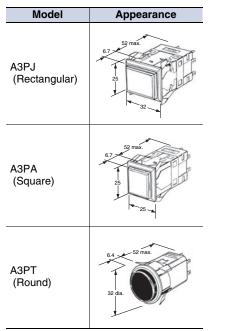
Large Square-bodied Lighted Pushbutton Switches

- 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.

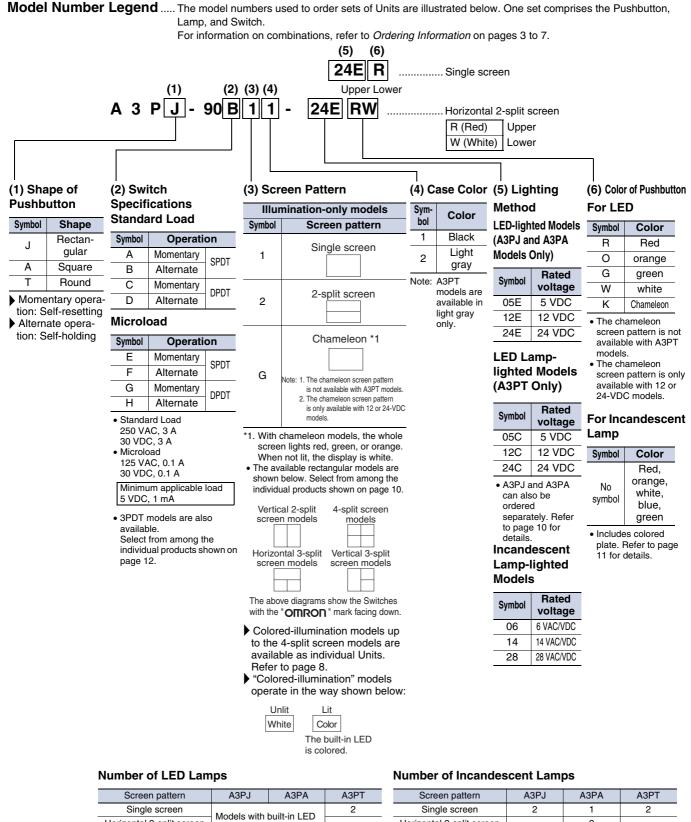
List of Models



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	e screen 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- descent		
Horizontal 3-split screen			
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	Case color Output Lighting		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	Chamalaan	12 VDC	A3PJ-90AG1-12EK		A3PJ-90BG1-12EK	A3PJ-90BG2-12EK	*1
5101	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	*2
		14 VDC/VAC	A3PJ-90A11-14	A3PJ-90A12-14	A3PJ-90B11-14	A3PJ-90B12-14	
		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
5151	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	1

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		Microload (125 VAC,	Microload (125 VAC, 0.1 A; 30 VDC, 0.1 A)			
Operation			Momentary operat	Momentary operation (Self-resetting)		
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)	Ŵ	
SPDT	Chameleon	12 VDC	A3PJ-90EG1-12EK		*1	
0. 5.	Chameleon	24 VDC	A3PJ-90EG1-24EK	A3PJ-90EG2-24EK		
	Incandescent lamp	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)	Ŵ	
DPDT	Chameleon	12 VDC	A3PJ-90GG1-12EK		*1	
5. 51	Chameleon	24 VDC	A3PJ-90GG1-24EK		1	
		6 VDC/VAC	A3PJ-90G11-06	A3PJ-90G12-06		
	Incandescent lamp	14 VDC/VAC	A3PJ-90G11-14	A3PJ-90G12-14	*2	
	amp	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	*
	lamp	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

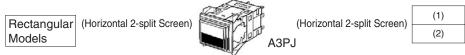
Note: Enter the desired color symbols for the Pushbutton in (1) and (2). (R) = Red, (O) = Orange, (G) = Green, (W) = White.

