

The NHP logo consists of the letters 'NHP' in a bold, white, sans-serif font, centered within a dark blue square.

NHP Power Quality Services

Providing end to end support for your power quality needs

POWER DISTRIBUTION AND PROTECTION





NHP Power Quality Solutions



NHP Power Factor Correction Systems - Wall mount PFCW and Floor Standing PFCE Series

The PFCE delivers a highly economical power factor correction system in a compact footprint. With sizes available from 100kVAR up to 500kVAR, other features include IP32 protection rating and detuning reactors fitted as standard.

Complementing the PFCE series is the wall-mountable PFCW system. With sizes available from 50kVAR up to 100kVAR this series is ideal for installations where floor space comes at a premium, such as inner-city locations and Commercial estates.

NHP Static Var Generator Systems

NHP's Static Var Generator (SVG) systems utilizes solid state inverter technology to deliver instantaneous power factor correction (total response time <20ms). With no risk of over- or under-correction, the SVG can correct the power factor of the system to >0.99 under all load conditions. As well as this, the SVG can correct for both leading and lagging power factor loads. The SVG range is modular in design providing greater flexibility and expandability to meet changing requirements.



NHP Active Power Filter Systems

NHP's Active Power Filter (APF) systems are the premier solution for mitigating onsite harmonic issues. These systems can mitigate harmonics up to the 50th harmonic with a filtering rate of up to 98% with the capability to also correct power factor and perform load balancing. With high efficiency (>97%) and fast response time (<20ms) the APF is modular in design providing greater flexibility to meet changing requirements.

NHP Hybrid SVG and APF Systems

NHP's Hybrid solution comprises of both Static Var Generator (SVG) modules and Active Power Filter (APF) modules to deliver instantaneous power factor correction and harmonic mitigation within the same cabinet. This powerful combination is the ideal solution where both poor power factor and harmonics is prominent onsite.



NHP Power Quality Services

At NHP we pride ourselves on solutions that deliver.

Our goal is to ensure you achieve improved power quality through optimal performance and results.

We're with you each step of the way with a range of power quality services available to assist in determining your needs through to ensuring your power quality system is up and running and delivering enduring results.

Available Power Quality services from NHP include:

- Power Quality Audits
- Commissioning services for:
 - NHP Power Factor Correction Systems
 - NHP Static Var Generators
 - NHP Active Power Filters
- Periodic service and maintenance of NHP power quality systems
- Installation of NHP power quality systems—application dependent

Extended warranties are also available for NHP Power Quality systems when an NHP commissioning service is undertaken - find out more by contacting 1300 NHP NHP and request to speak to your local NHP Application Engineering department.



Power Quality Audits

NHP can help you determine your onsite power factor and harmonic levels along with potential savings from your energy bill where improvement to your power quality can be made.

