Delta PQC Series **Active Power Filter**

A New Generation of Precision Filter Technology with Modular Design

Delta PQC Series is an advanced modular active power filter (APF) system. Our highly reliable power quality products are based on the global R&D and large-scale production of Delta Group. The PQC Series widely used in process Industries such as (cement, metal, chemicals and pharmaceuticals), as well as industries such as textiles, automobiles, health care, petrochemicals, datacenters, and more. The Delta PQC Series active power filter system is constructed of one or several filter modules, with an optional LCM system controller. The filter modules and LCM controller can be embedded in Delta's standard system cabinet or a third-party cabinet according to user requirements. CT terminations, C-class SPD and breakers are fixed in a standard cabinet, and the APF capacity can be configured according to user requirements. The filter capacity can be easily expanded at the user's site by plugging in filter modules.

Treatment Benefits

- Eliminates harmonic current and improves the voltage waveform
- Ensures the Total Harmonic Distortion of grid Voltage < 3%*
- Reduces additional power loss in cables, and wire wound components, and helps to improve the reliability of cables, switchgears, and more.
- Nullifies the chances of parallel resonance and enhances the life and performance of APFC

Adaptability

- Compatible with diesel generators
- Wider range of input voltage, frequency and higher response time
- Low thermal loss
- Compensates a wide range of harmonics from 2nd order to 50th order harmonics



Flexibility

- Designers have more choices with lower volume and flexible configuration
- Supports flexible configuration and capability to expand vertically as well as horizontally
- Higher operating temperature of up to 50 °C

High Reliability

- IGBT paralleling technology
- Intelligent air cooling technology
- International brand electronic device
- Advanced production technology















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Technical Specifications

Electrical Specification	Rated Voltage	AC 400V +15% to - 20%
	Electric Connection	3P3W/3P4W
	Rated Frequency	50Hz (60Hz) +/- 10%
	Steady-state Voltage THD	<15%
	Harmonic compensation range	$2^{nd} \sim 50^{th}$ order (individual selectable)
	Harmonic compensation degree	0 ~ 100% (Selectable)
	Harmonic Elimination Rate	> 98%, grid side after elimination THDu< 3%*, THDi< 5% *
	Reactive Power Compensation Capacity	Positive, Negative, Zero Sequence Reactive
	Full response time	< 20ms
	Instant response time	< 100us
	Thermal Loss	≤ 3 %
	Output Current Restriction	Auto 100% rated current limitation
	Most Parallel Num (System)	Up to 10 racks (7 modules per rack)
	MTBF	≥ 100 thousand hours
Control Performance	Switching Frequency	60kHz
	Controller	3 DSP control
	Communication	Modbus Protocol, RS232/485
	Connection	Fiber or Electric
Structural Performance	Weight	Max Capacity < 500kg (for single 525A cabinet)
	IP Grade	IP20 or IP21 or Customized
	Cooling Model	Intelligent air cooling
	Noise	< 65dB(A) @1m (for single PM)
	Installation	Cabinet Type/Embedded Type
Environmental Requirement	Ambient Temperature	-10∼50 °C
	Relative humidity (RH)	$0{\sim}95\%$, Non condensing
	Altitude	<= 1000m Rated Capacity, 1000-2000m (derating 1% per 100m)

^{*} With recommended APF capacity and lower utility harmonics. All specifications are subject to change without prior notice.







ISO 18001:2007

ISO 14001:2004