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 colo		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)	O G
		24 VDC	A3PA-90A11-24E(1)	A3PA-90A12-24E(1)	A3PA-90B11-24E(1)	A3PA-90B12-24E(1)	W
SPDT	Chamalaan	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 Iamp	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
	amp	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

· · ·						
Operation			Momentary operat	Pushbutton		
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	
0	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	
	Chameleon	24 VDC	A3PA-90GG1-24EK		1	
		6 VDC/VAC	A3PA-90G11-06	A3PA-90G12-06		
	Incandescent	14 VDC/VAC			*2	
	lamp	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	Incandescent lamp 6 VDC/VAC 14 VDC/VAC 28 VDC/VAC	6 VDC/VAC	A3PA-90A21-06	A3PA-90A22-06	A3PA-90B21-06	A3PA-90B22-06	
5-01		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	
	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		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.







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	ut Lighting	Case color	Light gray	Light gray	color symbol			
	LED	24 VDC	A3PT-90A12-24C(1)	A3PT-90B12-24C(1)	ROGW			
SPD	r	6 VDC/VAC	A3PT-90A12-06	A3PT-90B12-06				
350	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			
DPD	r	6 VDC/VAC	A3PT-90C12-06	A3PT-90D12-06				
DFD	Incandescent lamp	14 VDC/VAC	A3PT-90C12-14	A3PT-90D12-14	*			
		28 VDC/VAC	A3PT-90C12-28	A3PT-90D12-28				

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
3501	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.

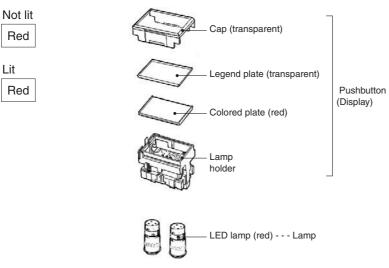
Individual models: Refer to pages 9 to 12. (The Pushbutton, Lamp, and Switch can be ordered separately.) ■ Specifications: Refer to page 15. ■ Dimensions: Refer to page 18. Accessories: Refer to pages 13 to 15.

Illumination-only and Colored-illumination LED Models

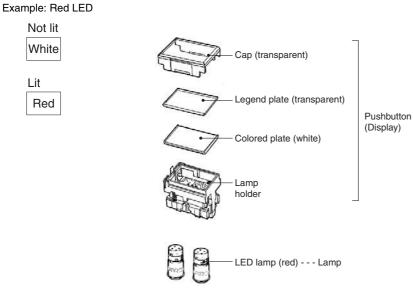
"Illumination only" describes LED models for which the screen color is the same whether the LED is lit or not. The screen simply becomes brighter when the LED lights.

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.

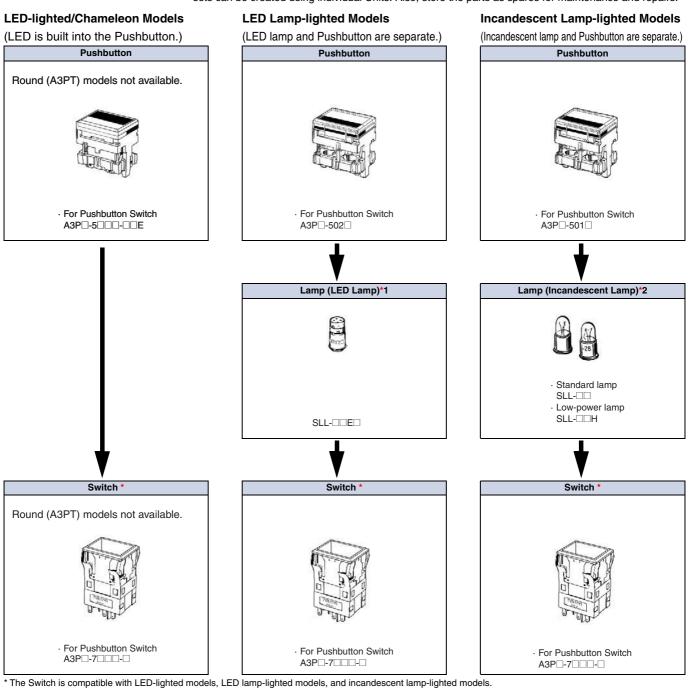


Ordering: With colored-illumination models, order the Pushbutton, Lamp, and Switch as shown in the following table.

