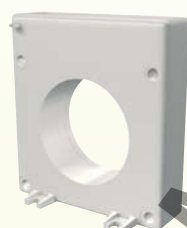


## Toroidal transformers

- To be used with ELR-B, ELR-3C and D30 relays.
- The transformer and relay assembly sensitivity is fixed by the relay.

### CT-1



Type	Inner Ø	Code no.	Weight (kg)
CT-1/35	35 mm	41025	0,2
CT-1/60	60 mm	41030	0,3
CT-1/80	80 mm	41035	0,5
CT-1/110	110 mm	41040	0,5
CT-1/160	160 mm	41045	1,4
CT-1/210	210 mm	41050	1,5

**Working principles:** The toroidal transformer is installed between the source and the load. The system works on the current balance principle. In a correct installation the vector sum of the currents is zero and the relay will not trip.

In case of an insulation fault on the circuit a leakage current flows to earth. Now the vector sum of the current passing through the transformer is not zero, this imbalance is detected by the transformer, which induces a current in the secondary winding which is connected to the relay.

If the fault level is higher than the selected sensitivity, and when the trip time delay has elapsed, the relay trips and actuates on the shunt trip of a circuit breaker or the coil of a contactor interrupting the supply to the load.

The dimensioning of the toroidal transformer depends on the diameter of all active wires (not earth conductors) put through the transformers.