

from 30 kvar to 100 kvar as PFC from 21 Amps to 72 Amps as AHF

SVG (Static VAR Generator) is a fully automatic systems which provides Power Factor Correction, Harmonic filtering and phase balancing.

Power Factor Correction;

thanks to its electronic operation (no capacitors and contactors) it's able to operate on both inductive and capacitive loads (or both) with elevated harmonic content (until THDi > 80 % and THDv > 15%)

Active Harmonic Filter;

as an Active Harmonic Filter, SVG can reduce the THD values less than 3%, operating from the 2nd to the 25th harmonic order

Phase balancing;

SVG is able to balance the phases, reducing to zero the current to the Neutral

General features

Display touch-screen 4.3"
Redundant operation
Serial port RS232, RS485, Modbus operation
Over 500 available alarms and signals

Applications

Heavy industry, Data Center Cement plant, Paper mills Building Automation, Automotive



CodeAXG3R...Rated Voltage $400 - 415 \text{ V} \pm 10\%$ Mains Frequency $50/60 \text{ Hz} \pm 3\text{Hz}$

Power Factor Correction -1..+1 (inductive and capacitive compensation)

kVAr / Amps from 30 kvar to 100 kvar as PFC / from 21 Amps to 288 Amps as AHF

Inverter Typology 3-level typology, IGBT

Harmonic mitigation performance From 2° to 25° order (even and odd harmonics)

Harmonic residue <3% (typical reduction with load harmonic above 50% unit rating)

Non Linear Loads All 3-phase Loads, with or without neutral wire

Load balancing

100 % unbalanced full compensation, unloading neutral wires

Alarms

Overvoltage, overcurrent, overtemperature (>500 alarms)

 $\begin{tabular}{lll} \textbf{Insertion time} & < 100 \ \mu s \\ \textbf{Sampling rate} & 200 \ kHz \\ \textbf{Switching frequency} & 80 \ kHz \\ \textbf{Cooling system} & Automatic \\ \end{tabular}$

Working temperature -10°C/+50°C Up to 55°C, derating 3% per Celsius)

Noise Level < 60 db

Altitude < 1500 m without derating, up to 4000 m derating 1% /100 m

Ambient conditions Relative humidity < 95 % non condensing, Pollution degree 2

Tomporature: Storage 55°C Transportation, 25°C to 75°C

Temperature: Storage 55°C, Transportation -25°C to 75 °C

Power Losses < 3 % under full mitigation performance

Color RA7035

Dimensions (W*H*D) 554*250*656 mm (approximate, to be defined in reference to the size)

Degree of protection IP20

Standards IEC 61000-4-2, 4-4, 4-5, 4-6

EN 61000-3-11, 3-12, EN 61000-6-2, EN 62477-1, EN 61800-3, EN 50160