | NR: Opaque red NG: Opaque green NY: Opaque yellow NW: Opaque white NA: Opaque blue NB: Opaque black | $\begin{aligned} & 110 \\ & 011 \\ & 101 \\ & 220 \\ & 022 \\ & 202 \\ & 120 \\ & 102 \\ & 210 \\ & 201 \\ & 012 \\ & 021 \end{aligned}$ |
| Metal bezels | 3R | 2 | A22NS-3R(3)-(4)(4)A-G(7)(7)(7)-NN |  |  | $\begin{aligned} & \hline 110 \\ & 011 \\ & 101 \\ & 220 \\ & 022 \\ & 202 \\ & 120 \\ & 102 \\ & 210 \\ & 201 \\ & 012 \\ & 021 \end{aligned}$ |

Note: Not all assembled configurations are possible.
Please refer to the subassemblies section for additional options.
Please refer to the specifications section for examples of linked contact block options.

## A22NS/A22NW

## Ordering Information

Model Numbers for Sets -- - Shipped as a set that includes the Operation Unit, LED Lamp, Mounting Collar, and Contact Block.
Lighted, Two-positon, Selector Switches

| Appearance | Bezel material | No. of outputs | Model | (3) Reset method | (4)(4) <br> Operation Unit color | (7)(7)(7) <br> Contact Configuration | $\begin{gathered} \text { (8) } \\ \text { LED Lamp } \\ \text { color } \end{gathered}$ | (9) <br> LED Lamp voltage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plastic bezels | 2B | 1 | A22NW-2B(3)-$(4)(4) A-G(7)(7)(7)-(8)(9)$ | M: Manual | TR: Transparent red TG: Transparent green TY: Transparent yellow TW: Transparent white TA: Transparent blue TO: Transparent orange | $\begin{aligned} & 100 \\ & 002 \end{aligned}$ | R: Red <br> G: Green <br> Y: Yellow <br> A: Blue <br> O: Orange | A: $6 \mathrm{VAC} / \mathrm{DC}$ <br> B: $12 \mathrm{VAC} / \mathrm{DC}$ <br> C: 24 VAC/DC <br> D: 100/110/120 VAC <br> E: 200/220/230/240 VAC |
|  |  | 2 |  |  |  | $\begin{aligned} & 102 \\ & 101 \\ & 202 \end{aligned}$ |  |  |
| Brushed metal bezels | 2M | 1 | A22NW-2M(3)-$(4)(4) A-G(7)(7)(7)-(8)(9)$ |  |  | $\begin{aligned} & 100 \\ & 002 \end{aligned}$ |  |  |
|  |  | 2 |  |  |  | $\begin{aligned} & 102 \\ & 101 \\ & 202 \end{aligned}$ |  |  |
|  | 2R | 1 | $\begin{aligned} & \text { A22NW-2R(3)- } \\ & \text { (4)(4)A-G(7)(7)(7)-(8)(9) } \end{aligned}$ |  |  | $\begin{aligned} & 100 \\ & 002 \end{aligned}$ |  |  |
|  |  | 2 |  |  |  | $\begin{aligned} & 102 \\ & 101 \\ & 202 \end{aligned}$ |  |  |

Lighted, Three-positon, Selector Switches


Note: Normally, the Operation Unit and LED Lamp with the same color are combined
However, opaque white is available by combining a white Operation Unit and yellow LED. A22N $\square-\square \square \square-\mathrm{TW}$-G $\square \square \square-\mathrm{Y} \square$

Note: Not all assembled configurations are possible.
Please refer to the subassemblies section for additional options.
Please refer to the specifications section for examples of linked contact block options.

Subassemblies: Refer to pages 9 to 13.
(You can order Operation Units, LED Lamps, Mounting Collars, and Contact Blocks individually.)

[^3]
## Ordering Information

Subassemblies
You can order Operation Units, LED Lamps, Mounting Collars, and Contact Blocks individually. Use them in combination for models that are not available as assembled Switches. They can also be used as inventory for maintenance parts.


Note: Use a Reinforcement Plate for greater strength.


