

# Selector Switches A30NZ M A

30-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 Contract Blocks (NO: blue, NC: orange) help prevent wiring errors.

### **Product Lineup**

- Meets global safety standards.
- Many color variations.





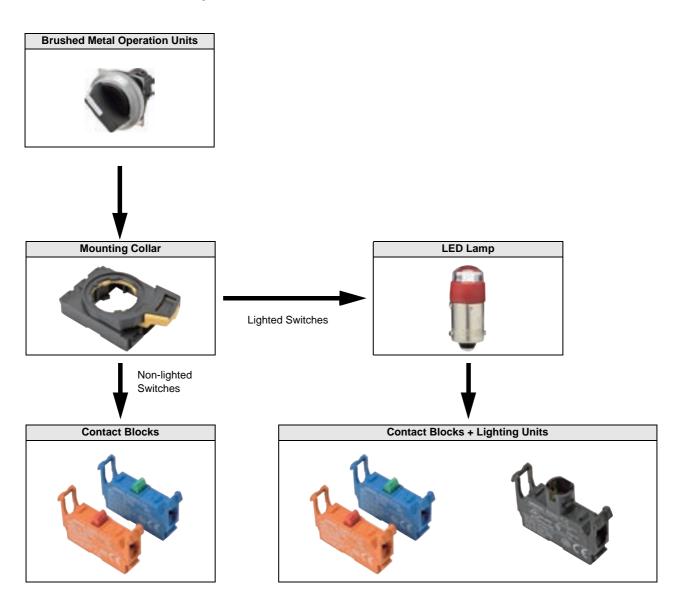
## **Operation Unit Colors**

				Green	Yellow	White	Blue	Black	
Non-lighted Switches			•	•	•	•	•	•	
	A30NZ-□M□-T□A — Transparent		Red	Green	Yellow	White	Blue	Orange	White
		When not lit	•	•		•	•	<b>(</b>	•
Lighted Switches			Red	Green	Yellow	White	Blue	Orange	Opaque white*
		When lit				(1)			•

<sup>\*</sup>The colors when the Switches are lit are for transparent white Operation Units (code: TW) and yellow LED Lamps (code: Y).

## **Structure**

**Subassemblies** - - - - Order Operation Units, LED Lamps, Mounting Collars, and Contact Blocks individually. The same LED Lamps, Mounting Collars, and Contact Blocks are also used for the A22N Series.



Note: Use a Reinforcement Plate for greater strength.



- Specifications: Refer to page 6 and refer to the A30NZ-M $\square$ - $\square$ A.
- Accessories and tools: Refer to the A22NN/A22NL.
- Dimensions: Refer to page 7.

## **Model Number Structure**

**Model Number Legend** - Order Operation Units, LED Lamps, Mounting Collars, and Contact Blocks individually. The same LED Lamps, Mounting Collars, and Contact Blocks are also used for the A22N Series.

### **Subassemblies**

## (1) Type

Code	Туре
Z	Subassembly

### (2) Number of Positions and Bezel Material

Code	No. of positions	Bezel material
2M	2	Brushed Metal
3M	3	Brushed Metal

### (3) Reset Method

Code	Reset method		
М	Manual	Two-position manual	\/
IVI	Waliuai	Three-position manual	
L	Automatic reset on left	Two-position automatic	$\overline{}$
L Automatic reset on left	Automatic reset on leit	Three-position left automatic	$\rightarrow$
R	Automatic reset on right	Three-position right automatic	
В	Automatic reset on left and right	Three-position left or right automatic	<b>\\</b>

### (4) Operation Unit Type and Color

· / ·	<b>7</b> 1		
Code	Туре	and color	
NR	Opaque red		
NG	Opaque green		
NY	Opaque yellow	Non-lighted models only	
NW	Opaque white	Non-lighted models only	
NA	Opaque blue		
NB	Opaque black	l	
TR	Transparent red		
TG	Transparent green		
TY	Transparent yellow	Lighted models only	
TW	Transparent white	Lighted models only	
TA	Transparent blue		
ТО	Transparent orange		

### (5) Degree of Protection

Code	Protection
Α	IP66

<sup>■</sup> Specifications: Refer to page 6 and refer to the A30NZ-M□□-□□A.

<sup>■</sup> Dimensions: Refer to page 7.

<sup>■</sup> Precautions for correct use: Refer to the A30NZ-M□□-□□A.

## **Ordering Information**

**Subassemblies** ----- Order Operation Units, LED Lamps, Mounting Collars, and Contact Blocks individually. The same LED Lamps, Mounting Collars, and Contact Blocks are also used for the A22N Series.

