

Miniature Split Core Current Transformer

The CTSR024 Series of **UL 2808 compliant**, 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:

CTSR010 Series – 11.0mm (0.40") opening
CTSR024 Series – 24.0mm (0.94") opening
CTSR036 Series – 36.0mm (1.42") opening

Features:

Rated Primary Current:

Silicon Steel CRGO core: **50A to 300A**

Secondary Output: 0.333V at 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

Maximum: 300mA

TVS device configured across the secondary to dissipate stored energy should the current transformer be opened while "live."

Specifications:

- Frequency: 50 to 400Hz.
- Maximum operating voltage: 600VAC.
- Dielectric withstand voltage: 4,000V for 10 seconds.
- Dielectric resistance: 100 MOhms @ 500 VDC

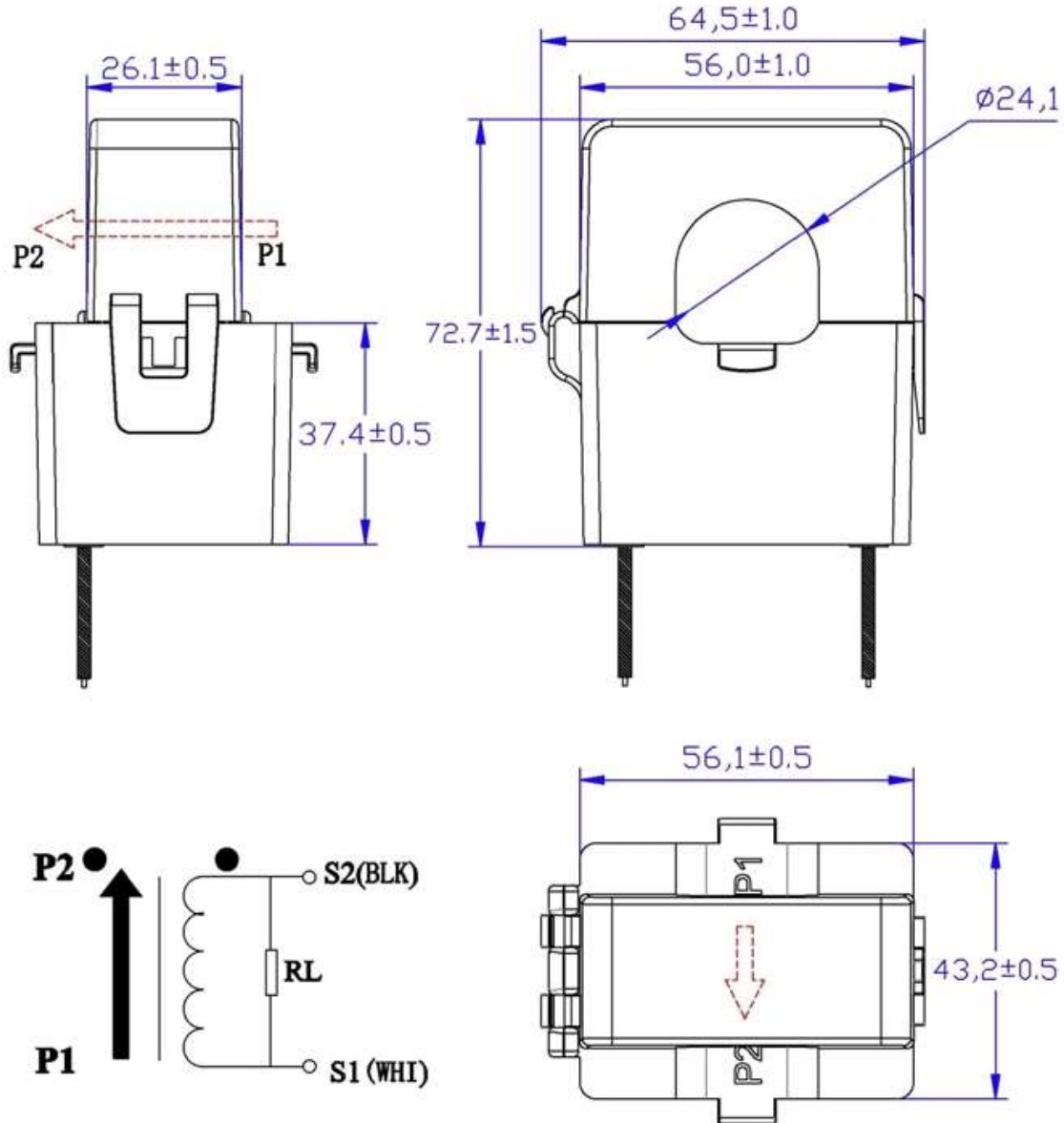
- Operating Temperature: -40°C to +50°C.
- Construction:
 - Silicon Steel CRGO core material.
 - Case material – UL flame retardant rating 94 V-0.
- Leads: 0.61m (2Ft), AWM 1015, Twisted Pair, 20AWG, 600V.
- Lead termination: Stripped and tinned.
- UL Listed Certification UL 2808 (E468983)
- RoHS compliant.



Performance:

- Accuracy Class: 0.5, 1.0 (IEC 61869-2)
- Accuracy: < 1%
- Phase Shift: $\pm 1.0^\circ$ @ 100% Rated Primary current.
- Linearity: $\pm 0.5\%$ from 5% to 120% of rated primary current.

Outline Drawing:



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.