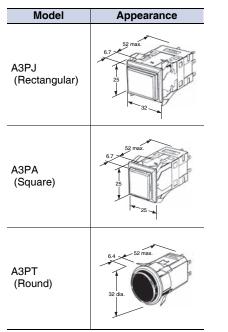
Large Square-bodied Lighted Pushbutton Switches

- Excellent operating sensitivity.
- Excellent illumination with even surface brightness.
- Three-color models (green, orange, red; chameleon lighting) included in lineup.



Refer to Safety Precautions for All Pushbutton Switches/ Indicators and Safety Precautions on page 24.

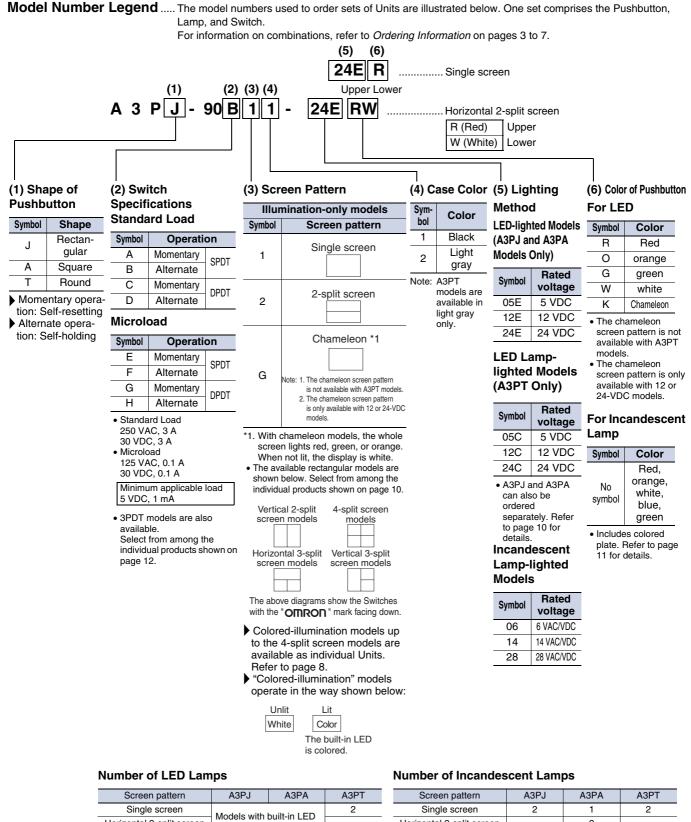
List of Models



Note: The A3PJ is shown in the figure above as an example.

■ Specifications: Refer to page 15. ■ Panel cutout: Refer to page 21. ■ Dimensions: Refer to page 18.
 ■ Accessories, replacements, and tools: Refer to pages 13 to 15. ■ Precautions for correct use: Refer to page 24.

Model Number Structure



Screen pattern	A3PJ	A3PA	A3PT		
Single screen	Medele with built in LED		Models with built-in LED		2
Horizontal 2-split screen	Models with	Models with built-in LED			
Vertical 2-split screen					
Horizontal 3-split screen	4				
Vertical 3-split screen	*2				
4-split screen					

*2. These split screen models are available only as individual Units. They cannot be ordered as sets.

Screen pattern	A3PJ	A3PA	A3PT
Single screen	2	1	2
Horizontal 2-split screen	4(Low-pow-	2	
Vertical 2-split screen	er incan-		
Horizontal 3-split screen	descent		
4-split screen	lamp)		

Note: Lamp positions for single-screen A3PJ (rectangular model).



the Pushbutton, Lamp, and Switch.

(Not all combinations are possible. Ask your OMRON representative for details.)

Rectangular	(Single Screen)	
Models		



A3PJ

(Single Screen)

(1)

Standard Loads

Contact type			Standard load (250 VAC, 3 A; 30 VDC, 4 A)				
Operation		Momentary operation (Self-resetting)		Alternate operation (Self-holding)		Pushbutton color	
Output	Output Lighting Case color		Black	Light gray	Black	Light gray	symbol
		5 VDC	A3PJ-90A11-05E(1)	A3PJ-90A12-05E(1)	A3PJ-90B11-05E(1)	A3PJ-90B12-05E(1)	R
	LED	12 VDC	A3PJ-90A11-12E(1)	A3PJ-90A12-12E(1)	A3PJ-90B11-12E(1)	A3PJ-90B12-12E(1)	O G
		24 VDC	A3PJ-90A11-24E(1)	A3PJ-90A12-24E(1)	A3PJ-90B11-24E(1)	A3PJ-90B12-24E(1)	w
SPDT	Chameleon	12 VDC	A3PJ-90AG1-12EK		A3PJ-90BG1-12EK	A3PJ-90BG2-12EK	*1
01 01	Chameleon	24 VDC	A3PJ-90AG1-24EK	A3PJ-90AG2-24EK	A3PJ-90BG1-24EK	A3PJ-90BG2-24EK	
	Incandescent lamp	6 VDC/VAC	A3PJ-90A11-06	A3PJ-90A12-06	A3PJ-90B11-06	A3PJ-90B12-06	
		14 VDC/VAC	A3PJ-90A11-14	A3PJ-90A12-14	A3PJ-90B11-14	A3PJ-90B12-14	*2
		28 VDC/VAC	A3PJ-90A11-28	A3PJ-90A12-28	A3PJ-90B11-28	A3PJ-90B12-28	
		5 VDC	A3PJ-90C11-05E(1)	A3PJ-90C12-05E(1)	A3PJ-90D11-05E(1)	A3PJ-90D12-05E(1)	R
	LED	12 VDC	A3PJ-90C11-12E(1)	A3PJ-90C12-12E(1)	A3PJ-90D11-12E(1)	A3PJ-90D12-12E(1)	O G
		24 VDC	A3PJ-90C11-24E(1)	A3PJ-90C12-24E(1)	A3PJ-90D11-24E(1)	A3PJ-90D12-24E(1)	w
DPDT	Chameleon	12 VDC	A3PJ-90CG1-12EK	A3PJ-90CG2-12EK	A3PJ-90DG1-12EK		*1
DIDI	Chameleon	24 VDC	A3PJ-90CG1-24EK	A3PJ-90CG2-24EK	A3PJ-90DG1-24EK	A3PJ-90DG2-24EK	
		6 VDC/VAC	A3PJ-90C11-06	A3PJ-90C12-06	A3PJ-90D11-06	A3PJ-90D12-06	
	Incandescent lamp	14 VDC/VAC	A3PJ-90C11-14	A3PJ-90C12-14	A3PJ-90D11-14	A3PJ-90D12-14	*2
	amp	28 VDC/VAC	A3PJ-90C11-28	A3PJ-90C12-28	A3PJ-90D11-28	A3PJ-90D12-28	

Note: Enter the desired color symbol for the Pushbutton in (1). (R) = Red, (O) = Orange, (G) = Green, (W) = White.

Example: Red A3PJ-90A11-24ER

*1. You can change the screen colors of chameleon models between red, green, and orange, by changing the terminal wiring. Refer to page 20 for details. *2. Incandescent lamps are supplied with colored plates (white, red, green, blue, and orange) and legend plates (milk-white and transparent). Use the appropriate combination.

Microloads

Contact type Operation			0.1 A; 30 VDC, 0.1 A) ion (Self-resetting)	Pushbutton		
Output Lighting		Case color	Black	Light gray	color symbol	
		5 VDC	A3PJ-90E11-05E(1)	A3PJ-90E12-05E(1)	R	
	LED	12 VDC	A3PJ-90E11-12E(1)	A3PJ-90E12-12E(1)	O G	
		24 VDC	A3PJ-90E11-24E(1)	A3PJ-90E12-24E(1)	W	
SPDT	Chameleon	12 VDC	A3PJ-90EG1-12EK		*1	
01 01	Incandescent lamp	24 VDC	A3PJ-90EG1-24EK	A3PJ-90EG2-24EK	1	
		6 VDC/VAC	A3PJ-90E11-06	A3PJ-90E12-06		
			14 VDC/VAC	A3PJ-90E11-14		*2
		28 VDC/VAC	A3PJ-90E11-28	A3PJ-90E12-28	-	
		5 VDC	A3PJ-90G11-05E(1)		R	
	LED	12 VDC	A3PJ-90G11-12E(1)	A3PJ-90G12-12E(1)	O G	
		24 VDC	A3PJ-90G11-24E(1)	A3PJ-90G12-24E(1)	W	
DPDT	Chameleon	12 VDC	A3PJ-90GG1-12EK		*1	
5, 51	Chameleon	24 VDC	A3PJ-90GG1-24EK			
		6 VDC/VAC	A3PJ-90G11-06	A3PJ-90G12-06		
	Incandescent lamp	14 VDC/VAC	A3PJ-90G11-14	A3PJ-90G12-14	*2	
	lamp	28 VDC/VAC	A3PJ-90G11-28	A3PJ-90G12-28		

Note: Enter the desired color symbol for the Pushbutton in (1). (R) = Red, (O) = Orange, (G) = Green, (W) = White.

Example: Red A3PJ-90E11-24ER

*1. You can change the screen colors of chameleon models between red, green, and orange, by changing the terminal wiring. Refer to page 20 for details. *2. Incandescent lamps are supplied with colored plates (white, red, green, blue, and orange) and legend plates (milk-white and transparent). Use the appropriate combination.