[^4]
## Model Number Legend

## Model Numbers for Subassemblies


(1) Type

| Code | Type |
| :---: | :---: |
| $Z$ | Subassembly |

(2) Number of Positions and Bezel Material

| Code | No. of positions | Bezel material |
| :---: | :---: | :---: |
| $2 B$ | 2 | Plastic |
| $2 M$ | 2 | Brushed metal |
| $2 R$ | 2 | Metal |
| 3B | 3 | Plastic |
| 3M | 3 | Brushed metal |
| 3R | 3 | Metal |

(3) Reset Method

| M | Manual | Two-position <br> manual |  |
| :---: | :--- | :--- | :--- |
|  | Three-position <br> manual |  |  |
| L | Automatic <br> reset on left | Two-position <br> automatic | Three-position <br> left automatic |
| R | Automatic <br> reset on <br> right | Three-position <br> right automatic |  |
| B | Automatic <br> reset on left <br> and right | Three-position <br> left or right <br> automatic |  |

(4) Operation Unit Transparency and Color

| Lighted/ nonlighted | Code <br> (4) | Code <br> (8) | Transparancy | Operation Unit color | $\begin{aligned} & \text { LED Lamp } \\ & \text { color } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nonlighted | NR | N | Opaque | Red | --- |
|  | NG |  | Opaque | Green |  |
|  | NY |  | Opaque | Yellow |  |
|  | NW |  | Opaque | White |  |
|  | NA |  | Opaque | Blue |  |
|  | NB |  | Opaque | Black |  |
| Lighted | TR | R | Transparent | Red | Red |
|  | TG | G | Transparent | Green | Green |
|  | TY | Y | Transparent | Yellow | Yellow |
|  | TW | W | Transparent | White | White |
|  | TA | A | Transparent | Blue | Blue |
|  | TO | O | Transparent | Orange | Orange |

(5) Degree of Protection

| Code | Protective code |
| :---: | :---: |
| A | IP66, NEMA 4X, NEMA13 |

## Ordering Information

Subassemblies - - - - You can order Operation Units, LED Lamps, Mounting Collars, and Contact Blocks individually. Use them in combination for models that are not available as assembled Switches. They can also be used as inventory for maintenance parts.

## Operation Unit <br> Non-lighted Switches

\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{No. of positions} \& \multirow[t]{2}{*}{Bezel materater
Reset method} \& \multirow[t]{2}{*}{and shape

Operation

Unit color} \& \multirow[t]{2}{*}{} \& \multirow[t]{2}{*}{Brushed metal} \& \multirow[t]{2}{*}{| Metal |
| :--- |
| Model |} <br>

