



# T.I.P. Rural Electric Cooperative

Your Touchstone Energy® Cooperative



Exhibit "C"

## CT METERING FOR CHECKING ELECTRIC USAGE OF HEAT PUMPS

Direct or CT metering is a requirement to be able to receive a rebate on a Ground Water Source Heat Pump or Air to Air Heat Pump. T.I.P. will provide junction box, CT, meterbase and meter - if needed.

### For interior of house:

This could be rigid, PVC conduit, Greenfield or Metal. **If you use PVC then the metal CT box needs to be grounded.**

### Exterior of house:

This must be 1/2 - 3/4 inch conduit. We recommend rigid metal conduit, however a minimum of Schedule 40 plastic is acceptable. (we recommend 3/4" conduit)

Use one 8 ft. ground rod and #8 copper.

Use #12 wire for meter base.

Meter height is 5 1/2 feet.

Meter can be placed anywhere on exterior of the house as long as we can access it.

Use the line voltage metering or

Use the Coop's 200:5 CT's for the metering which needs to be installed in the junction box that T.I.P. provides, but electrician installs.

Normal 5 terminal 100 amp base (Use color coded wires)

Blue and Black are voltage wires

Red and Green are CT wires

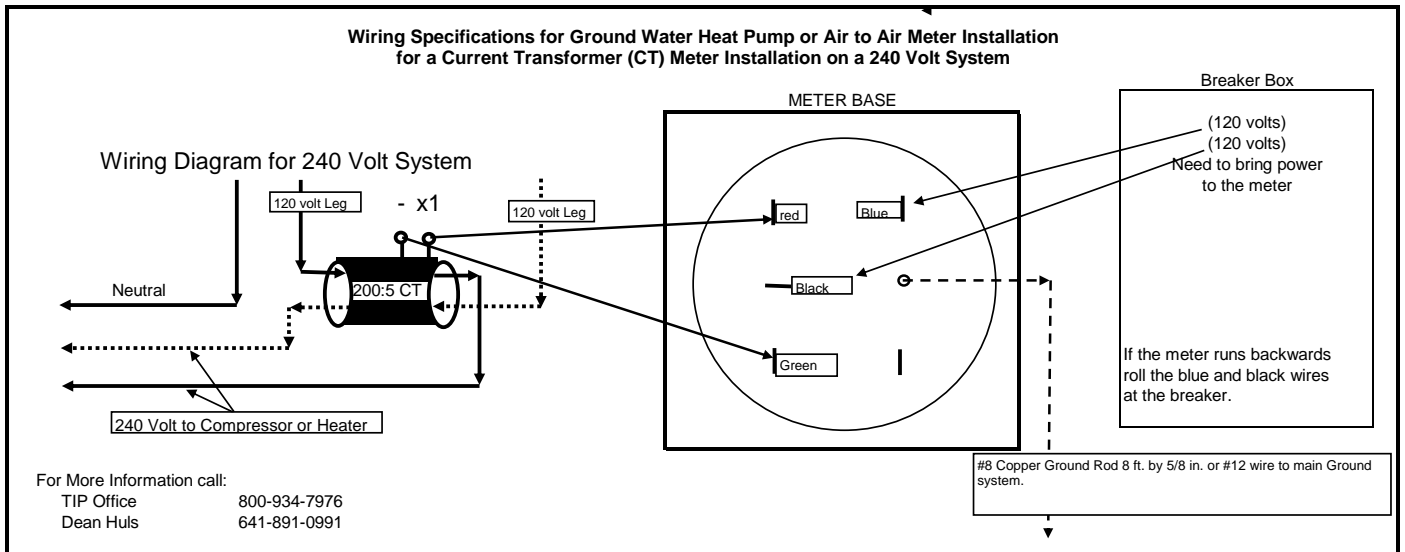
### Instructions:

The red wire goes to positive side of CT which is marked with a white mark or white square with X-1 printed inside the box.

The green wire goes to opposite terminal and the ground strap must be open so the kWh's record properly.

