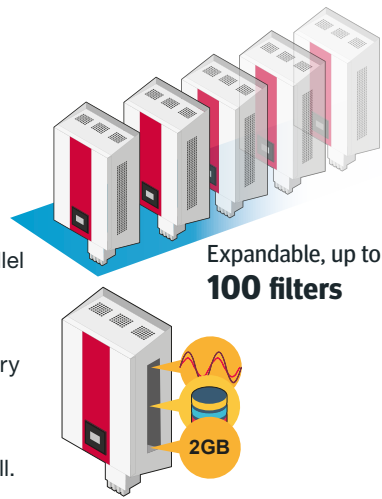


- Compensation without stages, instant compensation.
- No maintenance, it has no electromechanical components.
- Expandable, enables parallel installation of up to 100 filters.
- Datalogger, internal memory for logging electrical parameters.
- Plug & Play, easier to install.



Applications



Industry



Tertiary sector



Telecommunications

References

Type	Code	Phase current (A)	Total reactive power (kvar)	EMI filter
SVG-3WS-30k-480	R7NSTB.	44	30	—
SVG-3WF-30k-480	R7NST3.	44	30	•
SVG-3WF-100k-480	R7NST5.	145	100	•
SVG-3WF-200k-480	R7NST7.	290	200	•
SVG-3WM-100k-480	R7NSTM.	145	100	—

Technical features

Network voltage			
Voltage	230 - 480 V phase-phase +/-10%		
Frequency	50/60 Hz +/-5%		
Maximum THDv	25%		
Power	SVG-3WS-30k-480 SVG-3WF-30k-480	SVG-3WM-100k-480 SVG-3WF-100k-480	SVG-3WF-200k-480
Maximum consumption	1050 W	4000 W	8000 W
Maximum reactive power	30 kvar	100 kvar	200 kvar
Maximum current (phase)	44 Arms	145 Arms	290 Arms
Current measurement			
Type	3 or 2x transformer: 5/5 ... 5000/5 A Class 1 or higher (0.5 - 0.2-0.2 S) Frequency response up to 2500 Hz / 3000 Hz (60 Hz)		
Features			
Power factor correction	Adjustable, target 0.7 inductive...0.7 capacitive		
Parallel installation	<ul style="list-style-type: none"> Up to 100 devices/racks (SVG 30 kvar / SVG 100 kvar) Up to 50 devices/racks (SVG 200 kvar) Connection of CT, only to the "master" unit Advanced processing algorithm: <ul style="list-style-type: none"> Maximisation of the working life of units (alternating unit operation). Maximisation of operating efficiency (only the required filters are activated). Allows redundancy (system operation in the event of unit failure). 		
User interface	Colour 3.5" touch screen Web server and datalogger		
Ethernet	<ul style="list-style-type: none"> TCP/IP Modbus TCP 		
Installation			
Installation category	CAT III 300 V		
Pollution degree	2		
Operating temperature	-10 ... 45 °C		
Storage temperature	-20 ... 50 °C		
Relative humidity	0...95% (without condensation)		
Maximum altitude	2000 m		
Degree of protection	IP20		
Build features			
Dimensions (width x height x depth)	<ul style="list-style-type: none"> SVG-3WS-30k-480 (435 x 600 x 257 mm) SVG-3WF-30k-480 (435 x 705 x 257 mm) SVG-3WF-100k-480 (600 x 1836 x 822 mm) SVG-3WF-200k-480 (600 x 1836 x 822 mm) 		
Weight	<ul style="list-style-type: none"> SVG-3WS-30k-480 (31 kg) SVG-3WF-30k-480 (31 kg) SVG-3WF-100k-480 (206 kg) SVG-3WF-200k-480 (276 kg) 		
Noise	< 65 dBA		
Standards	EN 62477-1:2012, EN 55011:2011, EN 61000-6-2:2006, EN 61000-6-4:2007, IEC 61439-1:2011		



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R Power factor correction and harmonic filtering