\hline \& \& \& \& \& <br>
\hline \multirow[b]{2}{*}{2} \& Manual \& \multirow{6}{*}{Opaque red} \& A22NZ-2BM-NRA \& A22NZ-2MM-NRA \& A22NZ-2RM-NRA <br>
\hline \& Automatic reset on left \& \& A22NZ-2BL-NRA \& A22NZ-2ML-NRA \& A22NZ-2RL-NRA <br>
\hline \multirow{4}{*}{3} \& Manual \& \& A22NZ-3BM-NRA \& A22NZ-3MM-NRA \& A22NZ-3RM-NRA <br>
\hline \& Automatic reset on left \& \& A22NZ-3BL-NRA \& A22NZ-3ML-NRA \& A22NZ-3RL-NRA <br>
\hline \& Automatic reset on right \& \& A22NZ-3BR-NRA \& A22NZ-3MR-NRA \& A22NZ-3RR-NRA <br>
\hline \& Automatic reset on left and right \& \& A22NZ-3BB-NRA \& A22NZ-3MB-NRA \& A22NZ-3RB-NRA <br>
\hline \multirow[b]{2}{*}{2} \& Manual \& \multirow{6}{*}{Opaque green} \& A22NZ-2BM-NGA \& A22NZ-2MM-NGA \& A22NZ-2RM-NGA <br>
\hline \& Automatic reset on left \& \& A22NZ-2BL-NGA \& A22NZ-2ML-NGA \& A22NZ-2RL-NGA <br>
\hline \multirow{4}{*}{3} \& Manual \& \& A22NZ-3BM-NGA \& A22NZ-3MM-NGA \& A22NZ-3RM-NGA <br>
\hline \& Automatic reset on left \& \& A22NZ-3BL-NGA \& A22NZ-3ML-NGA \& A22NZ-3RL-NGA <br>
\hline \& Automatic reset on right \& \& A22NZ-3BR-NGA \& A22NZ-3MR-NGA \& A22NZ-3RR-NGA <br>
\hline \& Automatic reset on left and right \& \& A22NZ-3BB-NGA \& A22NZ-3MB-NGA \& A22NZ-3RB-NGA <br>
\hline \multirow[t]{2}{*}{2} \& Manual \& \multirow{6}{*}{Opaque yellow} \& A22NZ-2BM-NYA \& A22NZ-2MM-NYA \& A22NZ-2RM-NYA <br>
\hline \& Automatic reset on left \& \& A22NZ-2BL-NYA \& A22NZ-2ML-NYA \& A22NZ-2RL-NYA <br>
\hline \multirow{4}{*}{3} \& Manual \& \& A22NZ-3BM-NYA \& A22NZ-3MM-NYA \& A22NZ-3RM-NYA <br>
\hline \& Automatic reset on left \& \& A22NZ-3BL-NYA \& A22NZ-3ML-NYA \& A22NZ-3RL-NYA <br>
\hline \& Automatic reset on right \& \& A22NZ-3BR-NYA \& A22NZ-3MR-NYA \& A22NZ-3RR-NYA <br>
\hline \& Automatic reset on left and right \& \& A22NZ-3BB-NYA \& A22NZ-3MB-NYA \& A22NZ-3RB-NYA <br>
\hline \multirow[b]{2}{*}{2} \& Manual \& \multirow{6}{*}{Opaque white} \& A22NZ-2BM-NWA \& A22NZ-2MM-NWA \& A22NZ-2RM-NWA <br>
\hline \& Automatic reset on left \& \& A22NZ-2BL-NWA \& A22NZ-2ML-NWA \& A22NZ-2RL-NWA <br>
\hline \multirow{4}{*}{3} \& Manual \& \& A22NZ-3BM-NWA \& A22NZ-3MM-NWA \& A22NZ-3RM-NWA <br>
\hline \& Automatic reset on left \& \& A22NZ-3BL-NWA \& A22NZ-3ML-NWA \& A22NZ-3RL-NWA <br>
\hline \& Automatic reset on right \& \& A22NZ-3BR-NWA \& A22NZ-3MR-NWA \& A22NZ-3RR-NWA <br>
\hline \& Automatic reset on left and right \& \& A22NZ-3BB-NWA \& A22NZ-3MB-NWA \& A22NZ-3RB-NWA <br>
\hline \multirow[t]{2}{*}{2} \& Manual \& \multirow{6}{*}{Opaque blue} \& A22NZ-2BM-NAA \& A22NZ-2MM-NAA \& A22NZ-2RM-NAA <br>
\hline \& Automatic reset on left \& \& A22NZ-2BL-NAA \& A22NZ-2ML-NAA \& A22NZ-2RL-NAA <br>
\hline \multirow{4}{*}{3} \& Manual \& \& A22NZ-3BM-NAA \& A22NZ-3MM-NAA \& A22NZ-3RM-NAA <br>
\hline \& Automatic reset on left \& \& A22NZ-3BL-NAA \& A22NZ-3ML-NAA \& A22NZ-3RL-NAA <br>
\hline \& Automatic reset on right \& \& A22NZ-3BR-NAA \& A22NZ-3MR-NAA \& A22NZ-3RR-NAA <br>
\hline \& Automatic reset on left and right \& \& A22NZ-3BB-NAA \& A22NZ-3MB-NAA \& A22NZ-3RB-NAA <br>
\hline \multirow[b]{2}{*}{2} \& Manual \& \multirow{6}{*}{Opaque black} \& A22NZ-2BM-NBA \& A22NZ-2MM-NBA \& A22NZ-2RM-NBA <br>
\hline \& Automatic reset on left \& \& A22NZ-2BL-NBA \& A22NZ-2ML-NBA \& A22NZ-2RL-NBA <br>
\hline \multirow{4}{*}{3} \& Manual \& \& A22NZ-3BM-NBA \& A22NZ-3MM-NBA \& A22NZ-3RM-NBA <br>
\hline \& Automatic reset on left \& \& A22NZ-3BL-NBA \& A22NZ-3ML-NBA \& A22NZ-3RL-NBA <br>
\hline \& Automatic reset on right \& \& A22NZ-3BR-NBA \& A22NZ-3MR-NBA \& A22NZ-3RR-NBA <br>
\hline \& Automatic reset on left and right \& \& A22NZ-3BB-NBA \& A22NZ-3MB-NBA \& A22NZ-3RB-NBA <br>
\hline
\end{tabular}

Accessories and tools: Refer to the A22NN/A22NL.

## A22NS/A22NW

## Ordering Information

Subassemblies
.-.-- -You can order Operation Units, LED Lamps, Mounting Collars, and Contact Blocks individually. Use them in combination for models that are not available as assembled Switches. They can also be used as inventory for maintenance parts.

