

Miniature Split Core Current Transformer

The **CTSA035** 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: 200A to 500A

Secondary Output: 0.333V @ 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.

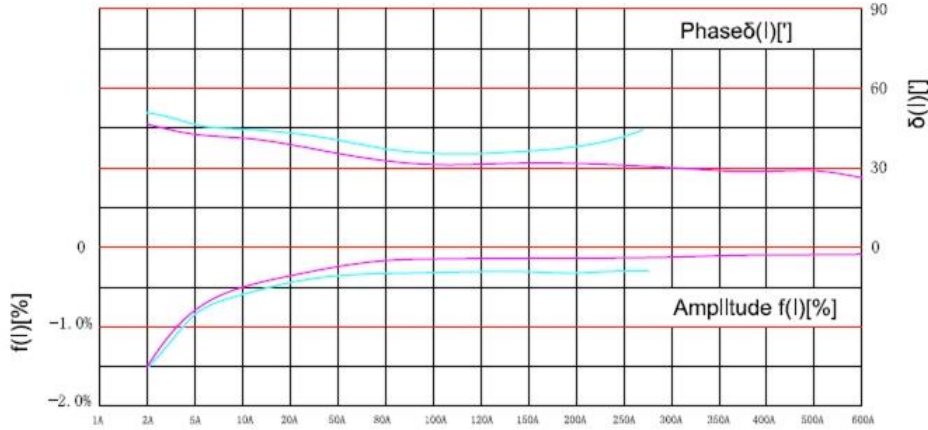
- Construction:
 - Core material: silicon steel CRGO.
 - Epoxy encapsulated housing.
 - Case material – PA66, UL flame retardant rating 94 V-0.
- Leads: 0.61m (2Ft), AWM 1015, Twisted Pair, 0.34mm² (22AWG), 600V, White/Black.
- Lead termination: Stripped & tinned.
- RoHS compliant.



Performance:

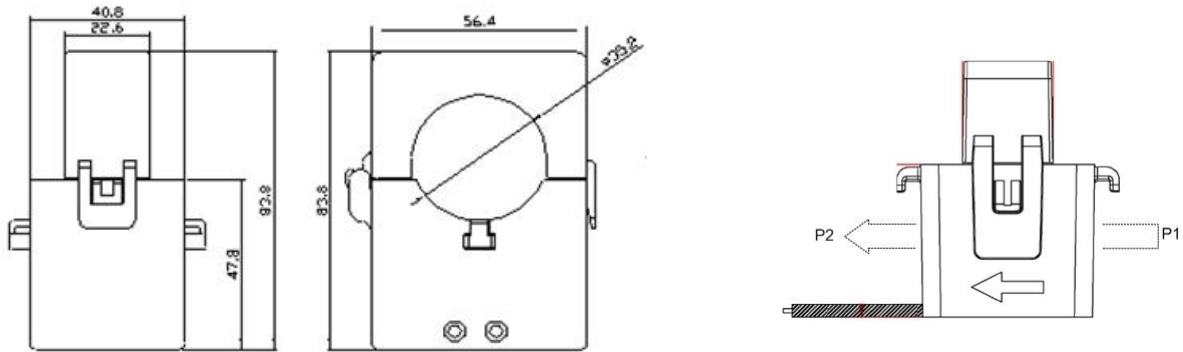
- Accuracy Class: 0.5, 1.0 (IEC 60044-1)
- Accuracy: $\pm 1.0\%$
- Phase Shift: ≤ 60 minutes with 5 ohms burden.
- Linearity: $\pm 1\%$ from 5% to 120% of rated primary current.

Typical Performance – CTSA035-500A/ 0.333V:

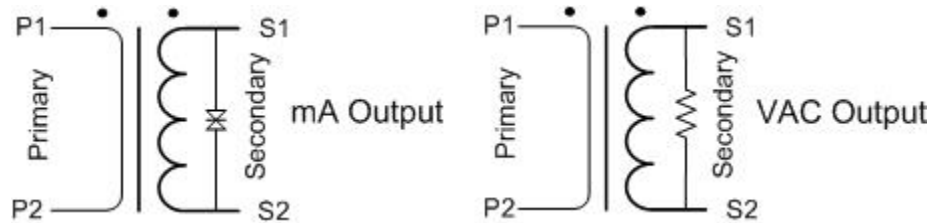


Magenta line provides phase shift error and amplitude error over the operating range.

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.

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