

Passive Harmonic Filter Offerings

HarmonicGuard & HarmonicShield Passive Product Families

TCI offers a wide variety of passive harmonic filters to suit a range of applications. High quality components and a robust design allow TCI's line of passive filters to deliver best in class performance under the harshest conditions and in the most challenging applications.

The HarmonicGuard Passive filter is a drive applied passive harmonic filter that limits current distortion to less than 5% at low loads. The HGP with PQconnect provides Bluetooth connectivity to monitor power quality and control the filter. TCI also offers a low-capacitance filter (HGL) as part of the HarmonicGuard product line - allowing for intelligent generator compatibility.

The HarmonicShield Passive Filter with PQconnect offers industry leading performance even at light loads and under harsh conditions. The HSD is a stand-alone input device that is furnished in its own enclosure and mounted adjacent to the drive/VFD or ECM (HVAC Applications). It is specifically designed to reduce harmonics caused by VFDs and ECMs. TCI offers a low-capacitance model (HSL) and EC Motor model (HSE) as part of the HarmonicShield Series.

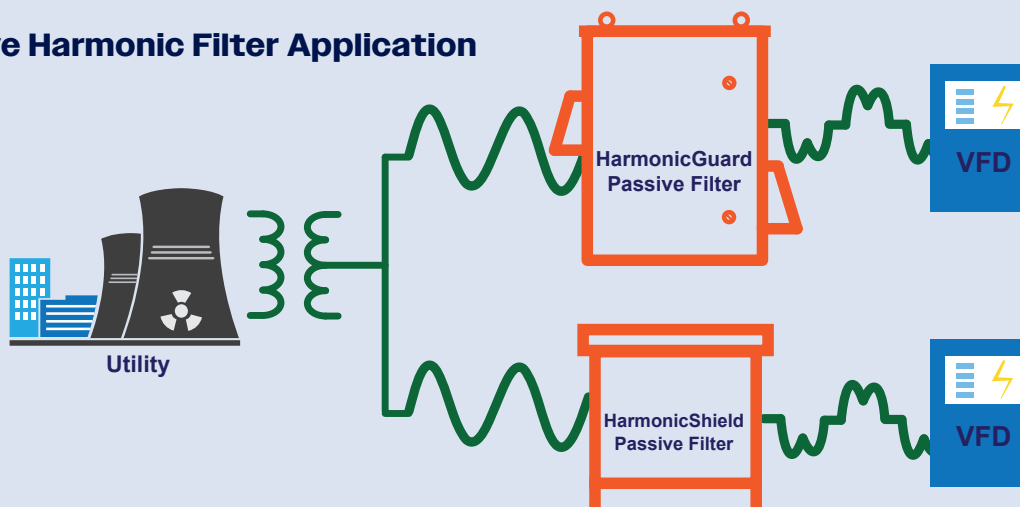
ADDITION OF PQCONNECT:

PQconnect on TCI's passive filters provides critical preventative maintenance and troubleshooting benefits to ensure smooth and long-term functionality. Be assured that your filter is accurately mitigating harmonics, eliminating your power quality issues.

FEATURES:

- Limits total harmonic current distortion down to 5% over the widest load range in the industry
- Ensures IEEE-519 2022 compliance
- Intelligent control and monitoring available with PQconnect
- Communications and data analytics available via Modbus RTU and EtherNet/IP
- Generator compatibility
- High quality components
- Made in the USA

Typical Passive Harmonic Filter Application



Technical Specifications

	HarmonicGuard Passive Series	HarmonicShield Passive Series
Voltage	60 Hz: 208, 240, 480, 600 VAC; 50 Hz: 380 - 415 VAC	60 Hz: 480, 600 VAC
Models	Standard, Low Capacitance	Standard, Low Capacitance, EC Motor Version
Power Rating	208 & 240 VAC: 5 - 200 HP 380 - 415 VAC: 4 - 1000 KW 480 & 600 VAC: 5 - 1250 HP	480 & 600 VAC: 3 - 1000 HP
THID	5% THID down to 50% loading, Low Capacitance version 5% THID at full load	5% THID down to 50% loading, Low Capacitance version 5% THID at full load
Enclosure Style	Hinged door for easy access in the field	Transformer style enclosure, no door
Component Mounting	Components mounted on back panel for easy inspection and replacement	Components mounted on base of enclosure
Mounting Options	Wall mounted	Floor mounted
Fusing	Fused branch circuit helps protect caps	No fusing
SCCR	100kA stand alone at 40 HP and above, need to add fusing below 40 HP	No SCCR
Connectivity and Intelligence	Option for PQconnect with Modbus RTU over RS485 & EtherNet/IP	Option for PQconnect with Modbus RTU over RS485 & EtherNet/IP - adds CPT into filter
UL Certifications/ Agency Approvals	UL508A - Field Maintainable by customer; cULus Listed, RoHS, and FCC	UL508 - To keep UL, filter must be maintained by factory authorized technician or shipped back to manufacturer for repairs; cULus Listed
Ambient Temperature	Open: -40°C (-40°F) to 50°C (122°F), Enclosed: -40°C (-40°F) to 40°C (104°F)	-40°C (-40°F) to 40°C (104°F)
Max Storage Temperature	60°C (140°F)	60°C (140°F)
Max Elevation	Up to 2,000m without derating. Consult factory for higher elevations.	Up to 2,000m without derating. Consult factory for higher elevations.
Cooling Method	Natural or Forced Air Convection	Convection cooled with no moving parts

APPLICABLE ACROSS INDUSTRIES:



**HVAC compressors
& blowers**



**HVAC/R chiller
systems**



**Water/wastewater
pump systems**



Irrigation pumps



**Oil & gas
applications**