

Automatic and fix capacitor banks are used for centralized and individual compensation of power factor in low voltage installation.

Automatic and Fix Capacitor Banks are supplied completely adjustment free ready for use: it is only necessary to connect it to the mains with cables of adequate cross section, and to supply the operation signal from a suitable current transformer (in automatic type).



Automatic capacitor banks are composed of the following:

Construction & Structure:

High Rupturing Capacity (HRC) fuses connected to a bus bar system include the terminals for the connection of the capacitor banks to the mains

Contactors specially adapted to operate with capacitors, equipped with pre-insertion block

Inrush current limiting inductances which is appliance on contactor

Fast discharge resistor (optional)

Low loss power capacitors

CBR3006, CBR3012 or CBR2012 reactive power controllers

Terminals for neutral and protection conductors

Metal cabinet, containing the whole switchgear

Features

The equipment, wired and tested at works, fully supplied with all control and safety devices

Easy transportation and installation due to their light weight

Easy selection and setting of the most appropriate $\cos\phi$ to avoid penalty charges on tariffs

Long life and high reliability, derived from the use of self-healing and low loss capacitors

Wide range of power (from 5 to 900 kvar, 400V) with standard equipments

Available wide range of optional accessories

Characteristics	
Rated power	5 up to 900 kvar
Rated voltage	400, 440, 460, 525, 690 volt
Rated frequency	50/60 Hz
Control voltage	220V (110V on request)
Installation	Indoor/outdoor (optional)
Fast discharge resistor	included (optional)
Controller	CBR3006/CBR3012
Working program	Unlimited
Indication of steps connection	Digital display on the controller
Manual & Automatic selector switch	Included (on regulator or by H-O-A selector)
External current transformer	/1A or /5A (not supplied)
Main switch	On request (Fuse switch or MCCB)
Maximum rating	
Max permissible over current	1.3*In
Max permissible over voltage	Ur+10% (up to 8h daily)
	Ur+15% (up to 30m daily)
	Ur+20% (up to 5m daily)
	Ur+30% (up to 1m daily)
Transient inrush current (max) Is	100*In
Losses:	
Dielectric	< 0.2 W/kvar
Total	< 0.5 W/kvar
Climatic Category	
Temperature range	-25 up to +55 °C
Permissible maximum humidity	0.95
Maximum altitude	2 000m above sea level
Design data	
Mounting position	Flour mounting/Wall mounting
Constriction	Metal cabinet (1.5 mm thickness)
Cables entry	From bottom
Arrangement	Front access
Gland plate	Included
Lifting angle	Included
Anti condensation heater	Optional (with thermostat)
Enclosure	IP3X
Color	RAL 7032

On request, automatic capacitors banks can be produced to customers special requirements among the different possibilities are the following:

- Other voltage and frequencies
- Capacitor banks with different degrees of protection
- Capacitor banks for outdoor installation
- Fixed step (for transformer compensation)
- Higher powers than the above stated

Installation

Automatic capacitor banks are supplied with all the necessary technical information for their installation and connection and maintenance.

Service

The TECHNICAL ASSISTANCE SERVICE is at your disposal to cooperate at different stage, from project to commissioning of automatic capacitor banks.

Important note

It is necessary to take special care where there is harmonic distortion in the network.