Individual models: Refer to pages 9 to 12.

(The Pushbutton, Lamp, and Switch can be ordered separately.)

■ Specifications: Refer to page 15. ■ Dimensions: Refer to page 18. Accessories: Refer to pages 13 to 15.

the Pushbutton, Lamp, and Switch.

(Not all combinations are possible. Ask your OMRON representative for details.)



(1) (Horizontal 2-split Screen) (2) A3PJ

Standard Loads

Models

		Contact type	Standard load (250 VAC, 3 A; 30 VDC, 4 A)				
		Operation	Momentary operat	ion (Self-resetting)	Alternate operation (Self-holding)		Pushbutton
Output	Output Lighting Case color		Black	Light gray	Black	Light gray	color symbol
	LED	5 VDC	A3PJ-90A21-24E(1)(2)	A3PJ-90A22-24E(1)(2)	A3PJ-90B21-24E(1)(2)	A3PJ-90B22-24E(1)(2)	ROGW
SPDT		6 VDC/VAC	A3PJ-90A21-06	A3PJ-90A22-06	A3PJ-90B21-06	A3PJ-90B22-06	
• · - ·	Incandescent lamp	14 VDC/VAC	A3PJ-90A21-14	A3PJ-90A22-14	A3PJ-90B21-14	A3PJ-90B22-14	*
	amp	28 VDC/VAC	A3PJ-90A21-28	A3PJ-90A22-28	A3PJ-90B21-28	A3PJ-90B22-28	
	LED	24 VDC	A3PJ-90C21-24E(1)(2)	A3PJ-90C22-24E(1)(2)	A3PJ-90D21-24E(1)(2)	A3PJ-90D22-24E(1)(2)	ROGW
DPDT		6 VDC/VAC	A3PJ-90C21-06	A3PJ-90C22-06	A3PJ-90D21-06	A3PJ-90D22-06	
	Incandescent lamp	14 VDC/VAC	A3PJ-90C21-14	A3PJ-90C22-14	A3PJ-90D21-14	A3PJ-90D22-14	*
		28 VDC/VAC	A3PJ-90C21-28	A3PJ-90C22-28	A3PJ-90D21-28	A3PJ-90D22-28	1

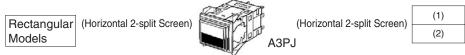
Note: Enter the desired color symbols for the Pushbutton in (1) and (2). (R) = Red, (O) = Orange, (G) = Green, (W) = White.

Example:

Upper A3PJ-90D21-24ERW Red

White Lower Red White

* Incandescent lamps are supplied with colored plates (white, red, green, blue, and orange) and legend plates (milky white and transparent). Use the appropriate combination.



Microloads

		Contact type	Microload (125 VAC,	0.1 A; 30 VDC, 0.1 A)	
Operation			Momentary operat	ion (Self-resetting)	Pushbutton
Output	Lighting	Case color	Black	Light gray	color symbol
	LED	5 VDC	A3PJ-90E21-24E(1)(2)	A3PJ-90E22-24E(1)(2)	ROGW
SPDT	Incandescent Iamp	6 VDC/VAC	A3PJ-90E21-06	A3PJ-90E22-06	
		14 VDC/VAC	A3PJ-90E21-14	A3PJ-90E22-14	*
		28 VDC/VAC	A3PJ-90E21-28	A3PJ-90E22-28	-
	LED	5 VDC	A3PJ-90G21-24E(1)(2)	A3PJ-90G22-24E(1)(2)	ROGW
DPDT		6 VDC/VAC	A3PJ-90G21-06	A3PJ-90G22-06	
	Incandescent Iamp	14 VDC/VAC	A3PJ-90G21-14	A3PJ-90G22-14	*
	amp	28 VDC/VAC	A3PJ-90G21-28	A3PJ-90G22-28	

Note: Enter the desired color symbols for the Pushbutton in (1) and (2). (R) = Red, (O) = Orange, (G) = Green, (W) = White.

Example:

Red Upper A3PJ-90D21-24ERW White Red White Lower

* Incandescent lamps are supplied with colored plates (white, red, green, blue, and orange) and legend plates (milky-white and transparent). Use the appropriate combination.

Individual models: Refer to pages 9 to 12.

(The Pushbutton, Lamp, and Switch can be ordered separately.)

■ Specifications: Refer to page 15. ■ Dimensions: Refer to page 18. ■ Accessories: Refer to pages 13 to 15.

the Pushbutton, Lamp, and Switch.

(Not all combinations are possible. Ask your OMRON representative for details.)

	_
Square	(Single Screen)
Models	



(Single Screen) A3PA

Standard Loads

Contact type				Standard load (250 VAC, 3 A; 30 VDC, 4 A)			
Operation			Momentary operation (Self-resetting)		Alternate operation (Self-holding)		Pushbutton
Output	Output Lighting Case color		Black	Light gray	Black	Light gray	color symbol
		5 VDC	A3PA-90A11-05E(1)	A3PA-90A12-05E(1)	A3PA-90B11-05E(1)	A3PA-90B12-05E(1)	R
	LED	12 VDC	A3PA-90A11-12E(1)	A3PA-90A12-12E(1)	A3PA-90B11-12E(1)	A3PA-90B12-12E(1)	0 G
		24 VDC	A3PA-90A11-24E(1)	A3PA-90A12-24E(1)	A3PA-90B11-24E(1)	A3PA-90B12-24E(1)	W
SPDT	0.	12 VDC	A3PA-90AG1-12EK	A3PA-90AG2-12EK	A3PA-90BG1-12EK	A3PA-90BG2-12EK	*1
01 01	Chameleon	24 VDC	A3PA-90AG1-24EK	A3PA-90AG2-24EK	A3PA-90BG1-24EK	A3PA-90BG2-24EK	
	Incandescent lamp	6 VDC/VAC	A3PA-90A11-06	A3PA-90A12-06	A3PA-90B11-06	A3PA-90B12-06	
		14 VDC/VAC	A3PA-90A11-14	A3PA-90A12-14	A3PA-90B11-14	A3PA-90B12-14	*2
		28 VDC/VAC	A3PA-90A11-28	A3PA-90A12-28	A3PA-90B11-28	A3PA-90B12-28	
		5 VDC	A3PA-90C11-05E(1)	A3PA-90C12-05E(1)	A3PA-90D11-05E(1)	A3PA-90D12-05E(1)	R
	LED	12 VDC	A3PA-90C11-12E(1)	A3PA-90C12-12E(1)	A3PA-90D11-12E(1)	A3PA-90D12-12E(1)	O G
		24 VDC	A3PA-90C11-24E(1)	A3PA-90C12-24E(1)	A3PA-90D11-24E(1)	A3PA-90D12-24E(1)	W
DPDT	Chameleon	12 VDC	A3PA-90CG1-12EK	A3PA-90CG2-12EK	A3PA-90DG1-12EK	A3PA-90DG2-12EK	*1
5151	Chameleon	24 VDC	A3PA-90CG1-24EK	A3PA-90CG2-24EK	A3PA-90DG1-24EK	A3PA-90DG2-24EK	
		6 VDC/VAC	A3PA-90C11-06	A3PA-90C12-06	A3PA-90D11-06	A3PA-90D12-06	
	Incandescent lamp	14 VDC/VAC	A3PA-90C11-14	A3PA-90C12-14	A3PA-90D11-14	A3PA-90D12-14	*2
	ianip	28 VDC/VAC	A3PA-90C11-28	A3PA-90C12-28	A3PA-90D11-28	A3PA-90D12-28	1

(1)

Note: Enter the desired color symbol for the Pushbutton in (1). (R) = Red, (O) = Orange, (G) = Green, (W) = White.

Example: Red A3PA-90A11-24ER

*1. You can change the screen colors of chameleon models between red, green, and orange, by changing the terminal wiring. Refer to page 20 for details. *2. Incandescent lamps are supplied with colored plates (white, red, green, blue, and orange) and legend plates (milk-white and transparent). Use the appropriate combination.

Microloads

· · ·			Microload (125 VAC,			
Operation			Momentary operat	Momentary operation (Self-resetting)		
Output Lighting		Case color	Black	Light gray	color symbol	
		5 VDC	A3PA-90E11-05E(1)	A3PA-90E12-05E(1)	R	
	LED	12 VDC	A3PA-90E11-12E(1)	A3PA-90E12-12E(1)	O G	
		24 VDC	A3PA-90E11-24E(1)	A3PA-90E12-24E(1)	Ŵ	
SPDT	Chameleon	12 VDC	A3PA-90EG1-12EK		*1	
••••••	Chameleon	24 VDC	A3PA-90EG1-24EK	A3PA-90EG2-24EK	1	
	Incandescent lamp	6 VDC/VAC	A3PA-90E11-06	A3PA-90E12-06		
		14 VDC/VAC		A3PA-90E12-14	*2	
		28 VDC/VAC	A3PA-90E11-28	A3PA-90E12-28		
		5 VDC			R	
	LED	12 VDC	A3PA-90G11-12E(1)	A3PA-90G12-12E(1)	O G	
		24 VDC	A3PA-90G11-24E(1)	A3PA-90G12-24E(1)	w	
DPDT	Chameleon	12 VDC	A3PA-90GG1-12EK		*1	
5.51	Chameleon	24 VDC	A3PA-90GG1-24EK			
		6 VDC/VAC	A3PA-90G11-06	A3PA-90G12-06		
	Incandescent lamp	14 VDC/VAC			*2	
		28 VDC/VAC	A3PA-90G11-28	A3PA-90G12-28		

Note: Enter the desired color symbol for the Pushbutton in (1). (R) = Red, (O) = Orange, (G) = Green, (W) = White.

