

Active Harmonic Filter

The active harmonic filter provides dynamic harmonic mitigation for electrical power systems. It actively monitors the current waveform and injects compensating currents to cancel out harmonic distortion, improving power quality and reducing stress on electrical equipment.



Overview

Advanced Harmonic Mitigation

The Active Harmonic Filter provides dynamic and effective harmonic mitigation for electrical power systems by actively monitoring current waveforms and injecting compensating currents. Designed for industrial and commercial applications, it effectively cancels out harmonic distortion to prevent equipment overheating, malfunction, and energy losses. This solution features a plug-and-play design for easy integration and offers advanced control features for optimal power quality management.

Performance Metrics

Dynamic Response Time

10 ms

Response Time

Filtering Range	2nd to 60th harmonic
Filtering Efficiency	95 %

Technical Capabilities

Core Functions	Harmonic Filtering, Power Factor Correction, Imbalance Rectification, Var Compensation
Voltage Compatibility	Up to 430V (Direct); >400V with transformer
Parallel Operation	10 sets

Control & Safety

Protection Mechanisms

- Over voltage protection
- Under voltage protection
- Over current protection
- Over heat protection
- Control supply under voltage protection
- Automatic resonance elimination
- Automatic current-limit output

Interface & Logging

LCD Display • Live Voltage Monitoring • Live Current Monitoring • Harmonic Monitoring • Log Recording