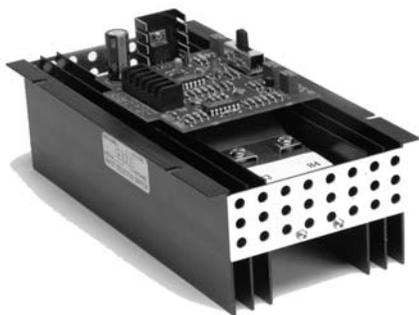


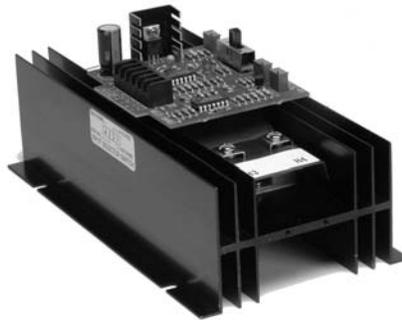


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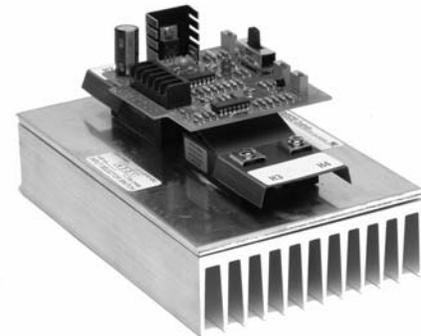
# A&B Series Power Controllers



101 Series



102 Series



103 Series

## Catalog and Part Numbers:

**1 0 1 - A 3 - 4 8 0 - 3 0 E**

Mounting	Type & Phase	AC Voltage	Max Current	Input Code
101 = through panel	A1 = master, 1 phase	240 = 240VAC	10 = 10 amps	A = 2200 ohm
102 = inside panel	A3 = master, 3 phase	480 = 480VAC	20 = 20 amps	C = 135 ohm
103 = INDEECO duct heaters	B1 = slave, 1 phase B3 = slave, 3 phase	600 = 600VAC	30 = 30 amps 40 = 40 amps 50 = 50 amps	E = 4-20mA L = 0-10VDC (blank) = slave

**Note:** Standard A1 & A3 Masters have 4 field-selectable inputs: A, C, E and L (I input code). The input code determines the switch position before shipment from the factory. Contact the factory for other inputs and codes (i.e. D = 6-9VDC, K = 2-10VDC).

## Operation

A&B Series power controllers are solid-state, zero-cross fired, proportional devices. Line voltage is switched 0-100% linearly, with respect to the input range. A 1 second time-base controls power to the load. For example, a 5VDC signal to a 0-10VDC input will cycle the output full on for 0.5 seconds and full off for 0.5 seconds.

Features of these controllers include an LED to indicate when the output should be on. Also, the output will be shut off if the input signal is disconnected or shorted.

Masters can operate alone or can drive additional slaves to control multiple loads. Other VDC-type controls can drive slaves.

## Specifications

UL Recognized: File E52105 Guide XAPX2

Storage Temp: -20° to 190°F

Operating Temp: 0°F to 122°F (101 & 102 Series)  
0°F to 80°F (103 Series)

Isolation: 4000Vrms input to output

Isolation: 2500Vrms input/output to heatsink

Control Voltage: 24VAC, 6VA (masters only)

Input Impedance: 250Ω (mA), 33KΩ (VDC)

Input Wire Range: 18-22 AWG, copper only

Line Voltage: 48VAC to +10% of model's rating

Frequency: 47 to 63 Hertz

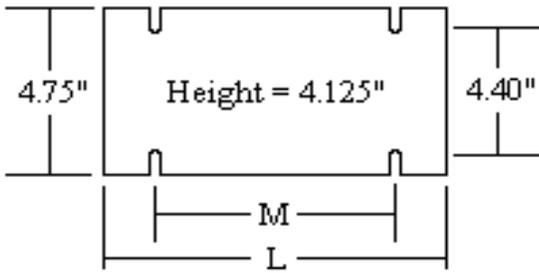
Load Current: 0.1A to model's max current rating

