

Static Var Generator

✓ Optimal Power Factor Correction

- Continuous power factor correction
- Accurate PF maintenance $-1.0 \leq \cos\phi \leq 1.0$
- Capacitive and inductive control
- No overcompensation or undercompensation
- Mixed power factor correction

✓ Advanced Performance

- Harmonic Control
- Three-phase load balancing
- Low noise
- Friendly human-machine interface

✓ Quality Assurance

- TI DSP, Top Brand IGBT (Infineon)
- High stability, resonance avoidance
- Hardware and software protection
- High reliability testing
- Good environmental adaptation



Technical Parameter

	220V	400V	480V	690V
Rated Voltage	(171-269V)	(300-456V)	(356-515V)	(483-793V)
Rated Capacity	10/20/30/40/50kvar	30/50/75/100/150kvar	30/50/75/100kvar	150/175/200kvar
Phase System	3P3W/3P4W/single phase			
Main Frequency	50/60Hz±5%			
Circuit Topology	Three-level			
Multiple Compensation Modes	Reactive power compensation, three-phase load imbalance compensation			
Filter Range	Filtering range 2 to 25th odd harmonics, 100% of rated capacity			
Harmonic Reduction Rate	≥97.5% of rated capacity			
Filtering Performance	Typically, THDi ≤ 5% for rated loads			
Neutral Line Filtering Capability	3 times the rated filtering current in case of 4-wire equipment			
Three-Phase Load Balancing Effect	≤ 5% to mitigate negative and zero sequence currents			
Switching/Control Frequency	25.6kHz			
Initial Response Time	≤50us			
Total Response Time	≤5ms			
System Active Loss	≤2.5 per cent			
Output Current Limit	Automatically limited to 100% output of rated capacity			
Control Algorithm	FFT, Adaptive Control Algorithm, Fast Fourier & Instant Reactive Power Algorithms			
Controller	DSP+FPGA			
Protection	Hardware protection, software protection			
Control Connections	Electrical Connections			
Human Machine Interface	4.3-inch / 7-inch / 10-inch touch TFT LCD HMI			
Noise	<60db (<45db at low speed operation)			
Installation Method	Module embedded (rack), wall-mounted, floor-mounted			
Protection Level	IP20~IP54			
Cooling Method	Speed Control Intelligent Air-cooled Cooling PWM Fan			
Colour	RAL 7035 Industrial Grey/Black			
Ambient Temperature	-20~55°C			
Relative Humidity	95% max, no condensation			
Installation Height Above Sea Level	Rated capacity at altitude ≤2000m, appropriate load shedding at altitude >2000m			
Qualification	CE, IEEE61000, Type Test Report, ISO9001:2015			
Conformity	IEEE 519, ERG5/4			
Communication Protocol	Adopts Modbus RTU remote communication protocol and TCP/IP protocol; Two way RS485 and CAN bus, support mobile phone APP operation, support Ethernet			