

## Split Core Current Transformers

The CTS series of split core style current transformers are designed for fast and easy installation. The split core design permits non-contact current measurements through magnetic field induction without requiring that the primary wire be taken offline and disconnected for CT installation. This method permits a safer, easier and portable current measurement.

The CTS split-core current transformers are designed specifically for integration into products which require exceptionally accurate signal transformation with low phase shift while exposed to harsh environmental operating conditions..



### Features:

- Split core design offers safer, easier installation, portable.
- mV and mA secondary output options.

### Specifications:

- Frequency Range: 50 to 400 Hz.
- **Secondary Output:** 0.333 VAC at rated current
  - Optional: mA secondary,
    - CTS0191 Ratio 1:2000
    - CTS0191 Ratio 1:7500
    - CTS0318 Ratio 1:7500
    - CTS0518 Ratio 1:7500.
- Dielectric withstand voltage: 3,000V for 1 minute.
- Maximum Primary Voltage: 5,000 VAC (Insulated conductor)
- Operating Temperature: -15°C to +60°C

- Maximum Operating Voltage: 600 VAC.
- Construction:
  - Core material: Silicon steel, CRGO
  - Case ABS Resin (UL flame retardant rating 94V-O).
  - Epoxy encapsulated,
- Leads: 0.61 m (2 Ft), AWM 1015, Twisted Pair, 0.34mm<sup>2</sup> (22AWG)
- UL Certified (File #E466650)
- CE Certified.
- RoHS compliant



### Performance:

- Accuracy Class: 1.0 (IEC 60044-1).
- Accuracy: ±1% from 10% to 130% of rated current.
- Phase Angle: less than 2 degrees at 50% of rated current.

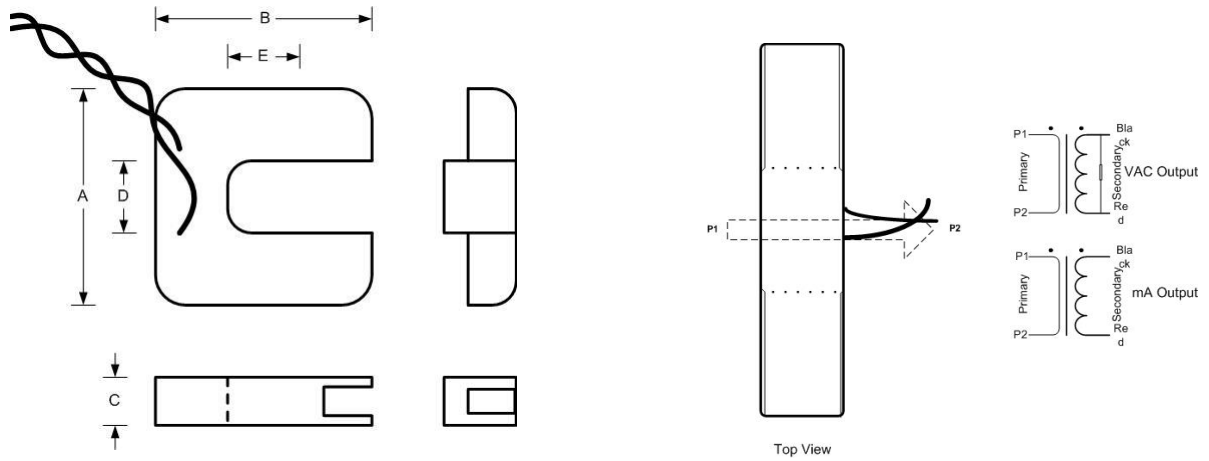
**Standard Configurations:**

Part Number	Rated Primary (Amp)	Opening (mm/in)	Accuracy Class (IEC60044-1)	Linearity Range	Secondary Burden Resistance
<b>CTS0191-xxxx/0.333V</b>	5, 10, 20, 25, 30, 40, 50, 60, 75, 80, 100, 120, 150, 160, 200A	19.1/.75	0.5, 1.0	10%-130% of rated current	≥ 100 kOhm
<b>CTS0318-xxxx/0.333V</b>	50, 60, 75, 80, 100, 120, 125, 150, 160, 200, 250, 300, 400, 500, 600A	31.8/1.25	0.5, 1.0	10%-130% of rated current	≥ 100 kOhm
<b>CTS0508-xxxx/0.333V</b>	100, 120, 125, 150, 160, 200, 250, 300, 400, 500, 600, 750, 800, 1000, 1200, 1250, 1500A	50.8/2.00	0.5, 1.0	10%-130% of rated current	≥ 100 kOhm
<b>CTS0191-2000</b>	Range from 100A to 200A (1:2000 ratio)	19.1/.75	0.5, 1.0	10%-130% of rated current	< 5 Ohms (Note #1)
<b>CTS0191-7500</b>	Range from 100A to 200A (1:7500 ratio)	19.1/.75	0.5, 1.0	10%-130% of rated current	< 5 Ohms (Note #1)
<b>CTS0318-7500</b>	Range from 50A to 600A (1:7500 ratio)	31.8/1.25	0.5, 1.0	10%-130% of rated current	< 5 Ohms (Note #1)
<b>CTS0508-7500</b>	Range from 100A to 1500A (1:7500 ratio)	50.8/2.00	0.5, 1.0	10%-130% of rated current	< 5 Ohms (Note #1)

**NOTES:**

1. The maximum secondary burden impedance for a current transformer with a mA secondary may be calculated: maximum burden impedance = 0.333V/ (secondary output @ rated primary current).
2. The CTS0191-2000 configuration is available for rated primary currents at the higher end of the rated primary current range.
3. The rated primary currents listed for each model are the configurations that are currently UL listed.

**Outline Drawing:**



**Outline Dimension:**

Dimension mm(inch)					
Part Number	A	B	C	D	E
CTS0191-xxxx	50.8 (2.00)	53.3 (2.10)	17.0 (0.67)	19.1 (0.75)	19.1 (0.75)
CTS0318-xxxx	82.5 (3.25)	85.1 (3.35)	27.0 (1.06)	31.8 (1.25)	31.8 (1.25)
CTS0508-xxxx	121.0 (4.75)	127.0 (5.00)	32.0 (1.20)	50.8 (2.00)	50.8 (2.00)

Custom split-core current transformer designs are available to meet the specific application requirements. Any of these models can be custom engineered for;

- Secondary current output in lieu of 0.333V, and/ or
- Lead length, lead termination, etc.

For a no obligation technical evaluation, please provide the specific performance requirements to [engineering@tichenassociates.com](mailto:engineering@tichenassociates.com) or the address below.