

## How Split-Core Type Transformers Work

Current transformers are used to acquire high alternating currents without contact and without interrupting the circuit. In principle, they consist of 2 separate transformator windings (B1 = primary winding with N1 windings, B2 = secondary winding with N2 windings) on one common iron core (closed magnetic circuit).

If an alternating current I1 flows through the winding B1, a current I2 is induced in the winding B2, which depends on the winding ratio N1/N2. In comparison with stationary-installed panel transformers, split-core type transformers must be able to embrace a conductor within a magnetic circuit that is split open.

In practice, the primary winding B1 consists of only one winding that carries the current to be measured. The transformation ratio of a current transformer is: I1 x N1 = I2 x N2

