

## Miniature Revenue Grade Split Core Current Transformer

The CTSE010 Series of miniature revenue split-core 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 conductor to be taken offline and disconnected for CT installation. This method permits a safer, easier, and portable current measurement.

The CTSE series of revenue grade 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:

**Rated Primary Current:** 5A to 100A

**Secondary Output:** mV at rated current  
(see notes)

mA secondary output, standard winding ratios (see notes) -

**Two core options** offering different price/performance relationships; Series 20 (nickel alloy), and Series 01 (Mn-Zn ferrite).

### Specifications:

- Frequency: 50 Hz to 2000 Hz.
- Maximum operating voltage: 600VAC.
- Dielectric withstand voltage: 5,400V for 1 minute.
- Dielectric resistance: 100 MOhms @ 500 VDC
- Operating Temperature: -40°C to +55°C.

- Construction:
  - Ultrasonic welded housing.
  - Case material – PC, UL flame retardant rating 94 V-0.
- Leads: 1.83m (6Ft), AWM 1015 (optional: MTW 1015) Twisted Pair, 0.82mm<sup>2</sup> (18AWG), 600V, Black/White..
- Lead termination: Stripped and tinned.
- UL Certified UL 2808 (File #E468983)
- RoHS compliant.

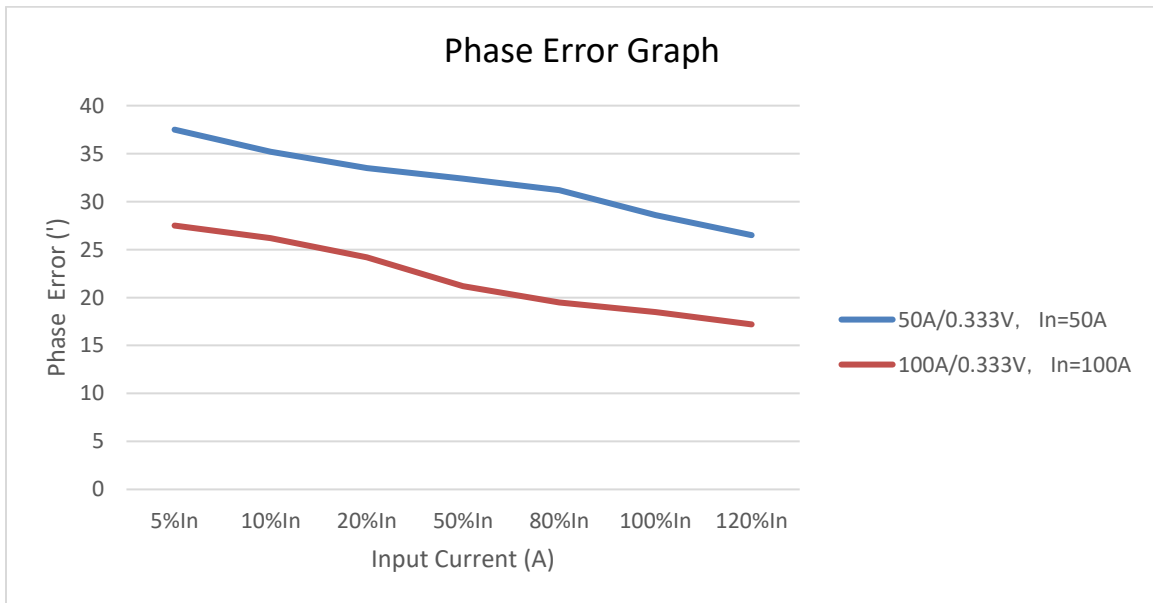
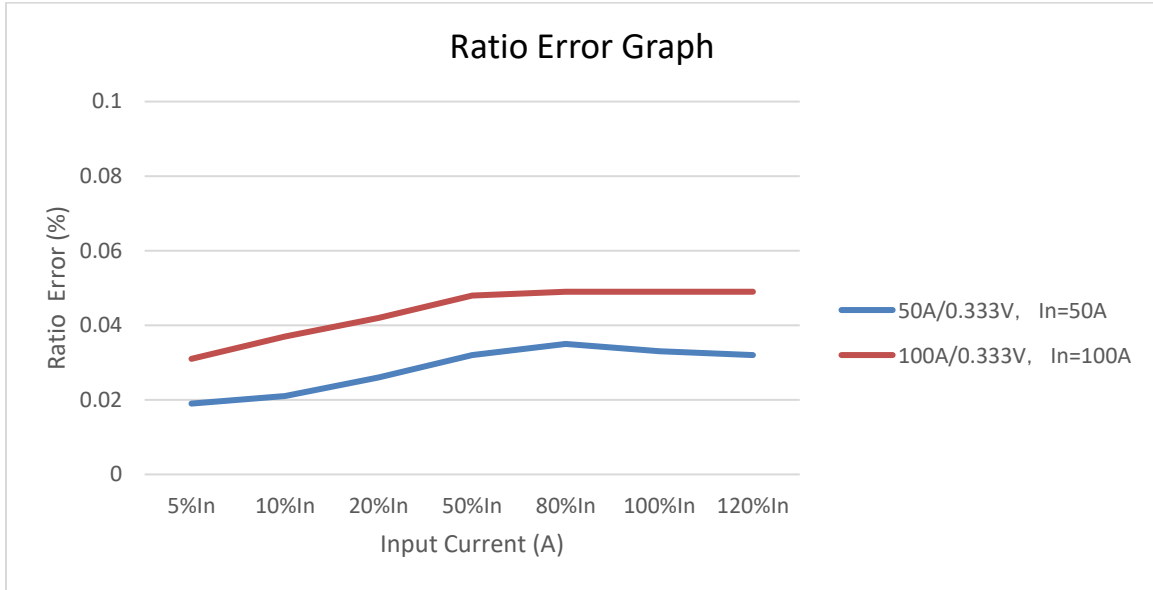


