



Technical Specification of Real Time Power Factor Correction System



RTPFC is designed to compensate the reactive power on real time basis for extremely rapid acquisition of the power factor within the range of 40 - 60 msec. Connection and disconnection of the capacitor to and from the network occurs at zero crossing. This smooth connection avoids transient effects like waveform distortions, generation of switching spikes etc., typically created by electromechanically switched contactor based system. The response time of this is much higher than electromechanically switched systems.

Advantages

- Transient free capacitor group switching using Electronics Switching elements.
- Reduction of voltage flickering.
- Enhances capacity of Transformer, Local generator systems such as Diesel and windmill generator.
- Avoid wave form distortions, since capacitors are connected and disconnected during Zero crossing.
- Prevents damages to sensitive electronic equipments.
- Saves energy by reduced max. Demand, PF bonus & saving in Transformer losses.
- Accurate Power Factor control, even in the presence of Harmonics.
- Dramatically increases the life expectancy of switching elements and capacitor.
- Built-in network analyzer, measuring all network parameter including harmonics.
- Modular and up gradable with increased plant load.

Features

- Response time 40-60 milli seconds Max.
- Basic System includes reactors to limit the inrush current.
- Detuned systems include iron core reactors that detune the network to prevent resonance and
- MCB/MCCB/HRC fuse Protection in each step.
- Current feedback system in each step for spike and over current detection with auto-reset facility.
- Over temperature protection with auto reset.
- Supply ON, Step ON, Spike current, Over current, Thyristor short, Phase missing, Over temperature indication.

Technical Specification

- Rating from 100 – 2000 kVAR
- Standard Steps 6 / 12.5 / 25 / 50 / 75 / 100 / 125 kVAR
- Incomer : MCCB / SFU / SD / ACB
- MCB / MCCB / HRC fuse Protection in each step.
- System includes reactors to limit the inrush current. - 0.96 % / 7 % Reactors.
- Capacitor :- Dry – Gas filled / Resin - 440 V / 525 V
- Three / Single Phase Load sensing to achieve target Power Factor.
- Current feedback system in each step for spike and over current detection with auto-reset facility.
- Over temperature protection.
- Supply ON, Step ON, Spike current, Over current, Thyristor short, Phase missing, Over temperature indication.

Non standard KVAR are also available on request.

NEELKANTH reserves the right to amend design and specification without notice as continuous efforts are Made to improve product performance

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Servo Controlled Voltage Stabilizer / Powercon / Ultra Isolation Transformer / 'K' Rated Transformer / Powerlux / Optilux / Furnace Transformer
Real Time Power Factor Correction System / Furnace Transformer / Linear Stabiliser / Ground Fault Monitoring System / Power Analysis