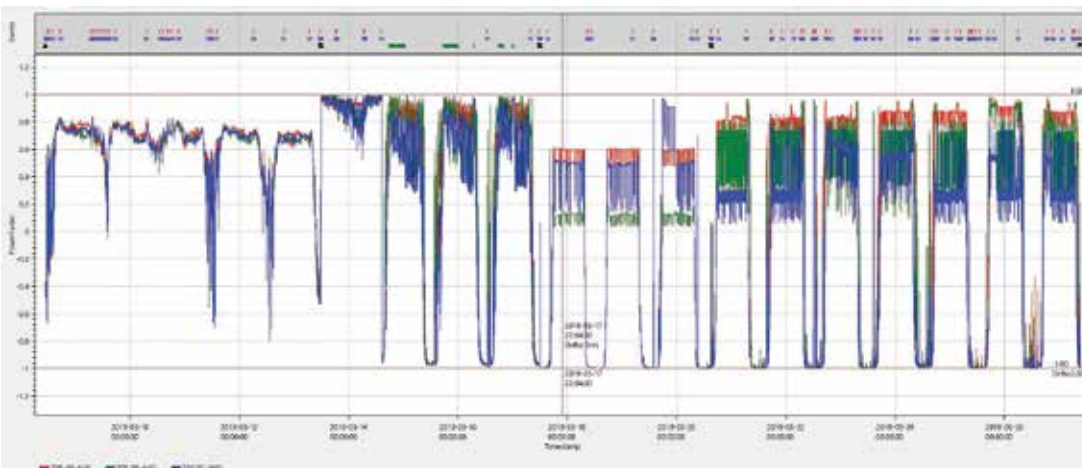
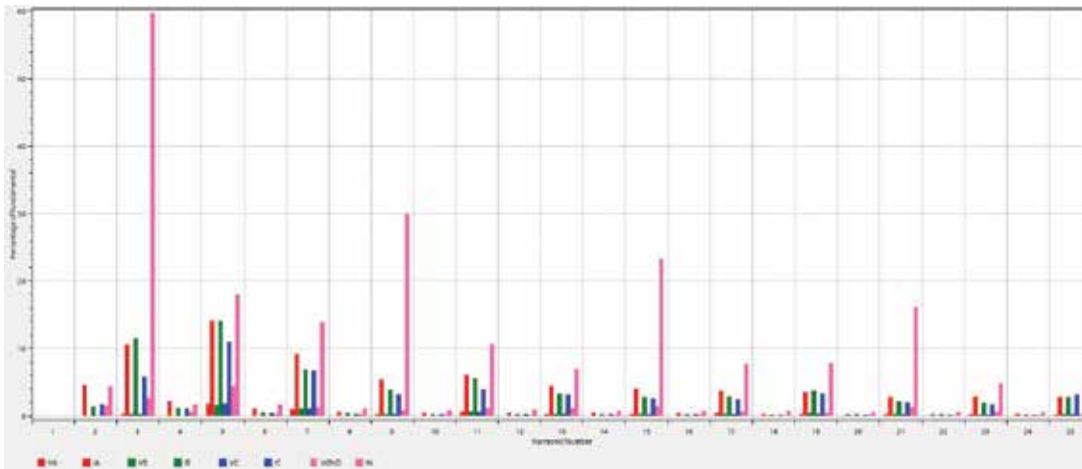
A NHP service technician can come to you and install our Miro PQ-45 data logger for 7 days (or longer as needed), specifically configured to capture all critical power quality measurements. Following retrieval of the data logger from site, our NHP application engineering team will extract and analyse the data, providing you with a comprehensive power quality report that includes recommendations for power quality improvements where available.

Our analysis includes:

- Current, power and voltage graphs including daily load profiles
- Harmonic graphs and total harmonic distortion (current & voltage)
- Waveform and RMS event capture for abnormal events
- Daily, average and minimum/maximum tables
- Clear summary of NHP's findings and recommendations

How can I arrange a power quality audit from NHP?

Simply contact NHP on 1300 NHP NHP and ask to speak to your local NHP Application Engineering department and reference SATFLDN006



Screenshots from Powermonic

Power Quality Commissioning Services

FREE EXTENDED WARRANTY for all NHP Power Quality systems when commissioned by NHP Service team

- Standard 12 month warranty is provided with all NHP Power Quality systems.
- Systems commissioned by NHP service team will receive an additional 12 months warranty.

It is critical that your power quality system is installed, connected and commissioned to ensure correct and reliable operation.

Common issues when equipment is not commissioned properly:

- System performance compromised - inability to reach and maintain target power factor and reduce onsite harmonics. This can also impact your energy bills, particularly where kVA and kVAr tariffs are in place.
- Incorrect operation of power quality equipment with potential impact on other onsite equipment
- Reduced equipment operating life
- Void of equipment warranty

Please note - Commissioning outside metropolitan areas may incur "Additional Travel and Accommodation Cost".

Please contact NHPService@nhp.com.au or 1300 NHP NHP

Commissioning Services Ordering Information

Please contact NHP on 1300 NHP NHP and request to speak to you local NHP Service or Application Engineering team, referencing the required service below.

Commissioning services for NHP PFC systems

Reference	Description
SATPFCC01	Commissioning NHP PFC system up to 500kVAr

Commissioning services for NHP SVG systems¹

Reference	Description
SATSVGC04	Commissioning NHP/Delta SVG System up to 100kVAr (Wall mount)
SATSVGC01	Commissioning and assembly NHP/Delta SVG system up to 200kVAr
SATSVGC02	Commissioning and assembly NHP/Delta SVG system up to 500kVAr
SATSVGC03	Commissioning and assembly NHP/Delta SVG system up to 700kVAr

Commissioning services for NHP APF systems¹

Reference	Description
SATAPFC03	Commissioning NHP/Delta APF system up to 100A (Wall mount)
SATAPFC01	Commissioning and assembly NHP/Delta APF system up to 300A
SATAPFC02	Commissioning and assembly NHP/Delta APF system up to 700A

Commissioning services for NHP HYBRID (SVG & APF) systems¹

Reference	Description
SATSVGAPFC01	Commissioning and assembly NHP/Delta Hybrid <100kVAr and 50A
SATSVGAPFC02	Commissioning and assembly NHP/Delta Hybrid >100kVAr and 50A

¹SVG and APF modules are delivered separately to the enclosure to site. Commissioning services of NHP SVG and APF systems includes assembly and connection of the modules within the enclosure.



