

PQvar Series Static Var Generator (SVG)

Series/Type: PQSWF6030V344/ 3P3W wall-mounted

Ordering code: B44066F6030V344

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Version:

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

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#### Characteristics

- The SVG PQVar series is a Static Var Generator (SVG) system designed to eliminate reactive power produced by non-linear loads; it monitors the current permanently and compensates the unwanted elements of the measured current.
- 30 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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## Technical data and specifications SVG system

Туре	PQSWF6030V344		
Ordering code	B44066F6030V344		
System input / number of phases	3-phase/3-wire		
Compensation capacity	30 kvar		
Frequency	45 62Hz		
Input voltage (min. / max.)	400V(-40% +20%)		
Inverter technology	12 IGBT three-level topology		
Steady state response time	< 5 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. 35 kg		
Dimensions of a single unit	Approx. 440x150x445 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 220L/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		



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#### Technical data and specifications SVG system (cont.)

5 95%, non-condensing		
Yes		
Yes		
Yes		
< 65 dB (depending on model and load conditions)		
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.		
EN 50178:1997/IEC 50178:1997		
EN 61000_6_2(2005)/EN55011,GROUP1,CLASS A		
IEC 61000_6_2(1999)/CISPR11,GROUP1,CLASS A		
EN 50091-3/IEC 62040-3/AS 62040-3(VFI SS 111)		

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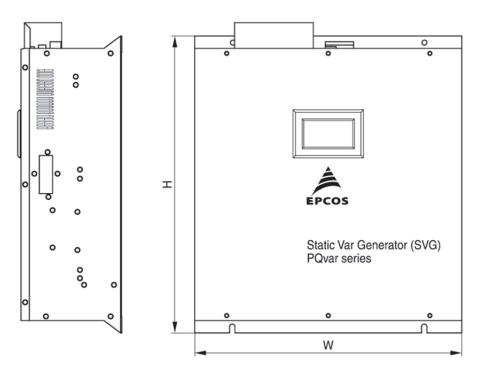
B44066F6030V344

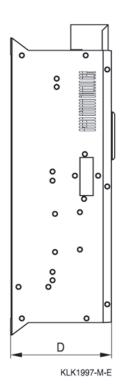
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## Dimensional drawing - 30 kvar Wall-Mounted system

## Outside cabinet dimensional drawings





Model	W (width) mm	D (depth) mm	H (high) mm
30 kvar wall-mounted	440	150	445

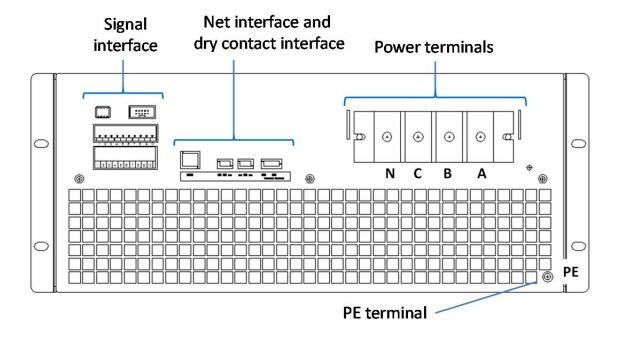


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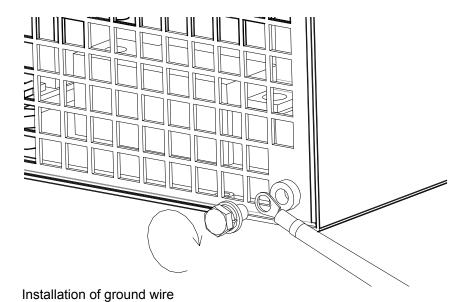
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#### **AC** mains connection



## Wiring terminal



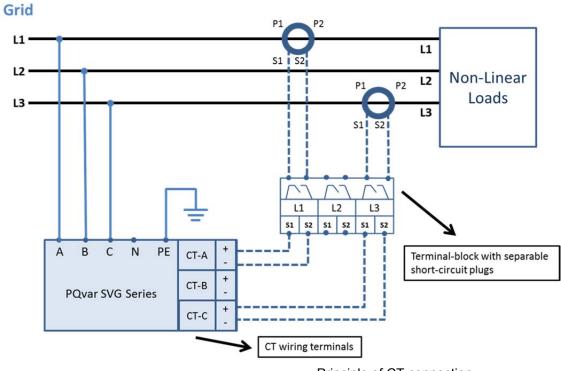


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#### **Connection Diagram**



Principle of CT connection

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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