

Active Harmonic Filter Offerings

HarmonicGuard Active Product Family

The HarmonicGuard[®] Active (HGA) filter is an elite system-applied harmonic filter that minimizes current distortion to less than 5% total demand distortion (TDD) at the point of common coupling. The HGA monitors the load current and reacts to changes immediately. By injecting a counter-current, the active filter cancels out harmonics and synchronizes the current and voltage waveforms while improving power factor to near unity. One HGA filter can handle multiple non-linear, harmonic-generating loads.

The HGA meets the demanding requirements of IEEE-519 2022. Offering top of the line performance and mitigation, the HGA provides a lower cost and a smaller footprint than a comparable 18-pulse VFD or active front end drive.

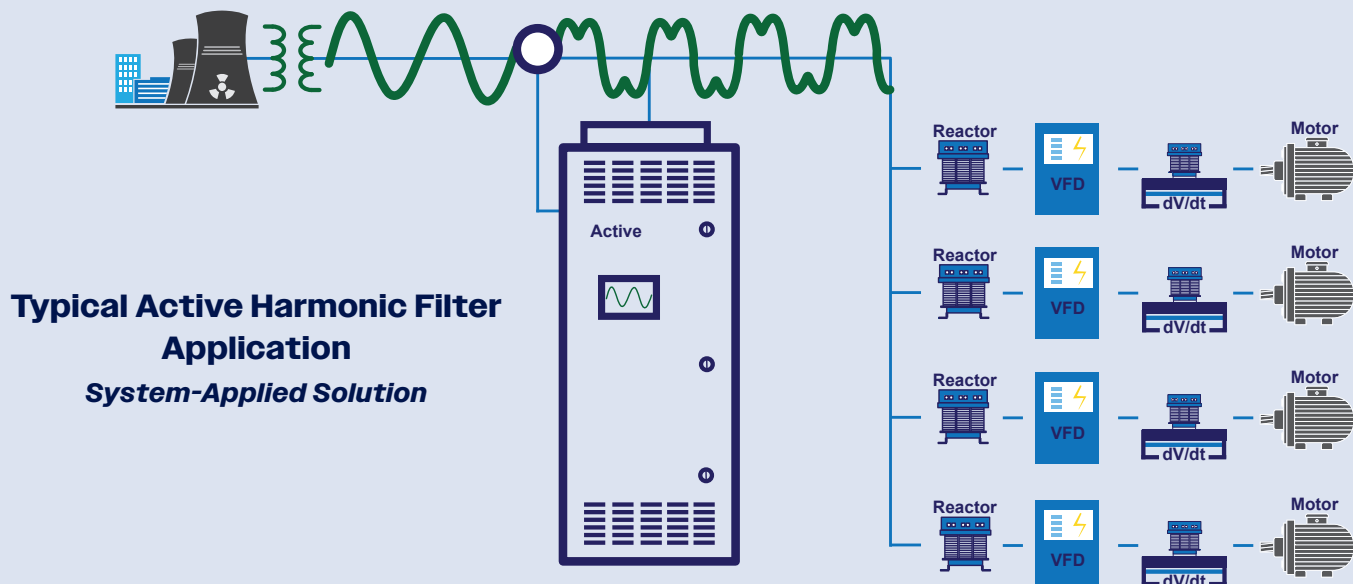
FEATURES AND BENEFITS:

- Meets the most stringent IEEE-519 2022 requirements
- ITDD reduction to less than 5% at full load
- Power Factor Correction
- Immediate response time to step load changes
- Self-commissioning installation
- Full line of Active filters ranging from 30-700 Amps
- 208 V - 600 V, 50/60 Hz system compatibility
- Easy to use color touch screen HMI display
- cULus Listed

FREE HARMONIC SIZING TOOL

TCI's Harmonic Sizing Tool is a free harmonic analysis software that enables users to size filtering solutions to meet harmonic and power factor requirements. Find out more:

transcoil.com/harmonic-sizing-tool-welcome/



Technical Specifications

Compensation Capacity (Parallel for Higher Capacity)	208 V - 480 V: 30A - 700A; 3-phase, 50 or 60 Hz
	600 V: 24A - 520A; 3-phase; 50 or 60 Hz
Harmonic Cancellation Spectrum	To the 51st harmonic - auto-selecting, optional overall THD Setpoint Target available
Response Time	Less than 8 ms to step load changes
Power Factor Correction	Up to 0.98 lagging, optional Power Factor target setpoint available, optional VAR injection setpoint available.
RMS Current Attenuation	Less than 10:1
Display	High quality touchscreen HMI with LED backlight; English, French, and Spanish avail.
Communications	Modbus RTU over RS485, Modbus TCP/IP, EtherNet/IP [®] , BACnet;
Over Current Protection	Molded case 65 kAIC and 100 kAIC circuit breakers, 200 kAIC fuse disconnect switch, 200kAIC fuse block.
Environmental Conditions	
Ambient Temperature	Open Chassis, UL Type 1, and UL Type 12: 0°C (32°F) to 40°C (104°F) Derating above 40°C (104°F)
	UL Type 3R: -20°C (-4°F) to 40°C (104°F) Derating above 40°C
	Open, UL Type 1 Gen 2 30A and 50A: 0°C (32°F) to 50°C (122°F) Derating above 50°C
Relative Humidity	95%, non-condensing
Operating Altitude	Up to 1000m (3,300 ft) without derating Up to 3000m (9,900 ft) with derating
Storage Temperature	Open Chassis, UL Type 1 & UL Type 12: -20°C (-4°F) to 60°C (140°F)
	UL Type 3R: -40°C (-40°F) to 60°C (140°F)
	UL Type 3R with HMI: 0°C (32°F) to 40°C (104°F)
Enclosure Options	Open Chassis, UL Type 1, UL Type 12, UL Type 3R
Reference Technical Standards	
Agency Approvals	cULus Listed
Surge Protection	ANSI C62.42

APPLICABLE ACROSS INDUSTRIES:



**ECMs, fan arrays
& chiller systems**



**Wastewater
treatment plants**



**Automation
production facilities**



**Multi-well
pads**