- CAT III, 600V

### Performance:

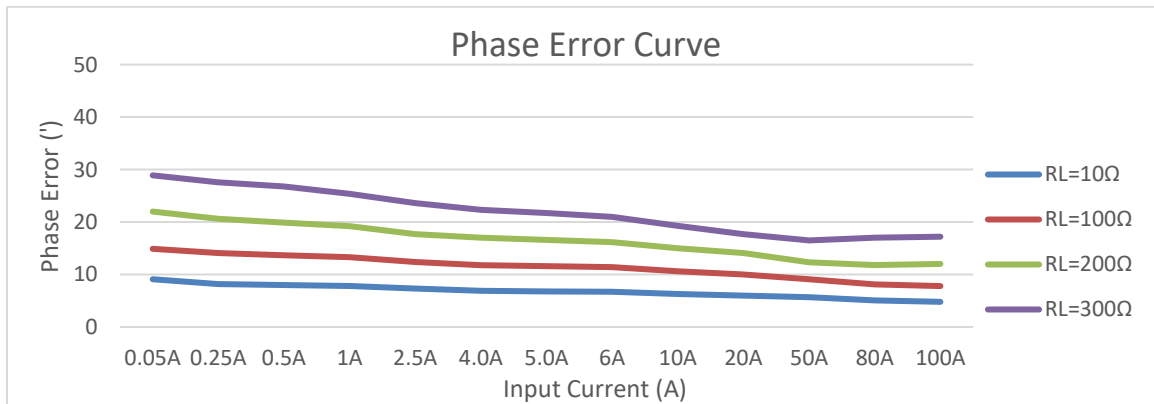
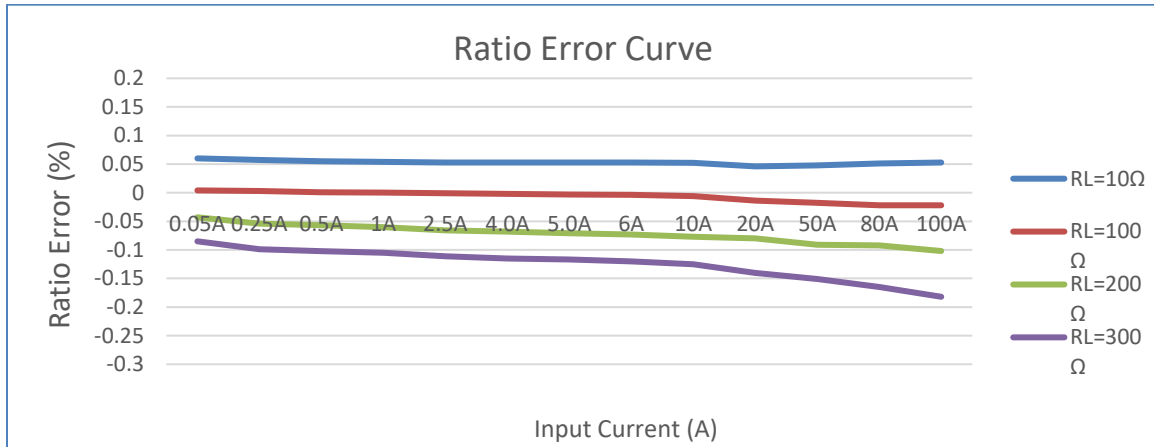
- Accuracy Class: 0.2S, 0.5S (IEC 60044-1)