Operation Units
Non-lighted Switches

#### **Brushed metal** Bezel material and shape No. of Operation posi-tions Reset method Unit color Manual A30NZ-2MM-NRA Automatic reset on left A30NZ-2ML-NRA A30NZ-3MM-NRA Opaque red Automatic reset on left A30NZ-3ML-NRA Automatic reset on right A30NZ-3MR-NRA Automatic reset on left and right A30NZ-3MB-NRA Manual A30NZ-2MM-NGA 2 Automatic reset on left A30NZ-2ML-NGA Manual A30NZ-3MM-NGA Opaque green Automatic reset on left A30NZ-3ML-NGA 3 Automatic reset on right A30NZ-3MR-NGA Automatic reset on left and right A30NZ-3MB-NGA A30NZ-2MM-NYA Automatic reset on left A30NZ-2ML-NYA Manual A30NZ-3MM-NYA Opaque yellow Automatic reset on left A30NZ-3ML-NYA 3 A30NZ-3MR-NYA Automatic reset on right A30NZ-3MB-NYA Automatic reset on left and right A30NZ-2MM-NWA Manual 2 Automatic reset on left A30NZ-2ML-NWA Manual A30NZ-3MM-NWA Opaque Automatic reset on left white A30NZ-3ML-NWA Automatic reset on right A30NZ-3MR-NWA A30NZ-3MB-NWA Automatic reset on left and right A30NZ-2MM-NAA Manual 2 Automatic reset on left A30NZ-2ML-NAA A30NZ-3MM-NAA Manual Opaque A30NZ-3ML-NAA Automatic reset on left 3 Automatic reset on right A30NZ-3MR-NAA Automatic reset on left and right A30NZ-3MB-NAA Manual A30NZ-2MM-NBA 2 Automatic reset on left A30NZ-2ML-NBA A30NZ-3MM-NBA Opaque black A30NZ-3ML-NBA Automatic reset on left 3 Automatic reset on right A30NZ-3MR-NBA Automatic reset on left and right A30NZ-3MB-NBA

#### **Lighted Switches**

Brushe	d metal
Bezel material and shape	
No. of posi- Reset method Operation Unit color	Model
Manual A30N	NZ-2MM-TRA
Automatic reset on left A30N	NZ-2ML-TRA
Manual Transparent A30N	NZ-3MM-TRA
Automatic reset on left red A30N	NZ-3ML-TRA
Automatic reset on right A30N	NZ-3MR-TRA
Automatic reset on left and right A30N	NZ-3MB-TRA
Manual A30N	NZ-2MM-TGA
	NZ-2ML-TGA
Manual Transparent A30N	NZ-3MM-TGA
Automatic reset on left green A30N	NZ-3ML-TGA
Automatic reset on right A30N	NZ-3MR-TGA
Automatic reset on left and right A30N	NZ-3MB-TGA
Manual A30N	NZ-2MM-TYA
	NZ-2ML-TYA
Manual Transparent A30N	NZ-3MM-TYA
Automatic reset on left yellow A30N	NZ-3ML-TYA
Automatic reset on right A30N	NZ-3MR-TYA
Automatic reset on left and right A30N	NZ-3MB-TYA
Manual A30N	NZ-2MM-TWA
Automatic reset on left A30N	NZ-2ML-TWA
Manual Transparent A30N	NZ-3MM-TWA
Automatic reset on left white A30N	NZ-3ML-TWA
Automatic reset on right A30N	NZ-3MR-TWA
Automatic reset on left and right A30N	NZ-3MB-TWA
_ Manual A30N	NZ-2MM-TAA
Automatic reset on left A30N	NZ-2ML-TAA
Manual Transparent A30N	NZ-3MM-TAA
Automatic reset on left blue A30N	NZ-3ML-TAA
Automatic reset on right A30N	NZ-3MR-TAA
Automatic reset on left and right A30N	NZ-3MB-TAA
Manual A30N	NZ-2MM-TOA
Automatic reset on left A30N	NZ-2ML-TOA
Manual Transparent A30N	NZ-3MM-TOA
Automatic reset on left orange A30N	NZ-3ML-TOA
Automatic reset on right A30N	NZ-3MR-TOA
Automatic reset on left and right A30N	NZ-3MB-TOA

<sup>■</sup> Specifications: Refer to page 6 and refer to the A30NZ-M□□-□□A.

<sup>■</sup> Accessories and tools: Refer to the A22NN/A22NL.

<sup>■</sup> Dimensions: Refer to page 7.