Example: Red A3PA-90E11-24ER

*1. You can change the screen colors of chameleon models between red, green, and orange, by changing the terminal wiring. Refer to page 20 for details. *2. Incandescent lamps are supplied with colored plates (white, red, green, blue, and orange) and legend plates (milk-white and transparent). Use the appropriate combination.

Individual models: Refer to pages 9 to 12.

(The Pushbutton, Lamp, and Switch can be ordered separately.)

■ Specifications: Refer to page 15. ■ Dimensions: Refer to page 18. Accessories: Refer to pages 13 to 15.

(Horizontal 2-split Screen)

the Pushbutton, Lamp, and Switch.

(Not all combinations are possible. Ask your OMRON representative for details.)

Square
Models



A3PA

(1) (Horizontal 2-split Screen) (2)

Standard Loads

		Contact type	Standard load (250 VAC, 3 A; 30 VDC, 4 A)				
		Operation	Momentary operat	ion (Self-resetting)	Alternate operation (Self-holding)		Pushbutton
Output	Lighting	Case color	Black	Light gray	Black	Light gray	color symbol
	LED	24 VDC	A3PA-90A21-24E(1)(2)	A3PA-90A22-24E(1)(2)	A3PA-90B21-24E(1)(2)	A3PA-90B22-24E(1)(2)	ROGW
SPDT	-	6 VDC/VAC	A3PA-90A21-06	A3PA-90A22-06	A3PA-90B21-06	A3PA-90B22-06	
5-01	Incandescent lamp	14 VDC/VAC	A3PA-90A21-14	A3PA-90A22-14	A3PA-90B21-14	A3PA-90B22-14	*
		28 VDC/VAC	A3PA-90A21-28	A3PA-90A22-28	A3PA-90B21-28	A3PA-90B22-28	
	LED	24 VDC	A3PA-90C21-24E(1)(2)	A3PA-90C22-24E(1)(2)	A3PA-90D21-24E(1)(2)	A3PA-90D22-24E(1)(2)	ROGW
DPDT		6 VDC/VAC	A3PA-90C21-06	A3PA-90C22-06	A3PA-90D21-06	A3PA-90D22-06	1
	Incandescent lamp	14 VDC/VAC	A3PA-90C21-14	A3PA-90C22-14	A3PA-90D21-14	A3PA-90D22-14	*
		28 VDC/VAC	A3PA-90C21-28	A3PA-90C22-28	A3PA-90D21-28	A3PA-90D22-28	1

Note: Enter the desired color symbols for the Pushbutton in (1) and (2). (R) = Red, (O) = Orange, (G) = Green, (W) = White.

Example: Red Upper A3PA-90D21-24ERW

White Lower Red White

* Incandescent lamps are supplied with colored plates (white, red, green, blue, and orange) and legend plates (milk-white and transparent). Use the appropriate combination.

Square	(Horizontal 2-split Screen)	S	(Horizontal 2-split Screen)	(1)]
Models	(1011201141 2 0p11 0010011)		A3PA	(2)	
Microloads					

		Contact type	Microload (125 VAC,		
		Operation	Momentary operat	ion (Self-resetting)	Pushbutton
Outpu	t Lighting	Case color	Black	Light gray	color symbol
	LED	24 VDC	A3PA-90E21-24E(1)(2)	A3PA-90E22-24E(1)(2)	ROGW
SPDT	T	6 VDC/VAC	A3PA-90E21-06	A3PA-90E22-06	
5501	Incandescent lamp	14 VDC/VAC	A3PA-90E21-14	A3PA-90E22-14	*
		28 VDC/VAC	A3PA-90E21-28	A3PA-90E22-28	
	LED	24 VDC	A3PA-90G21-24E(1)(2)	A3PA-90G22-24E(1)(2)	ROGW
DPDT		6 VDC/VAC	A3PA-90G21-06	A3PA-90G22-06	
DPDI	Incandescent lamp	14 VDC/VAC	A3PA-90G21-14	A3PA-90G22-14	*
		28 VDC/VAC	A3PA-90G21-28	A3PA-90G22-28	1

Note: Enter the desired color symbols for the Pushbutton in (1) and (2). (R) = Red, (O) = Orange, (G) = Green, (W) = White.

Example:

Red Upper A3PA-90D21-24ERW White Lower Red White

* Incandescent lamps are supplied with colored plates (white, red, green, blue, and orange) and legend plates (milk-white and transparent). Use the appropriate combination.

Individual models: Refer to pages 9 to 12.

(The Pushbutton, Lamp, and Switch can be ordered separately.)

■ Specifications: Refer to page 15. ■ Dimensions: Refer to page 18. ■ Accessories: Refer to pages 13 to 15.

the Pushbutton, Lamp, and Switch.





(Single Screen) (1)

Standard Loads

		Contact type	Standard load (250 V	Standard load (250 VAC, 3 A; 30 VDC, 4 A)				
	Operation		Momentary operation (Self-resetting)	Alternate operation (Self-holding)	Pushbutton color symbol			
Outpu	It Lighting	Case color	Light gray	Light gray	color symbol			
	LED	24 VDC	A3PT-90A12-24C(1)	A3PT-90B12-24C(1)	ROGW			
SPDT	-	т (6 VDC/VAC	A3PT-90A12-06	A3PT-90B12-06			
SFDI	Incandescent lamp	14 VDC/VAC	A3PT-90A12-14		*			
		28 VDC/VAC	A3PT-90A12-28	A3PT-90B12-28				
	LED	24 VDC	A3PT-90C12-24C(1)	A3PT-90D12-24C(1)	ROGW			
DPDT	-	6 VDC/VAC	A3PT-90C12-06	A3PT-90D12-06				
DPDI	Incandescent lamp	14 VDC/VAC	A3PT-90C12-14	A3PT-90D12-14	*			
		28 VDC/VAC	A3PT-90C12-28	A3PT-90D12-28	1			

Note: Enter the desired color symbols for the Pushbutton in (1) and (2). (R) = Red, (O) = Orange, (G) = Green, (W) = White.

Example: (Red) A3PT-90A12-24CR

* Incandescent lamps are supplied with a colored plates (white, red, green, blue, and orange). Use the appropriate combination. Models A3PT (round models), however, are not supplied with legend plates.



Microloads

		Contact type	Microload (125 VAC, 0.1 A; 30 VDC, 0.1 A)	
Operation		Momentary operation	Pushbutton color symbol	
Output	Lighting	Case color	Light gray	
SPDT	LED	24 VDC	A3PT-90E12-24C(1)	ROGW
SFDI	Incandescent lamp	28 VDC/VAC	A3PT-90E12-28	*
DPDT	LED	24 VDC	A3PT-90G12-24C(1)	G W
DFDT	Incandescent lamp	28 VDC/VAC	A3PT-90G12-28	*

Note: Enter the desired color symbols for the Pushbutton in (1). (R) = Red, (O) = Orange, (G) = Green, (W) = White.

Example: (Red) A3PT-90E12-24CR

* Incandescent lamps are supplied with a colored plates (white, red, green, blue, and orange). Use the appropriate combination. Models A3PT (round models), however, are not supplied with legend plates.

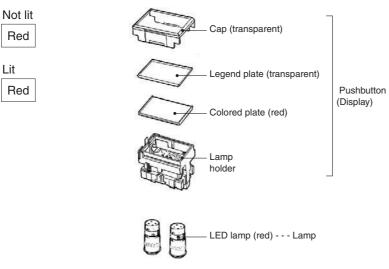
Individual models: Refer to pages 9 to 12. (The Pushbutton, Lamp, and Switch can be ordered separately.) ■ Specifications: Refer to page 15. ■ Dimensions: Refer to page 18. Accessories: Refer to pages 13 to 15.

Illumination-only and Colored-illumination LED Models

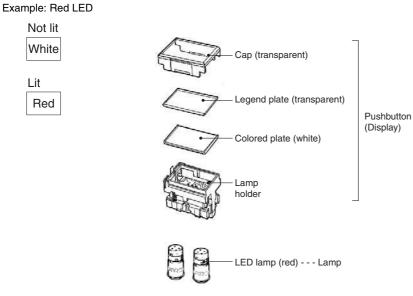
"Illumination only" describes LED models for which the screen color is the same whether the LED is lit or not. The screen simply becomes brighter when the LED lights.

Example: Red LED

Lit



"Colored illumination" describes LED models for which the screen color is white when the LED is not lit and changes to the color of the LED lamp when the LED is lit.

