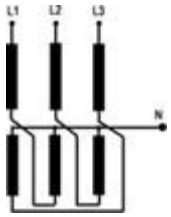
CE

Specials Reactors

Series RS

How to create a neutral



In many areas, worldwide, electric networks do not have a Neutral, where there are single phase and unbalanced loads there is a need for a stable Neutral.
The possibilities are various: if it is necessary to separate the network from loads, a transformer with a secondary must be installed, to be able to create a Neutral; if the separation is not needed, a transformer with a Neutral creator can be installed.
It is improperly called an autotransformer, when is actually a reactor connected in Zig Zag (see Figure).

Note:

An interesting point of this Reactor is the currents division and even with heavily unbalanced loads can be made into a single-phase load. This permits the Neutral to remain stable.

Short circuit Reactors

Limiting Reactor,
800A nominal 10 kA in c.c.

These type of reactors are used to limit the short circuit currents in both MT and BT installments.
Both the manual and automatic switches have been built for precise nominal values, but in open can also face higher limits than the majority offered on the market.
For example, if magneto-thermal switch undergoes heavy use, we know that it has a maximum opening of current of 6 kA.
What does it mean?

In short circuiting, the switch line must have an impedance that can limit a maximum current of 6 kA or less.
If this doesn't happen, specially in heavy power installments, an inductive element must be added, which prohibits the total impedance to exceed the maximum level accepted by the switch.
Contrarily, the contacts could be destroyed and melt.

Compensated current Reactor

A compensated current reactor is when the current circulates in the spool and during balancing compensates and creates two flows, circulating in the same nucleus, equal and contrary.
For a classical rectification of double star, parallel, etc. connections....