

General Purpose Current Transformers



Falco maintains close communication with the design team of the customers to develop and manufacture custom current sensors for different applications. When the accuracy of the current sensor is not critical and the cost should be very low, we design current transformers with silicon steel or ferrite. As an option we can assemble a burden resistor to meet a specific requirement of mV/Amp. When very high sensitivity is needed, like in the Ground Fault Interrupters (GFI), we develop current transformers with nanocrystal ribbon, which has very high permeability.

When the transformer needs to be installed without interrupting the electricity wiring, we can offer Split Core Current Transformers. They can be made with cores of different materials such as ferrite, nanocrystal, silicon steel. They have an intrinsic gap that reduces the accuracy. However they can be made with accuracies as good as 0.8%.

When high current sensing is needed in combination with DC tolerance, a Rogowski coil is a good choice. In principle the Rogowski coil has an air core therefore it does not exhibit saturation problems. It is very susceptible to the external electromagnetic noise. As a consequence they normally need a magnetic shield that can be made of Nickel lamination, ferrite and other materials. The disadvantage of the Rogowski coil is the poor sensitivity at low current. It also requires an integrator at the output since its signal is proportional to di/dt

APPLICATION

The current transformers can be used in Power Distribution Units, Circuit Breakers, UPS. The ground fault current sensors are used in safety outlets. Split Core Current transformers are used in industrial and commercial electrical installations to sense the power line current. The Rogowski coils can be used in electricity meters.

Features

Current Transformers

- Accuracy from 3% to 0.8%
- Embedded burden resistor
- From 1 to 1500 Amps
- Ground fault current sensors
- Sensing from 0.4 mAmp

Split Core Current Transformer

- Current range from 40 to 250 Amp
- Accuracy from 2% to 0.8%

Rogowski coils

UL approved

