

NO: PH-209 **PRODUCT:** E3NX-FA Fiber-Optic Amplifier
DATE: December 2015 **TYPE:** Modification Notice

E3NX-FA Fiber-Optic Sensor Amplifiers Modified to Reduce Power Consumption

Effective date: December 2015 production

Reason for Modification: A benefit of improving product quality, the reduction in power consumption supports Omron's global effort to conserve energy resources and help build a better life for our society.



Affected Parts

Models	Specification
E3NX-FA0	Model for Sensor Communications Unit
E3NX-FA11 2M	Standard Model, Pre-wired 2M, NPN
E3NX-FA11 5M	Standard Model, Pre-wired 5M, NPN
E3NX-FA41 2M	Standard Model, Pre-wired 2M, PNP
E3NX-FA41 5M	Standard Model, Pre-wired 5M, PNP
E3NX-FA6	Standard Model, Wire-saving Connector, NPN
E3NX-FA8	Standard Model, Wire-saving Connector, PNP
E3NX-FA21 2M	Advanced Model, Pre-wired 2M, NPN
E3NX-FA21 5M	Advanced Model, Pre-wired 5M, NPN
E3NX-FA51 2M	Advanced Model, Pre-wired 2M, PNP
E3NX-FA51 5M	Advanced Model, Pre-wired 5M, PNP
E3NX-FA7	Advanced Model, Wire-saving Connector, NPN
E3NX-FA9	Advanced Model, Wire-saving Connector, PNP
E3NX-FA7TW	Advanced Model, Wire-saving Connector, NPN
E3NX-FA9TW	Advanced Model, Wire-saving Connector, PNP
E3NX-FA24	Advanced Model, M8 Connector, NPN
E3NX-FA54	Advanced Model, M8 Connector, PNP
E3NX-FA54TW	Advanced Model, M8 Connector, PNP
E3NX-FA11M 2M	Standard Model M-type, Pre-wired 2M, NPN
E3NX-FA21M 2M	Advanced Model M-type, Pre-wired 2M, NPN
E3NX-FA6M	Standard Model M-type, Wire-saving Connector, NPN
E3NX-FA7M	Advanced Model M-type, Wire-saving Connector, NPN
E3NX-FA7TWM	Advanced Model M-type, Wire-saving Connector, NPN
E3NX-FA6-1	Customized Model, Wire-saving Connector, NPN

See the following pages for changes.

Changes



Power Consumption

Before the change	After the change
<p>Power consumption</p> <p>1. Standard Model E3NX-FA11)41)6)8</p> <p>1) Power supply voltage 24V: Normal mode: 960mW max. (Power consumption 40mA max.) Eco function ON: 720mW max. (Power consumption 30mA max.) Eco function LO: 840mW max. (current consumption at 35mA max.)</p> <p>2) Power supply voltage 10V to 30V: Normal mode: 1,080mW max. (Power supply voltage 30V: Power consumption 36mA max.) (Power supply voltage 10V: Power consumption 108mA max.) Eco function ON: 880mW max. (Power supply voltage 30V: Power consumption 28mA max.) (Power supply voltage 10V: Power consumption 88mA max.) Eco function LO: 980mW max. (Power supply voltage 30V: Power consumption 32mA max.) (Power supply voltage 10V: Power consumption 98mA max.)</p>	<p>Power consumption</p> <p>1. Standard Model E3NX-FA11)41)6)8</p> <p>1) Power supply voltage 24V: Normal mode: 840mW max. (Power consumption 35mA max.) Eco function ON: 650mW max. (Power consumption 27mA max.) Eco function LO: 750mW max. (current consumption at 31mA max.)</p> <p>2) Power supply voltage 10V to 30V: Normal mode: 990mW max. (Power supply voltage 30V: Power consumption 33mA max.) (Power supply voltage 10V: Power consumption 65mA max.) Eco function ON: 780mW max. (Power supply voltage 30V: Power consumption 26mA max.) (Power supply voltage 10V: Power consumption 42mA max.) Eco function LO: 840mW max. (Power supply voltage 30V: Power consumption 28mA max.) (Power supply voltage 10V: Power consumption 45mA max.)</p>
<p>2. Model for Sensor Communications Unit E3NX-FA0</p> <p>Power supply voltage 24V: Normal mode: 960mW max. (Power consumption 40mA max.) Eco function ON: 720mW max. (Power consumption 30mA max.) Eco function LO: 840mW max. (current consumption at 35mA max.)</p>	<p>2. Model for Sensor Communications Unit E3NX-FA0</p> <p>Power supply voltage 24V: Normal mode: 920mW max.(Power consumption 38mA max.) Eco function ON: 680mW max.(Power consumption 28mA max.) Eco function LO: 800mW max. (current consumption at 33mA max.)</p>

Power Consumption continued

Before the change	After the change
<p>Power consumption</p> <p>3. Advanced Model E3NX-FA21)51)7)9)7TW)9TW)24)54)54TW</p> <p>1) Power supply voltage 24V: Normal mode: 1,080mW max. (Power consumption 45mA max.) Eco function ON: 840mW max. (Power consumption 35mA max.) Eco function LO: 960mW max. (current consumption at 40mA max.)</p> <p>2) Power supply voltage 10V to 30V: Normal mode: 1,230mW max. (Power supply voltage 30V: Power consumption 41mA max.) (Power supply voltage 10V: Power consumption 123mA max.) Eco function ON: 1,030mW max. (Power supply voltage 30V: Power consumption 33mA max.) (Power supply voltage 10V: Power consumption 103mA max.) Eco function LO: 1,130mW max. (Power supply voltage 30V: Power consumption 37mA max.) (Power supply voltage 10V: Power consumption 113mA max.)</p>	<p>Power consumption</p> <p>3. Advanced Model E3NX-FA21)51)7)9)7TW)9TW)24)54)54TW</p> <p>1) Power supply voltage 24V: Normal mode: 920mW max. (Power consumption 38mA max.) Eco function ON: 680mW max. (Power consumption 28mA max.) Eco function LO: 800mW max. (current consumption at 33mA max.)</p> <p>2) Power supply voltage 10V to 30V: Normal mode: 1020mW max. (Power supply voltage 30V: Power consumption 34mA max.) (Power supply voltage 10V: Power consumption 67mA max.) Eco function ON: 810mW max. (Power supply voltage 30V: Power consumption 27mA max.) (Power supply voltage 10V: Power consumption 44mA max.) Eco function LO: 870mW max. (Power supply voltage 30V: Power consumption 29mA max.) (Power supply voltage 10V: Power consumption 48mA max.)</p>

Emitter Brightness

Before the change	After the change
<p>Brightness of the emitter</p> 	<p>Brightness of the emitter</p> <p>About 40% of the visibility improved. However, the amount of light received is equal.</p> 

Specifications and prices in this product news are as of the issue date and are subject to change without notice.
Only main changes in specifications are described in this document. Please be sure to read the relevant catalogs, datasheets, product specifications, instructions, and manuals for precautions and necessary information when using products.