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.	Select the LED lamps to suit your desired col- oration from the selection on page 12. Number of necessary LED lamps (standard) A3PJ (rectangular): 4 A3PA (square): 2 A3PT (round): 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-scree (color sy		White (W)	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:
		Orange	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-
Y PO	2-split screen	Green	A3PA-5731 -□□E	A3PA-5732 -□□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 mo	dels						
Appearance			Ć		S		Selection precautions					
Screen pattern	Screen	Model	Screen	Model	Screen	Model						
Single screen		A3PJ-5021		A3PA-5021	A3PT-5021		 Parts included: Colored plates (white, red, green, and or- ange), a legend plate (transparent), and a light baffle (split-screen models only) are 					
Horizontal 2- split screen		A3PJ-5022		to enable colored illumina								
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	

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	\bigcirc	A3PT-5011 *	 Parts included Colored plates blue), legend plates 	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	dels do	not con	tain a leo	gend pla	te.		
Vertical 2-split screen		A3PJ-5013					The number of the following tag Screen pattern		d plate	S INCIUO		nown in 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-					<u> </u>		
4-split screen		A3PJ-5016					split screens Vertical 3-split screens	2	2	2	2	2		
•							4-split screen	2	2	2	2	2		

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	
ad			•	Alternate operation	A3PJ-7020-1	A3PA-7020-1	A3PT-7020-2	denotes a black flange, and -2 denotes a light
Standard load	Silver alloy contact		2	Momentary operation	A3PJ-7030-1	A3PA-7030-1	A3PT-7030-2	gray flange. Round switches are available
anda			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 combi- nation with the same
			Alternate operation	A3PJ-7160-1			shape Lamp (rectangu- lar, square or round).	
		1 I alloy 2	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			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-	
		3	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	Classif	ication	Rectangular	Square	Application precautions	
Socket	l	Wire-wrap term	ninal	A3PJ-4101	A3PA-4101	The Socket cannot be used	
		PCB terminal		A3PJ-4102	A3PA-4102	with when mounting multi- ple Switches or with 3C	
	ाम्मम्।	Solder termina	I	A3PJ-4103	A3PA-4103	models.	
		Short edge barrier (Hori-	Black	A3PJ-4001	A3PA-4001		
	Th	zontal mount- ing) (1 pair)	Light gray	A3PJ-4002	A3PA-4002	• The purpose of the barrier is to prevent malfunction-	
		Long edge barrier (Verti-	Black	A3PJ-4004		ing and to improve design image of the mounting panel.	
Barrier		cal mounting) (1 pair)	Light gray	A3PJ-4005		 Intermediate barrier × 1. Edge barriers × 1 pair (2 Units). 	
		Short inter- mediate barri-	Black	A3PJ-4007	A3PA-4007	Mount short barriers hori- zontally.	
		er (Horizontal mounting)	Light gray	A3PJ-4008	A3PA-4008	Mount long barriers verti- cally.	
	T	Long interme- diate barrier	Black	A3PJ-4010		• For details on mounting, re- fer to page 25.	
		(Vertical mounting)	Light gray	A3PJ-4011			
		For horizontal mounting (with OMRON logo facing down)		A3PJN-5050	A3PAN-5050	 Can be used by exchanging with the cap. Cannot be used with seal cover. Can be used with barrier. 	
Switch guard		For vertical mounting (with OMRON logo facing to the right)		A3PJN-5055	A3PAN-5055	 Use horizontal mounting guard for consecutive hori- zontal mounting, and use vertical mounting guard for consecutive vertical mounting. 	
Seal cover				A3PJ-5060	A3PA-5060	 Cannot be used with barrier and/or switch guard. For details on mounting, re- fer to page 25. Cap is manufactured from vinyl chloride. 	
Long mounting plate	No Color		-	A3PJ-3002		 Use when vertically mount- ing individual (with barrier) or multiple Switches (in standard mounting style and with barrier). Since a short mounting plate is at- tached to the Switch, re- place it with the long one. 	

