

# E300 Expansion Input/Output Modules

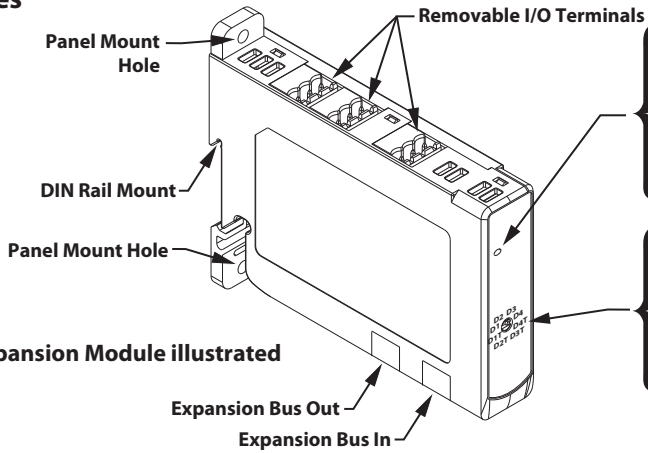
(Cat 193-EXP-DIO-42-120; 193-EXP-DIO-42-240; 193-EXP-DIO-42-24D; 193-EXP-AIO-31; 193-EXP-PS-AC; 193-EXP-PS-DC)

**WARNING:** To prevent electrical shock, disconnect from power source before installing or servicing. Follow NFPA 70E requirements. Install in suitable enclosure. Keep free from contaminants. Installation, adjustments, putting into service, use, assembly, disassembly, and maintenance shall be carried out by suitably trained personnel in accordance with applicable code of practice. In case of malfunction or damage, no attempts at repair should be made. The product should be returned to the manufacturer for repair. Do not dismantle the product.

**Additional Resources:**

- 1) Go to <http://www.literature.rockwellautomation.com>;
- 2) Go to **Search**. Type in publication number: **193-UM015**

**Features**



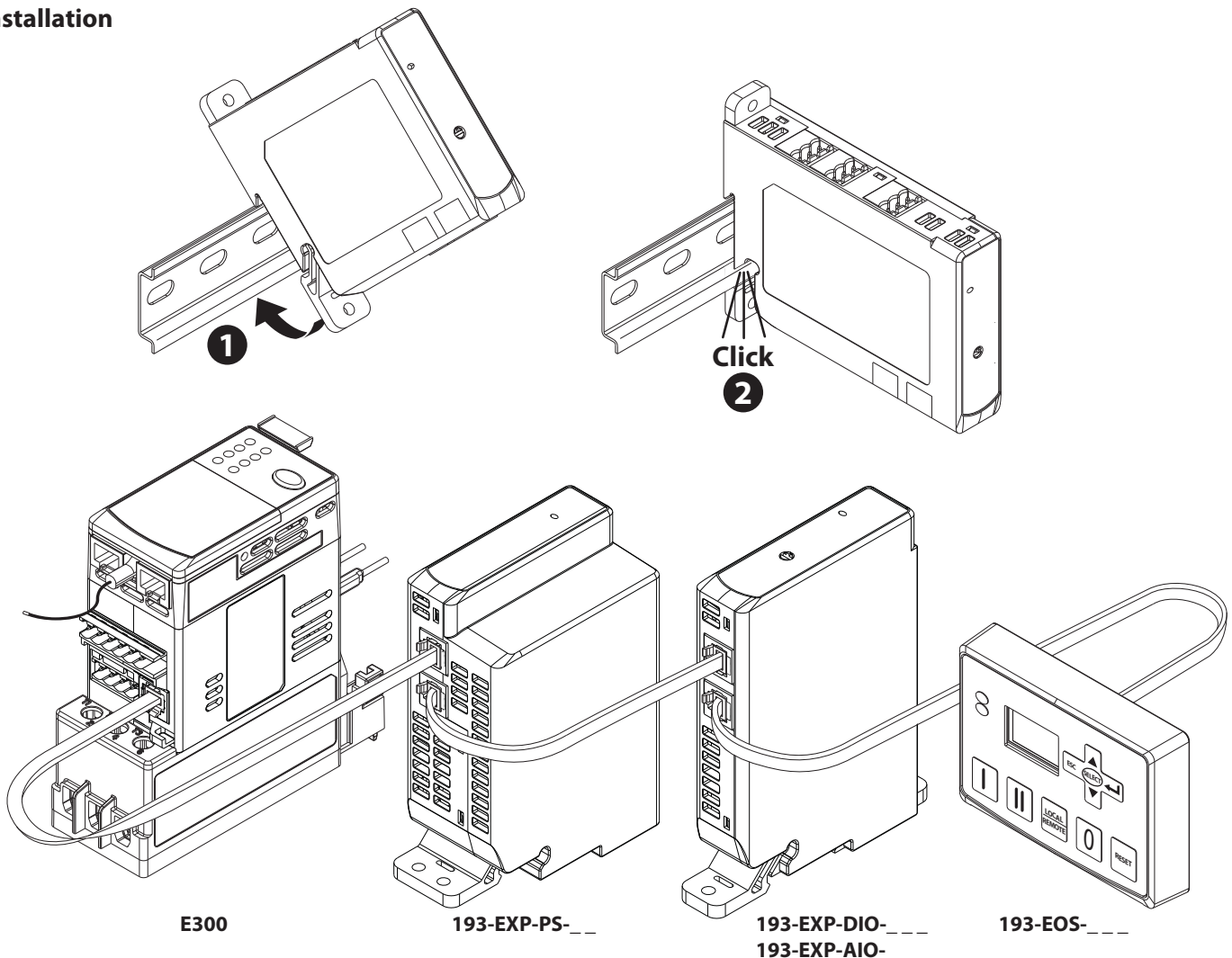
Digital Expansion Module illustrated

Status LED	
Color	Description
Off	No power applied
Blinking Green	Module OK with no connection
Green	Module OK and active
Red	Error Detected

