
Code:

Description

The **AFQevo** cabinet series parallel multifunction active filter is the most complete solution for solving Quality problems related to industrial, commercial or services installations with presence of harmonics, consumption of reactive power (usually capacitive) and also phase unbalance. This AFQevo is meant rack mounting into market standard cabinets, designed to facilitate its installation.

The implemented features and functions are:

- Filtering capacity from 100 to 200 A for each cabinet.
- Reduced rack dimensions to be installed easily in standard cabinets.
- Range of filters for installations with 3 wires (3W model) or 4 wires (4W model).
- Multirange, dual frequency (50/60 Hz)
- Reduction of harmonic currents up to the 50th harmonic (2500 Hz).
- Selection of harmonic frequencies to be filtered so to reach the filter's highest effectiveness.
- Power factor correction. Both inductive and capacitive currents.
- Phase current balancing. In the 4W model, it also helps to reduce consumption in neutral.

If higher capacities are required, the system can be expanded with **AFQevo** racks in parallel (all the filters/racks must be the same model, 3 or 4 wires).

Application

Ideal solution for installations with large amounts of single-phase and three-phase loads that generate harmonics, such as computers, UPS's, lights' units, air-conditioning systems with phase shifters, etc. Also for installations that requires high power Quality to increase the production efficiency or reduce supply continuity of the system.



Code:

Specifications

AC power supply

Installation category	4 kV, CAT III Class 1
Consumption	4000 W
Frequency	50 / 60 Hz (± 5 %)
Nominal voltage	230 ... 400 Vca F-F (± 10 %)

Mechanical characteristics

Size (mm) width x height x depth	260 x 480 x 500 (mm)
Envelope	Galvanized steel 1,5 mm
Connection type	Network / Ground: M8 / M10 terminals, Current: 6-pole connector, RS-485: 3-pole connector, Ethernet: RJ-45
Weight (kg)	70

Environmental characteristics

Protection class	IP 20
Relative humidity (without condensation)	0 ... 95 %
Storage temperature	-20 ... +50 °C
Working temperature	-10 ... +45 °C

Electrical characteristics

Current crest factor	2:1
Maximum phase current	100 A (RMS)
Maximum neutral current	300 A (RMS)
Earthing system	TN, TT

Current measurement circuit

Consumption	1,5 VA x 3
Sampling frequency	... 2500 / 3000 Hz (50 / 60 Hz)
Transformation ratio	5 ... 5000 / 5A

Standards

Electrical safety, Maximum height (m)	2000
Electrical safety, Contamination level/class	Pollution resistance 2
Standards	IEC 61000-6-4 , UNE-EN 55011 , IEC 61000-6-2 , IEC 62477-1 , IEC 61439-1

User interface

Display type	TFT color, 3.5" touchscreen
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Measurement accuracy

Voltage harmonics (THD)	25 % (max)
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Features / performance

Phase compensation	Selectable
Reactive power compensation (Kvar)	selectable
Filtering / Response time	2° ... 50° harmonic (selectable) / < 100 µs
Parallel assembly/installation	Up to 100 units, with different gauges. Transformer connection only to the Master unit
Priority scheduling	selectable

Power supply output

Power	69000 VA
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