

PQvar Series Static Var Generator (SVG)

Series/Type: PQSW6110V744/ 3P3W wall-mounted Ordering code: B44066F6110V744

Date: Version: August 2018

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#### PQvar Series Static Var Generator (SVG)

#### B44066F6110V744

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# Characteristics

- Static Var Generator (SVG) PQvar Series utilizes three level inverter topology to provide real time response to reactive power requirements and load balancing. It monitors the current continuously and compensates the reactive part of the measured current.
- 110 kvar 3P3W (3-phase/3-wire) device for phase and neutral wire current correction

# Features

- User-friendly menu operation via TFT color touch screen
- **Reactive power compensation**  $\cos \phi \le 0.99$
- Ultra-fast reactive power compensation
- Load balancing between phases
- Power factor correction fully inductive and capacitive current compensation from 0 ... 100%
- High performance and reliability
- Simple installation & commissioning

# **Typical applications**

- Industries having variable frequency drives, inverters UPS, furnaces such as paper, steel rolling mills, textile, garment, software parks, automotive, battery manufacturing, continuous process plants, pharmaceutical industries, etc.
- Green power generation (e.g. photovoltaics and wind turbines)
- Data centers, hotels, hospitals, shopping malls and office buildings

## Safety features

- Highest safety and reliability
- Overload protection
- Internal short-circuit protection
- Overheating protection
- Overvoltage and undervoltage protection
- Inverter bridge protection
- Resonance protection
- Fan fault alarm



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Туре	PQSW6110V744	
Ordering code	B44066F6110V744	
System input / number of phases	3-phase/3-wire	
Compensation capacity	110 kvar	
Frequency	45 Hz to 62Hz	
Input voltage (min. / max.)	690V(-30%~+15%)	
Inverter technology	12 IGBT three-level topology	
Steady state response time	<15 ms (steady state response time to full steady state compensation)	
Power factor correction	Fully inductive and capacitive current compensation from 0 100%	
Weight of a single unit	Approx. 66 kg	
Dimensions of a single unit	Approx. 504x253x725 mm (w x d x h)	
Current transformer	2 CTs are needed. Source or load-side selectable, primary current range 150 A 10000 A, secondary current 5 A (see details of choosing the right CT in the manual) External current transformers are mandatory needed, but not included in the SVG delivery.	
Efficiency	> 97%	
Cabinet mounting	Wall	
Cooling	Smart air cooling 359L/sec	
Communication ports	RS485, CAN, and network port	
Communication protocols	Modbus and PMBus	
Operating temperature	-10 +40 °C	
Protection class	IP20 (other IP classes are customizable)	
Panel color	RAL7035 light grey	

#### Technical data and specifications SVG system



Power Quality Solutions

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Humidity	5%~ 95%, non-condensing	
Self-protection	Yes	
Overheating protection	Yes	
Overvoltage and undervoltage protection	Yes	
Typical noise level	< 65 dB (depending on model and load conditions)	
Altitude	1% up 1500 m. Between 1500 m to 4000 m, according to GB/T3859.2, the power decreases by 1% for every additional 100 m.	
General safety requirements for SVG use and operation area	EN 50178:1997/IEC 50178:1997	
SVG EMC requirements	EN 61000_6_2(2005)/EN55011,GROUP1,CLASS A	
	IEC 61000_6_2(1999)/CISPR11,GROUP1,CLASS A	
SVG performance requirements	EN 50091-3/IEC 62040-3/AS 62040-3(VFI SS 111)	

Technical data and specifications SVG system (cont.)

# **⇔TDK**

# Power Quality Solutions

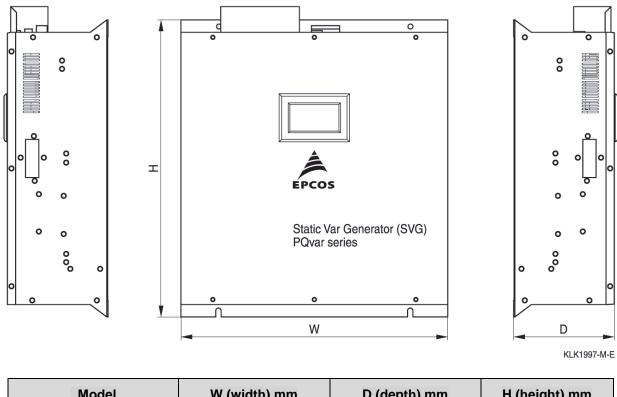
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Dimensional drawing – 110 kvar Wall-Mounted system

# Outside cabinet dimensional drawings



Model	W (width) mm	D (depth) mm	H (height) mm
110 kvar wall-mounted	504	253	725

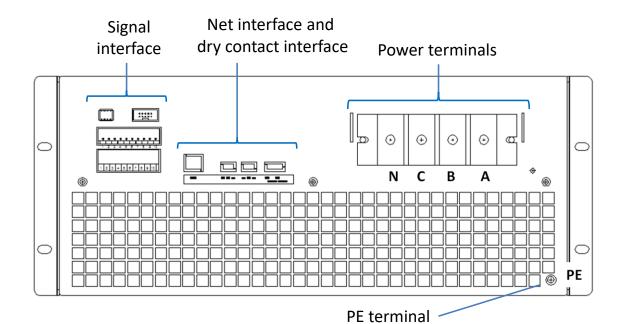


**PQvar Series Static Var Generator (SVG)** 

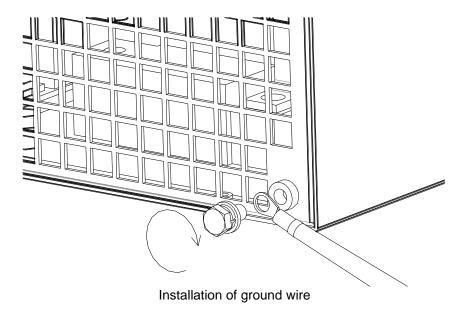
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#### AC mains connection



Wiring terminal



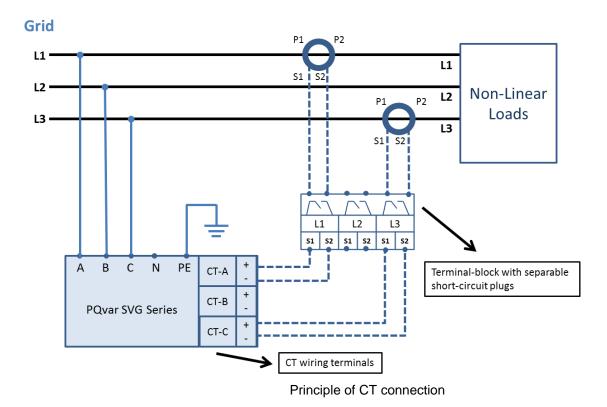


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# **Connection Diagram**



Note: Current transformers are not included in the delivery and must be purchased separately.

Please also carefully read the cautions, notes and warnings in the SVG PQVar operating and installation instructions manual!

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