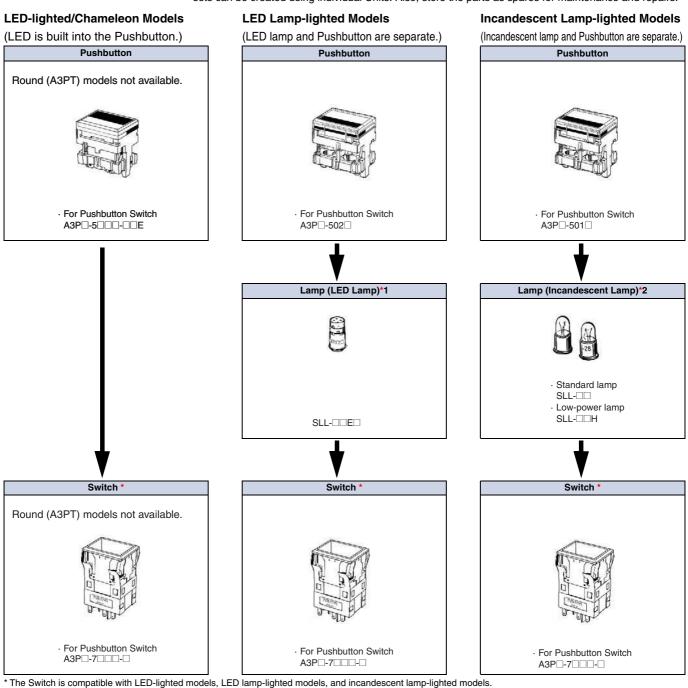


Ordering: With colored-illumination models, order the Pushbutton, Lamp, and Switch as shown in the following table.

Pushbutton	Lamp	Switch
Select the LED lamp-lighted model required from the selection on page 10. Each assembly includes the number of white colored plates re- quired to enable colored illumination for the corresponding screen-split configuration. For example, 4-split screen models include 4 white colored plates.	A3PJ (rectangular): 4 A3PA (square): 2	Select from the Switches on page 12.

Ordering Individually Pushbuttons, Lamps, and Switches can be ordered separately. Combinations that are not available as

sets can be created using individual Units. Also, store the parts as spares for maintenance and repairs.



*1. Number of necessary LED lamps.

Screen pattern	A3PJ	A3PA	A3PT
Single screen		2	2
Horizontal 2-split screen		2	
Vertical 2-split screen	4		
Vertical 3-split screen Horizontal 3-split screen			
4-split screen			

*2. Number of necessary incandescent lamps.

Screen pattern	A3PJ	A3PA	A3PT
Single screen	2	1	2
Horizontal 2-split screen		2	
Vertical 2-split screen	4 (low-power		
Vertical 3-split screen Horizontal 3-split screen	incandes- cent lamp)		
4-split screen			

Ordering set combinations: Refer to page 3 to 7.

Specifications: Refer to page 15. Dimensions: Refer to page 18.
 Accessories: Refer to pages 13 to 15.

Ordering IndividuallyPushbuttons, Lamps, and Switches can be ordered separately. Combinations that are not available as

sets can be created using individual Units. Also, store the parts as spares for maintenance and repairs.

Pushbutton

LED-lighted Models (LED is built-in.)

Appearance		Split-screen color (color symbol)		Red (R) Green (G)		Orange (O)	Selection precau- tions
	Single screen		A3PJ-5701 -□□E	A3PJ-5702 -□□E	A3PJ-5703 -□□E	A3PJ-5706 -□□E	Enter the voltage to
Rectangular models		White	A3PJ-5711 -□□E	A3PJ-5712 -□□E	A3PJ-5713 -□□E	A3PJ-5716 -□□E	be used in the at the end of the mod-
	Horizontal	Red	A3PJ-5721 -□□E	A3PJ-5722 -□□E	A3PJ-5723 -□□E	A3PJ-5726 -□□E	el number.
	2-split screen	Green	A3PJ-5731 -□□E	A3PJ-5732 -□□E	A3PJ-5733 -□□E	A3PJ-5736 -□□E	Examples of voltag- es used:
			A3PJ-5741 -□□E	A3PJ-5742 -□□E	A3PJ-5743 -□□E	A3PJ-5746 -□□E	5V=0.5 E 12V=1.2 E 24V=2.4 E
	Single screen		A3PA-5701 -□□E	A3PA-5702 -□□E	A3PA-5703 -□□E	A3PA-5706 -□□E	Horizontal 2-split
Square models		White	A3PA-5711 -□□E	A3PA-5712 -□□E	A3PA-5713 -□□E	A3PA-5716 -□□E	port only 24V.For the color of the
	Horizontal	Red	A3PA-5721 -□□E	A3PA-5722 -□□E	A3PA-5723 -□□E	A3PA-5726 -□□E	shaded part, select the model accord-
J.Co	2-split screen	split screen A3PA-5731 A3PA-5732 A3PA-5 - E - E - E - E		A3PA-5733 -□□E	A3PA-5736 -□□E	ing to the colors given at the top of	
		Orange	A3PA-5741 -□□E	A3PA-5742 -□□E	A3PA-5743 -□□E	A3PA-5746 -□□E	the table.

Note: 1. A cap, legend plate (transparent), colored plate, white plunger case, and LED (with a current-limiting resistor) are built into the standard lighting unit. 2. Split-screen coloring configurations are given with the OMRON mark on the Switch facing down.

3. The LED is built-in and cannot be replaced individually.

LED Lamp-lighted Models (LED is not built-in.)

	Rectangul	ar models	Square mo	odels	Round models								
Appearance					S				Selec	tion pr	ecautio	ons	
Screen pattern	Screen	Model	Screen	Model	Screen	Model							
Single screen		A3PJ-5021		A3PA-5021	A3PT-5021		 Parts included: Colored plates (ange), a legend light baffle (split 	plate (t -screen	ranspa model	rent), a s only)	and a are in-		
Horizontal 2- split screen		A3PJ-5022		A3PA-5022			 cluded. Use the the LED coloring The number of v to enable colore sponding screen 	g requir white co d illumi	ed. blored p nation	plates re for the	equired corre-		
Vertical 2-split screen		A3PJ-5023					ed. (For exampl include 4 white • The number of co model are shown	e, 4-spl colored olored p	it scree plates) lates in	en mod). cluded	els for each		
Horizontal 3-split							Screen pattern	White	Red	Green	Orange		
screen		A3PJ-5024					Single screen	1	1	1	1		
Vertical 3-split		A3PJ-5025					Horizontal 2- split screens Vertical 2-split screens	2	1	1	1		
4-split screen		A3PJ-5026					Horizontal 3- split screens Vertical 3-split screens *	3	2	2	2		
·							4-split screen	4	1	1	1		

* The following types of colored plates are included with Horizontal and Vertical 3-splitScreen Switches.

White: One colored plate for a 2-split screen and two colored plates for a 4-split screen.

Red, green, or orange: One colored plate for a 2-split screen and one colored plates for a 4-split screen.

Ordering set combinations: Refer to page 3 to 7.

Specifications: Refer to page 15. Dimensions: Refer to page 18.
 Accessories: Refer to pages 13 to 15.

Ordering Individually Pushbuttons, Lamps, and Switches can be ordered separately. Combinations that are not available as

sets can be created using individual Units. Also, store the parts as spares for maintenance and repairs.

Pushbutton

Incandescent Lamp-lighted Models (Incandescent lamp is not built-in.)

Appearance	Rectangular models		Square models		Round models		Round models		Si	electio	n preca	autions	5	
Screen pattern	Screen	Model	Screen	Model	Screen	Model								
Single screen		A3PJ-5011		A3PA-5011	A3PT-5011 *		 Parts included Colored plates blue), legend p and a light her 	s (white plates (transpa	arent ar	nd milk	white),		
Horizontal 2- split screen		A3PJ-5012		A3PA-5012			and a light baf supplied. * A3PT (round) mo • The number of	dels do	not cont	ain a leg	gend pla	te.		
Vertical 2-split screen		A3PJ-5013					the following ta		Red	Green	Orange	Blue		
							Single screen	1	1	1	1	1		
Horizontal 3-split screen		A3PJ-5014					Horizontal 2- split screens Vertical 2-split	1	1	1	1	1		
Vertical 3-split screen		A3PJ-5015					Screens Horizontal 3-							
4-split screen		A3PJ-5016					split screens Vertical 3-split screens *	2	2	2	2	2		
							4-split screen	2	2	2	2	2		

* The following types of colored plates are included with Horizontal and Vertical 3-splitScreen Switches. All colors: One colored plate for a 2-split screen and one colored plate for a 4-split screen.

Chameleon Models (with Built-in LED)

Appearance	Rated voltage	Chameleon pushbutton switch
Rectangular	12 VDC	A3PJ-5800-12E
	24 VDC	A3PJ-5800-24E
Square	12 VDC	A3PA-5800-12E
	24 VDC	A3PA-5800-24E

Note: 1. With chameleon models the whole screen lights red, green, or orange

(i.e., red and green simultaneously).
 A cap, legend plate (transparent), white colored plate, and LED (with a current-limiting resistor) are built into the Pushbutton.

Ordering set combinations: Refer to page 3 to 7.

Ordering Individually Pushbuttons, Lamps, and Switches can be ordered separately. Combinations that are not available as sets can be created using individual Units. Also, store the parts as spares for maintenance and repairs.

Pushbutton (For information on mounting, refer to page 25.)