Power Quality service and maintenance

Regular maintenance ensures peak performance and longevity of your power quality investment. No equipment is immune from the effects of restricted air flow and temperature and much like servicing of your car, periodic servicing of your power quality equipment is essential to keep things running smoothly.

The service team at NHP will perform the following maintenance tasks and any other necessary service for NHP Power Quality systems.

System check:

Check of the overall system, the controller, settings etc. to make sure that unit is performing as required.

Check tightness of all electrical connections:

All electrical connections should be checked and tightened after transit, and as part of a twelve-monthly check. As electrical connections heat up and cool down, they expand and contract, possibly causing the connection to loosen and result in a resistive joint.

ThermoScan:

A thermoscan is included for each service of your NHP power quality equipment to ensure there are no deficiencies which are not visible to the naked eye. This service completes a comprehensive visual inspection of the power quality system.

Remove all dust and deposits, inside and outside:

Over time dust will enter the PFC, SVG and/or APF system and accumulate on surfaces, or if any work has been done on the system there may be deposits of some kind left behind.

Check function of fans and thermostats:

Once every twelve months check that the fans and thermostats are fully operational by applying hot air from a hot air blower or hair dryer to the temperature switches. The fans should turn on at 35°C and the controller (and any active functional steps) should turn off at 50°C.

Clean/replace filters:

Once every three months the filters should be cleaned. If the environment is dusty, dirty or corrosive, the filters may require more frequent cleaning or replacement.

Current measurements:

Every six months each capacitor step should be checked. A log is provided to keep a history of how the capacitor steps are performing over time, which will help in diagnosing a problem before it becomes a hazard to your business.

This check involves taking the phase voltage readings (RMS voltage), and the current readings per phase.

Recommended service and maintenance schedule:

- NHP PFC Systems - 3, 6 and 12 monthly services
- NHP SVG and APF systems 12 monthly service

Power Quality Installation

Installation services for NHP Power Quality systems can be provided upon request. This will be subject to an initial site inspection with consideration to the following:

- Location and installation of required current transformers
- Location of power quality system and any required assembly (i.e. assembly of SVG and APF modules)
- Termination of power and current transformer connections to the NHP Power Quality system
- Removal of any old power quality system

Reference	Description
SATSVGAPFSI01	Site inspection for SVG/APF installation

For further information please contact service@nhp.com.au or 1300 NHP NHP

How can I arrange a Power Quality service from NHP?

Please contact NHP on 1300 NHP NHP and request to speak to your local NHP Service or Application Engineering team.

Extended Warranty

Systems commissioned by NHP service team will receive an additional 12 months warranty.

Additional protection against the cost of repairs can be achieved through extending the standard 12 month warranty up to a maximum of five years.

Please inquire 1300 NHP NHP and request to speak to your local NHP Application Engineering department.

Other services available from NHP

While our customers' challenges may be complex, their ultimate goal is likely simple: run a profitable, safe and sustainable operation. The NHP Service Team can assist our customers achieve their goals through services designed to minimise downtime, stabilise maintenance costs and help modernise their plant assets.

The availability and easy access to NHP's expertise, combined with our extensive local stockholding and sound processes, are each potentially empowering factors, which will give customers access to a holistic approach across their automation, industrial switchgear, training and commissioning business requirements, for complete peace of mind.

To support our range of quality products, NHP offer a wide range of service and training options, including technical support, Air Circuit Breaker (ACB) service and upgrades, NHP product repair services and training.



ACB Service

AUSTRALIA

nhp.com.au

SALES 1300 NHP NHP

sales@nhp.com.au

NEW ZEALAND

nhp-nz.com

SALES 0800 NHP NHP

sales@nhp-nz.com



NHP Electrical Engineering Products

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