## Lighted Switches

| No. of positions | Reset method | and shape <br> Operation <br> Unit color | Plastic | Brushed metal | Metal |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Model | Model | Model |
| 2 | Manual | Transparent red | A22NZ-2BM-TRA | A22NZ-2MM-TRA | A22NZ-2RM-TRA |
|  | Automatic reset on left |  | A22NZ-2BL-TRA | A22NZ-2ML-TRA | A22NZ-2RL-TRA |
| 3 | Manual |  | A22NZ-3BM-TRA | A22NZ-3MM-TRA | A22NZ-3RM-TRA |
|  | Automatic reset on left |  | A22NZ-3BL-TRA | A22NZ-3ML-TRA | A22NZ-3RL-TRA |
|  | Automatic reset on right |  | A22NZ-3BR-TRA | A22NZ-3MR-TRA | A22NZ-3RR-TRA |
|  | Automatic reset on left and right |  | A22NZ-3BB-TRA | A22NZ-3MB-TRA | A22NZ-3RB-TRA |
| 23 | Manual | Transparent green | A22NZ-2BM-TGA | A22NZ-2MM-TGA | A22NZ-2RM-TGA |
|  | Automatic reset on left |  | A22NZ-2BL-TGA | A22NZ-2ML-TGA | A22NZ-2RL-TGA |
|  | Manual |  | A22NZ-3BM-TGA | A22NZ-3MM-TGA | A22NZ-3RM-TGA |
|  | Automatic reset on left |  | A22NZ-3BL-TGA | A22NZ-3ML-TGA | A22NZ-3RL-TGA |
|  | Automatic reset on right |  | A22NZ-3BR-TGA | A22NZ-3MR-TGA | A22NZ-3RR-TGA |
|  | Automatic reset on left and right |  | A22NZ-3BB-TGA | A22NZ-3MB-TGA | A22NZ-3RB-TGA |
| 2 | Manual | Transparent yellow | A22NZ-2BM-TYA | A22NZ-2MM-TYA | A22NZ-2RM-TYA |
|  | Automatic reset on left |  | A22NZ-2BL-TYA | A22NZ-2ML-TYA | A22NZ-2RL-TYA |
| 3 | Manual |  | A22NZ-3BM-TYA | A22NZ-3MM-TYA | A22NZ-3RM-TYA |
|  | Automatic reset on left |  | A22NZ-3BL-TYA | A22NZ-3ML-TYA | A22NZ-3RL-TYA |
|  | Automatic reset on right |  | A22NZ-3BR-TYA | A22NZ-3MR-TYA | A22NZ-3RR-TYA |
|  | Automatic reset on left and right |  | A22NZ-3BB-TYA | A22NZ-3MB-TYA | A22NZ-3RB-TYA |
| 23 | Manual | Transparent white | A22NZ-2BM-TWA | A22NZ-2MM-TWA | A22NZ-2RM-TWA |
|  | Automatic reset on left |  | A22NZ-2BL-TWA | A22NZ-2ML-TWA | A22NZ-2RL-TWA |
|  | Manual |  | A22NZ-3BM-TWA | A22NZ-3MM-TWA | A22NZ-3RM-TWA |
|  | Automatic reset on left |  | A22NZ-3BL-TWA | A22NZ-3ML-TWA | A22NZ-3RL-TWA |
|  | Automatic reset on right |  | A22NZ-3BR-TWA | A22NZ-3MR-TWA | A22NZ-3RR-TWA |
|  | Automatic reset on left and right |  | A22NZ-3BB-TWA | A22NZ-3MB-TWA | A22NZ-3RB-TWA |
| 2 | Manual | Transparent blue | A22NZ-2BM-TAA | A22NZ-2MM-TAA | A22NZ-2RM-TAA |
|  | Automatic reset on left |  | A22NZ-2BL-TAA | A22NZ-2ML-TAA | A22NZ-2RL-TAA |
| 3 | Manual |  | A22NZ-3BM-TAA | A22NZ-3MM-TAA | A22NZ-3RM-TAA |
|  | Automatic reset on left |  | A22NZ-3BL-TAA | A22NZ-3ML-TAA | A22NZ-3RL-TAA |
|  | Automatic reset on right |  | A22NZ-3BR-TAA | A22NZ-3MR-TAA | A22NZ-3RR-TAA |
|  | Automatic reset on left and right |  | A22NZ-3BB-TAA | A22NZ-3MB-TAA | A22NZ-3RB-TAA |
| 2 | Manual | Transparent orange | A22NZ-2BM-TOA | A22NZ-2MM-TOA | A22NZ-2RM-TOA |
|  | Automatic reset on left |  | A22NZ-2BL-TOA | A22NZ-2ML-TOA | A22NZ-2RL-TOA |
| 3 | Manual |  | A22NZ-3BM-TOA | A22NZ-3MM-TOA | A22NZ-3RM-TOA |
|  | Automatic reset on left |  | A22NZ-3BL-TOA | A22NZ-3ML-TOA | A22NZ-3RL-TOA |
|  | Automatic reset on right |  | A22NZ-3BR-TOA | A22NZ-3MR-TOA | A22NZ-3RR-TOA |
|  | Automatic reset on left and right |  | A22NZ-3BB-TOA | A22NZ-3MB-TOA | A22NZ-3RB-TOA |

Specifications: Refer to page 14 and refer to the A22NN/A22NL.

- Dimensions: Refer to page 15.