Accessories

Name Appearances Classification A3PJ A3PA **Application precautions** White A3PJ-5101 A3PA-5101 A3PJ-5102 A3PA-5102 Single screen Red Green A3PJ-5103 A3PA-5103 Blue A3PJ-5104 A3PA-5104 Yellow A3PJ-5105 A3PA-5105 A3PJ-5106 A3PA-5106 Orange White A3PJ-5121 A3PA-5121 Horizontal 2-Red A3PJ-5122 A3PA-5122 split screen Green A3PJ-5123 A3PA-5123 Blue A3PJ-5124 A3PA-5124 · Keep mounted at all times. Yellow A3PJ-5125 A3PA-5125 Contact your OMRON repre-Colored plate A3PA-5126 Orange A3PJ-5126 sentative for color changes for incandesor other specifications. White A3PJ-5131 cent lamp Vertical 2-split · For details on mounting, refer Red A3PJ-5132 ---screen to page 25. Green A3PJ-5133 ----A3PJ-5134 Blue Yellow Orange A3PJ-5136 A3PJ-5161 White A3PJ-5162 Red 4-split screen Green A3PJ-5163 Blue ----Yellow A3PJ-5165 ----Orange A3PJ-5166 White A3PJ-5301 A3PA-5301 Single screen Red A3PJ-5302 A3PA-5302 A3PJ-5303 Green A3PA-5303 Yellow A3PJ-5305 A3PA-5305 A3PA-5306 Orange A3PJ-5306 White A3PJ-5321 A3PA-5321 Horizontal 2split screen Red A3PJ-5322 A3PA-5322 Green A3PJ-5323 A3PA-5323 Keep mounted at all times. If the colored plate is lost or Yellow A3PJ-5325 A3PA-5325 damaged, contact OMRON. Colored plate Orange A3PJ-5326 A3PA-5326 Use in accordance with color-A3PJ-5331 for LED White Vertical 2-split ing of the built-in LED. screen Red A3PJ-5332 · For details on mounting, refer A3PJ-5333 Green to page 25. Yellow A3PJ-5335 A3PJ-5336 Orange White A3PJ-5361 4-split screen Red A3PJ-5362 Green A3PJ-5363 ----Yellow A3PJ-5365 Orange A3PJ-5366 Horizontal 2-split screen A3PJ-4302 A3PA-4302 Vertical 2-split screen A3PJ-4303 · Keep mounted at all times. A3PJ-4304 Horizontal 3-Long axis ----If the light baffle is lost, consplit screen Short axis A3PJ-4305 tact OMRON. Light baffle Long axis A3PJ-4306 Used in LED lamp-lighted Vertical 3-split models. Cannot be used in screen A3PJ-4307 Short axis ----LED-lighted models. A3PJ-4304 Long axis ----4-split screen A3PJ-4308 Short axis Transparent legend plate A3PJ-5202 A3PA-5202 • A transparent legend plate is Legend plate mounted on the Pushbutton. Milk-white legend plate A3PJ-5201 A3PA-5201 A3PJ-5600 A3PA-5600 Transparent cap Cap • The surface is crimp-pro-Crimp-processed transpar-A3PJ-5600-A A3PA-5600-A cessed, so there is no reflecent cap tion.

Name	Appearance	Classification		Model			Ар	olicatio	n preca	utions	;
Extractor			A	\3PJ-50	30			extract o ig the P			hen
Specificatio	ons										
Approved Sta	andard Ratings		Ratings	5							
UL (File No. E4 ⁻	1515), CSA (File No	. LR45258)	Contact	Rating	s						
Standard Load:	5 A at 125 VAC		Silver Alloy Contacts (for Standard Loads)								
	3 A at 250 VAC		Rated	No	n-induct	ive load	re load (A) Inductive load (A))
Microload:	0.1 A at 125 VAC		voltage	Resisti		Lamp	• •	Inducti		•	, r load
	0.1 A at 30 VDC		(V)	NC	NO	NC	NO	NC	NO	NC	NO
For detailed inf	as been obtained for the S formation on individual pro onsult your supplier.		125 VAC 250 VAC	5 3		0.7 0.5		3 2		1.3 0.8	
CCC (GB14048.	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		8 VDC 14 VDC 30 VDC	5 5 4		2 2 2		4		3 3 3	
Standard Load:	3 A at 250 VAC 4 A at 30 VDC		125 VDC 250 VDC	4 0. 0.		2 0.0 0.0		0		3 0.0 0.0	
Microload:	0.1 A at 125 VAC		Note: 1. The	e above va					- 7 mo		

Inductive load: Power factor = 0.4; time constant = 7 ms.
 The lamp load has an inrush current of 10 times the steady-state current.
 The motor load has an inrush current of 6 times the steady-state current.

