

Miniature Split Core Current Transformer

The **CTSA024** 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: 50A to 200A
- Silicon steel: 50A to 400A

Secondary Output: 0.333V @ rated current
(Optional: 0.100V to 5.000V @ rated current).

Optional: mA secondary output, standard winding ratios:

- 1:1000, 1:2000, 1:2500
- 1:3000, 1:4000, 1:5000, 1:6000

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

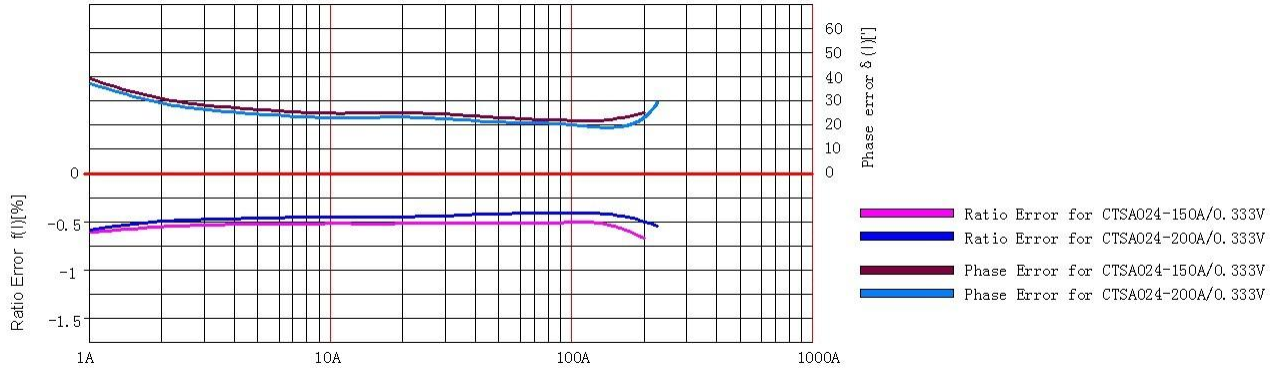
- Operating Temperature: -15°C to +60°C.
- Construction:
 - Core material: ferrite or silicon steel.
 - Epoxy encapsulated housing.
 - Case material – UL flame retardant rating 94 V-0.
- Leads: 0.61m (2Ft), AWM 1015, Twisted Pair, 0.34mm² (22AWG), 600V.
- ETL Certified (Control Number 4002689)
- RoHS compliant.



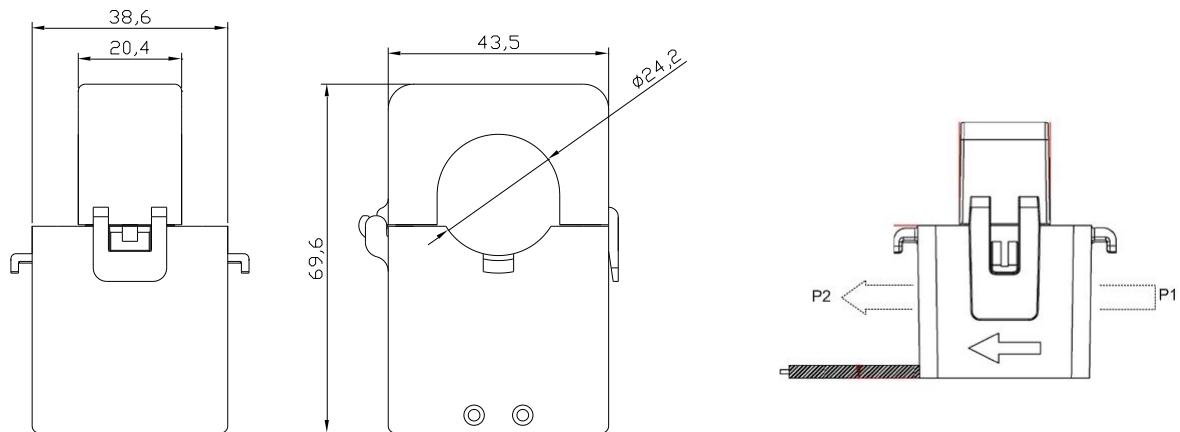
Performance:

- Accuracy Class: 0.5, 1.0 (IEC 60044-1)
- Accuracy: < 1.0%
- Phase Shift: < 60 minutes with 5 ohms burden.
- Linearity: ±1% from 5% to 130% of rated primary current.

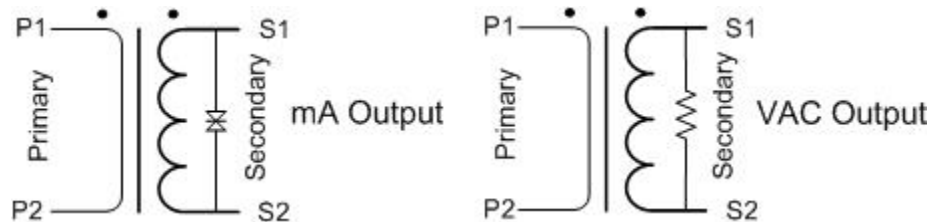
Typical Performance – CTSA024-150A & 200A (Ferrite Core):



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 or the address below.