Modular Active Filters



The new series of **SAF-M** active filters represents the ideal solution to compensate for the most demanding harmonic currents, with any type of non-linear load involved, and have a **modular design** specifically designed for easy cabinet assembly and application flexibility.

DATI DI PERFORMANCE

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

Rated frequency 50 Hz / 60Hz

Inverter topology
3-level NPC topology, IGBT

■ Switching frequency 16 kHz

Response time <100 μs

Compensated harmonic Up To the 50th harmonic currents (even and odd harm. orders)

Residual THDI (in current) < 5%

420 mm

Three-phase, 3-wire or 4-wire

(three-phase+neutral)

Max. rated phase / neutral conductor mitigation current

60 Arms / 180 Apk

TECHNICAL DATA

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

Power losses <1100 W under full mitigation performance (<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

C.T. ratio xx:5 A or xx:1 A

 $\begin{tabular}{ll} \textbf{Degree of protection} & IP 20 / 21. \end{tabular}$

Weight (single module) 44 Kg.

Mounting Wall-mounting (book or flat mounting).

 $\label{eq:continuous} \textbf{Ambient temperature} \hspace{1.5cm} 0 \dots 50^{\circ} \text{C full performance, up to } 55^{\circ} \text{C with degrading of } 3\% \text{ per Kelvin.}$

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

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

Display Module

Furthermore, the SAF-M filter is equipped with the LCD display module, which is used to monitor the measured values of the three-phase network and to change the filter parameters. A display module adapts to all power supply modules and can be used in any system configuration, whether it is a single power supply module, a double power supply unit or a cabinet installation.



QUALITY AND APPROVALS

Reference standards IEE 519, EN 61000-3-12

Certifications CE, UL

