

Active Hybrid Power Factor Correction Panel

Advance Panels is one of the leader in manufacturing of most reliable “Hybrid Capacitors Panels” in India.

In last 25 years, Advance Panels has manufactured & commissioned 5000+ MVAR Plus capacitors panels in various Data centers, Steel Plants, Glass Industries, Sugar, Papers, Plywood, Cement, Power, Hospitals etc. applications. We have offer technical solutions with products of Schneider. on pan India basis.

Unique Features of AHPFC Panels

1. Modular / Bolted Constructions, Foldable Design, Both Side Expandable Type.
2. Bus Bar Design available in Copper and Aluminum
3. Reference Standards IEEE 519-1992 harmonic standard.
4. Harmonic cancellation spectrum from 2nd to 50th Order with individual harmonic selection
5. Compensation : close loop
6. Rated current for Main Bus / ACB Feeder – 2500A
7. AHPFC panel offers with 7% / without Reactors.
8. Ratings from 100kVAR to 1000kVAR.
9. Operational Voltage – 415 V, +10% - 15% VAC
10. Rated Frequency – 50 Hz +/-5%
11. Degree of Protection - IP 4X/ 41/42
12. Upto 350kVAR = MCCB 36kA, 350 to 500kVAR = MCCB 50kA, 500 to 1000kVAR = ACB 65kA.
13. Internal Segregation: Form Separation 2B/3B
14. Mechanical Impact – IK10
15. Design will be Capacitor duty contactor without Reactor design and Power contactor with reactor design.
16. Doors, Covers & Frames are very well gasket with Neoprene / PU-Foam type gaskets
17. Cubical is well ventilated with use of exhaust fan with louvers.
18. Remote Monitoring: Ethernet based / Modbus RTU etc.
19. Operator interface: Touch screen Display / Dedicated controller with operator activity log.
20. Provision of Installation of Gas Flooding System.
21. Hybrid PFC has an Active Power Filter coupled with heavy duty APP type detuned capacitor banks.
22. Hybrid PFC offers benefits of Active Power Filter technology.
23. Complete solutions in it to take care of Power Factor, Harmonics and Load Balancing & Neutral Compensation issues and Flicker.
24. Hybrid PFC can be programmed for Reactive Compensation, Harmonic Mitigation, Neutral Compensation (4P/4W) and Load Unbalancing.
25. 3-Level IGBT to meet tough target requirements from Utilities.
26. Unit design to work in high ambient temp up to 50 Deg C.

Benefits of “Active HPFC Solutions”

1. Instantaneous true PF compensation up to unity.
2. Achieves Target set PF.
3. Eliminates demand Penalty.
4. Highest output to step ratio “ ∂ ”.
5. Step less reactive compensation.
6. Reaction in micro seconds.
7. Lagging / Leading both compensation.
8. Runs on Generators as well grid.
9. Load balancing & neutral compensation (4P/4W System).
10. Low Maintenance and longer life.
11. Harmonic compensation as per IEE- 519 Standard.
12. >1.5% improvement on losses, avoids jerk loading effect.

Why our AHPFC Panel

1. Auto start, Auto detection, Auto polarity check, Auto c/k.
2. Thermal intelligence.
3. Harmonic intelligence.
4. Asset management and performance.
5. PQ Disturbance detection (Optional).
6. Compliance to IEC 61921 and Indian Standards.
7. Stringent quality control measures.
8. Capacitors are 440/480V with 3Ph simultaneous PSD.
9. Burst proof capacitors
10. Detuned Reactors-No Harmonic Amplification.
11. Minimum switching transient.
12. Flexible to move to connected world.
13. Web page monitor facility through Schneider Gateway devices (Optional)
14. Seam less integration with PME. PSE.
15. Flexible CT Connection: Load Side / Source Side.
16. Suitable to work in Harsh environment including marine application.
17. Standard Compliance / Certification: (UL508, CSA 22.2 No. 14) CE Certified.
18. PCBA Protection – conformal coating on all PCBAs pollution Degree 2.
19. DPF correction.

Complied