LED Lamp

Voltage	5 VDC	12 VDC	24 VDC	Applicable cap (color)	Selection precautions
Color	Model (DC only)	Model (DC only)	Model (DC only)	(colored plate)	Selection precautions
Red	SLL-05ER	SLL-12ER	SLL-24ER	Red	
Yellow	SLL-05EY	SLL-12EY	SLL-24EY	Orange	In the standard setup, 4 LED lamps are used with A3PJ models and 2 LED lamps are
Green	SLL-05EG	SLL-12EG	SLL-24EG	Green	used with A3PA and A3PT models.
White	SLL-05EW	SLL-12EW	SLL-24EW	White	

Incandescent Lamp

Lamp type Voltage	Standard lamp	Low-power lamp	Selection precautions
5 VAC/VDC	SLL-06	SLL-06H	• In the standard setup for A3PJ models, 2 lamps are used with sin- gle screen models, and 4 lamps are used with split-screen models.
12 VAC/VDC	SLL-14	SLL-14H	If 3 or 4 lamps are lit continuously, use low-power lamps.In the standard setup for A3PA models, 1 lamp is used with single
24 VAC/VDC	SLL-28	SLL-28H	 screen models, and 2 lamps are used with split-screen models. In the standard setup for A3PT models, 2 lamps are used.

Switch (common to both incandescent lamp-lighted models and LED models)

				Rectangular models	Square models	Round models			
			Appearance				Selection precautions		
	Contact type	Switch Number of outputs	Operation	Model	Model	Model			
		1	Momentary operation	A3PJ-7010-1	A3PA-7010-1	A3PT-7010-2	• The end digit denotes the color of the flange: -1		
pe			I	•	Alternate operation	A3PJ-7020-1	A3PA-7020-1	A3PT-7020-2	denotes a black flange, and -2 denotes a light
Standard load		Momentary operation	A3PJ-7030-1	A3PA-7030-1	A3PT-7030-2	gray flange. Round switches are available			
anda	contact	2	Alternate operation	A3PJ-7040-1	A3PA-7040-1	A3PT-7040-2	only in light gray, and not in black.		
s		3	Momentary operation	A3PJ-7150-1			Use the Switch in combination with the same		
		5	Alternate operation	A3PJ-7160-1			shape Lamp (rectangu- lar, square or round).		
		1	Momentary operation	A3PJ-7050-1	A3PA-7050-1	A3PT-7050-2	Example: For rectangular Lamp A3PJ-5011, select		
		•	Alternate operation	A3PJ-7060-1	A3PA-7060-1	A3PT-7060-2	Switch A3PJ-7□□0-□. On the Switch itself, how-		
Microload	Gold alloy	2	Momentary operation	A3PJ-7070-1	A3PA-7070-1	A3PT-7070-2	ever, only 3 digits are shown, as follows:		
Micro	contact	2	Alternate operation	A3PJ-7080-1	A3PA-7080-1	A3PT-7080-2	A3PJ-7□□. • Momentary operation is		
		3	Momentary operation	A3PJ-7170-1			self-resetting, and alter- nate operation is self-		
		J J	Alternate operation	A3PJ-7180-1			holding (i.e., push-on, push-off).		

Ordering set combinations: Refer to page 3 to 7.

■ Specifications: Refer to page 15. ■ Dimensions: Refer to page 18. Accessories: Refer to pages 13 to 15.

Accessories, Replacements, and Tools Accessories

Name	Appearance	Classifica	tion	Rectangular	Square	Application precautions		
	A	Wire-wrap terminal		A3PJ-4101	A3PA-4101	• The Socket cannot be used with when mounting multiple Switch-		
Socket		PCB terminal	PCB terminal		A3PA-4102	es or with 3C models. • You can use the same Sockets		
	1199991	Solder terminal		A3PJ-4103	A3PA-4103	for the A3P Ultra Bright Lighted Pushbutton Switches.		
		Short edge barrier (Horizontal mount-	Black	A3PJ-4001	A3PA-4001			
		ing) (1 pair)	Light gray	A3PJ-4002	A3PA-4002	• The purpose of the barrier is to		
		Long edge barrier (Vertical mounting)	Black	A3PJ-4004		prevent malfunctioning and to improve design image of the mounting panel.		
Deview	TRA	(1 pair) Light gray A3PJ-4005		 Intermediate barrier × 1. Edge barriers × 1 pair (2 Units). 				
Barrier		Short intermediate	Black	A3PJ-4007	A3PA-4007	 Mount short barriers horizontally. Mount long barriers vertically. For details on mounting, refer to 		
		barrier (Horizontal mounting)	Light gray	A3PJ-4008	A3PA-4008	 page 25. You can use the same Sockets for the A3P Ultra Bright Lighted 		
		Long intermediate	Black	A3PJ-4010		Pushbutton Switches.		
		barrier (Vertical mounting)	Light gray	A3PJ-4011				
		For horizontal mour	ating (with			• Can be used by exchanging with the cap.		
		OMRON logo facing down)		A3PJN-5050	A3PAN-5050	 Cannot be used with seal cover. Can be used with barrier. Use horizontal mounting guard 		
Switch guard	T					for consecutive horizontal mounting, and use vertical mounting guard for consecutive		
		For vertical mountir RON logo facing to		A3PJN-5055	A3PAN-5055	 You can use the same Sockets for the A3P Ultra Bright Lighted Pushbutton Switches. 		
						 Cannot be used with barrier and/ or switch guard. For details on mounting, refer to 		
Seal cover	$\langle \rangle$			A3PJ-5060	A3PA-5060	 Cap is manufactured from vinyl chloride. 		
						• You can use the same Sockets for the A3P Ultra Bright Lighted Pushbutton Switches.		
Long mounting plate	Re R			A3PJ-3002		 Use when vertically mounting in- dividual (with barrier) or multiple Switches (in standard mounting style and with barrier). Since a short mounting plate is attached to the Switch, replace it with the 		
F						 You can use the same Sockets for the A3P Ultra Bright Lighted Pushbutton Switches. 		

Accessories

Name A	ppearances	Classific		A3PJ	A3PA	Application precautions									
			White	A3PJ-5101	A3PA-5101										
		Single screen	Red	A3PJ-5102	A3PA-5102										
					Green	A3PJ-5103	A3PA-5103								
							Blue	A3PJ-5104	A3PA-5104						
			Yellow	A3PJ-5105	A3PA-5105	_									
			Orange	A3PJ-5106	A3PA-5106										
			White	A3PJ-5121	A3PA-5121										
		Horizontal 2-	Red	A3PJ-5122	A3PA-5122	-									
		split screen	Green	A3PJ-5123	A3PA-5123	 Keep mounted at all times. 									
			Blue	A3PJ-5124	A3PA-5124	 Contact your OMRON represent 									
				ļ	Yellow	A3PJ-5125	A3PA-5125	tive for color changes or other							
Colored plate or incandes-	\sim		Orange	A3PJ-5126	A3PA-5126	 specifications. For details on mounting, refer to 									
		White	A3PJ-5131		page 25.										
ent lamp				\checkmark	\checkmark		Vertical 2-split	Red	A3PJ-5132		• You cannot use the same Colore				
		screen		A3PJ-5132 A3PJ-5133		Plates for Incandescent Lamps f									
			Green			the A3P Ultra Bright Lighted Pus									
			Blue	A3PJ-5134		– button Switches.									
			Yellow			_									
			Orange	A3PJ-5136											
			White	A3PJ-5161											
		4-split screen	Red	A3PJ-5162											
			Green	A3PJ-5163											
			Blue												
			Yellow	A3PJ-5165											
			Orange	A3PJ-5166		-									
		<u>a:</u> .	White	A3PJ-5301	A3PA-5301										
		Single screen	Red	A3PJ-5302	A3PA-5302	_									
						Green	A3PJ-5303	A3PA-5303	-						
													Yellow	A3PJ-5305	A3PA-5305
					Orange	A3PJ-5306	A3PA-5306	_							
		Horizontal 2-	White	A3PJ-5321	A3PA-5321	• Koon mounted at all times									
		split screen	Red	A3PJ-5321	A3PA-5321 A3PA-5322	 Keep mounted at all times. If the colored plate is lost or dar 									
		spiit screen				aged, contact OMRON.									
			Green	A3PJ-5323	A3PA-5323	Use in accordance with coloring									
			Yellow	A3PJ-5325	A3PA-5325	 bise in accordance with coloring the built-in LED. For details on mounting, refer 									
olored plate	\frown	\sim	Orange	A3PJ-5326	A3PA-5326										
or LED		Vertical 2-split	White	A3PJ-5331		page 25.									
		screen	Red	A3PJ-5332		You cannot use the same Colore									
			Green	A3PJ-5333		Plates for Incandescent Lamps									
			Yellow	A3PJ-5335		the A3P Ultra Bright Lighted Pus									
			Orange	A3PJ-5336		button Switches.									
		4	White	A3PJ-5361		-									
		4-split screen	Red	A3PJ-5362											
		······	Green	A3PJ-5363											
			Yellow	A3PJ-5365		-									
			Orange	A3PJ-5366		_									
		Horizontal 2-spli	-		A3PA-4302										
				A3PJ-4302	A3PA-4302	• Keep mounted at all times. If the light baffle is lost, contact									
		Vertical 2-split se	creen	A3PJ-4303		– OMRON.									
		Horizontal 3-	Long axis	A3PJ-4304		Used in LED lamp-lighted mode									
	\sim	split screen	Short axis	A3PJ-4305		Cannot be used in LED-lighted									
ight baffle	5	Vartical 2 anlit	Long axis	A3PJ-4306		models.									
	\sim	Vertical 3-split screen	-			• You cannot use the same Colore									
		Scieen	Short axis	A3PJ-4307		Plates for Incandescent Lamps									
		4-split screen	Long axis	A3PJ-4304		the A3P Ultra Bright Lighted Put									
		4-spiit screen	Short axis	A3PJ-4308		button Switches.									
						A transparent legend plate is									
		Transparent lege	end plate	A3PJ-5202	A3PA-5202	mounted on the Pushbutton.									
agond plata						You cannot use the same Colore									
egend plate						Plates for Incandescent Lamps									
		Milk-white legen	d plate	A3PJ-5201	A3PA-5201	the A3P Ultra Bright Lighted Pu									
						button Switches.									
						You can use the same Sockets f									
		Transparent cap		A3PJ-5600	A3PA-5600	the A3P Ultra Bright Lighted Pus									
						button Switches.									
	\sim	<u> </u>				• The surface is crimp-processed,									
Cap		Crimer and	dtroperat			there is no reflection.									
	and the second s	Crimp-processe	a transpar-	A3PJ-5600-A	A3PA-5600-A	You can use the same Sockets f									
		ent cap				the A3P Ultra Bright Lighted Pus									
		1				button Switches.									