## **Ordering Information**

**Subassemblies** -- Order Operation Units, LED Lamps, Mounting Collars, and Contact Blocks individually. The same LED Lamps, Mounting Collars, and Contact Blocks are also used for the A22N Series.

### **LED Lamps**

Annogrance	Applied voltage	6 VAC/DC	12 VAC/DC	24 VAC/DC	100/110/120 VAC	200/220/230/240 VAC
Appearance	Color	Model	Model	Model	Model	Model
	Red	A22NZ-L-RA	A22NZ-L-RB	A22NZ-L-RC	A22NZ-L-RD	A22NZ-L-RE
Mr. 17 (1)	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
	A22NZ-H-01

### **Contact Blocks**

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

## **Lighting Units**

Appearance	Applied voltage	Model
A	6 VAC/DC	A22NZ-T-A
11	12 VAC/DC	A22NZ-T-B
	24 VAC/DC	A22NZ-T-C
ALC: NO.	100/110/120 VAC	A22NZ-T-D
	200/220/230/240 VAC	A22NZ-T-E

#### **Reinforcement Plate**

Appearance	Model
Sier	A22NZ-A-C01

### $A30NZ-\square M\square-\square\square A$

## **Specifications** (When Operation Unit, LED Lamp, Mounting Collar, and Contact Blocks Are Combined)

### **Characteristics**

Туре		Selector Switches			
Item		Non-lighted models	Lighted models		
Allowable operating	Mechanical	30 operations/minute max.			
frequency	Electrical	30 operations/minute max.			
Insulation resistance		100 MΩ min. (at 500 VDC)			
Contact resistance		100 mΩ max. (initial value)			
Dielectric strength	Between terminals of same polarity	2,500 VAC at 50/60 Hz for 1 min			
	Between each terminal and ground	2,500 VAC at 50/60 Hz for 1 min			
Vibration resistance	Malfunction	10 to 55 Hz, 1.5-mm double amplitude (malfunction within 1 ms)			
Shock resistance	Malfunction	1,000 m/s² 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°C	−25 to 55°C		
Ambient operating humidity		35% to 85% RH			
Ambient storage temperature*1		-40 to 80°C			
Degree of protection*2		IP66			
Electric shock protection class		Class II			
PTI (tracking characteristic)		175			
Degree of contamination (application environment)		3 (IEC 60947-5-1)			
Weight		Approx. 60 g (for 1NC/1NO)	Approx. 75 g (for 1NC/1NO)		

**<sup>\*1.</sup>** With no icing or condensation.

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

Туре	Selector Switches		
Item	Manual reset	Automatic reset	
Total travel force (torque) (maximum TTF)	0.6 N·m	0.6 N·m	
Total travel (TT)	2 positions: Approx. 90°, 3 positions: Approx. 45°		
Resetting force (torque) (RF)	0.5 N⋅m max.		

### **Examples of Linked Contact Blocks**

Selector Switches  2 positions 3 positions  Lighted Non-lighted Lighted  Operation Unit  Mounting Collar  Operation Unit  Mounting Collar  Operation Unit  Mounting Collar  Operation Unit  Mounting Collar  About 1 April 1 A	Examples of Linked Contact Blocks		Contact Blocks	Lighting Units			
Lighted Non-lighted Lighted  Operation Unit  Mounting Collar		Selector Switches					
Operation Unit  Mounting Collar  Mounting Collar  Operation Unit  Mounting Collar  Operation Unit  Mounting Collar  Operation Unit  Mounting Collar		2 positions		3 positions			
Mounting Collar		Lighted	Non-lighted	Lighted	Non-lighted		
	king example		Mounting Collar  Operation Unit  Mounting Collar		Operation Unit  Mounting Collar		

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.

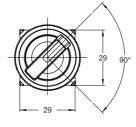
<sup>\*2.</sup> Degree of protection from the front of the panel.

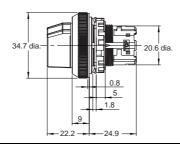
Dimensions (Unit: mm)

### **Lighted and Non-lighted Selection Switches**

## **Two-position Switches with Brushed Metal Bezels**

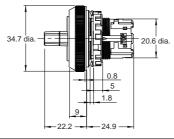




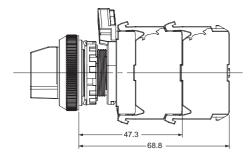


## Three-position Switches with Brushed Metal Bezels A30NZ-3M $\square$





## **Depth with Linked Units**



## **Safety Precautions**

Refer to Safety Precautions for All Pushbutton Switches/Indicators for common precautions. Read the Safety Precautions in the A30NZ-M□□-□□A datasheet.

