

## Transformer Premagnetization System RPRM

The connection of a power transformer to the network can arise some problems such as high inrush currents, sometimes up to 20 times of the nominal current. This inrush period can last for more than 5 or 10 seconds. That can cause many problems like: voltage drop on the network and physical tension on the cables and the windings of the transformer itself.

The Rutech premag system is a system that prepares the power transformer for the connection to the network.

The premag is connected to the windings of the secondary of the power transformer and premagnetize the core prior the connection of the primary to the network, after the premagnitation of the core the power transformer is ready to be connected to the network. The result is no inrush current.

After that the transformer can be connected to the network without any inrush current and without any voltage drop to the network and any physical tension to the cables and the transformer itself.

The result of the no inrush current, is very important especially for "weak networks" because of no voltage drop.

For industrial applications also with several power transformers after a blackout, the premag system reduces a lot the time for the recovery because of the no inrush current.

Rutech can provide premag systems for all kind of power transformers of all manufacturers.

Every premag system is custom made and it is based on the specific characteristics of each power transformer.

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Every premag system is ready for use, with terminals for the connections of the power cables and for control signals

The premag system can also be equipped with remote control unit for manually use.

### Benefits and features

- Inrush current  $< 1n$
- No voltage drop on weak networks
- Faster recovery time after a blackout
- No physical stress on the construction of the transformer
- Increasing the life time of the transformer
- Solution for all kinds of power transformer, low or medium voltage
- PLC controlled system for the complete control of the premagnetization process

### Applications

- Pre magnetization Medium Voltage Transformers
- Industry Substations
- Grid connected P/V Plants
- Hospitals Substations
- Container Terminals Query Cranes
- Harbor Cranes
- Vessels Substations