

## PC-6500-600 Current Amplifier

The PC-6500-600 Current Amplifier is designed to raise the input impedance of DA/VA-3200/3400 actuators and the PC-3001 and N-6800 transducers for compatibility with Cybertronic 6000 Series controllers and auxiliary devices. The input impedance of the current amplifier is approximately ten times its load resistance. The amplifier requires a 21 volt DC supply voltage from the 6000 Series unit or other power supply.

### Mounting

When used with a DA/VA-3200/3400 actuator, the amplifier may be housed in the actuator junction box. To save on wiring costs, the amplifier may also be mounted next to the controller or auxiliary device. This eliminates running a third wire with 21 volt DC power out to the actuator.

When used with an electro-pneumatic transducer, the PC-6500-600 is typically mounted next to the transducer in the apparatus cabinet.

A plastic collar is provided for mounting. It requires one No. 6 screw. A plastic tie is also provided for bundling wiring.

### Wiring

Connections are made to color-coded pigtail leads. See Fig. 3. All wiring must be in accordance with applicable electrical code requirements.

With sufficient operating power, up to five PC-6500-600 amplifiers can be paralleled off



**Fig. 1: PC-6500-600 Current Amplifier**

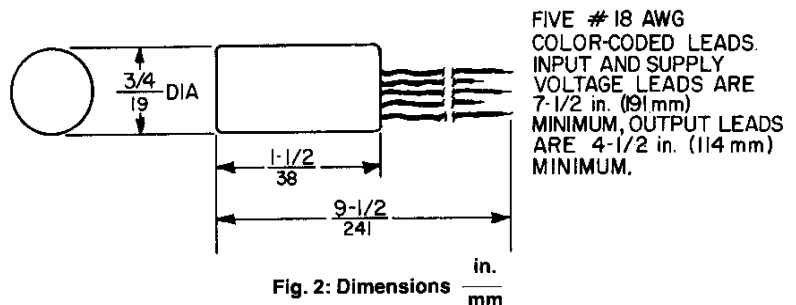
of a single output of any 6000 Series device when driving 1000-ohm loads (DA/VA-3200/3400s or N-6800s). Input impedance 10k ohms with output to 1k ohm coil. Up to two PC-6500-600 amplifiers can be paralleled off of a single output when driving 600-ohm loads (PC-3001s).

Each PC-6500-600 current amplifier can drive up to two DA/VA-3200/3400 actuators, two N-6800s, or one PC-3001. Using this fact and paralleling, the number of amplifiers can be reduced in multiple amplifier situations if they are located at the 6000 Series device. For

example, in an application where one output is controlling five actuators, two amplifiers can be wired in parallel at the 6000 device with each amplifier driving two actuators. A third amplifier, wired in parallel with the other amplifiers, would drive the remaining actuator. See Fig. 4.

**WARNING:**

The PC-6500-600 is not short circuit protected. A short across its RED and BLUE output leads could damage or destroy it.

