

# **Key-type Selector Switches**A30NZ-□M□-01□A

# **Keyed 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.
- The terminals can be retightened when Contact Blocks are
- Contact Blocks can be attached in any direction for easy
- 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**

- · Meet global safety standards.
- · All models are keyed alike.



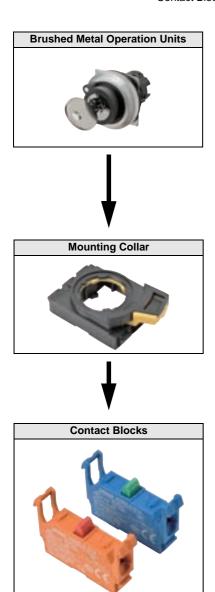
Refer to Safety Precautions for All Pushbutton Switches/Indicators and Safety Precautions in the A30NZ-M□□-□□A datasheet





## **Structure**

**Subassemblies** - - - - Order Operation Units, Mounting Collars, and Contact Blocks individually. The same 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□□-□□A.
- Accessories and tools: Refer to the A22NN/A22NL.
- Dimensions: Refer to page 7.

## **Model Number Structure**

**Model Number Legend** ----- Order Operation Units, Mounting Collars, and Contact Blocks individually. The same 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		
	Manual	Two-position manual	\ <u></u>
М	Mariuai	Three-position manual	
L	Automatic reset on left	Two-position automatic	
		Three-position left automatic	
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) Key Number

Code	No.
01	No.1

#### (5) Key Release Position

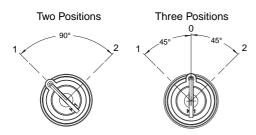
Code	Release position	Two positions	Three positions
А	All positions	000	
В	Left	•	
С	Right	•	• • •
D	Center		• • •
E	Left and center		•
F	Right and center		• 000
G	Left and right		

O: Release position

#### (6) Degree of Protection

Code	Protection
Α	IP66

## **Operation Angle**



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

■ Dimensions: Refer to page 7.

■ Precautions for correct use: Refer to the A30NZ-M□□-□□A.

<sup>:</sup> Locked position

## **A30NZ-**□**M**□**-01**□**A**

# Type

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

## **Operation Units**

Bezel material and shape		Brushed metal	(1) Key release positions
No. of positions	Reset method	Model	
2	Manual	A30NZ-2MM-01(1)A	A: All positions B: Left
2	Automatic reset on left	A30NZ-2ML-01(1)A	C: Right
	Manual	A30NZ-3MM-01(1)A	A: All positions B: Left
3	Automatic reset on left	A30NZ-3ML-01(1)A	C: Right D: Center
	Automatic reset on right	A30NZ-3MR-01(1)A	E: Left and center F: Right and center
	Automatic reset on left and right	A30NZ-3MB-01(1)A	G: Left and right

<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, Mounting Collars, and Contact Blocks individually. The same Mounting Collars and Contact Blocks are also used for the A22N Series.

#### **Mounting Collar**

Appearance	Model
	A22NZ-H-01

#### **Contact Blocks**

Appearance	Contact Specification	Model
1	SPST-NO (blue)	A22NZ-S-G1A
	SPST-NC (orange)	A22NZ-S-G1B

#### **Reinforcement Plate**

Appearance	Model
000	A22NZ-A-C01

#### **Accessories**

Appearance	Model
Key	
Next Market Mark	A22NZ-K-01

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

#### **Characteristics**

Туре		Key-type Selector Switches	
Item		. , ,	
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	
Dielectric Strength	Between each termi- nal 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)		1,000 m/s <sup>2</sup> max. (malfunction within 1 ms)	
Durability	Mechanical	500,000 operations min. (Switches with 3 positions: 300,000 operations min.)	
Durability	Electrical	500,000 operations min. (Switches with 3 positions: 300,000 operations min.)	
Ambient operating te	mperature*1	−25 to 70°C	
Ambient operating hu	ımidity	35% to 85% RH	
Ambient storage temp	perature*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. 75 g (for 1NC/1NO)	

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

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

Туре	Key-type 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.		

Note: For Knob-type or Key-type Selector Switches, this is the rotational torque.

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

Examples of Link	Contact Blocks		
	Key-type Selector Switches		
	2 positions	3 positions	
Linking example	Operation Unit  Mounting Collar	Operation Unit  Mounting Collar	

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.

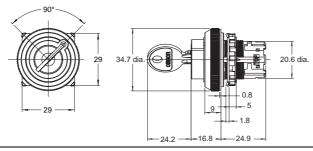
Dimensions (Unit: mm)

#### Lighted and Non-lighted Key-type Selection Switches

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

A30NZ-2M□-01□A

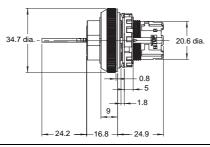




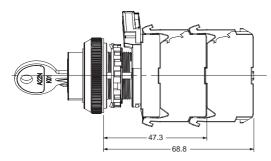
### **Three-position Switches with Brushed Metal Bezels**

A30NZ-3M□-01□A





## **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.

**Precautions for Correct Use** 

Insert the key all of the way to the back of the cylinder before you turn it.

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. A245-E1-01

0415 (0415)