Accessories and tools: Refer to the A22NN/A22NL.

A22NS/A22NW
A22NS/A22NW

## Ordering Information

Subassemblies ..
You can order Operation Units, LED Lamps, Mounting Collars, and Contact Blocks individually. Use them in combination for models that are not available as assembled Switches. They can also be used as inventory for maintenance parts.

## LED Lamps

| Appearance | Applied voltage | 6 VAC/DC | 12 VAC/DC | 24 VAC/DC | 100/110/120 VAC | 200/220/230/240 VAC |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Color | Model | Model | Model | Model | Model |
|  | Red | A22NZ-L-RA | A22NZ-L-RB | A22NZ-L-RC | A22NZ-L-RD | A22NZ-L-RE |
|  | Green | A22NZ-L-GA | A22NZ-L-GB | A22NZ-L-GC | A22NZ-L-GD | A22NZ-L-GE |
|  | Yellow | A22NZ-L-YA | A22NZ-L-YB | A22NZ-L-YC | A22NZ-L-YD | A22NZ-L-YE |
|  | White | A22NZ-L-WA | A22NZ-L-WB | A22NZ-L-WC | A22NZ-L-WD | A22NZ-L-WE |
|  | Blue | A22NZ-L-AA | A22NZ-L-AB | A22NZ-L-AC | A22NZ-L-AD | A22NZ-L-AE |
|  | Orange | A22NZ-L-OA | A22NZ-L-OB | A22NZ-L-OC | A22NZ-L-OD | A22NZ-L-OE |

## Mounting Collar

| Appearance | Model |
| :---: | :---: |
|  |  |
|  |  |
|  |  |

Contact Blocks

| Appearance | Contacts | Model |
| :---: | :---: | :---: |
| 1 | SPST-NO (blue) | A22NZ-S-G1A |
|  | SPST-NC (orange) | A22NZ-S-G1B |

## Lighting Units

| Appearance |  |  |
| :--- | :--- | :--- |
|  | Applied voltage | Model |
|  | $6 \mathrm{VAC} / \mathrm{DC}$ | A22NZ-T-A |
|  | $12 \mathrm{VAC} / \mathrm{DC}$ | A22NZ-T-B |
|  | $24 \mathrm{VAC} / \mathrm{DC}$ | A22NZ-T-C |
|  | $100 / 110 / 120 \mathrm{VAC}$ | A22NZ-T-D |
|  | $200 / 220 / 230 / 240 \mathrm{VAC}$ | A22NZ-T-E |

Reinforcement Plate

| Appearance | Model |
| :---: | :---: |
|  | A22NZ-A-C01 |
|  |  |

Accessories and tools: Refer to the A22NN/A22NL.

## A22NS/A22NW

## Specifications

## Characteristics

| Item Type |  | Selector Switches |  |
| :---: | :---: | :---: | :---: |
|  |  | Non-lighted models | Lighted models |
| Allowable operating frequency | Mechanical | 30 operations/minute max. |  |
|  | Electrical | 30 operations/minute max. |  |
| Insulation resistance |  | $100 \mathrm{M} \Omega \mathrm{min}$. (at 500 VDC ) |  |
| Contact resistance |  | $100 \mathrm{~m} \Omega$ max. (initial value) |  |
| Dielectric strength | Between terminals of same polarity | 2,500 VAC at $50 / 60 \mathrm{~Hz}$ for 1 min |  |
|  | Between each terminal and ground | 2,500 VAC at $50 / 60 \mathrm{~Hz}$ for 1 min |  |
| Vibration resistance | Malfunction | 10 to $55 \mathrm{~Hz}, 1.5-\mathrm{mm}$ double amplitude (malfunction within 1 ms ) |  |
| Shock resistance | Malfunction | $1,000 \mathrm{~m} / \mathrm{s}^{2} \mathrm{max}$. (malfunction within 1 ms ) |  |
| Durability | Mechanical | 500,000 operations min. (Switches with 3 positions: 300,000 operations min.) |  |
|  | Electrical | 500,000 operations min. (Switches with 3 positions: 300,000 operations min.) |  |
| Ambient operating temperature*1 |  | -25 to $70^{\circ} \mathrm{C}$ | -25 to $55^{\circ} \mathrm{C}$ |
| Ambient operating humidity |  | $35 \%$ to $85 \% \mathrm{RH}$ |  |
| Ambient storage temperature*1 |  | -40 to $80^{\circ} \mathrm{C}$ |  |
| Degree of protection*2 |  | IP66, NEMA 4X, NEMA 13 |  |
| Electric shock protection class |  | Class II |  |
| PTI (tracking characteristic) |  | 175 |  |
| Degree of contamination (application environment) |  | 3 (IEC 60947-5-1) |  |
| Weight |  | Approx. 50 g (for 1NC/1NO) | Approx. 60 g (for $1 \mathrm{NC} / 1 \mathrm{NO}$ ) |

*1. With no icing or condensation.
*2. Degree of protection from the front of the panel.