Name	Appearance	Classification		Model	Ар	plication preca	utions
Extractor			A	3PJ-5080	replacir • You car the A3F	extract compone ng the Pushbutto n use the same P Ultra Bright Lig Switches.	on. Sockets fo
Specificatio	ons						
Approved Sta	andard Ratings		Ratings				
	1515), CSA (File No. I	_R45258)	Contact F	Ratings			
JL (File No. E4 ⁻	1010 <i>)</i> , 00A (110 No. 1						
•	5 A at 125 VAC	,		oy Contacts	for Standa	rd Loads)	
JL (File No. E4 Standard Load:		,		oy Contacts	•	Inductive	load (A)

0.1 A at 30 VDC Note: Certification has been obtained for the Switch Unit. For detailed information on individual products that have received certification, consult your supplier.

CCC (GB14048.5)

Standard Load:	3 A at 250 VAC
	4 A at 30 VDC
Microload:	0.1 A at 125 VAC
	0.1 A at 30 VDC

LED and Incandescent Lamp Ratings LED for LED-lighted Models

	Model	A3PJ/	/M2PJ	A3PA/M2PA		
		Rated	current	Rated	current	
Applied voltage	Rated voltage	Single screen	2-split screen	Single screen	2-split screen	
5 VDC±5%	5 VDC	80 mA		80 mA		
12 VDC±5%	12 VDC	40 mA		40 mA		
24 VDC±5%	24 VDC	20 mA	$15 \text{ mA} \times 2$	20 mA	$13 \text{ mA} \times 2$	

LED for Chameleon Models

Applied voltage	Rated voltage	Rated	current
Applied voltage	naleu voltage	Green	Red
12 VDC±5%	12 VDC	26 mA	20 mA
24 VDC±5%	24 VDC	13 mA	10 mA

Incandescent Lamp

	ltem	Standard	l lamp	Low-power lamp		
Applied voltage	Rated voltage	Rated current	Model	Rated current	Model	
5 VDC	6 V	200 mA	SLL-06	100 mA	SLL-06H	
12 VDC	14 V	80 mA	SLL-14	40 mA	SLL-14H	
24 VDC	28 V	40 mA	SLL-28	25 mA	SLL-28H	

LED Lamp (for LED Lamp-lighted Models)

Туре	Applied voltage	Rated voltage	Rated current	Model
	5 VDC±5%	5 VDC	30 mA	SLL-05E
DC only	12 VDC±5%	12 VDC	15 mA	SLL-12E
	24 VDC±5%	24 VDC	12.5 mA	SLL-24E

Rated	No	Non-inductive load (A)				Inductive load (A)			
voltage	Resistive load		Lamp load		Inductive load		Motor load		
(V)	NC	NO	NC NO		NC	NO	NC	NO	
125 VAC 250 VAC	5 3		0.7 0.5		3 2		1.3 0.8		
8 VDC 14 VDC 30 VDC	5 5		2 2 2		4 4 3		333		
125 VDC 250 VDC	-	4 0.4 0.2		0.05 0.03		0.4 0.2		5 3	

Note: 1. The above values are for steady-state currents. 2. Inductive load: Power factor = 0.4; time constant = 7 ms.

3. The lamp load has an inrush current of 10 times the steady-state current. 4. The motor load has an inrush current of 6 times the steady-state current. Standard testing condition

(1) Ambient temperature: $20 \pm 2^{\circ}C$

(2) Ambient humidity: 65 ± 5%RH
(3) Operating frequency: 20 times/min.

Gold Alloy Contacts (for Microloads)

	0.1 A at 30 VDC (resistive load); 0.1 A at 125 VAC (resistive load)		
Minimum applicable load	1 mA at 5 VDC		

Characteristics

Operating frequency		Mechanical	120 operations/minute max. *1	
		Electrical	30 operations/minute max.	
Insulation resistance		100 MΩ min. (at 500 VDC)		
Contact Standard load resistance Microload			40 m Ω max. (initial value)	
			40 mΩ max. (initial value)	
	Between terminals of same polarity		1,000 VAC, 50/60 Hz for 1 minute *2	
Dielectric p strength B	Between terminals of different polarity		2,000 VAC, 50/60 Hz for 1 minute	
	Between current-carrying metal part and ground		2,000 VAC, 50/60 Hz for 1 minute	
	Between each terminal and non-current-carrying metal part		2,000 VAC, 50/60 Hz for 1 minute	
	Between lamp te	rminals	1,000 VAC, 50/60 Hz for 1 minute *3	
Vibration resistance Malfunction		10 to 55 Hz, 1.5 mm double am plitude (1 ms max.)		
Shock resistance Image: Constraint of the second		Destruction	500 m/s² max.	
		Malfunction	200 m/s ² max. (1 ms max.)	
		Mechanical	Momentary operation models: 1,000,000 operations min. Alternate operation models: 200,000 operations min. (One operation consists of set and reset operations.)	
		Electrical	100,000 operations min.	
Weight		I	Approx. 30 g	
		NC	Silver contact: 10 A max.	
Inrush cu	irrent	NO	Silver contact: 10 A max.	
Ambient operating temperature			LED-lighted models: -10°C to 40°C (with no icing or condensation) Incandescent lamp-lighted models: -10°C to 50°C (with no icing or condensation)	
Ambient operating humidity		35% to 85%RH		
Ambient storage temperature		-25°C to 65°C		
Degree of protection		IP40		
Degree o	Electric shock protection class		Class II	
•	shock protection c	1855		
Electric s	shock protection c of tracking index)	1855	175	

*1. With alternate operation models, 60 operations/minute max. One operation cycle consists of set and reset operations.
 *2. 600 VAC for microloads.
 *3. With no incandescent lamp or LED lamp mounted.

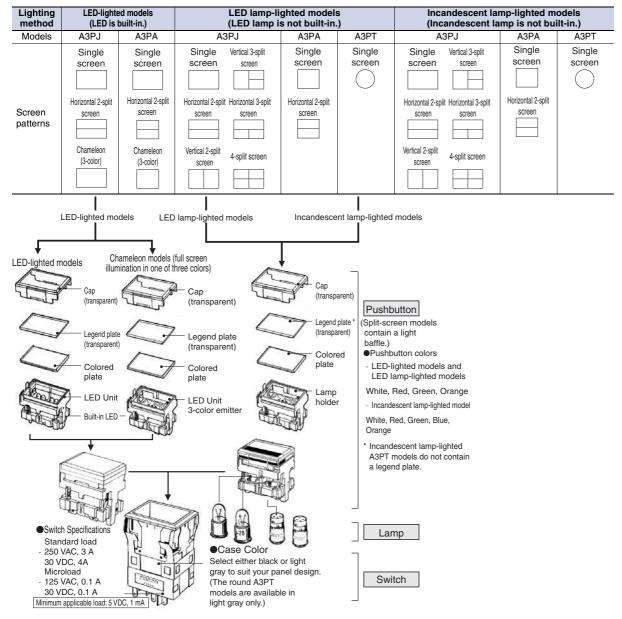
Specifications

Operating Characteristics

	Model	A3PJ series		A3PA series		A3PT series	
Operating Characteristics		Momentary operation models	Alternate operation models	Momentary operation models	Alternate operation models	Momentary operation models	Alternate operation models
Operating force	OF max.	5.88 N	6.86 N	5.88 N	6.86 N	3.92 N	4.90 N
Releasing force	RF min.	0.39 N	0.29 N	0.39 N	0.29 N	0.39 N	0.29 N
Total travel	TT	Approx. 3.5 mm					
Pretravel	PT max.	3 mm					
Lock travel alternate	LTA min.		0.5 mm		0.5 mm		0.5 mm