(1) Ambient temperature: $20 \pm 2^{\circ}$ C (2) Ambient humidity: $65 \pm 5\%$ 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	
operadin	ginequency	Electrical	30 operations/minute max.	
Insulatio	n resistance		100 MΩ min. (at 500 VDC)	
Contact Standard load			40 m Ω max. (initial value)	
resistance Microload		40 m Ω max. (initial value)		
	Between terminals of	of same polarity	1,000 VAC, 50/60 Hz for 1 minute *2	
	Between terminals of	of different polarity	2,000 VAC, 50/60 Hz for 1 minute	
Dielectric strength	Between current- part and ground	-carrying metal	2,000 VAC, 50/60 Hz for 1 minute	
- j	Between each ter non-current-carry	ying 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 re	sistance	Destruction	500 m/s² max.	
Onockie	Sistance	Malfunction	200 m/s ² max. (1 ms max.)	
Life expectancy		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			Approx. 30 g	
Inrush cu	weat	NC	Silver contact: 10 A max.	
inrush cu	inent	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	
		Class II		
Electric s	shock protection c	lass	olass li	
Electric s	of tracking index)	lass	175 3 (IEC947-5-1)	

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

	ilt your supplier.
B14048.5)	
Load:	3 A at 250 VAC
	4 A at 30 VDC
d:	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 lamp		Low-powe	er 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

