SAF-M

Active Harmonic Filters



SAF-M active filters are the ideal solution for compensating the most demanding harmonic currents, with any type of non-linear load involved, and has a specially **designed modular design** for easy assembly in the cabinet and flexibility in applications. Installation, by the customer, must include the protection device and 3 CTs.

Rated voltage

3-wire: 380 - 480 Vac 4-wire: 380 - 415 Vac

50 Hz / 60Hz

16 kHz

<100 µs

Rated frequencyInverter topology

3-level NPC topology, IGBT

Switching frequency

Response time

Harmonic currents
offset

fset (odd and even orders)

Power supply

neutral

Residual THDI (current) < 5

Three-phase, 3-wire or 4-wire (3-phase+neutral)

Up to the **50th** harmonic

Max. compensated harmonic current / on

60 Arms / 180 Apk

TECHNICAL DATA

Power factor correction $\cos \varphi = -0.7 \dots 1 \dots 0.7$ (inductive and capacitive correction).

Power losses <1100 W at full mitigation efficiency (<2.6%)

<970 W in typical operation (<2.3%)

Communication interface Ethernet TCP/IP, Modbus RTU RS 485.

Digital I/O 2 DI + 2 DO.

T.A. Report xx:5 A or xx:1 A.

Degree of protection IP 20 / 21.

Weight (single module) 44 Kg.

Assembly Wall mounting (vertical or horizontal).

Ambient temperature 0 ... 50°C at full power, up to 55°C with 3% degradation per Kelvin.

Noise level < 56 to 63 dB A (depending on the load situation).

Altitude < 1000 m without degradation; up to 4000 m with 1% degradation / 100 m

Display Module

In addition the SAF- Mfilter is equipped with the LCD display module, which is used to monitor the measured values of the three-phase net work and to change the filter parameters. A display module fits all power supply modules and can be used in any system configuration, whether it is a single power supply module, a dual power supply or a cabinet installation.

QUALITY AND CERTIFICATIONS

Regulations IEE 519, EN 61000-3-12

Certifications CE, UL

Our Active Filter solutions, and their codes, are available on request.