

# OMRON

# Product Discontinuation Notices

November 1, 2011

**Photoelectric Sensors** 

No. 2011371E-2

Discontinuation Notice of Photoelectric Sensor E3X-DA[]TW series (for china area only)

**Product Discontinuation** 

**Recommended Replacement** 



E3X-DA11TW/DA41TW E3X-DA6TW/DA8TW



E3X-DA21-S/DA51-S E3X-DA7-S/DA9-S

# Discontinuation date : The end of March, 2012

## Caution on recommended replacement

E3X-DA[]TW series

- The method of AMP adjustment is different , Please attention
- The expression of AMP is different. The Light reception and the function concent of Substitute is expressed by red font (The left of product), The Threshold and the function setting is expressed by green font (The right of product).
- The location of light that express AMP is different, Please attention
- The size of body is different, Please confirm the size of setting
- The Residual voltage is different, Please attention on Input Characteristics of following control unit when it is used
- The Standard distance of the suspended Production is 300mm (use E32-DC200), The distance of the Substituted Production is 600mm (use E32-DC200), Because the distance gets longer, So we need adjust the Standard distance

## Difference from discontinued product

## E3X-DA11TW/DA41TW

Model	Body Color	Dimen sions	Wire connection	Mounting Dimensions		Operation ratings	Operation methods
E3X-DA21-S/DA51-S	**		*	*	**	*	*

\*\* : Fully compatible

\* : The change is a little/Almost compatible

-- : Not compatible

- : No corresponding specification

# E3X-DA6TW/DA8TW

Model	Body Color	Dimen sions	Wire connection	Mounting Dimensions		Operation ratings	Operation methods
E3X-DA7-S/DA9-S	**		*	*	**	*	*

\*\* : Fully compatible\* : The change is a little/Almost compatible

-- : Not compatible

- : No corresponding specification

## Product Discontinuation and recommended replacement

Product discontinuation	Recommended replacement
E3X-DA11TW 2M	E3X-DA21-S 2M
E3X-DA41TW 2M	E3X-DA51-S 2M
E3X-DA6TW	E3X-DA7-S
E3X-DA8TW	E3X-DA9-S

## **Body color**

Product discontinuation	Recommendable replacement
E3X-DA[]TW series	E3X-DA[]-S series
Black	Black

#### Dimensions





#### Dimensions





#### Wire connection

#### Product discontinuation E3X-DA11TW/DA41TW E3X-DA6TW/DA8TW

#### Recommendable replacement E3X-DA21-S/DA51-S E3X-DA7-S/DA9-S



#### NPN Output E3X-DA21-S Operation indicator (orange) ch2 Display -14 8888 Opera-tion indicator (orange) ch1 Black Load output Load Photo - Control Orange 12 to 24 VDC electric 8888 Senso -Control output ink ch2 \*1 V<del>∓−</del>C ,Pink nain ≵ circuit External input #2 Blue

#### E3X-DA7-S Display Operation indicator ton Occange Operation indicator Display Operation indicator Complex Control output Control output



# Mounting dimensions

Product discontinuation	Recommendable replacement
E3X-DA[]TW series	E3X-DA[]-S series
Mounting Holes	Mounting Holes
Two, M3	Two, M3

#### Nomenclature



Operation methods	
Product discontinuation E3X-DA[]TW series	Recommendable replacement E3X-DA[]-S series
Operation with slide switch and push button	Operation with slide switch and push button.