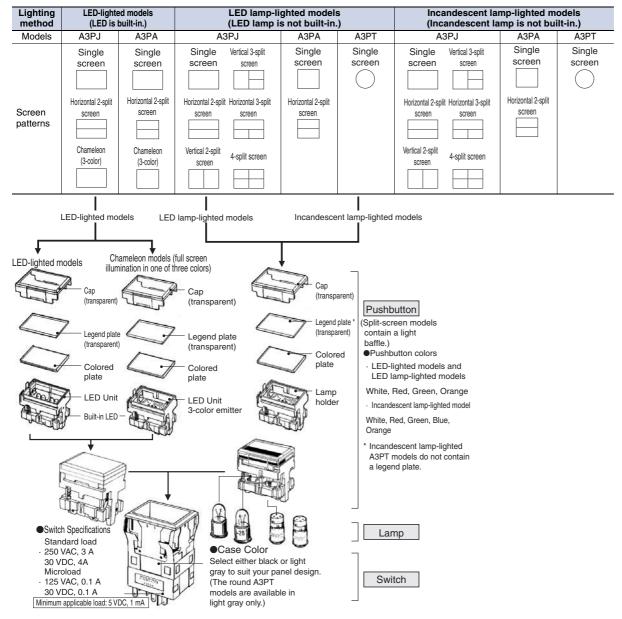
Specifications

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

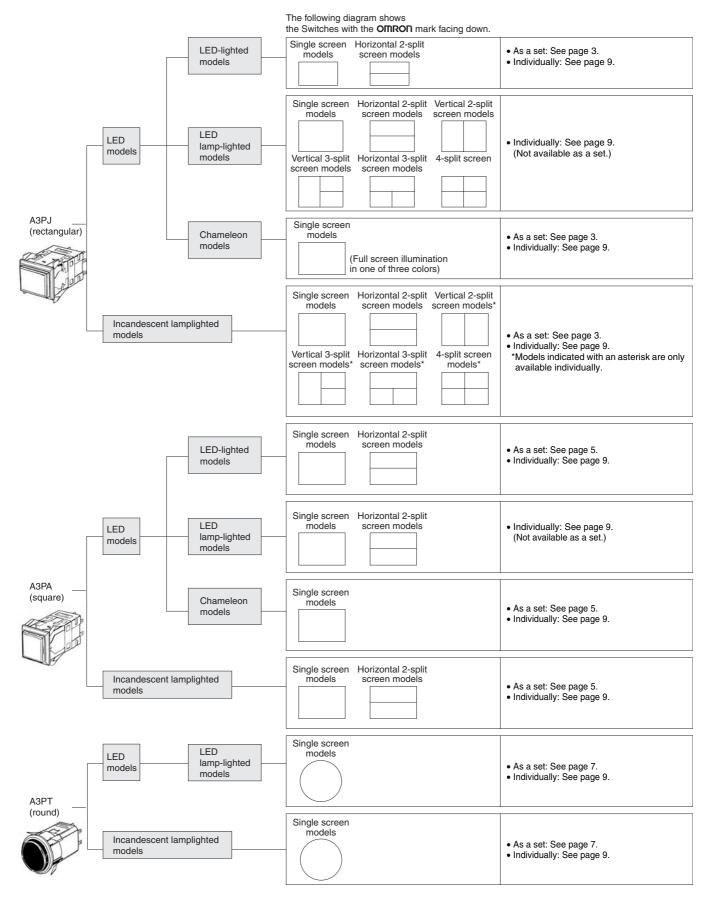
Nomenclature

Model Structure



Nomenclature

A3P Lighting Method Diagram

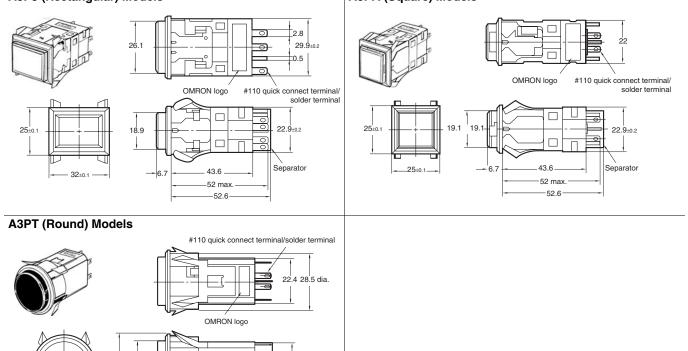


(Unit: mm)

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

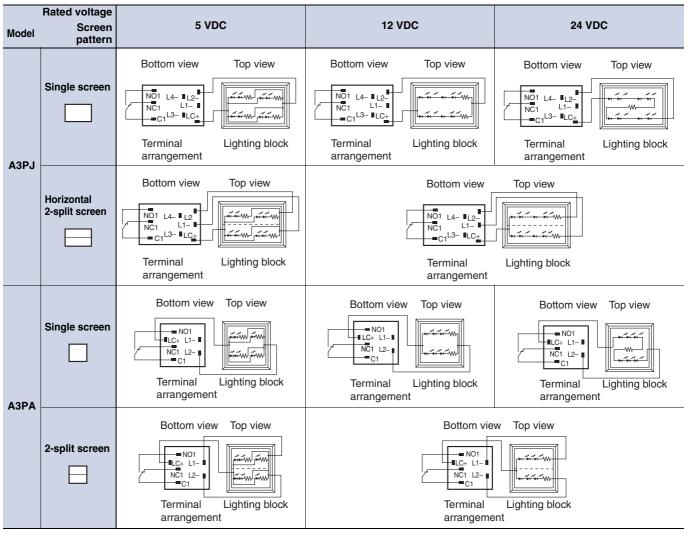
43.6 — - 52 max — 52.6 -

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.)



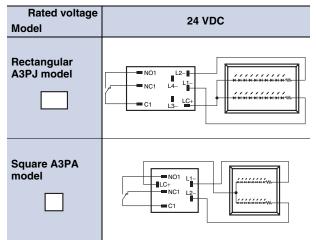
Incandescent Lamp-lighted/LED Lamp-lighted Models

(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
3PDT	arrangement Bottom view Top view Top view Terminal Lighting block arrangement	arrangement	arrangement

LED Chameleon Models

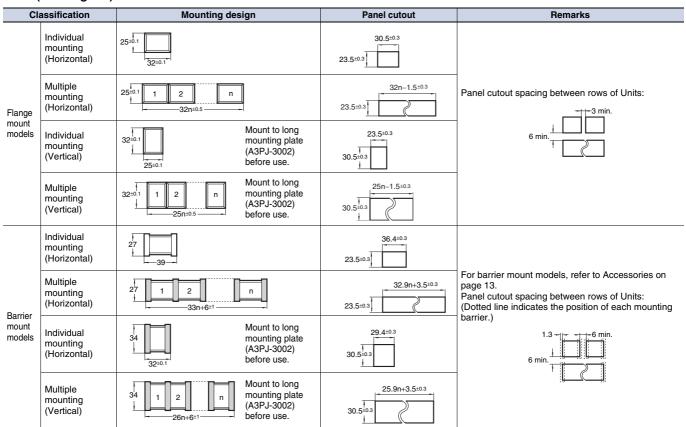
(The terminal arrangement diagram shows a 1-switch output. Connections to terminals from the lighting block are the same for 2 outputs.)