SVG

Static Var Generator

The most versatile compensation system

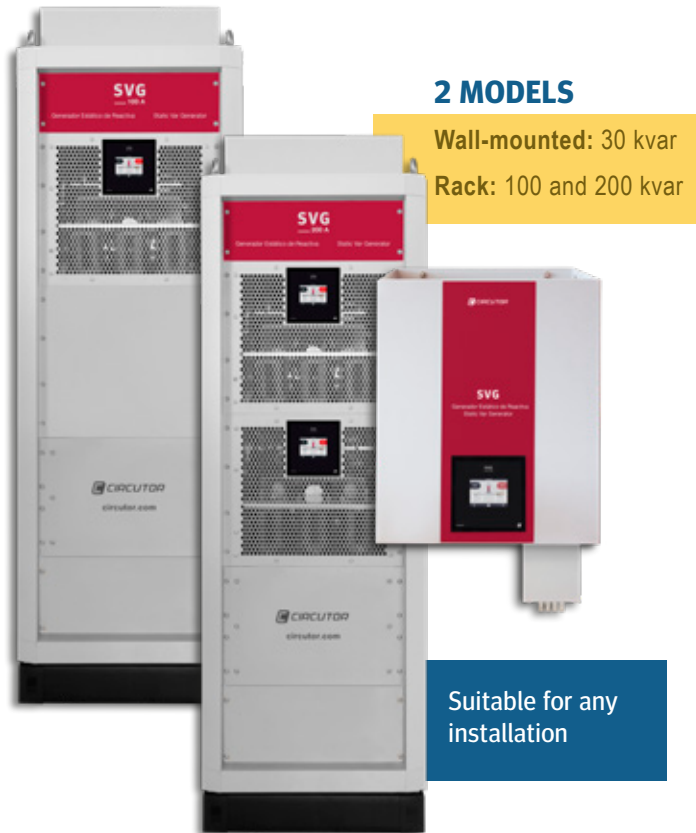


Energy efficiency technology



More accurate compensation

- The **SVG** Static Var Generator is an electronic reactive power compensation system, for both capacitive and inductive power. It has the same operating principle as an active filter; the **SVG** injects a current in the opposite direction to counteract the installation's non-useful power (inductive and capacitive), thus ensuring that the target $\cos\phi$ is achieved.
- The **SVG** instantly compensates and adjusts according to demand in a matter of milliseconds. It also compensates phase to phase in unbalanced systems. The **SVG** is the perfect device for installations where there are strict penalties for the consumption of reactive power.



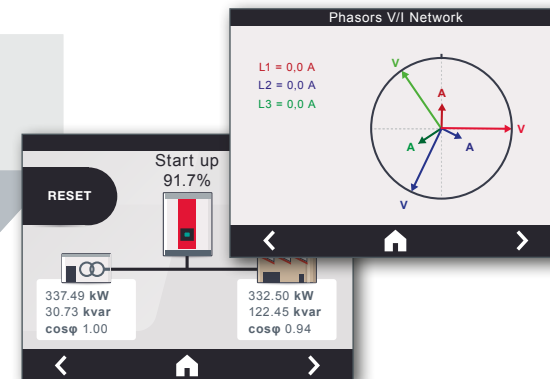
Benefits

- Instant compensation**
The system has a response time below 20 ms, offering highly efficient operation thanks to the development of IGBT technology.
- Minimal maintenance**
It has no electromechanical components, so no spare parts are required.
- Stable network voltage**
The output current is not affected by fluctuations in the network voltage.
- No resonance**
SVG technology generates no resonance with the installation's harmonics.

$$\cos\phi=0.8$$

$$S=50 \text{ kVA}$$
$$Q=30 \text{ kvar}$$
$$P=40 \text{ kW}$$

Individualised compensation for unbalanced installations



Zero penalties

- For installations that have problems with fluctuating load currents and imbalances, the SVG is the system that fixes these problems when a capacitor bank is unable to correct them. **The SVG continuously reduces the reactive power, always ensuring that the target $\cos\phi$ is achieved, both for inductive and capacitive loads.**
- Built-in web server**
SVG features an Ethernet port to access its web site from any browser, to enable you to monitor instantaneous parameters and download data and events stored online, without having to download a software application.
- Touch-screen display**
Touch-screen HMI display for quick management and configuration of the unit. It can also display the onsite filter data.

$$\text{TARGET } \cos\phi=1$$
$$S=40 \text{ kVA}$$
$$Q=0 \text{ kvar}$$
$$P=40 \text{ kW}$$