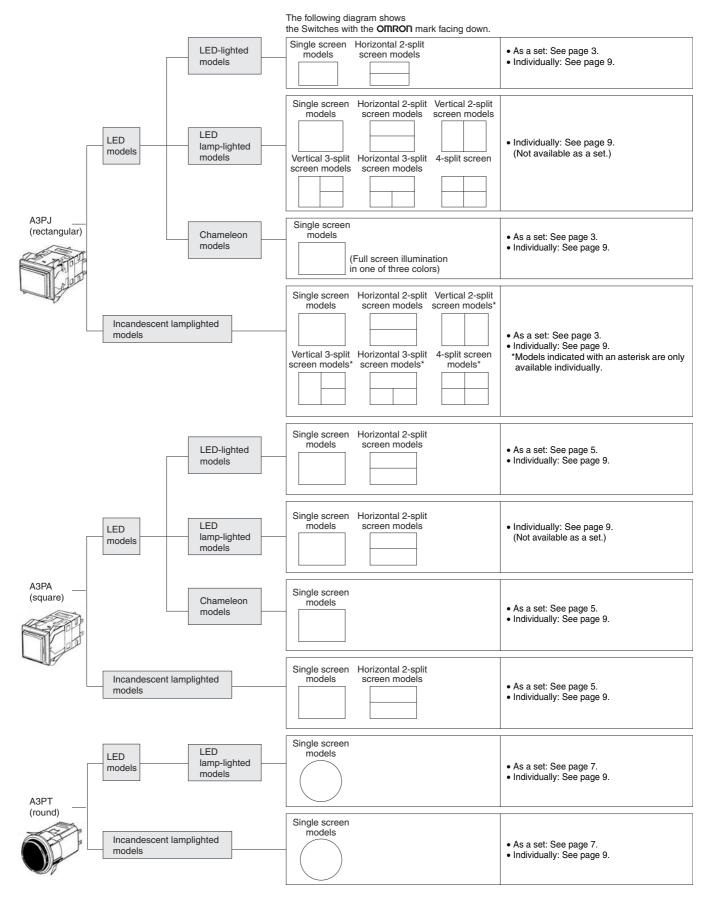
Nomenclature

Model Structure



Nomenclature

A3P Lighting Method Diagram

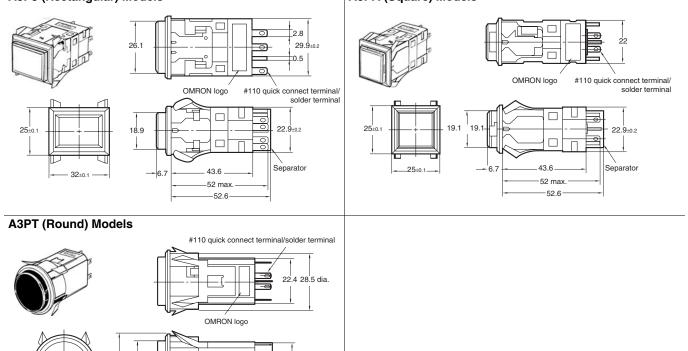


(Unit: mm)

Dimensions The Dimension shows 2-switch outputs.

A3PJ (Rectangular) Models

A3PA (Square) Models



23.8

C

Note: The thickness of tab terminals #110 and solder terminals is 0.5 mm.

6.4

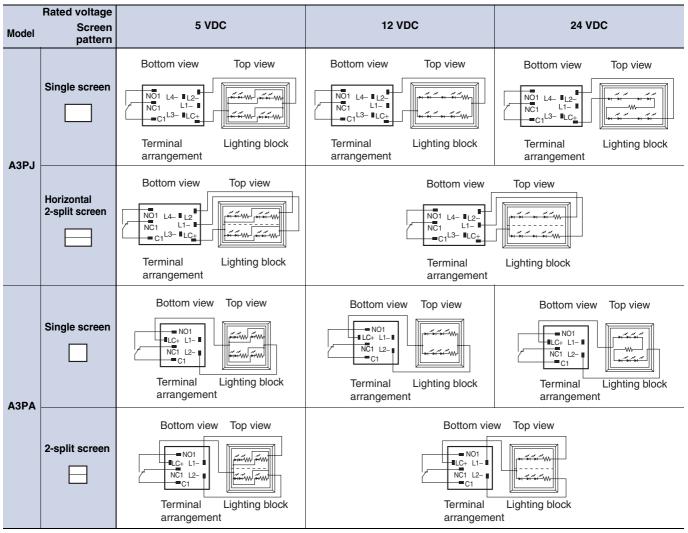
43.6 — - 52 max — 52.6 -

24.9 dia. 32 dia.

Terminal connections

LED-lighted Models

(The terminal arrangement diagram shows a 1-switch output. Connections to terminals from the lighting block are the same for 2 outputs.)



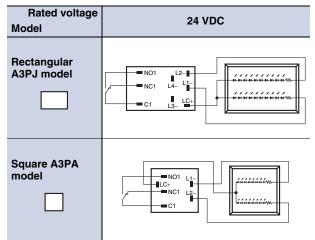
Incandescent Lamp-lighted/LED Lamp-lighted Models

(All are shown with the OMRON logo facing down. The terminal arrangements are the same as for the LED-lighted models.)

Model Output	Rectangular A3PJ models	Square A3PA models	Round A3PT models
SPDT	Bottom view Top view	Bottom view Top view	Bottom view Top view
	arrangement	arrangement	arrangement
PPDT	Bottom view Top view	Bottom view Top view	Bottom view Top view
	arrangement	arrangement	arrangement
3PDT	Bottom view Top view		

LED Chameleon Models

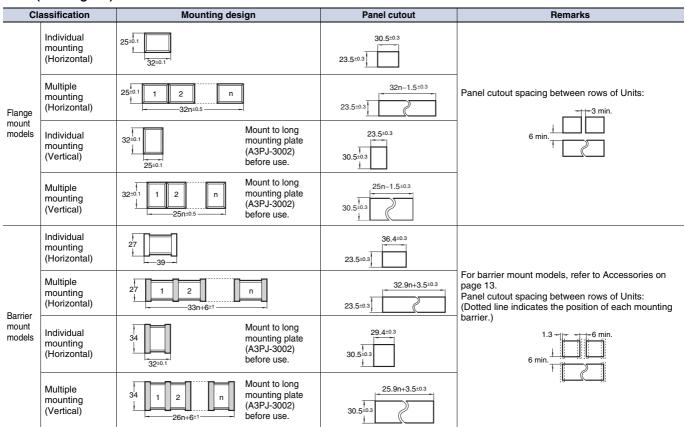
(The terminal arrangement diagram shows a 1-switch output. Connections to terminals from the lighting block are the same for 2 outputs.)



Terminal Arrangement and Coloring Chameleon Models

	LC+	LC+	LC+	
Wiring	L1–	L2-	L1– and L2– shorted	
Coloring	Green	Red	Orange	

Panel Cutout (If using a Switch Guard or Seal Cover, refer to the panel cutout diagrams on page 23.) A3PJ (Rectangular) Models



Note: 1. n: Number of Units

2. Recommended panel thickness: 1 to 5 mm

3. Mount the panel before mounting the Switch Guard.

4. If the panel is to be finished (e.g., coated), make sure that the panel meets the specified dimensions after the coating.

A3PA (Square) Models

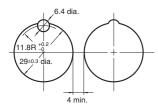
Clas	sification	Mounting design	Panel cutout	Remarks	
Flange mount models	Individual mounting	25±0.1 25±0.1	23.5±0.3	Panel cutout spacing between rows of Units:	
	Multiple mounting	25 ^{±0.1} 1 2 n 25n ^{±0.1}	23.5±0.3	6 min.	
Barrier mount models	Individual mounting	27	23.5±0.3 27.8±0.3	Panel cutout spacing between rows of Units: (Dotted line indicates the position of each mounting barrier.) 1.3 -	
	Multiple mounting	27 1 2 n 26n+6.5±1	23.5±0.3	6 min.	

Note: 1. n: Number of Units

2. Recommended panel thickness: 1 to 5 mm

Mount the panel before mounting the Switch Guard.
 If the panel is to be finished (e.g., coated), make sure that the panel meets the specified dimensions after the coating.

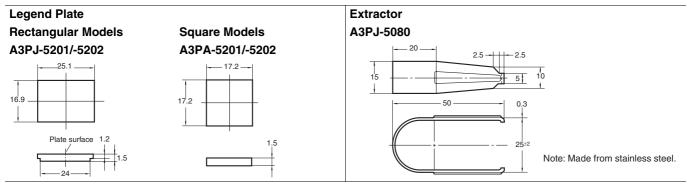
A3PT (Round) Models



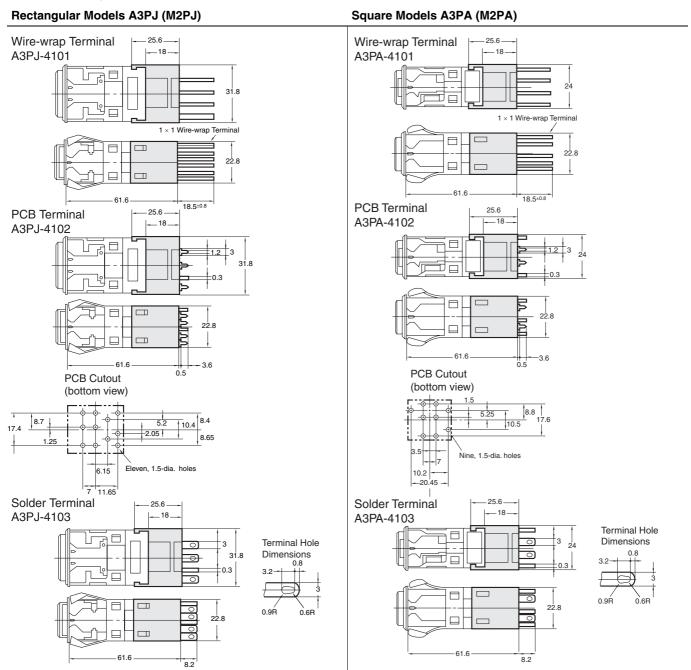
Note: 1. Recommended panel thickness: 1 to 5 mm

2. If the panel is to be finished (e.g., coated), make sure that the panel meets the specified dimensions after the coating.