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

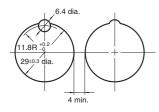
Clas	sification	Mounting design	Panel cutout	Remarks	
Flange mount models	Individual mounting	25±0.1 25±0.1	23.5±0.3	Panel cutout spacing between rows of Units:	
	Multiple mounting	25 ^{±0.1} 1 2 n 25n ^{±0.1}	23.5±0.3		
Barrier mount models	Individual mounting	27	23.5±0.3 27.8±0.3	Panel cutout spacing 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.

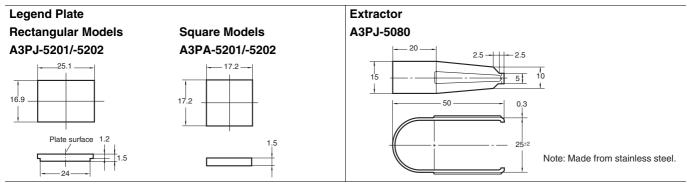
A3PT (Round) Models



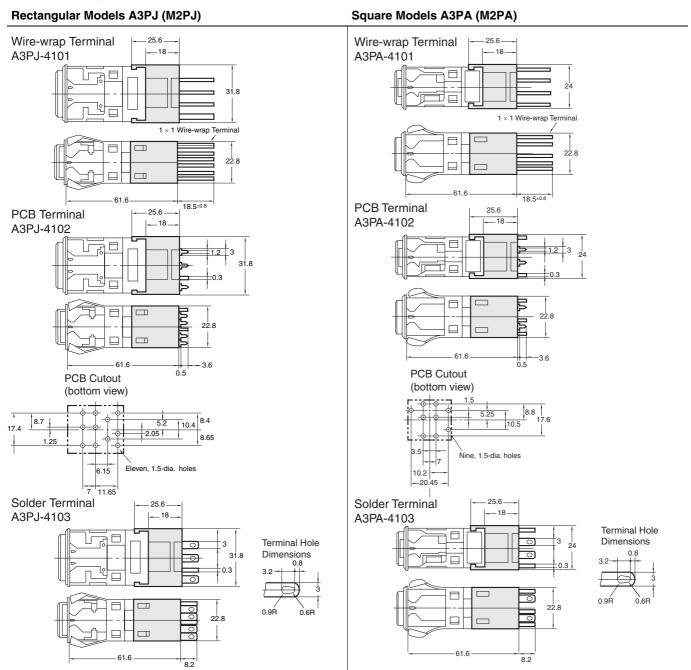
Note: 1. Recommended panel thickness: 1 to 5 mm

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.

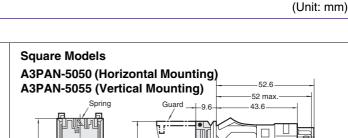
Rectangular Models

25

A3PJN-5050 (Horizontal Mounting)

Sprinc

A3PJN-5055 (Vertical Mounting)



Switch Guard

(A3AN-5050)

19.1

25.4

÷ 25± 25.2 Ê -25+0 1 .32 Switch Guard (A3PJN-5050) OMRON logo 0 F. 26.2±0.2 0 0 ľ Panel Cutouts Individual Mounting Panel Cutouts Individual Mounting **Multiple Mounting** (Horizontal) (Horizontal) (Horizontal) 22.5±0.3 32n-1.5±0.3 -30.5±0.3 23.5±0.3 23.5±0.3 23 5+0 3 n = Number of mountings Note: Multiple vertical mounting is not possible. Note: Multiple vertical mounting is not possible.

