

M. V. Auto Switched P.F. Correction System :

Automatic power factor correction systems are optimal solution for varying load patterns where there is demand for varying reactive power to meet desired Power Factor.

- Targeted programmed power factor can be achieved by installing MVAPFC.
- Leading power factor conditions by fixed compensation can be avoided.
- Single centralized power factor correction system which saves investments in giving compensations at various points.
- Additional reactive power is possible by adding steps in the existing system.

Individual Compensation :

In this type of system capacitors are connected at load end for individual load reactive power compensation is fulfilled as per requirement. (Fig. 1)

Central Compensation :

To compensate overall reactive power of the system, this type of compensation is used. It is normally connected at transformer secondary. As per requirement we can adopt protection scheme for the system. (Fig. 2)

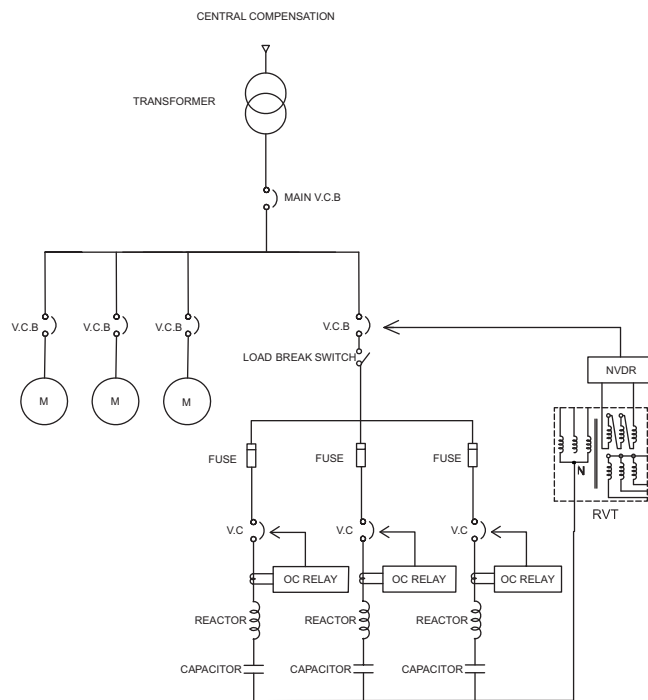


Fig. 1

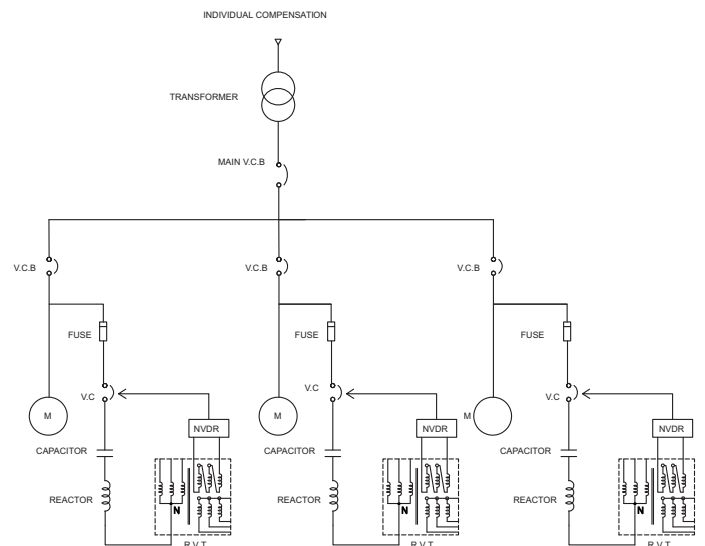


Fig. 2

- Available in 3.3KV, 6.6KV, 11 KV system
- Compact design & ease for handling.
- Auto as well as manual operated.
- Local as well as remote operation for Metal clad enclosed system.
- Power factor correction with harmonic suppression filter / inrush current limiting reactor.

- Relay displays all electrical parameters with in-built protection.
- Defective capacitor step can easy be isolated from the system.
- Fully enclosed design for metal clad enclosure suitable for IP55 class.
- Presence of wire mesh in enclosed APFC avoids access of live parts. In addition, Door limit switch facility for safety.
- LED Indications for each step with in comer details.

Metal Clad Enclosed System :

Metal clad enclosed system is available for Indoor and Outdoor application. It is available in compact, compartmentalized design, fully enclosed protecting live parts.

Indoor :

The incomer section controls the PF systems by VCB/off load Isolator, incoming power cable, VT/CT/RVT (As per customer requirement) APFC Relay and protection relay are provided for controlling the PFC system.

The capacitor feeder section consists of power capacitors, series reactor, HRC fuse, voltage controllers, RVT/CT/T's (As per the customer requirement).

Outdoor :

The outdoor section consists of isolator, VCB, CT, VT/RVTs, Lightning Arrester; Power cable.

The capacitor feeder section consists of capacitor, reactor with fuses and RVT.

The outdoor capacitor bank is controlled by indoor/outdoor, control relay panel APFC Relay & Protection Relay.

Structure Mounted Outdoor System :

Structure mounted system suitable for Outdoor application.

High voltage components consist of vacuum circuit breaker with oil cooled CTs, Off load type isolator facilitates to connect / disconnect the capacitor bank and customer power system, incoming power cable termination with supporting structure, surge suppressor, protection voltage transformer.

Each capacitor step consist outdoor vacuum capacitor switch (suitable for outdoor application & IP55 protection class), busbar with insulator, series reactor, capacitor units with expulsion fuse. (protection voltage transformer, current transformer options are also available for step protection)

