



Active Power Filters 480V Series



APF 480
(Indoor)



XDF 480-155
(Outdoor)

Low Voltage Active Power Filters

Exclusive Distribution Partner:



Elevating Your Electrical Infrastructure

The 480V Series Active Power Filters incorporates dimensional functionality to mitigate harmonics, voltage, and reactive distortion; making it a critical component of the overall Xeco Power Quality Platform. Xeco's Power Filters cancel the harmonic current on the AC system by injecting current of the same amplitude and reverse phase as the harmonic currents of the load to offset the harmonic current.

Beyond Conventional Filtering

Xeco's Active Power Filter advanced performance is realized through a multitude of attributes:

- Latest Generation 3-Level NPV Topology
- Fast Fourier Transform (FFT) logic compensate 51 level harmonic order spectrum
- Automated real-time algorithmic intelligence adjusts to load variances
- Programmable dynamic compensation modes
- Integrated Static Var Generator (SVG)
- HMI Integrated Graphical User Interface

Your Power System, Optimized.

Efficiency



Reduced Reactive Power

Improve power factor to lower demand charges and free up system capacity.

Lower Energy Losses

Minimize harmonic distortion and heat buildup for more efficient power flow.

Optimized Load Utilization

Unlock full capacity of transformers, cables, and switchgear by eliminating current distortion.



Stability

Consistent Voltage Quality

Smooth out voltage fluctuations to protect sensitive loads.

Harmonic Suppression

Eliminate waveform distortion at the source for reliable equipment

Dynamic Load Balancing

Adapt in real-time to shifting loads and maintain system equilibrium.

Longevity



Reduced Thermal Stress

Lower heat on conductors and equipment to prevent premature wear.

Protection from Electrical Noise

Shield electronics and controls from damaging interference.

Fewer Unplanned Outages

Cut downtime caused by power-quality-related failures.

480V Series Models

50A-3P3W/3P4W-Indoor 5

50 Amps, 3-phase 3-wire / 3-phase 4-wire

50A-3P3W/3P4W-IP55 6

50 Amps, 3-phase 3-wire / 3-phase 4-wire

100A-3P3W/3P4W-Indoor 7

100 Amps, 3-phase 3-wire / 3-phase 4-wire

100A-3P3W/3P4W-IP55 8

100 Amps, 3-phase 3-wire / 3-phase 4-wire



50A-3P3W/3P4W-Indoor

50 Amps, 3-phase 3-wire / 3-phase 4-wire

UL 508:2024
CSA C22.2 No. 14-18
EN IEC 61000-6-2:2019
EN IEC 61000-6-4:2019

System Parameters	
System Parameters	480V
Voltage Range	Phase Voltage: 215~304Vac, Line Voltage: 372~526Vac
Nominal Frequency	50/60Hz (Range: 45Hz ~ 62.5Hz)
Parallel Quantities	Unlimited
Efficiency	≥ 97%
Wiring Configuration	3-Phase, 3-Wire / 3-Phase 4-Wire
Current Transformer	0 ~ 5,000/5
Topology	Three Level
Environment Requirements	
Altitude	≤ 1,500m, 1,500 ~ 4,000m (according to GB/T3859.2, increase every 100m derating capacity 1%)
Operation Temperature	-10°C ~ +40°C
Relative Humidity	5% to 95%, non-condensing
Protection Class	Standard: IP20 (other IP classes can be customized)
Capacity Parameters	
Capacity	50A
Harmonic Compensation Ability	>97%
Harmonic Compensation Range	2nd - 51st Harmonic Order
IGBT Frequency	20Khz
Reaction Time	<50μs
Full Response Time	<10ms
Cooling	895CFM
Noise Level	<60dB
Resonance Protection	Yes
Neutral Compensation Capacity	3 Times Rating
Power Loss	<3% Rated Power
Mechanical Characteristics	
Color	Black
Installation	Rack Mounted
Dimensions (L x W x H) mm	193 x 584 x 504
Net Weight (KG)	32
Gross Weight (KG)	42
Communications	
Communication Port	RS485, Ethernet Port, 4G, WiFi (7th Display Option)
Communication Protocol	Modbus, TCP/IP (7th Display Option)
Monitoring	Individual Monitoring/Central Monitoring
Alarm	16 Alarm Record
Active Power Filter Cabinet Models	
Rated Compensation Current	Customized
Cabinet Dimensions	Customized
Protection Class	Customized