Accessory Mounting Dimensions



Socket-mounting Dimensions



Note: PCB cutout dimensions show the switch mounted to the socket with the OMRON logo facing down.

Rectangular Models

25

A3PJN-5050 (Horizontal Mounting)

Sprinc

25.2

Switch Guard

(A3PJN-5050)

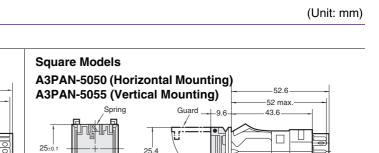
26.2±0.2

23.5±0.3

A3PJN-5055 (Vertical Mounting)

÷

.32



OMRON logo

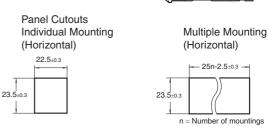
Г

25n-2.5±0.3

Switch Guard (A3AN-5050) 19.1

25.4

Ê -25+0 1



Note: Multiple vertical mounting is not possible.

Seal Cover Mounting Dimensions

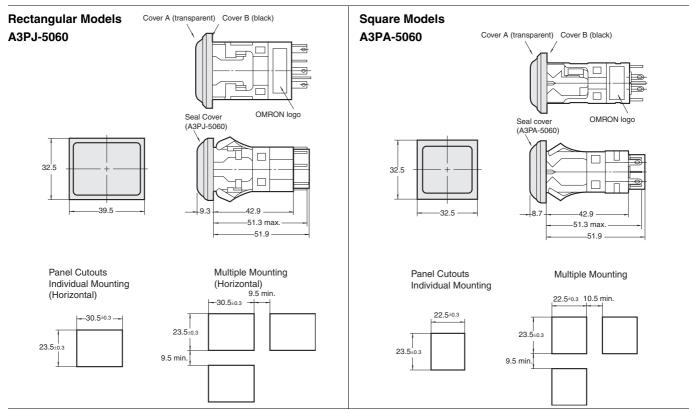
Note: Multiple vertical mounting is not possible.

Panel Cutouts Individual Mounting

-30.5±0.3

(Horizontal)

23 5+0 3



52.6

-52 max

0

0

0

OMRON logo

F.

ľ

(Horizontal)

32n-1.5±0.3

Multiple Mounting

n = Number of mountings

43.6

Q F

Note: 1. Recommended panel thickness: 1 to 5 mm

2. Unless otherwise specified, a tolerance of \pm 0.4 mm applies to all dimensions.

Refer to Safety Precautions for all Pushbutton Switches/Indicators.

Caution

Do not apply a voltage higher than the maximum rated operating voltage between the lamp terminals, as there is a risk that the incandescent lamp or LED will be damaged, and the Pushbutton will be ejected.



When replacing the incandescent lamp, first turn OFF the power supply, and then wait 10 minutes before performing replacement, as the lamp is still hot immediately after the power is turned OFF, so there is a risk of burns.



Precautions for Correct Use

- Always make sure that the power is turned OFF before mounting, removing, or wiring the Switch, or performing maintenance. Electric shock or fire may occur.
- After wiring the Switch, make sure that there is a suitable isolation distance.

Wiring

• Solder quickly and correctly at 350°C max and for 3 s or less. Wait for one minute after soldering before exerting any external force on the solder.

Operating Environment

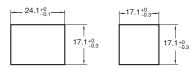
• Do not use in locations that are subject to dust, oil, or metal filings as these may penetrate the interior of the Switch and cause malfunction.

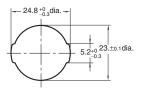
LED (for VDC)

- Check the terminal polarity when wiring.
- The rated voltage is shown on the plate on the back of the lighting unit, so be sure to use within the voltage shown.
- An LED current-limiting resistor is built in, so there is no need to mount an external resistor.

Incandescent Lamp

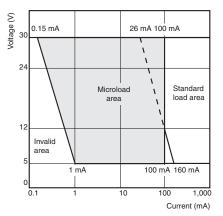
- Apply 80% of the rated voltage (operating voltage) to the incandescent lamp to improve life expectancy and incandescence.
- Character Plate (Character Film)
- If preparing the character plate separately, use a heat-resistant film with a thickness of 0.1 to 0.3 mm.





Using Microloads

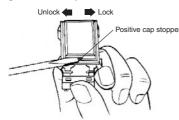
• Using a standard load switch when a microload circuit is opened or closed may cause contact failure on the contacts. Use the switch within the operating range. (Refer to the diagram below.) Even when using microload models within the operating range shown below, if inrush current occurs when the contact is opened or closed, it may cause the contact surface to become rough, and so decrease life expectancy. Therefore, insert a contact protection circuit where necessary. The minimum applicable load is the N-level reference value. This value indicates the malfunction reference level for the reliability level of 60% (λ 60) (conforming to JIS C5003). The equation, λ 60 = 0.5 x 10⁻⁶/time indicates that the estimated malfunction rate is less than 1/2,000,000 with a reliability level of 60%.



Others

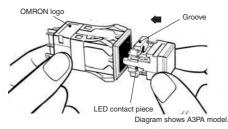
• If the panel is to be finished (e.g., coated), make sure that the panel meets the specified dimensions after the coating.

Assembly/Disassembly A3PJ/M2PJ (Rectangular Models), A3PA/M2PA (Square Models) Locking/Unlocking Positive Cap Lock Mechanism



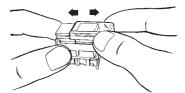
Mounting Pushbutton

- Be sure to mount the Pushbutton with the correct orientation. Align the groove on the Pushbutton, the projections in the Switch, and the LED contact piece before pushing the Pushbutton into the Switch.
- When dismounting the Pushbutton, use the Extractor (A3PJ-5080) for easy dismounting.



Removing/Mounting Cap

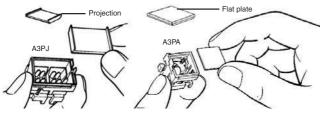
Insert the A3PA from the open side into the theft-prevention stopper.



Mounting Colored Plate

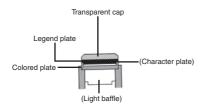
Place the colored plate on the plunger case with the dull side of the colored plate facing downward.

With A3PJ split-screen models, be sure that the projections on the upper surface of the colored plate face outward. For the A3PA, make sure that the flat plate is facing upwards.



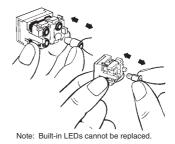
Mounting Character Plate (Character Frame) and Legend Plate

Mount the legend plate for the A3PJ under the layered surfaces and mount the cap, as shown below.



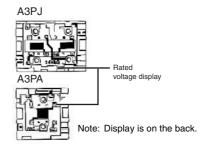
Mounting and Replacing LED and Incandescent Lamps

If using an A3PA (square) model with one incandescent lamp, insert the lamp in the center hole.



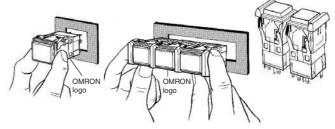
LED Rated Voltage Display (LED Models Only)

The LED rated voltage is shown between the built-in resistors on the back of the lighting unit. Use within a range of \pm 5%.



Mounting Switch onto Panel

- Individual Mounting and Barrier Mounting When mounting the Switch, push it into the panel cutout from the front of the mounting panel by holding it with the logo mark
 "OMRON" facing downward.
- Multiple Barrier Mounting (A3PJ) When mounting a number of Switches in line on the panel, link the Switches with spacing barriers in between, attach mounting barriers at both sides of this block of Switches and, pushing in on the mounting barriers at the side, insert the Switches into the panel cutout together.



Mounting Barriers

Mount each part by pushing it in the direction of the arrow shown in the corresponding illustration below.



Mounting Seal Cover

After mounting the seal cover onto the flange of the Switch, push the Switch into the panel cutout.

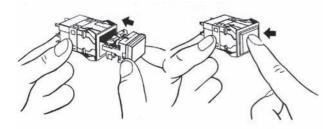


Inscribing the Legend Plate

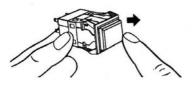
- Inscribe the legend plate to a depth of 0.5 mm max.
- The legend plate is made from polycarbonate resin. To coat the legend plate, use an alcohol-based coating such as melamine, phthalic acid, or acrylic.

Maintenance Lock

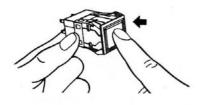
1. First, when you insert the transparent lens while pressing the center, the maintenance lock mechanism will be activated, and the Switch will not operate. Lamp replacement and other maintenance can be performed without turning OFF the power supply to devices and equipment. Use an insertion force of 4 kg.



2. Next, when you remove your finger from the Switch, the lock will be released.



3. The Switch will start to operate when the lighting unit is pressed the second time.



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.

In the interest of product improvement, specifications are subject to change without notice.

OMRON Corporation Industrial Automation Company