**Series 01 Performance – Mn-Zn Ferrite Core:**



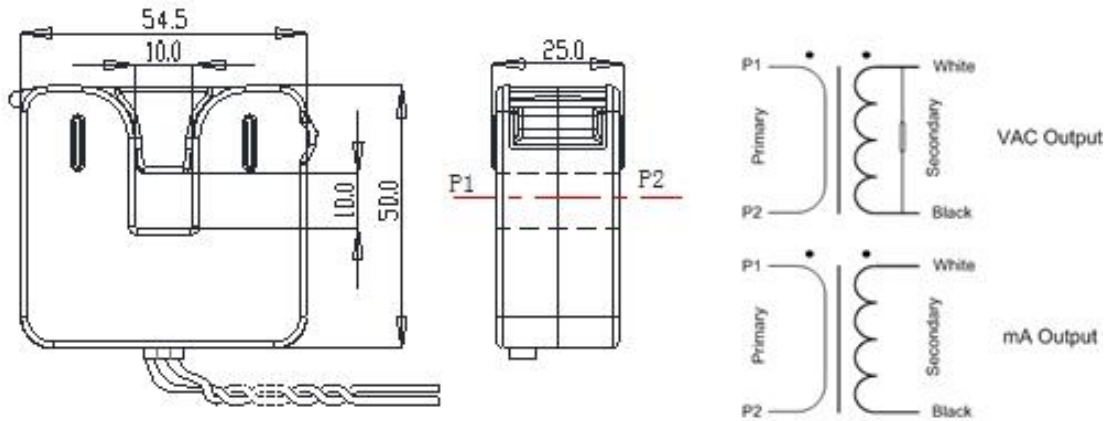
**Note:** Room temperature, Secondary burden 100kOhms

**Series 20 Performance – Nickel Alloy Core:**



**Note:** Room temperature, Ratio: 3000:1

**Outline Drawing:**



**NOTES:**

Secondary Output Options

- mV @ Rated Current: 0.100V, 0.200V, 0.250V, 0.333V, 0.500V  
0.666V, 1.000V, 1.500V, 2.000V, 2.500V, 3.530V
- mA Winding Ratios: 1:1000, 1:2000, 1:2500, 1:300, 1:4000, 1:5000

**Custom split-core current transformer designs** are available to meet the specific application requirements. For a no obligation technical evaluation, please provide the specific performance requirements to [engineering@tichenassociates.com](mailto:engineering@tichenassociates.com) or the address below.