



## AFQe -4WF-030M-400

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Code: R7QM03. DESCATALOGADO

- > Active Filter
- > System: 4 wires
- > 400 V
- > Phase current: 30
- > Peak current: 60
- > Max. neutral current: 90
- > EMI filter: 1

### Description

The **AFQevo** parallel multifunction active filter is the most complete solution for solving power quality problems related to industrial, commercial or service installations with presence of harmonics, consumption of reactive power (usually capacitive) and also phase unbalance. The **AFQevo** is meant for wall-mounting thanks to its small size to facilitate its installation.

The features and functions implemented are:

- Filtering capacity of 30 A
- Reduced metallic enclosure for wall assembly. Its compact dimensions make it easy to install.
- Range of filters for installations with 3 wires (3W model) or 4 wires (4W model)
- Multi-range voltage and dual frequency (50/60 Hz).
- Reduction of harmonic currents up to the 50th harmonic (2,500 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 helps to reduce consumption in neutral.

If higher filtering capabilities are required, the system can be expanded with up to 100 **AFQevo** connected in parallel (the filters must all be of the same 3 or 4-wire model).

### Application

Ideal solution for installations with large amounts of single-phase and three-phase loads that generate harmonics, such as computers, UPS's, lights, lifting units, air-conditioning systems with phase shifters, etc.



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### Specifications

#### AC power supply

Installation category	4 kV, CAT III Class 1
Consumption	1050 W
Frequency	50 / 60 Hz ( $\pm 5\%$ )
Nominal voltage	230 ... 400 Vca F-F ( $\pm 10\%$ )

#### Mechanical characteristics

Size (mm) width x height x depth	435 x 708 x 257 (mm)
Envelope	Galvanized steel 1,5 mm
Connection type	Ground: M6 ring terminal, Network: toe, Current: 6-pole connector, RS-485: 3-pole connector, Ethernet: RJ-45
Weight (kg)	35

#### 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	30 A (RMS)
Maximum neutral current	90 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



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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	20700 VA
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