Load Wire Range: 6-14 AWG, copper only

Slave Input: 3-32VDC = on, 1KΩ impedance

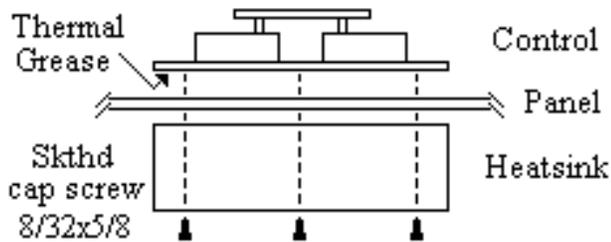
Maximum Slaves per Master: 4

85-2221-83-1



### Physical Dimensions: 101-102 Series

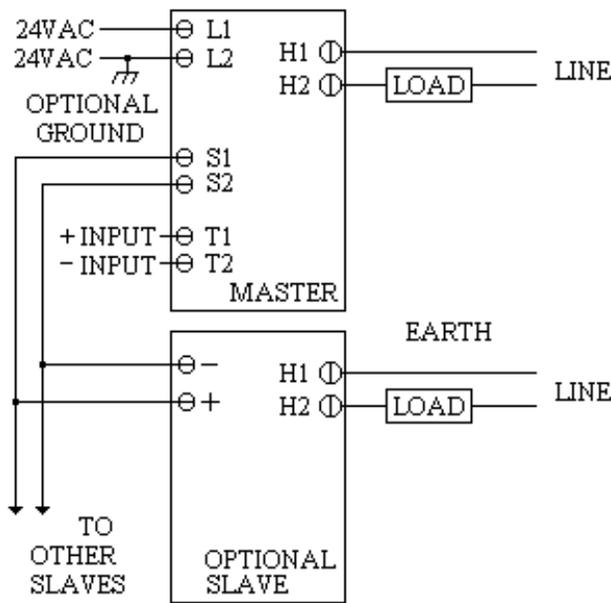
Type & Phase	Amps	L	M
A1, B1	(all)	6.0"	4.0"
A3, B3	10 to 40	9.0"	6.0"
A3, B3	50	12.0"	8.0"



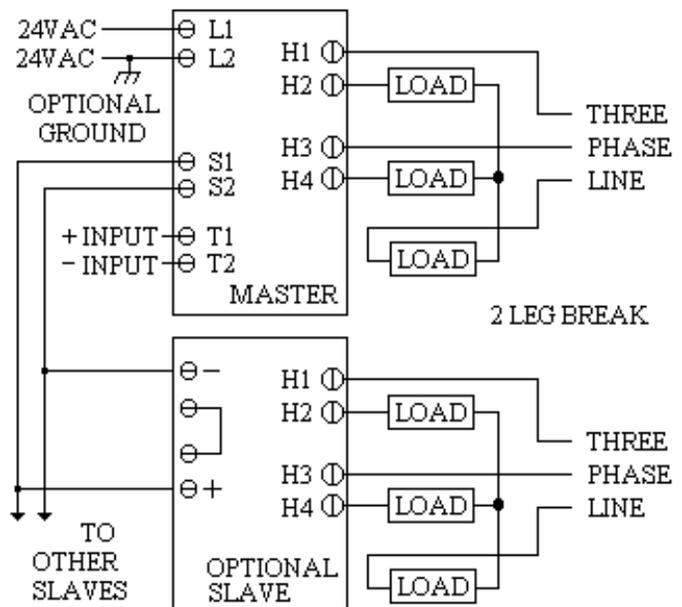
### Part Replacement: 103 Series

**Note:** Field installation must be done with kit 103-1901. Order separately. It is important to follow all instructions, in order to maintain the original rating of the INDEECO electric duct heater.

### Wiring Diagrams: 1 Phase



### Wiring Diagrams: 3 Phase



**NOTE:** All masters have L2 and T2 electrically connected on the circuit board.

### INDEECO CONTROLS

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### Input Specifications & Settings

Input Code	Full Off	Full On
A = 2200 ohms	2150 ohms	2250 ohms
C = 135 ohms	20 ohms	120 ohms
E = 4-20mA	5.6 mA	18.4 mA
L = 0-10VDC	1.0 VDC	9.0 VDC