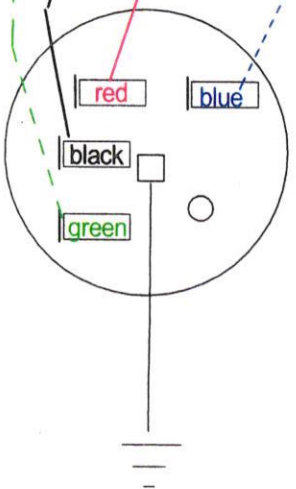
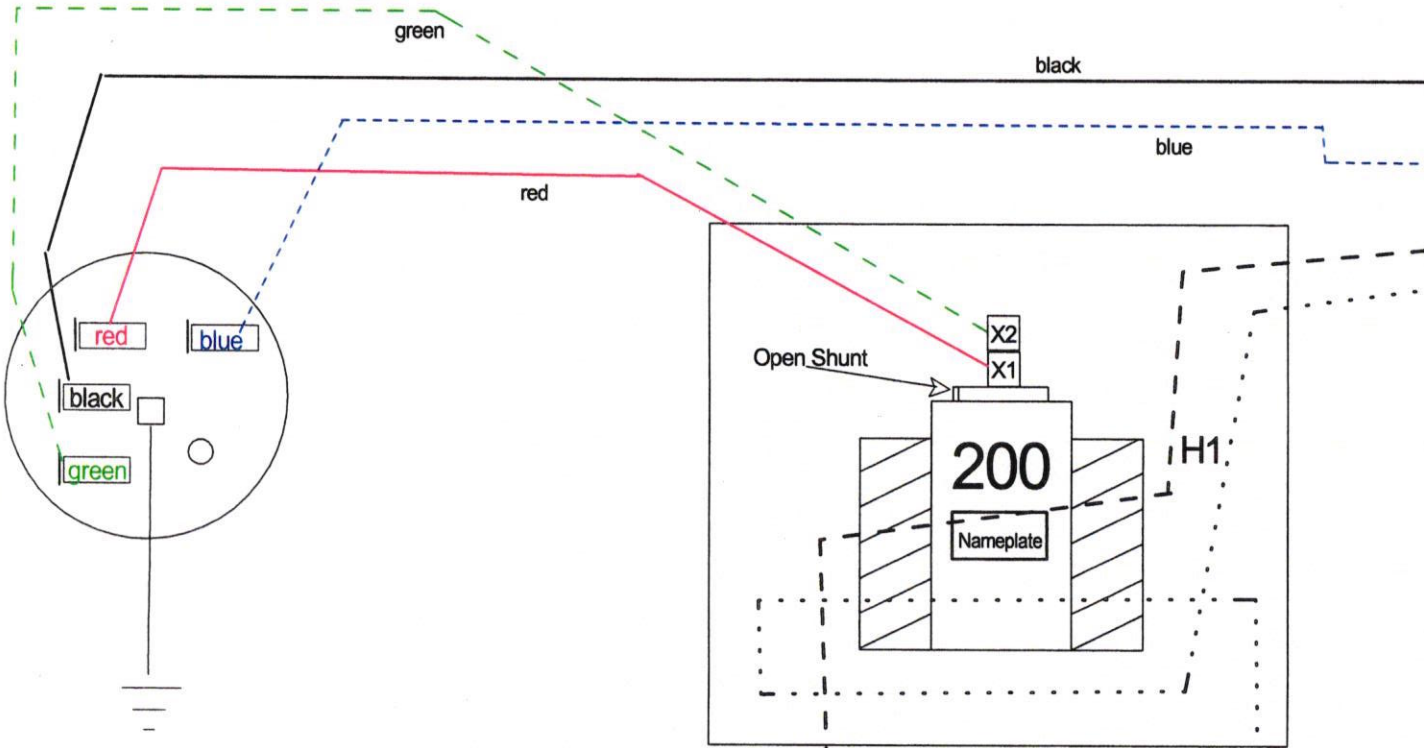
All wires that pass through the CT in the same direction must be the same 120 volts to register correctly.

On a 240 volt system – each leg of 120 volts go through the CT from different sides.



# Single Phase, Three Wire, CT

- Blue
- Black
- ..... B
- Green
- A
- Red



A	A
B	B
A	A
B	B

All A phase wires from breaker in the same side of CT.

All B phase wires from breaker in the opposite side of CT.

TO LOAD

**A**                      **B**