## Operating Characteristics (for SPST-NO/SPST-NC)

| Item | Type | Selector Switches |
| :--- | :--- | :--- |
|  | Manual reset | Automatic reset |
| Total travel force (torque) (maximum TTF) | $0.6 \mathrm{~N} \cdot \mathrm{~m}$ | $0.6 \mathrm{~N} \cdot \mathrm{~m}$ |
| Total travel (TT) | 2 positions: Approx. $90^{\circ}, 3$ positions: Approx. $45^{\circ}$ |  |
| Resetting force (torque) (RF) | $0.5 \mathrm{~N} \cdot \mathrm{~m}$ max. | --- |

## Examples of Linked Contact Blocks

Lighting Units

|  | Selector Switches |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2 positions |  | 3 positions |  |
|  | Lighted | Non-lighted | Lighted | Non-lighted |
| Linking example |  |  |  |  |

* If you use three Contact Blocks in stage 1, you can add one more Contact Block in the middle of stage 2.

Note: If you increase the number of Contact Blocks, evaluate the Switch under actual working conditions before permanent installation and use the Switch within a number of switching operations that will not adversely affect the Switch's performance.

Lighted and Non-lighted Selection Switches


Two-position Switches with Brushed Metal Bezels


Two-position Switches with Metal Bezels


Three-position Switches with Brushed Metal Bezel:


Three-position Switches with Metal Bezels


## Depth with Linked Units



Terminal Wiring Diagrams
Bottom View

| Non-lighted Switches (2NO/1NC) Contact configuration code:112 | Lighting Units Contact configuration code:102 |
| :---: | :---: |
|  |  |

## Safety Precautions

Refer to Safety Precautions for All Pushbutton Switches/Indicators for common precautions.
Read the Safety Precautions on the following pages.

## Refer to Safety Precautions for All Pushbutton Switches/Indicators.

## Precautions for Safe Use

- Never perform wiring work on a Switch while power is being supplied. Never touch terminals and other charged parts while power is being supplied. Doing so may result in electrical shock.
- Never attempt to disassemble or modify the Switch in any way. Doing so may prevent correct operation.
- Switch functionality may be inhibited. Do not drop the Switch. Never apply a force that would deform or alter the nature of the Switch.
- The durability of the Switch is greatly affected by operating conditions. Evaluate the Switch under actual working conditions before permanent installation and use the Switch within a number of switching operations that will not adversely affect the Switch's performance.
- Do not use a load voltage or current that exceeds the rating. Doing so may damage or cause burning in the Switch.
- Do not use the Switch in a location with inflammable or explosive gases, or where the Switch would be subjected to inflammable solvents. The arcs and heat generated when the Switch is operated can cause ignition or explosions.
- Do not use the Switch where sulfur gas $\left(\mathrm{H}_{2} \mathrm{~S}, \mathrm{SO}_{2}\right)$, ammonia gas $\left(\mathrm{NH}_{3}\right)$, nitric acid gas $\left(\mathrm{HNO}_{3}\right)$, chlorine gas $\left(\mathrm{Cl}_{2}\right)$, or other harmful gases are present or where high humidity is present. Contact faults and damage due to corrosion may interfere with the functionality of the Switch.
- Do not use the Switch in oil or water or in an environment subject to constant contact with oil or water. The oil or water may enter the Switch, causing failure.
- Do not use or store the Switch in the following locations.
- Locations subject to rapid temperature changes
- Locations subject to condensation due to high humidity
- Locations subject to vibration
- Locations subject to direct sunlight
- Locations subject to salty air
- Make sure that the rubber washer is in place between the Operation Unit and the panel. Otherwise, the specifications of the protective structure may not be satisfied.
- Do not subject the Contact Block or wiring to excessive force. The Contact Block may be damaged or deformed and faulty contact may occur.


## Precautions for Correct Use

## Mounting

- Do not tighten the Mounting Nut more than necessary using tools such as pointed-nose pliers. Doing so will damage the Mounting Nut. (The tightening torque of the Mounting Nut is 1.0 to $2.0 \mathrm{~N} \cdot \mathrm{~m}$.)


## Wiring

- Terminal screws must be M3.5 Phillips or slotted screws with a square washer.
- The terminal screw tightening torque is 1.0 to $1.3 \mathrm{~N} \cdot \mathrm{~m}$.
- Solid wires, stranded wires, and crimp terminals can be connected to the Switch.
Stranded wires: AWG14 to AWG16
Solid wire: 1.6 dia. max.
Bare Crimp Terminals


Crimp Terminals with Insulating Sheathes


- After wiring the Switch, maintain appropriate clearance and creepage distances.


