

AUTOMATIC CONTROLLED CAPACITOR BANKS – APFC SERIES

AB Power Automatic Power Factor Correction System is unique with its Custom Based Design, based on the Load Study Conducted on site with High Speed Power Quality Analyser with recording interval selected as appropriate to the study, depending on the Loading pattern. The System is basically designed as a series RLC Circuit to suppress the transient inrush current, while injecting reactive current. Its Components Selection is critical due to the inherent operating parameters of the Capacitors which draws high inrush current during switching and while opening out. The Electrical charges remains in the capacitor thereby building up the Restriking Voltage. This characteristics of the Capacitors needs careful study and selection of the correct components to ensure long life for the total system.



The choice of capacitor duty contactors with damping resistors provide protection from inrush current during switching. The coil wound inductors provide additional protection from short time high current peaks. The sequential cyclic switching of capacitors with pre-set time delay for safe discharge of capacitors, increases the life of capacitors and avoids problems rooting from voltage peaks while energizing the charged capacitors at sinusoidal peak instants of supply voltage. The selection of capacitor stages with appropriate stage ratios matching the load profile provides power factor correction with high-resolution.

Advantages

- Wide Product Range** : Suit to All Requirements for small to Large Industries
- 4 Quadrant Operational Principle** : Suitable for Import & Export Power
- Compartmental Design** : Safety from Flash over & Fire Proof
- Light Weight** : Easy Transportation & Installation
- Use of Heavy Duty Capacitors** ; Long Life & High Reliability filtering result

Technical Data

Power Supply Voltage	400 - 1000 V
Frequency	50 Hz / 60 Hz
Function	Power Factor improvement and harmonic control for variable loads to avoid leading Power Factor

Applications

Automatic Power Factor Correction for variable industrial load like AC/ DC drive, furnace, cement Industry, paper mills, steel industry, distribution transformer carrying commercial loads, oil and gas industry, Water industry, sugar industry etc.

The Ideal Customer

- All industries having harmonic generation
- Company with variable loads

ABPS SOLUTION PRIVATE LIMITED

Gat No. 258/1, Plot No. 8/2, Village Khalumbre, Chakan, Pune - 410501. Maharashtra, India.
Tel : +91-8485006294, 8379096294 | e: marketing@abpowerindia.com , ablifasa@gmail.com

Branches / Service Centres : | Chennai | Coimbatore | Delhi | Kolkata | Ludhiana | Pune | Raipur | Bahrain | Saudi Arabia | Bangladesh

Rating and Specification

Rated Voltage	230 V – 1000 V
Rated Power	25 kVAR – 2000 kVAR
Frequency 50/60 Hz	50/60 Hz
Dielectric Loss	< 0.2 W / kvar
Total Losses < 0.5 W / kvar	< 0.5 W / kvar
Permissible Over Voltage	1.1 x Rated Voltage
Permissible Over Current	1.3 x Rated Current
Main Incomer	Air Circuit Breaker / MCCB / Switch Fuse Unit
Feeder Protection	MCCB / HRC Fuses
Switching Devices	Contactors suitable for Capacitors Switching
Working Program	1:1:1:1 / 1:2:2:2 / 1:2:4:4 / 1:2:4:8 / 1:1:2:2 /
Regulation Equipment	MCE Adv / Master Var/ Auto Var
Control Voltage	230 V
Capacitor Banks	Round type (POLB) / Box type (FM / APP)
Filter Reactors	5 to 14 % Filter Series Reactors (Optional)
Degree of Protection	IP4X
Ambient Temp. Cat.	- 25 / + 50 ° C
Mounting Arrangement	Small ratings in Wall Mounted / Higher Rating in Self-Standing Floor Mounted
Installations	Indoor
Applicable Std	IEC 60831 , IEC 60439 , EN 60831 , EN 60439 -1

Note: Other KVAR & Voltage rating available on request.