MEMO	
MENU	

## **Terms and Conditions Agreement**

#### Read and understand this catalog.

Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments.

#### Warranties.

- (a) Exclusive Warranty. Omron's exclusive warranty is that the Products will be free from defects in materials and workmanship for a period of twelve months from the date of sale by Omron (or such other period expressed in writing by Omron). Omron disclaims all other warranties, express or implied.
- (b) Limitations. OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCTS. BUYER ACKNOWLEDGES THAT IT ALONE HAS DETERMINED THAT THE PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE.

Omron further disclaims all warranties and responsibility of any type for claims or expenses based on infringement by the Products or otherwise of any intellectual property right. (c) Buyer Remedy. Omron's sole obligation hereunder shall be, at Omron's election, to (i) replace (in the form originally shipped with Buyer responsible for labor charges for removal or replacement thereof) the non-complying Product, (ii) repair the non-complying Product, or (iii) repay or credit Buyer an amount equal to the purchase price of the non-complying Product; provided that in no event shall Omron be responsible for warranty, repair, indemnity or any other claims or expenses regarding the Products unless Omron's analysis confirms that the Products were properly handled, stored, installed and maintained and not subject to contamination, abuse, misuse or inappropriate modification. Return of any Products by Buyer must be approved in writing by Omron before shipment. Omron Companies shall not be liable for the suitability or unsuitability or the results from the use of Products in combination with any electrical or electronic components, circuits, system assemblies or any other materials or substances or environments. Any advice, recommendations or information given orally or in writing, are not to be construed as an amendment or addition to the above warranty.

See http://www.omron.com/global/ or contact your Omron representative for published information.

#### Limitation on Liability; Etc.

OMRON COMPANIES SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCTS, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE OR STRICT LIABILITY.

Further, in no event shall liability of Omron Companies exceed the individual price of the Product on which liability is asserted.

#### Suitability of Use.

Omron Companies shall not be responsible for conformity with any standards, codes or regulations which apply to the combination of the Product in the Buyer's application or use of the Product. At Buyer's request, Omron will provide applicable third party certification documents identifying ratings and limitations of use which apply to the Product. This information by itself is not sufficient for a complete determination of the suitability of the Product in combination with the end product, machine, system, or other application or use. Buyer shall be solely responsible for determining appropriateness of the particular Product with respect to Buyer's application, product or system. Buyer shall take application responsibility in all cases.

NEVER USE THE PRODUCT FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY OR IN LARGE QUANTITIES WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCT(S) IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

#### **Programmable Products.**

Omron Companies shall not be responsible for the user's programming of a programmable Product, or any consequence thereof.

#### Performance Data.

Data presented in Omron Company websites, catalogs and other materials is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of Omron's test conditions, and the user must correlate it to actual application requirements. Actual performance is subject to the Omron's Warranty and Limitations of Liability.

#### Change in Specifications.

Product specifications and accessories may be changed at any time based on improvements and other reasons. It is our practice to change part numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the Product may be changed without any notice. When in doubt, special part numbers may be assigned to fix or establish key specifications for your application. Please consult with your Omron's representative at any time to confirm actual specifications of purchased Product.

#### **Errors and Omissions.**

Information presented by Omron Companies has been checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical or proofreading errors or omissions.

#### **OMRON Corporation Industrial Automation Company**

Tokyo, JAPAN

Contact: www.ia.omron.com

## Regional Headquarters OMRON EUROPE B.V.

Wegalaan 67-69, 2132 JD Hoofddorp The Netherlands Tel: (31)2356-81-300/Fax: (31)2356-81-388

### OMRON ASIA PACIFIC PTE. LTD.

No. 438A Alexandra Road # 05-05/08 (Lobby 2), Alexandra Technopark, Singapore 119967 Tel: (65) 6835-3011/Fax: (65) 6835-2711

#### **OMRON ELECTRONICS LLC**

2895 Greenspoint Parkway, Suite 200 Hoffman Estates, IL 60169 U.S.A Tel: (1) 847-843-7900/Fax: (1) 847-843-7787

OMRON (CHINA) CO., LTD.
Room 2211, Bank of China Tower,
200 Yin Cheng Zhong Road,
PuDong New Area, Shanghai, 200120, China
Tel: (86) 21-5037-2222/Fax: (86) 21-5037-2200

#### **Authorized Distributor:**

© OMRON Corporation 2015 All Rights Reserved. In the interest of product improvement, specifications are subject to change without notice.

CSM\_1\_1\_0415 Cat. No. A244-E1-01

0415 (0415)