# Characteristics

Item	Product discontinuation	Recommendable replacement		
	E3X-DA11/41TW	E3X-DA21/51-S		
	E3X-DA6/8TW	E3X-DA7/9-S		
Light source	Red LED (660 nm)	Red, 4-element LED (625 nm)		
(wavelength)				
Current	Normally: 960 mW max.	Normal mode: 960 mW max.		
consumption/	(current consumption: 40 mA max. at	(current consumption: 40 mA max. at 24		
Power	power supply voltage of 24 VDC)	VDC, 80 mA max. at 12 VDC)		
consumption				
	Eco Mode: 720 mW max.	Power saving ECO1: 720 mW max.		
	(current consumption: 30 mA max. at	(current consumption: 30 mA max. at 24		
	power supply voltage of 24 VDC)	VDC, 60 mA max. at 12 VDC)		
	Digital display not lit: 600 mW max.	Power saving ECO2: 600 mW max.		
	(current consumption: 25 mA max. at	(current consumption: 25 mA max. at 24		
	power supply voltage of 24 VDC)	VDC, 50 mA max. at 12 VDC)		
Control output	Load current: 50 mA (residual voltage	Load power supply voltage: 26.4 VDC		
-	(NPN/PNP): 1 V max.,	max.; NPN/PNP open collector;		
	Open collector (NPN or PNP output,	load current: 50 mA max.; residual voltage:		
	depending on the model)	2 V max.		
	Light ON/Dark ON selectable			
Protection	Power supply reverse polarity, Output	Power supply reverse polarity protection,		
circuits	short-circuit protection, Mutual	output short-circuit protection and output		
en eune	interference prevention (supported for up	reverse polarity protection		
	to 10Units)			
Response time	Super-high-speed Mode:	Super-high-speed mode:		
	0.5ms for operation and reset respectively	Operate or reset: 80µs		
		Lich an and Marday		
	Standard Mode:	High-speed Mode:		
	2ms operation and reset	Operate or reset: 250µs		
	Super-long distance Mode:	Standard Mode:		
	7ms for operation and reset respectively	Operate or reset: 1ms		
		High- resolution Mode:		
		Operate or reset: 4ms		
		Tough Mode:		
		Operate or reset: 16m		

Characterist	ics			
Item	Product discontinuation E3X-DA11/41TW E3X-DA6/8TW	Recommendable replacement E3X-DA21/51-S E3X-DA7/9-S		
Functions	Timer function OFF -delay timer: 0 to 200 ms, 1 to 20 ms (set in 1-ms units); 20 to 200 ms (set in 5-ms units)	Power tuning : Light emission power and reception gain, digital control method		
	Using Mobile Console: OFF delay, ON delay, or one shot (selectable)Automatic power control (APC): Fiber-optic current digital controlZero-reset: Negative values can be displayed.	Differential detection: Switchable between Single-edge and Double-edge Detection Modes. Single edge: Set to 250 µs, 500 µs, 1 ms, 10 ms, or 100 ms. Double edge: Set to 500 µs, 1 ms, 2 ms, 20 ms, or 200 ms Automatic power control (APC):		
	Initial reset: Settings can be returned to defaults as required.	Always enabled. High-speed control of emission current Wide-range APC for the E3X-DA[]R-S		
		Timer: Select from timer disabled, OFF-delay, ON-delay, One-shot, or ON-delay + OFF-delay timer 1 ms to 5 s (1 to 20 ms set in 1-ms increments, 20 to 200 ms set in 10-ms increments, 200 ms to 1 s set in 100-ms increments, and 1 to 5 s set in 1-s increments)		
		ATC: Provided		
		Zero reset : Negative values can be displayed. (Threshold value is shifted.)		
		Resetting settings : Select from initial reset (factory defaults) or user reset (saved settings).		
		Mutual interference prevention Possible for up to 10 units		
		ECO Mode : Select from OFF (digital display lit), ECO1 (digital display dimmed), and ECO2 (digital display OFF).		
		External input setting : Select from teaching operations, power tuning, zero reset, emitter OFF, or ATC start.		
		Output setting : Select from output for each channel, area output, or self-diagnosis.		
Indicators	Operation indicator (orange), 7-segment digital incident level display (red), 7-segment digital incident level percentage display (red), threshold and excess gain 2-color double bar indicators (green and red), 7-segment digital threshold display (red)	Operation indicator for channel 1 (orange) Operation indicator for channel 2 (orange)		
Ambient temperature range	Operating: Groups of 1 to 3 Amplifiers: -25 to 55°C Groups of 4 to 11 Amplifiers: -25 to 50°C Groups of 12 to 16 Amplifiers: -25 to 45°C Storage:-30 to 70°C (with no icing or condensation)	Operating: Groups of 1 to 2 Amplifiers: -25 to 55°C Groups of 3 to 10 Amplifiers: -25 to 50°C Groups of 11 to 16 Amplifiers: -25 to 45°C		