

CT-100

Universal Current Transducer

The CT-100 is a revolutionary split core current transducer, with built-in dip switches. Measures up to 100 Amps of current in selectable ranges of 0-2.5A, 0-10A, 0-20A, 0-50A or 0-100A with a low output of 4mA and a high output of 20mA when connected to a controller or monitoring device. The CT-100 is specifically designed to supply precise signals at the most economical cost available while also reducing necessary transducer inventory.

The CT-100, containing advanced micro miniature technology and solid state sensors, is accurate to 2% at full scale and handles most applications of submetering and monitoring that consume less than 100 Amps. The CT-100 measures all loads with the exception of main power. The DIP switch selectability, 4-20mA output, split core makes the CT-100 a unique and universal current transducer.

The compact size of the CT-100, 1" x 1" x 2.25", coupled with its split core CT provides for fast and easy installation in very small spaces. No need to break the wire where current is to be measured. CT-100 needs only two wires for connection to a controller or monitoring device. The CT-100 has a built in status LED that indicates power is on and the load is running. The varying intensity of this LED also indicates the amount of current passing through the CT-100. The more intense the light the greater the amount of current.



- ◆ Built-in split core transformer
- ◆ Built-in DIP switch selectable current ranges 0-100 amp measurement capability
- ◆ Built-in diagnostic LED-light intensity varies with current load
- ◆ 4-20mA output signal
- ◆ 23mA signal cutoff
- ◆ All CMOS sensor and circuit technology
- ◆ Consumes less than 1/10 watts
- ◆ Signal stabilization with supply function
- ◆ Flange mount base for secure installation
- ◆ Extremely low unit cost



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Established in 1982, Control Tech Supply has experience in numerous areas to help customers reduce utilities: *building controls, temperature controls, lighting controls, variable frequency drives, VAV controls, access controls, CCTV, and much more.*

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SPECIFICATIONS

ELECTRICAL

Signal output	4-20mA Max. load resistance has to be 250 Ohms
Load current measured	0-2.5Amps (50 or 60Hz) all DIP switches off 0-10Amps (50 or 60Hz) with DIP switch # 1 set 0-20Amps (50 or 60Hz) with DIP switch #2 set 0-50Amps (50 or 60Hz) with DIP switch #3 set 0-100Amps (50 or 60Hz) with DIP switch #4 set
Measurement accuracy	2% F.S.
Operating voltage	1 to 35VCD (24VDC external power supply is recommended)
Primary load volt	0-480VAC (insulate load wires for at least 600 VAC)
Power consumption	4-20mA
Current transformer	Split type with built-in latch
Output signal	4-20mA (25mA max.) 4mA+/-2% when load current=0 Amps 20mA+/-2% when load current=at max. for dip switch range

MECHANICAL

Dimensions	L 1.90" x W 1.20" x H 2.15"
CT	Incorporates latch for closing and locking the split core. Accommodates wire to .375 diameter

ENVIRONMENTAL

Operating temperature	-20° to 170° F
Storage temperature	-40° to 170° F
Operating humidity	0-99% RH non-condensing
Storage humidity	0-100% RH non-condensing

INSTALLATION AND WIRING STEPS FOR THE CT-100

- Step 1** Select a location for the CT-100 and secure it with two screws.
- Step 2** Open the split CT latch.
- Step 3** Place the load wire inside the split CT opening. Close and lock the latch. If multiple CT-100 units are to be installed, separate them by at least 2" to avoid current signal distortion.
- Step 4** Connect red wire to +24 VDC external DC power supply positive terminal.
- Step 5** Connect the negative side of the 24VDC supply to the sensor common terminal.
- Step 6** Connect black wire to 4-20mA sensor or controller input terminal.
- Step 7** Set the DIP switch for the appropriate load measurement. A zero Amp current will correspond to a 4mA output from the CT-100. The maximum current, depending on DIP switch range settings, will correspond to 20mA.

When necessary, the CT-100 can hang on wire after it is latched.

PRICING

Qty 1-5	\$45.00 ea
Qty 6-24	\$42.00 ea
Qty 25+	\$38.00 ea

