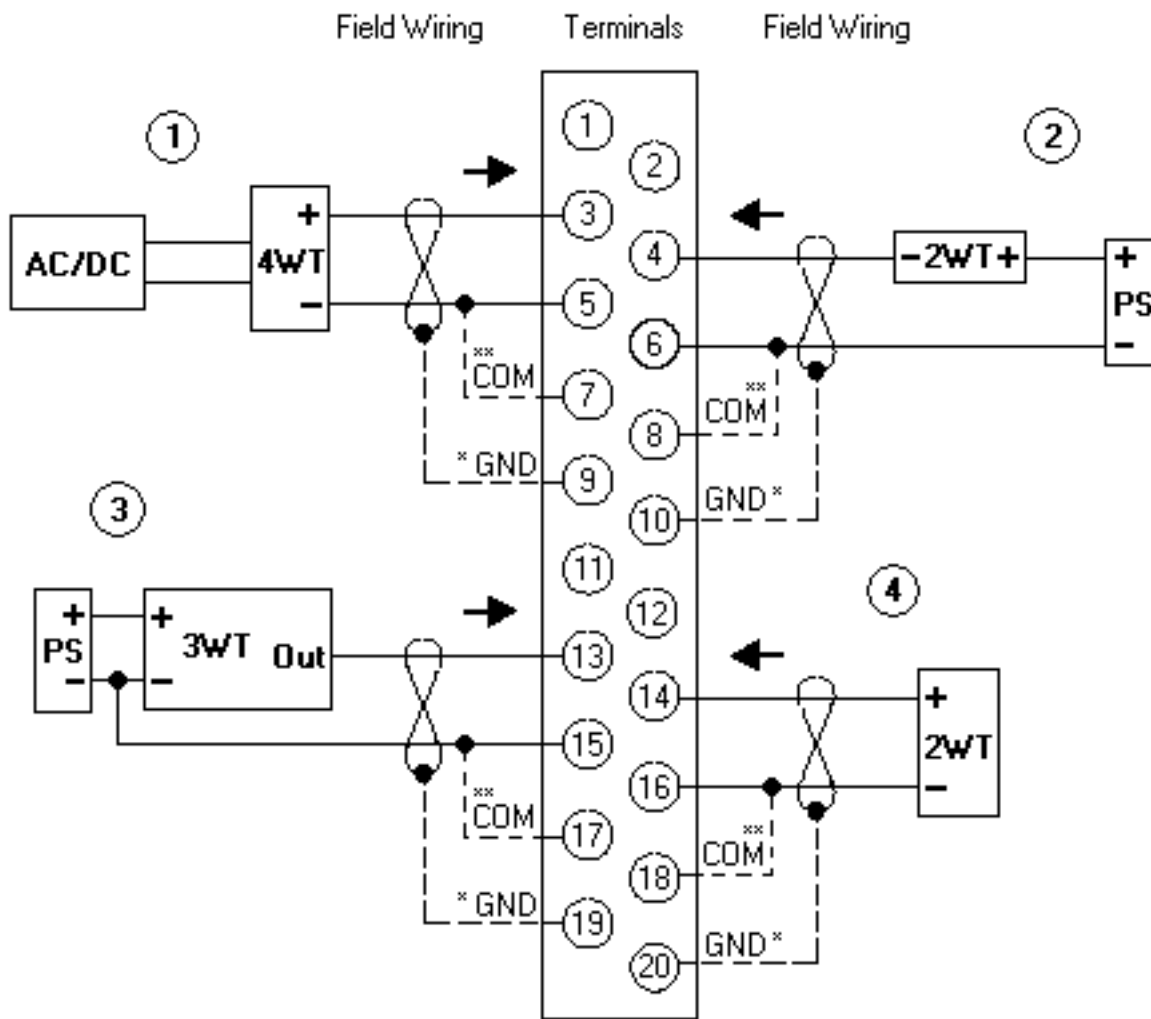# Wiring Diagram for Current Transducers

Example drawing for a Series 90-30 IC693ALG221:

* Connect shield wire to GND terminal at one end only.

** Connect (-) return to Control Module COM terminal if the source is floating to limit common-mode voltages. Data may be compromised in noisy environments. If inaccurate readings persists due to noise, (-) return may also be connected to GND. Note that common mode voltage is limited to 11 volts.

Circuit Examples:

1. 4 Wire Transducer, Externally Powered via AC or DC.

2. 2 Wire Transducer, Externally Powered via DC.

3. 3 Wire Transducer, Externally Powered via DC.

4. 2 Wire Transducer, Self Powered.

To verify your input current: Series 90-30 Analog Current Input Modules have a 250 ohm internal resistor across the input. You can measure the voltage drop across the input points using a volt meter and using Ohms Law, determine your actual input current.
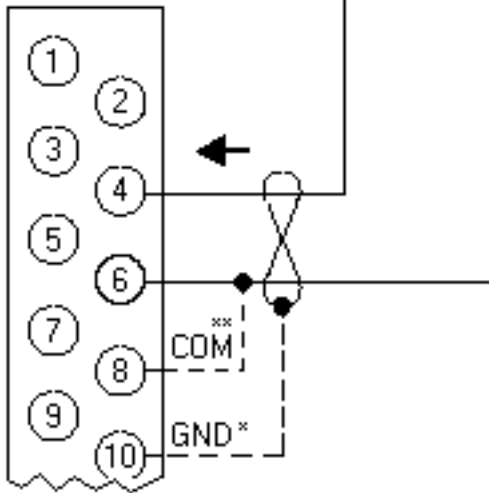
I = V / 250

Wiring diagram for connecting a transducer to two measuring devices:
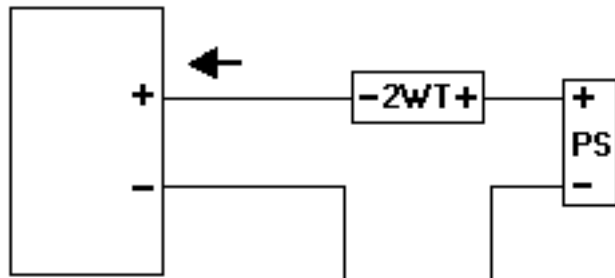
Caution: The Control Module must be the last device in the circuit. When grounding the (-) return side of the control module the other current sensing device must be floating and able to withstand a common mode voltage of at least 10 volts including the noise level.