## Operating Environment

- The Switch is intended for indoor use only.

Using the Switch outdoors will result in failure.

## LED Lamps

- A current-limiting resistor is built into the LED Lamp, so external resistance is not required.
- False Lighting of the LED Lamp

The LED Lamp will light with a microcurrent of approx. 0.1 mA or less. Take countermeasures, such as adding a resistor in parallel to the LED Lamp, to prevent false lighting. The micro-current varies with the machine (due to leakage current, stray capacity between cables, etc.). Select a resistance value and allowable power consumption according to the actual current.

## Example of Circuit to Prevent False Lighting For 24 VAC/VDC Lighting Unit



## Application

## Mounting to the Panel Panel Hole Dimensions

- Panel hole dimensions are given below.
- The recommended panel thicknesses are given below.

| Panel hole dimension | Panel thickness |
| :---: | :---: |
| 22.3 dia. | 0.8 to 5 mm |
| 25.5 dia. | 0.8 to 6 mm |

- If outer surface treatment such as coating is performed for the panel, the panel dimensions after outer surface treatment must meet the specified panel dimensions.
- The following figure gives pitch dimension A and pitch dimension $B$ between the centers of the mounting holes.

Panel Hole Dimensions for 22.3 Diameter


Panel Hole Dimensions for 25.5 Diameter


## Dimension A

| Wire type | Number of <br> linked Con- <br> tact Blocks | Number of <br> wires per ter- <br> minal | Minimum al- <br> lowable pitch <br> Dimension A <br> (mm) or larger |
| :--- | :---: | :---: | :---: |
| Leads (twisted wires <br> or solid wire) | 1 | 1 | 50 |
| Bare crimp terminals | 1 | 1 | 50 |
| Crimp terminals with <br> insulating sheathes | 1 | 1 | 60 |

Note: The minimum mounting pitch is based on three Contact Blocks in stage 1 with one wire attached to each terminal. If you attach two wires or link Units, determine the mounting pitch based on the dimensions diagrams and ease of operation and wiring.

## Dimension A When Using Accessory

- Dimension A is 50 mm minimum when a Standard Legend Plate Frame is attached.
- Dimension A is 51 mm minimum when a Large Legend Plate Frame is attached.
- Dimension A is 75 mm minimum when a Protective Cover is attached.


## Dimension B

| Operation Unit shape | Dimension B |
| :---: | :---: |
| Mushroom | 40 mm min. |
| Other than the above | 30 mm min. |

## Mounting the Operation Unit

- Panel Hole of 22.3-mm Diameter

Insert the Operation Unit from the front of the panel, insert the Lock Ring and Mounting Nut from the back of the panel, and tighten the Mounting Nut. Before tightening, check that the rubber washer is present between the Operation Unit and the panel.


- Panel Hole of 25.5-mm Diameter

Do not use the Lock Ring, and tighten the Mounting Nut while confirming that the projecting part (see following figure) on the Mounting Nut is aligned with mounting hole. Before tightening, check that the rubber washer is present between the Operation Unit and the panel.


- Align the Lock Ring with the slot on the case and insert it so that the edge is flush with the panel.


## Mounting the Contact Block to the Operation Unit

- Insert the Operation Unit into the Mounting Collar, aligning the TOP mark inscribed on the Operation Unit with the lever on the Mounting Collar, and then turn the lever in the direction indicated by the arrow in the following figure all of the way until it clicks into place.



## Removing the Mounting Collar

- Press the lock lever in from the back side to release the lock, and then hook the Mounting Collar with a screwdriver, move it in the direction indicated at (2), and remove it. Turn the lever all of the way until it clicks into place.



## Contact Block

## Attaching the Contact Block

- Catch the projection on the opposite side of the Mounting Collar from the lever side and press the Contact Block in the direction indicated at (1).



## Removing the Contact Block

- Insert a screwdriver into the gap between the Mounting Collar and Contact Block and press it inward in the direction shown at (2).



## Attaching the Reinforcement Plate

- To link Contact Blocks together, attach a Reinforcement Plate in the direction shown in the following figure. To remove the Plate, insert a screwdriver in the direction indicated at (1) and rotate it in the direction indicated at (2).



## Engraving

- Engrave legends on the Legend Plates.

Do so with the straight part of the Legend Plate positioned on the right and left.

- The characters must be engraved no deeper than 0.5 mm . Use an alcohol-based paint, such as a melamine, phthalic acid, or acrylic resin based paint.

| Projected, Full-guard, or Mushroom |
| :---: | :---: |
| Switches |$\quad$ Flat Switches

## Attaching Character Films

- To attach a character film, remove the Button and attach the film, aligning it with the straight portions of the Legend Plate.


