



**INDUSTRIES LIMITED**

## ***HVAC Tech Note #4 – March 2003***

### **Accurately Setting Heat Anticipators**

Many thermostats have adjustable heat anticipators that must be set to match the current in the control circuit to provide reasonable operating cycles of the equipment being controlled. As the control circuit current draw is usually quite low, it is difficult to accurately measure with even a digital clamp-on ammeter. Here's a trick that will allow you to accurately measure the current and set the anticipator even if you are using an old style analog amprobe.

Use some thermostat wire to make a coil that has exactly 10 loops in it. Place the coil in the control circuit and measure the current by clamping the ammeter around the coil. The coil will amplify the current by a factor of 10, so divide the ammeter reading by 10 to get the actual current draw. For example, if the ammeter reading is 9 amps, the correct setting for the anticipator will be 0.9 amps.

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