

TH0540 Precision Current Transducer



1. Summary

TH0540 is a series of I/I type precision AC/DC current transducer. These transducers are special accessories for TD1300, TD1310, TH1300, TH0560, TK6500 and other instruments to realize AC/DC current measurement.

2. Features

- Supports two current access modes, through core and direct connected type respectively.
Direct connected type nominal input current: 1A... 1kA.
Through core type nominal input current: 200 A... 2 kA.
- Both support forward and reverse current input.
- The uncertainty of DC optimal transformation ratio reaches 5 ppm.
- The uncertainty of AC optimal transformation ratio reaches 200 ppm@53 Hz.

3. Applications

- Precision AC/DC large current measurement
- Calibrate AC/DC high current source/meter
- Calibrate precision current sensor and DC shunt
- Set up AC/DC power/electric energy measurement system with high-precision voltage transducer

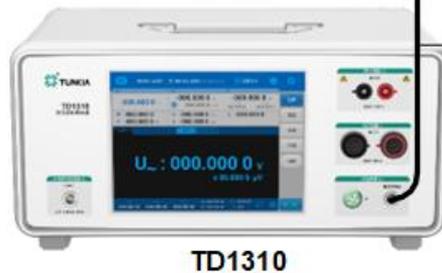
☆ Through core type current measurement

Measured large current signal



☆ Direct connected type current measurement

Measured large current signal



4. Specifications

4.1 TH0540-D type (direct connected type)

Model	Primary Test Current (A)	Secondary Output Current (A)	Accuracy at Different Frequencies (k=2, ppm)			
			DC	45≤F≤200	200<F≤1k	1k<F≤5k
TH0540-D-1A	1	0.1 / 0.2 / 0.5 / 1	5	200	500	1000
TH0540-D-2A	2	0.1 / 0.2 / 0.5 / 1	5	200	500	1000
TH0540-D-5A	5	0.1 / 0.2 / 0.5 / 1	5	200	500	1000
TH0540-D-10A	10	0.1 / 0.2 / 0.5 / 1	5	200	500	1000
TH0540-D-20A	20	0.1 / 0.2 / 0.5 / 1	5	200	500	1000
TH0540-D-50A	50	0.1 / 0.2 / 0.5 / 1	5	200	500	1000
TH0540-D-100A	100	0.1 / 0.2 / 0.5 / 1	5	200	500	1000
TH0540-D-200A	200	0.1 / 0.2 / 0.5 / 1	5	200	500	1000
TH0540-D-500A	500	0.2 / 0.5 / 1	5	200	500	1000
TH0540-D-1kA	1 k	0.2 / 0.5 / 1	8	200	500	1000

- Current measurement range: (0~120%) * FS, supporting forward and reverse current measurement

4.2 TH0540-T type (through core type)

Model	Primary test Current (A)	Secondary Output Current (A)	Accuracy at Different Frequencies (k=2, ppm)			
			DC	45≤F≤200	200<F≤1k	1k<F≤5k
TH0540-T-200A	200	0.1 / 0.2 / 0.5 / 1	10	200	500	1000
TH0540-T-500A	500	0.1 / 0.2 / 0.5 / 1	5	200	500	1000
TH0540-T-1kA	1 k	0.2 / 0.5 / 1	5	200	500	1000
TH0540-T-2kA	2 k	0.5 / 1	10	200	500	1000

- Current measurement range: (0~120%) * FS, supporting forward and reverse current measurement

5. General Specifications

Power Supply	DC \pm 15V, Lemo interface
Insulation performance	50 Hz, 1 min, 2 kV
Temperature performance	Working temperature: $-20^{\circ}\text{C}\sim 55^{\circ}\text{C}$; Storage temperature: $-20^{\circ}\text{C}\sim 70^{\circ}\text{C}$
Humidity Performance	Working humidity: 50% R·H, non-condensing ; Storage humidity: <95%R·H, non-condensing。

Model	Length(mm)	depth(mm)	Height(mm)	Diameter of Ppen Window(mm)	Weight (kg)
TH0540-D-1A	130	250	215	—	6
TH0540-D-2A	130	250	215	—	6
TH0540-D-5A	130	250	215	—	6
TH0540-D-10A	130	250	215	—	6
TH0540-D-20A	130	250	215	—	6
TH0540-D-50A	130	250	215	—	6
TH0540D-100A	130	250	215	—	6
TH0540-D-200A	130	250	215	—	6
TH0540-D-500A	130	250	215	—	6
TH0540-D-1kA	130	250	215	—	6
TH0540-T-200A	147	177	74	40	2
TH0540-T-500A	147	177	74	40	2
TH0540-T-1kA	172	222	76	54	3
TH0540-T-2kA	172	222	76	54	3

Remarks: The product may be upgraded and revised, and the specific size and weight shall be subject to the latest product.

6. Ordering Information

