



The new **AHF** series represents the ideal solution to compensate harmonic currents, with any type of non-linear load involved. It is available both in the version for **wall installation**, with integrated display, and with a modular design, specially designed for easy **assembly in the cabinet**.

PERFORMANCE DATA

- Operating voltage 228V ÷ 456 Vac (different request)
- Nominal frequency 45Hz ÷ 62Hz
- Inverter topology 3-level NPC topology, IGBT
- Switching frequency 20 kHz (average)
- Response time <5 ms
- Compensated harmonic currents Up to the 50th harmonic (both odd and even order)
- Typical residual THDI < 5% (in current)
- Electrical supply Three-phase, 3-wire or 4-wire (three-phase + neutral)
- Nominal current of the neutral 3In only for 4-wire type

TECHNICAL DATA

Power factor correction	Inductive and capacitive compensation function.
Unbalance compensation	Compensation function (phase by phase) of unbalanced loads.
Communication and protocol	RS485 connectivity; MODBUS protocol (RTU).
Protection functions	Abnormal voltage / frequency; Inverter overload; Overtemperature, DC BUS overvoltage
LCD display	User interface for parameter setup, real-time data, waveforms and spectrum with percentage (wall mounted)
C.T. ratio	150/5 ~ 10.000/5 A.
Degree of protection	IP 20.
Power losses	≤3%.
Assembly	Wall mounting (multiple module connection is available) or cabinet for stand alone mounting.
Room temperature	-20 ÷ 40°C (temperature > 45 ° C can derate the operation).
Relative humidity	5% up to 95%, non-condensing.
Storage temperature	-20 ÷ 70°C.
Noise level	<65 dB.
Altitude	≤ 1,500m (from 1,500m to 4,000m, 1% derating every 100m).

QUALITY AND CERTIFICATIONS

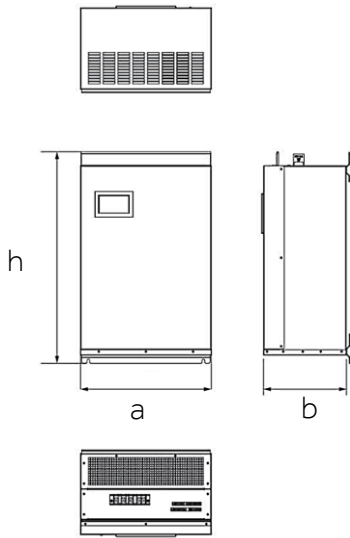
Reference standards for filtering	IEEE 519, EMC:IEC 61000
Compliance	CE

AHF

Active Harmonic Filters

WALL MOUNTING CONFIGURATION

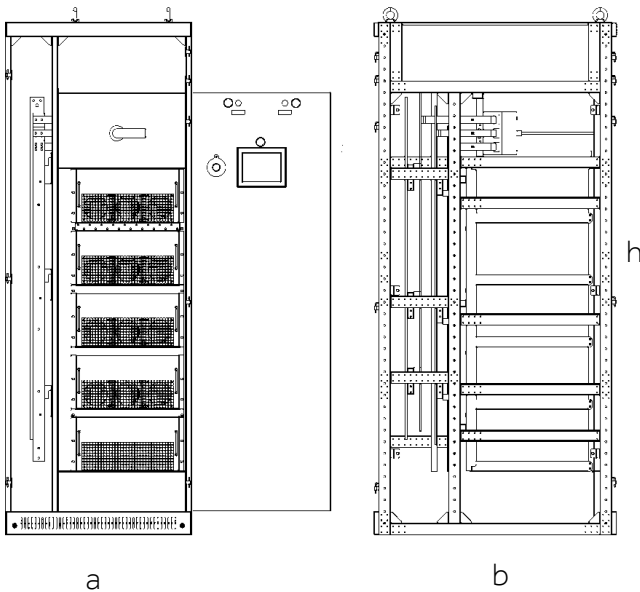
Modular design for easier installation and maintenance.



Code	Max. compensable harmonic current (A)	Order of compensated harmonics both of even order and odd order	Dimensions a x b x h (mm)	Weight (kg)
AHF-15	15	2 [^] ÷ 61 [^]	410 x 45 x 340	5
AHF-50	50	2 [^] ÷ 50 [^]	500 x 180 x 540	23
AHF-60	60	2 [^] ÷ 50 [^]	500 x 180 x 540	25
AHF-100	100	2 [^] ÷ 50 [^]	500 x 200 x 600	35
AHF-150	150	2 [^] ÷ 50 [^]	500 x 275 x 640	44

CABINET CONFIGURATION

For higher harmonic currents, multiple cabinet layouts are available, 600 x 1000 x 2200 mm (a x b x h) consisting of up to 5 rack modules.



Other solutions are available on request (e.g. voltages other than 400 V).