

Low Voltage Static Var Generator (SVG) PQvar LV-Series

Features

- Compact
- Modular in construction
- 3 Level Topology
- Low Loss
- Low Noise
- High Attenuation Efficiency
- Capable for both inductive & capacitive compensation



EPCOS has been committed to providing a range of Power Factor Correction (PFC) of critical components and Power Quality Solutions (PQS). On behalf of the rapid development of industry and infrastructure the use of power electronic loads in operating conditions is ever increasing. Conventional APFC panels which consist of contactor/Thyristor, detuned filter reactor and capacitor cannot fulfill the need of reactive power compensation for rapidly changing loads. The step/steps compensation cannot meet the precise criteria of reactive power and may get excess or lower than desired.

Technical data and specifications of low-voltage SVG PQvar series

Rated voltage	400 V; -40% ~ +20%	
Mains frequency	50/60 Hz (range: 45 ~ 63 Hz)	
Parallel operation	Unlimited	
Response time	< 15 ms	
Overall efficiency	> 97%	
Power grid structure	3P3W / 3P4W	
Current transformers	150/5 ~ 10000/5	
Circuit topology	3-level	
Single-module compensation capacity	30/50 kvar	100 kvar
Module net weight	35 kg	48 kg
Dimensions (W × D × H mm)	30 kvar: 440 × 445 × 150 (module) 50 kvar: 500 × 510 × 190 (module)	100 kvar: 500 × 470 × 270 (module)
Cooling mode	Smart air cooling: 220 L/sec	Smart air cooling: 405 L/sec
Target power factor	Adjustable from -1 to +1	
Cabinet mounting	Floor-mounted, wall-mounted	
Communication ports	RS485, CAN, and network port	
Communication protocols	Modbus and PMBus	
Noise level	< 65 dB (depending on the model)	
Protection functions	Over-voltage, under-voltage, short-circuit, inverter bridge inverse, over-compensation, and so on	
Operating temperature	-10 to +40 °C	
Relative humidity	5% ... 95%, non-condensing	
Protection class	IP20 (other IP classes are customizable)	
Panel color	RAL7035 light grey	
Altitude	1500 m, 1% derating per 100 m plus	
General safety requirements for SVG PQvar use and operation area	EN 50178:1997/ IEC 50178:1997	
SVG PQvar EMC requirements	EN 61000_6_2(2005)/ EN55011, GROUP1, CLASS A IEC 61000_6_2(1999)/ CISPR11, GROUP1, CLASS A	
SVG PQvar performance requirements	EN 50091-3/ IEC 62040-3/ AS 62040-3(VFI SS 111)	