



Universal Current Transducer

CT-300 is designed to measure up to 80 Amps load current for 50 or 60 Hz main power. Its unique design allows 4-20mA signal output for 5 current ranges. The CT-300's 4 position jumper array allows you to select between 5 different current sensing ranges; from 0- 5A, 10A, 20A, 40A and 80A.

Each selected range via 4 position jumper array generates 4-20mA output signal proportional to the current passing through the split core transducer.

Specifications

- Output Signal:** 4-20mA
- Max Load Current Measured:** 80Amps (50 or 60Hz)
- Measurement Accuracy:** +/- 2% F.S.
- Linearity:** +/- 2% F.S.
- Accuracy over Temperature:** +/- 1% F.S.
- Operating Voltage:** 14-35VDC
- Maximum Output Signal:** 25mA
- Current Transformer:** Split type with latch
- Status Output:** Red LED intensifies as current increases
- Operating Temperature:** -20°F to +150°F (-30°C to +65°C)
- Storage Temperature:** -40°F to +170°F (-40°C to +77°C)
- Operating Humidity:** 10 to 95 %RH non-condensing
- Storage Humidity:** 10 to 98 %RH non-condensing

Dimensions

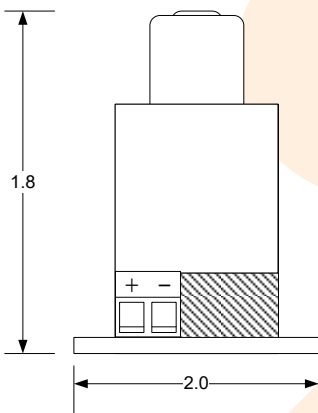


Figure 1

WARNING: To reduce risk of electrical shock, always open or disconnect circuit from power-distribution system (or service) of building before installing/servicing current-sensing transducers

Installation

The following steps should be taken to install CT-300:

1. Set the jumper for the intended load current measurement. The jumper setting is shown on the label attached to the CT-300 housing.
 2. Mount the CT-300 via 2 flanged mounting holes (1.75" apart) in a suitable place, close to the load wire where the load current will be measured.
 3. Open the CT clamp latch and place the load wire inside the CT opening.
 4. Close the latch making sure that the closing is smooth and there are no objects stuck in the split section when the latch is closed (This will change the readings drastically if the latch is not properly closed). CT-300 has two terminal wiring blocks to make connection simple and fast.
 5. Connect CT-300 "+" terminal to +14 to +35 power supply. The DC power supply can be unregulated provided that the peak DC voltage does not exceed +35 VDC and the bottom of the voltage (ripple) is higher than +14 VDC.
- Note: Full or half way rectified AC voltage without a smoothing filter capacitor will NOT work as a DC power supply. The unregulated voltage must have minimum 14 VDC bottom voltage (ripple).
6. Connect CT-300 "-" signal output terminal to your data collection device (DDC controller, datalogger, etc.)

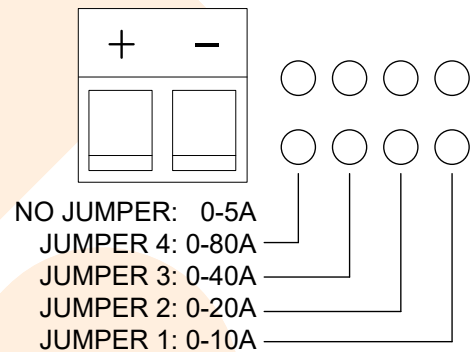


Figure 2

Only 1 jumper should be inserted at a time.

- 0-5A = No Jumper
- 0-10A = Jumper 1
- 0-20A = Jumper 2
- 0-40A = Jumper 3
- 0-80A = Jumper 4