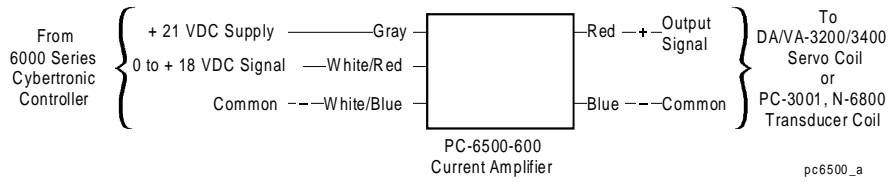


**Fig. 2: Dimensions** in.  
mm

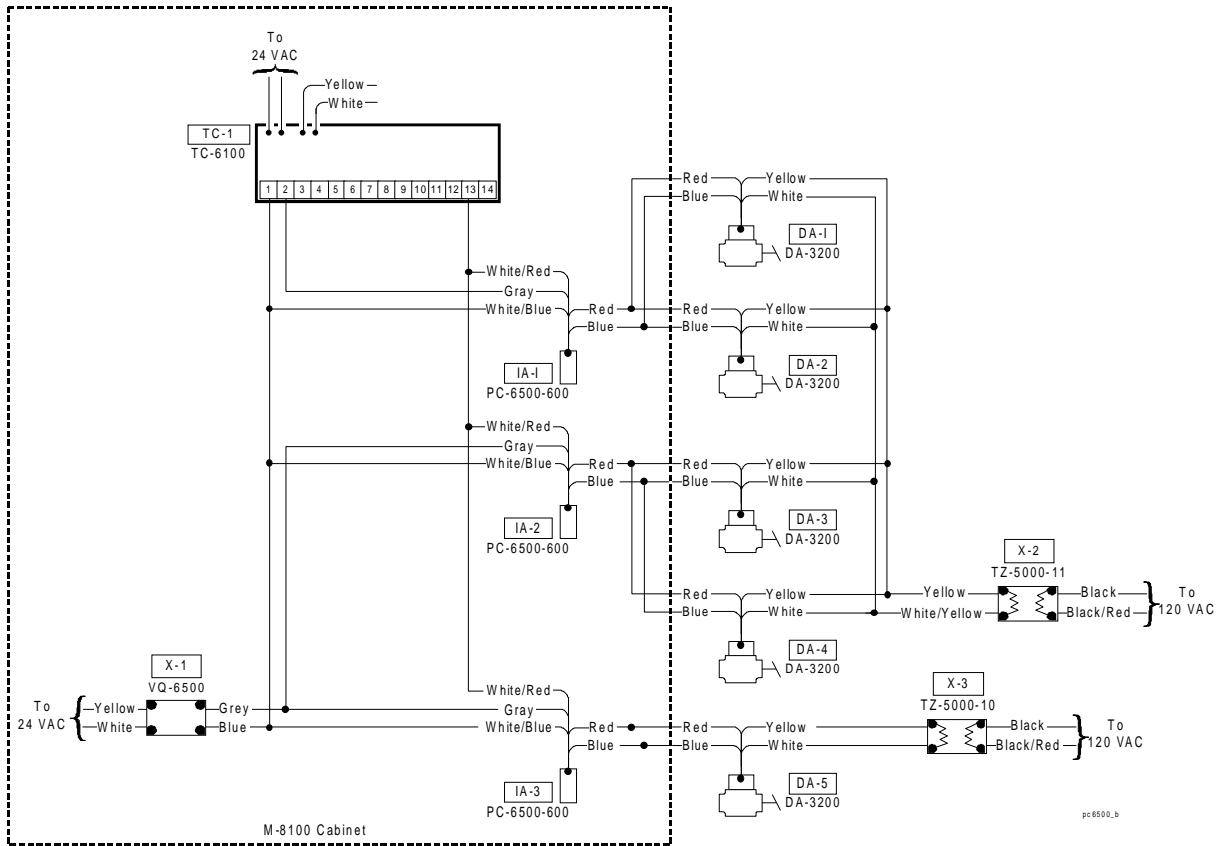
### Specifications

<b>Accessory</b>	PC-6500-600 Current Amplifier
<b>Supply Voltage</b>	21 volts DC + 1.5, -.5 volts at 35 mA Maximum
<b>Input Signal</b>	<1 to >18 volts DC (21 volts Maximum)
<b>Input Impedance</b>	10k ohms with Output to 1k ohm Coil (DA/VA-3200/3400 and N-6800); 6k ohms with Output to 600 ohm Coil (PC-3001)
<b>Output Signal</b>	Input Signal -- (1 volt Maximum)
<b>Ambient Operating Environment</b>	-25 to 135°F (-32 to 57°C), 10 to 95% RH, Non-condensing
<b>Shipping Weight</b>	1.5 oz. (42g)

The performance specifications are nominal and conform to acceptable industry standards. For application at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

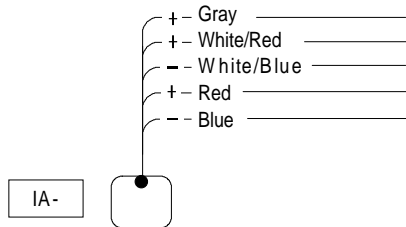


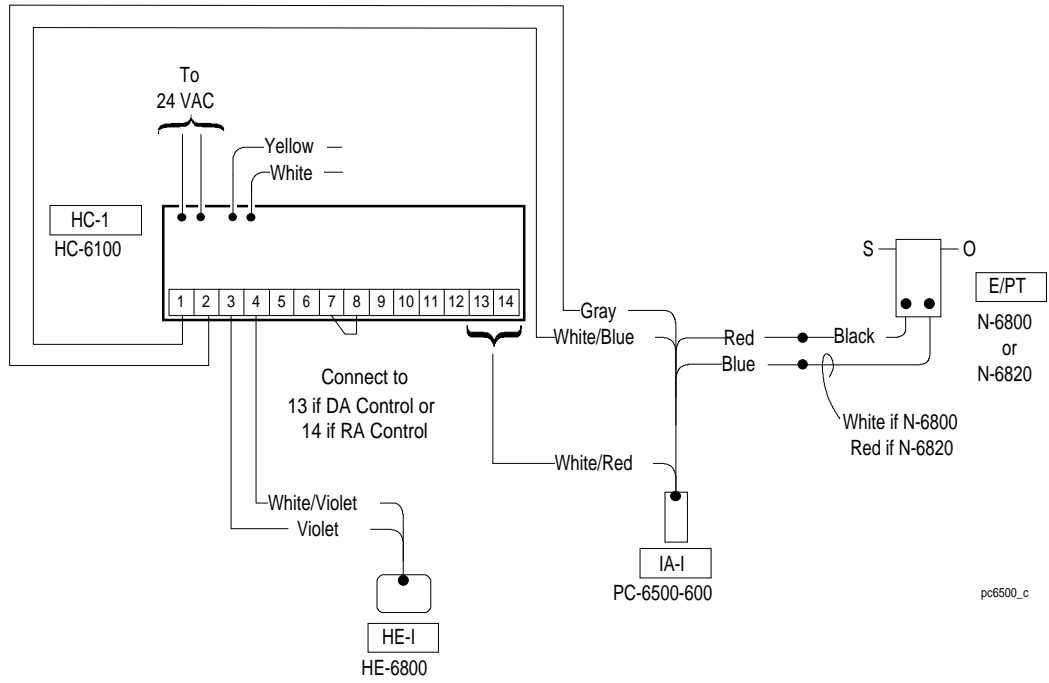
**Fig. 3: PC-6500-600 Lead Identification**



**Fig. 4: Wiring for Five Actuators on One Output with Current Amplifiers in Apparatus Cabinet**

### Application and Drawing Identification





**Fig. 5: HC-6100 and N-6800 Wiring**

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# Notes



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