

Split Core Current Transformer

Model 401013 (5 A) and 401017 (1 A)



The split core transformer measures current in a 5 A or 1 A secondary CT circuit and works in conjunction with the TESLA disturbance fault recorder to monitor secondary currents.

It is designed to clamp around the secondary circuit wires from the primary CT and is intended to connect an in-line CT for situations which do not allow an “open-circuit”.

The “on load” installation does not require the main CT to be taken out of service during testing. The secondary current “circuit” wire can be placed in the split core and the removable leg screwed back on the split core CT. The spring-loaded leg will mate with the core of the main housing (split core).

The outputs from the CT are scaled and impedance matched to connect directly to the TESLA’s analog input connectors.

Notes:

1. Due to impedance matching requirements, the CT cannot be connected to more than one TESLA input channel.
2. Locate modules up to 1200 meters (4000 ft) from the recorder. Use shielded wire (e.g. Belden 9728/30) for connection to the recorder’s inputs. The ground cable should be attached only at the recorder end.

Specs	Model 401013 (5 A)	Model 401017 (1 A)
Nominal Current	In = 5 Arms	In = 1 Arms
Full Scale/Continuous	3x In = 15 Arms	3x In = 3 Arms
Maximum Over-scale	20x = 100 Arms for 1 second (no distortion)	20x = 20 Arms for 1 second (no distortion)
Thermal Rating	80x = 400 Arms for 1 second	400x = 400 Arms for 1 second
Burden	<0.25 VA @ 5 Arms	<0.25 VA @ 5 Arms
Ratio (1 kΩ load)	15.8 mV/A	79 mV/A
Ratio/Linearity Accuracy	0.5% full scale, +/-0.5% range	
Phase Displacement or Shift	0.25° or less @ 60Hz	
Phase Connection Relationship	White wire positive with arrow towards source of current	