50A-3P3W/3P4W-Weatherproof

50 Amps, 3-phase 3-wire / 3-phase 4-wire

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EN IEC 61000-6-4:2019

System Parameters	
System Parameters	480V
Voltage Range	Phase Voltage: 215~304Vac, Line Voltage: 372~526Vac
Nominal Frequency	50/60Hz (Range: 45Hz ~ 62.5Hz)
Parallel Quantities	Unlimited
Efficiency	≥ 97%
Wiring Configuration	3-Phase, 3-Wire / 3-Phase 4-Wire
Current Transformer	0 ~ 5,000/5
Topology	Three Level
Environment Requirements	
Altitude	≤ 1,500m, 1,500 ~ 4,000m (according to GB/T3859.2, increase every 100m derating capacity 1%)
Operation Temperature	-10°C ~ +40°C
Relative Humidity	5% to 95%, non-condensing
Protection Class	Standard: IP65
Capacity Parameters	
Capacity	50A
Harmonic Compensation Ability	>97%
Harmonic Compensation Range	2nd - 51st Harmonic Order
IGBT Frequency	20Khz
Reaction Time	<50μs
Full Response Time	<10ms
Cooling	895CFM
Noise Level	<60dB
Resonance Protection	Yes
Neutral Compensation Capacity	3 Times Rating
Power Loss	<3% Rated Power
Mechanical Characteristics	
Color	Gray
Installation	Floor Mounted or Wall Mounted
Dimensions (L x W x H) mm	2nd - 51st Harmonic Order
Net Weight (KG)	78
Gross Weight (KG)	95
Communications	
Communication Port	RS485, Ethernet Port, 4G, WiFi (7th Display Option)
Communication Protocol	Modbus, TCP/IP (7th Display Option)
Monitoring	Individual Monitoring/Central Monitoring
Alarm	16 Alarm Record
Active Power Filter Cabinet Models	
Rated Compensation Current	Customized
Cabinet Dimensions	Customized
Protection Class	Customized



100A-3P3W/3P4W-Indoor

100 Amps, 3-phase 3-wire / 3-phase 4-wire

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Nominal Frequency	50/60Hz (Range: 45Hz ~ 62.5Hz)
Parallel Quantities	Unlimited
Efficiency	≥ 97%
Wiring Configuration	3-Phase, 3-Wire / 3-Phase 4-Wire
Current Transformer	0 ~ 5,000/5
Topology	Three Level
Environment Requirements	
Altitude	≤ 1,500m, 1,500 ~ 4,000m (according to GB/T3859.2, increase every 100m derating capacity 1%)
Operation Temperature	-10°C ~ +40°C
Relative Humidity	5% to 95%, non-condensing
Protection Class	Standard: IP20 (other IP classes can be customized)
Capacity Parameters	
Capacity	100A
Harmonic Compensation Ability	>97%
Harmonic Compensation Range	2nd - 51st Harmonic Order
IGBT Frequency	20Khz
Reaction Time	<100us
Full Response Time	<15ms
Cooling	895CFM
Noise Level	<60dB
Resonance Protection	Yes
Neutral Compensation Capacity	3 Times Rating
Power Loss	<3% Rated Power
Mechanical Characteristics	
Color	Black
Installation	Rack Mounted
Dimensions (L x W x H) mm	254 x 501 x 736
Net Weight (KG)	64
Gross Weight (KG)	80
Communications	
Communication Port	RS485, Ethernet Port, 4G, WiFi (7th Display Option)
Communication Protocol	Modbus, TCP/IP (7th Display Option)
Monitoring	Individual Monitoring/Central Monitoring
Alarm	16 Alarm Record
Active Power Filter Cabinet Models	
Rated Compensation Current	Customized
Cabinet Dimensions	Customized
Protection Class	Customized



100A-3P3W/3P4W-Weatherproof

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Cooling	895CFM
Noise Level	<60dB
Resonance Protection	Yes
Neutral Compensation Capacity	3 Times Rating
Power Loss	<3% Rated Power
Mechanical Characteristics	
Color	Gray
Installation	Floor Mounted or Wall Mounted
Dimensions (L x W x H) mm	840 x 1,100 x 490
Net Weight (KG)	88
Gross Weight (KG)	110
Communications	
Communication Port	RS485, Ethernet Port, 4G, WiFi (7th Display Option)
Communication Protocol	Modbus, TCP/IP (7th Display Option)
Monitoring	Individual Monitoring/Central Monitoring
Alarm	16 Alarm Record
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Always Connected. Always in Control.

All of Xeco's Active Power Filters seamlessly connect to the Xeco Energy Portal, giving you instant visibility of performance metrics, alerts, and system status.

Weather on-site or remote, you stay in control. Monitor, configure, and optimize from any device with an internet connection.

Reduce downtime, improve efficiency, and simplify maintenance with secure, cloud-based access.



Remote Monitoring Made Simple.

- Automatic or manual calibration to adjust for load variations
- Real-time monitoring and diagnostics
- Historical meter data and reporting
- Multi-site management from one dashboard
- Secure, browser-based access
- Alerts and notifications for proactive maintenance
- Track day-to-day electricity cost
- Forecast monthly energy consumption
- Schedule remote on/off testing
- Monitor your entire facility's energy consumption



Talk to our team about enabling your Active Power Filters.