

## Miniature Split Core Current Transformer

The **CTSA016** Series of low cost miniature 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 wire be taken offline and disconnected for CT installation. This method permits a safer, easier and portable current measurement.

The relatively small physical size accommodates applications where the installation of the CT will be in physically small spaces.

Miniature split-core current transformers models:

- CTSA010 Series – 10.2mm (0.40”) opening
- CTSA016 Series – 16.2mm (0.64”) opening
- CTSA024 Series – 24.2mm (0.95”) opening
- CTSA035 Series – 35.2mm (1.39”) opening.



### Features:

#### Rated Primary:

- Ferrite core material: 50A to 150A
- Silicon steel CRGO core material: 50A to 200A

**Secondary Output:** 0.333V at rated current

Optional: mA secondary output, standard winding ratios -

- 1:1000, 1:2000
- 1:2500, 1:3000

**TVS** device configured across the secondary to dissipate stored energy when current transformer is opened while “live”.

### Specifications:

- Frequency: 50 to 400Hz.
- Maximum operating voltage: 720VAC.
- Dielectric withstand voltage: 2,500V for 1 minute.

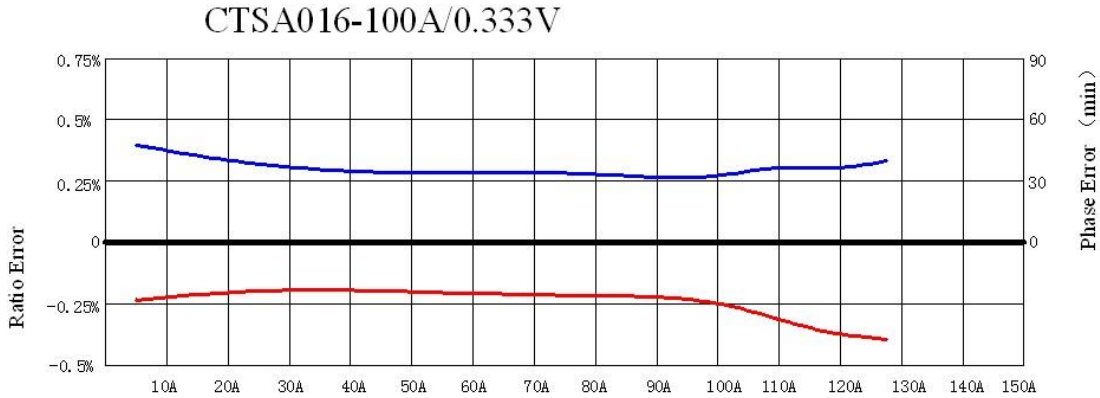
- Dielectric resistance: 100 MOhms @ 500 VDC
- Operating Temperature: -15°C to +60°C.
- Construction:
  - Epoxy encapsulated housing.
  - Case material – Nylon, UL flame retardant rating 94 V-0.
- Leads: 0.61m (2Ft), AWM 1015, Twisted Pair, 0.34mm<sup>2</sup> (22AWG), 600V.
- ETL Certified (Control Number 4002689)
- RoHS compliant.



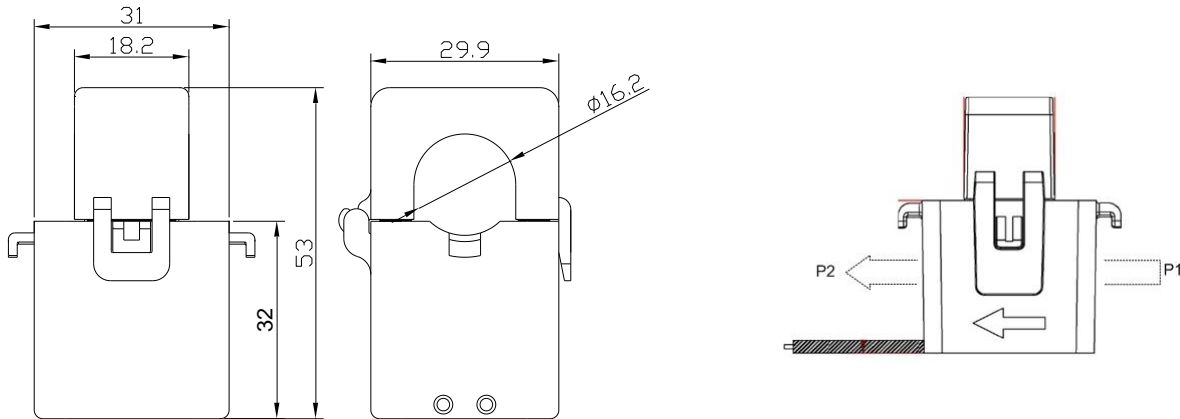
### Performance:

- Accuracy Class: 0.5, 1.0 (IEC 60044-1)
- Accuracy: < 1.0%
- Phase Shift: < 60 minutes with 5 ohm burden.
- Linearity: ±1% from 5% to 120% of rated primary current.

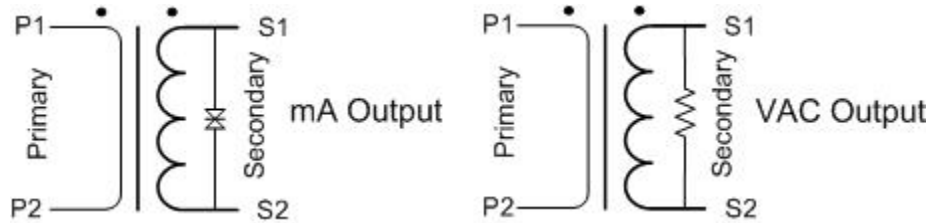
**Typical Performance – CTSA016-100A (Ferrite Core):**



**Outline Drawing:**



**Polarity:**



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.