Digital Module Number Selector		Analog Module Number Selector	
Number	Description	Number	Description
D1 - D4	Module number	A1 - A4	Module number
D1T - D4T	Module number with expansion bus terminating resistor applied	A1T - A4T	Module number with expansion bus terminating resistor applied

**Note:** If the expansion bus does not have an operator station, then the last expansion module number must be set to terminated.

**Installation**



E300

193-EXP-PS-\_\_

193-EXP-DIO-\_\_  
193-EXP-AIO-\_\_

193-EOS-\_\_

## Digital Expansion Module - Wiring Diagram

193-EXP-DIO-42-240

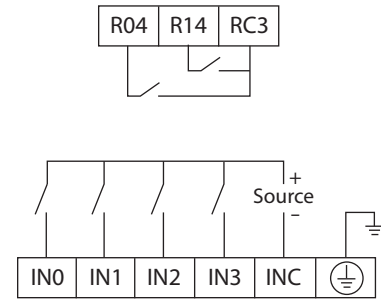
193-EXP-DIO-42-120

193-EXP-DIO-42-24D

Outputs		
Rated Operating Current (I <sub>e</sub> )	Output Current Rating	
	Resistive (P.F. = 1.0)	Inductive
5A @ 250V AC 0.25A @ 220V DC	5A @ 250V AC 5A @ 5-30V DC	2A @ 250V AC 2A @ 5-30V DC

Inputs	
Cat No	Operating Voltage Range
193-EXP-DIO-42-240	159 - 265V AC
193-EXP-DIO-42-120	74 - 132V AC
193-EXP-DIO-42-24D	11 - 30V DC



Replacement Connectors: 193-NCXP-DIO-CNT

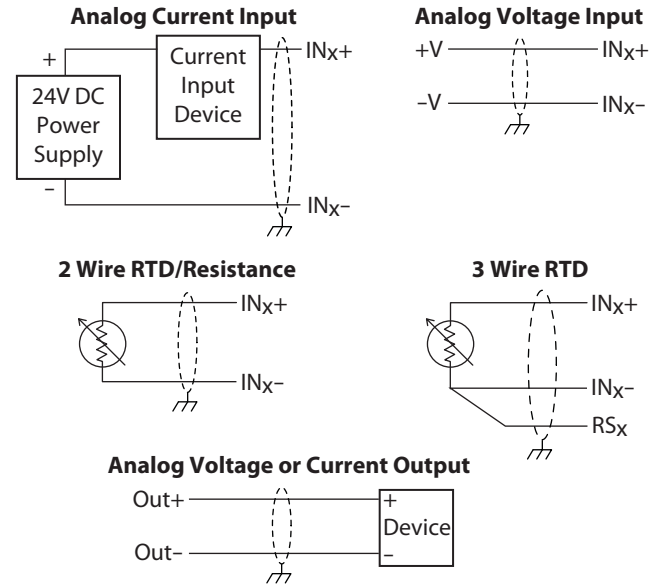
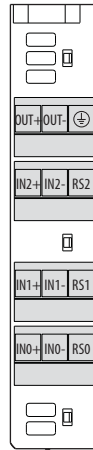
## Analog Expansion Module Wiring Diagram

193-EXP-AIO-31

(Requires control module firmware v3.000 or higher)

Output Type	Input Type
0 - 20 mA	0 - 20 mA
4 - 20 mA	4 - 20 mA
0 - 5V	0 - 5V
1 - 5V	1 - 5V
0 - 10V	0 - 10V
	RTD (2 - Wire)
	RTD (3 - Wire)
	0 - 150Ω
	0 - 750Ω
	0 - 3000Ω
	0 - 6000Ω (PTC/NTC)

Replacement Connectors: 193-NCXP-AIO-CNT

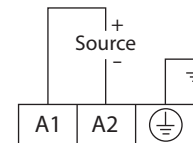
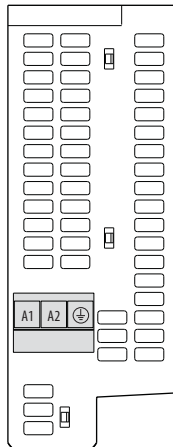


## Power Supply Expansion Module Wiring Diagram

193-EXP-PS-AC

193-EXP-PS-DC

Cat No	Inputs	
	Operating Voltage Range	Maximum Inrush
193-EXP-PS-AC	85 - 265V AC (47 - 63Hz)	25A
193-EXP-PS-DC	19.2 - 26.4V DC	30A



Replacement Connectors: 193-NCXP-PS-CNT

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