## Projected Switches

Full-guard Switches


Mushroom Switches


Flat Switches


- Prepare films of the following sizes depending on the type of Legend Plate.

| Projected, <br> Full-guard, or <br> Mushroom <br> Switches |
| :--- | :--- | :--- |
| Legend |
| Plate di- |
| mensions |

## Removing and Tightening the Cap

For all Switches except for Mushroom Switches, use the A22Z-3908 Cap Tightening Tool to loosen the cap. When you tighten the cap, make sure that the Legend Plate is in the correct position and then turn the cap in the direction opposite of the direction shown in the following figure. Tighten it to a torque of 0.5 to $1.0 \mathrm{~N} \cdot \mathrm{~m}$ so that it will not become loose.


(1) $\downarrow$

(2)

(2)

## Attaching the LED Lamp to the Lighting Unit

- Insert the protrusions on the LED Lamp into the guides on the Lighting Unit and then turn the LED Lamp in direction (2) to lock it in place.



## Attaching and Replacing LED Lamps

## Removing the LED Lamp from the Panel Surface

- Insert the LED Lamp Extractor as shown in the following figure and then rotate the Extractor in the direction shown at (2) while pressing it inward.



## Attaching the LED Lamp from the Panel Surface

- Insert the LED Lamp into the LED Lamp Extractor as shown in the following figure. Align the projections on the LED Lamp with the LED Lamp insertion guides, insert the LED Lamp, and turn it in the direction indicted at (2).



## Control Box

You can attach a Legend Plate Frame.
Attach it in the direction shown in the following figure.
Mount the Switch in the same way as for a standard panel. The tightening torque of the Box screws is 1.4 to $2.0 \mathrm{~N} \cdot \mathrm{~m}$.


## Creating a Cable Hole

To open a cable hole, leave the cover attached, place the tip of a screwdriver in the grooves at four locations around the cable hole, and strike the screwdriver with a hammer to open the hole.


## Attaching and Removing Legend Plates

- Press the Legend Plate into the depression in the Legend Plate Frame. The Legend Plate Frame can be separate or it can be mounted on the panel when you attach the Legend Plate.
- The direction of the characters will depend on the mounting direction of the Operation Unit if the Switch is a Selector Switch or Key Selector Switch.

- You can easily remove the Legend Plate by pressing it forwards from the back of the Legend Plate Frame.
- The acrylic plastic Legend Plate is easily damaged by shock. Handle it with care.



## Attaching the Lock Ring

Attach the Lock Ring as shown in the following figure.
To ensure water resistance, attach the rubber washer in the specified location.


- Align the TOP mark on the Operation Unit, part A on the Legend Plate, and the notch in the panel, and insert the Operation Unit.

- If there is no notch in the panel, remove part A from the Legend Plate with pliers.



## Attaching the Protective Cover

Attach the Protective Cover (A22NZ-A-303) to a panel that is 0.8 to 1.0 mm thick. To ensure water resistance, attach the rubber washer in the specified location.


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11. Shipping; Delivery. Unless otherwise expressly agreed in writing by Omron: a. Shipments shall be by a carrier selected by Omron; Omron will not drop ship except in "break down" situations.
b. Such carrier shall act as the agent of Buyer and delivery to such carrier shall constitute delivery to Buyer;
c. All sales and shipments of Products shall be FOB shipping point (unless otherwise stated in writing by Omron), at which point title and risk of loss shall pass from Omron to Buyer; provided that Omron shall retain a security interest in the Products until the full purchase price is paid;
d. Delivery and shipping dates are estimates only; and
. Omron will package Products as it deems proper for protection against normal handling and extra charges apply to special conditions.
12. Claims. Any claim by Buyer against Omron for shortage or damage to the Products occurring before delivery to the carrier must be presented in writing to Omron within 30 days of receipt of shipment and include the original transportation bill signed by the carrier noting that the carrier received the Products from Omron in the condition claimed.
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[^0]:    * The colors when the Switches are lit are for transparent white Operation Units (code: TW) and yellow LED Lamps (code: Y).

[^1]:    Note: Not all assembled configurations are possible.

[^2]:    - Specifications: Refer to page 14 and refer to the A22NN/A22NL.

    Precautions for correct use: Refer to the A22NN/A22NL.
    Dimensions: Refer to page 15.

[^3]:    Specifications: Refer to page 14 and refer to the A22NN/A22NL. Dimensions: Refer to page 15

    - Accessories and tools: Refer to the A22NN/A22NL

[^4]:    Model numbers of sets: Refer to pages 6 to 8 .