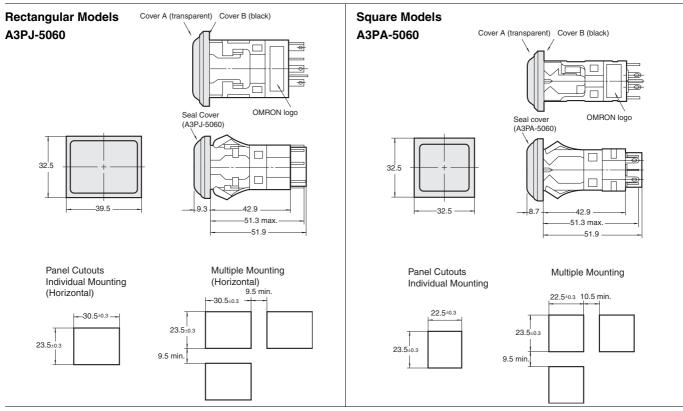
52.6

-52 max

43.6

Q F

Seal Cover Mounting Dimensions



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

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

OMRON logo

Г

Multiple Mounting

25n-2.5±0.3

n = Number of mountings

(Horizontal)

23.5±0.3

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

- 1. 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.
- 2. 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

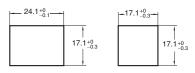
 Do not use in locations that are subject to dust, oil, or metal filings as these may penetrate the interior of the Switch and cause malfunction.

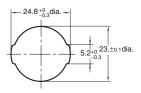
LED (for VDC)

- 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

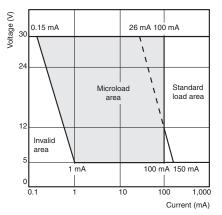
- Apply 80% of the rated voltage (operating voltage) to the incandescent lamp to improve life expectancy and incandescence.
- Character Plate (Character Film)
- If preparing the character plate separately, use a heat-resistant film with a thickness of 0.1 to 0.3 mm.





Using Microloads

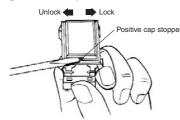
• Using a standard load switch when a microload circuit is opened or closed may cause contact failure on the contacts. Use the switch within the operating range. (Refer to the diagram below.) Even when using microload models within the operating range shown below, if inrush current occurs when the contact 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

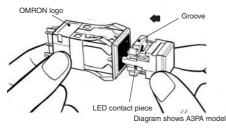
• If the panel is to be finished (e.g., coated), make sure that the panel meets the specified dimensions after the coating.

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



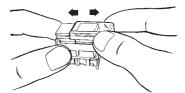
Mounting Pushbutton

- 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

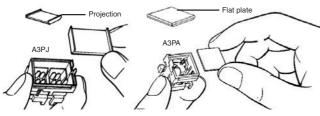
Insert the A3PA from the open side into the theft-prevention stopper.



Mounting Colored Plate

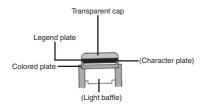
Place the colored plate on the plunger case with the dull side of the colored plate facing downward.

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.



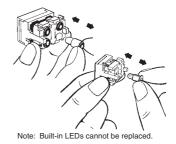
Mounting Character Plate (Character Frame) and Legend Plate

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



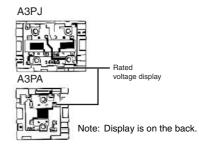
Mounting and Replacing LED and Incandescent Lamps

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



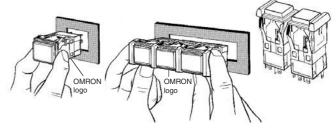
LED Rated Voltage Display (LED Models Only)

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.



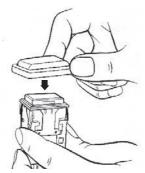
Mounting Barriers

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.

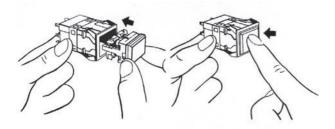


Inscribing the Legend Plate

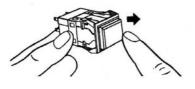
- Inscribe the legend plate to a depth of 0.5 mm max.
- The legend plate is made from polycarbonate resin. To coat the legend plate, use an alcohol-based coating such as melamine, phthalic acid, or acrylic.

Maintenance Lock

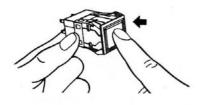
1. First, when you insert the transparent lens while pressing the center, the maintenance lock mechanism will be activated, and the Switch will not operate. Lamp replacement and other maintenance can be performed without turning OFF the power supply to devices and equipment. Use an insertion force of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



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