Advanced Static Var Generator

ASVG-150kVAR



Features:

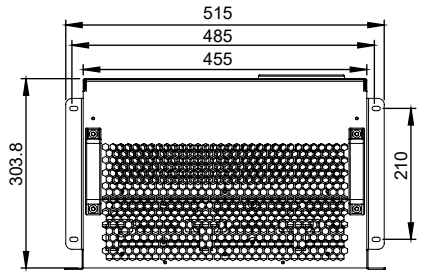
- Real time, dynamic step-less compensation
- Instant response time of 50 µsec & full response within 1 cycle
- Capacitive (Leading) & Inductive (Lagging) reactive power mitigation
- Advance feature- Harmonic correction up to 15th order
- RS485, Optional Wi-Fi / Ethernet
- Modular arrangement-parallel operation up to 8 module
- Can be installed with conventional capacitor banks

Technical specifications

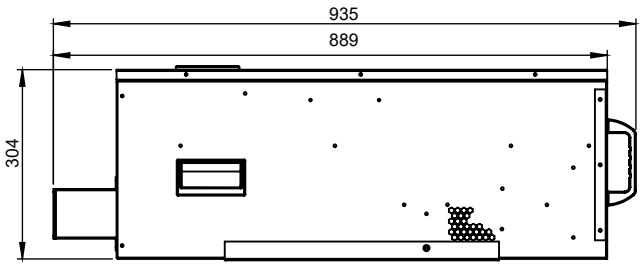
Main	
Product name	ASVG
Product or component type	Advanced static var generator
System parameter	
Network configuration	3P3W
Line - Line voltage	308V to 480V
Operating voltage range (P-N)	178V to 277V
Frequency	50/60 Hz (±2.5Hz)
Power efficiency	≥97%
Compensation efficiency	>98%
Incomer protection	External short circuit protection device mandatory
CT Ratio	settable through HMI upto 30000 / 5A
CT Location	Load side (default) / Grid side
Rated RMS Current	200A
Reactive power compensation and load balancing	As per priority & Based on site (Q+H+B, H+Q+B)
Inverter topology	3 level IGBT Inverter topology
Performance	
Response time	<50µsec and full response within 1 cycle
Overall response time	<5ms
Target power factor	Adjustable from -1 to +1
Cooling	Forced air, 188L / sec
Operating modes	Power factor correction, Harmonic mitigation, Load balancing
Noise level	<65 dB*
Normal spectrum of compensation	Up to 15th order of harmonics
Harmonic mitigation	100A
Protection type	Built in semi conductor fuse
Protection function	Over-voltage protection, Under-voltage protection, IGBT desaturation protection, Over temperature protection, Over compensation protection, over-current protection
Communications and monitoring capabilities	
Local monitoring	4.3" HMI display
Digital inputs	1 DI-Pogrammable for DG input
Digital outputs	2 DO-Programmable for alarms
Communication ports	RS485 (Default)
Communication protocols	MODBUS-RTU (default)
Software updates	Through RS485 port using customised utility

Mechanical properties	
Mounting type	Wall / Rack mount
Dimensions (W × D × H) mm	515*304*935
MCCB	250A
Colour	RAL9004
Environment conditions	
Altitude	<2000m
Operating temperature	-10 to 45 ºC (Current derating of 2% per °C beyond 45 ºC)
Relative humidity	95% RH; Non condensing
Protection class	IP20
Certification and Standard	EN 50178:1997/ IEC 50178:1997
Certification	EN 61000_6_2(2005) / EN55011, GROUP1, CLASS A IEC 61000_6_2(1999) / CISPR11, GROUP1, CLASS A
ASVG Series performance requirement	EN 50091-3 / IEC 62040-3 / AS 62040-3 (VFI SS 111)

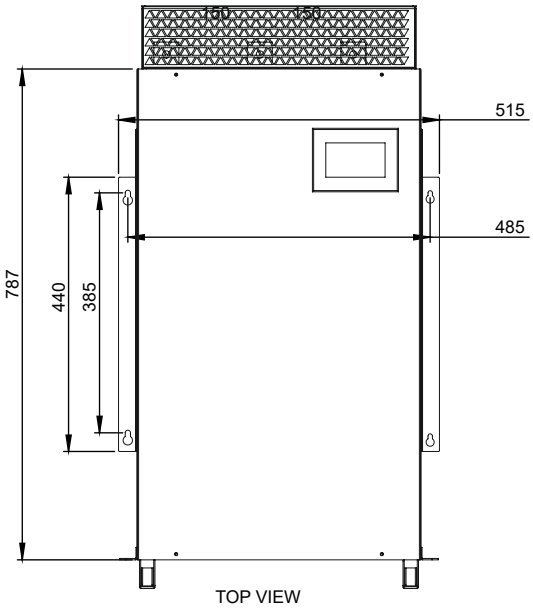
Mechanical diamensions



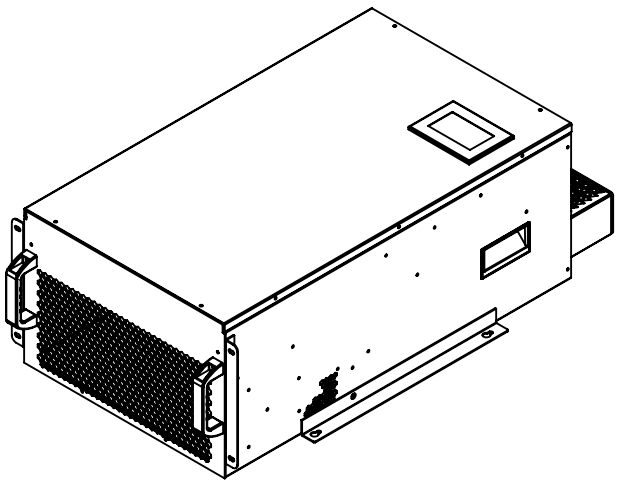
FRONT VIEW



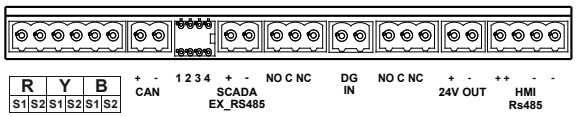
SIDE VIEW

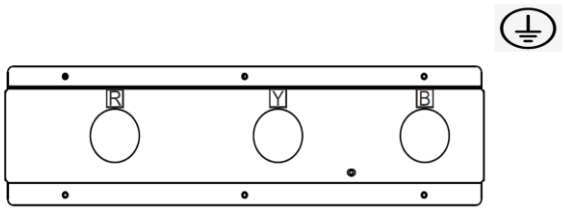


TOP VIEW

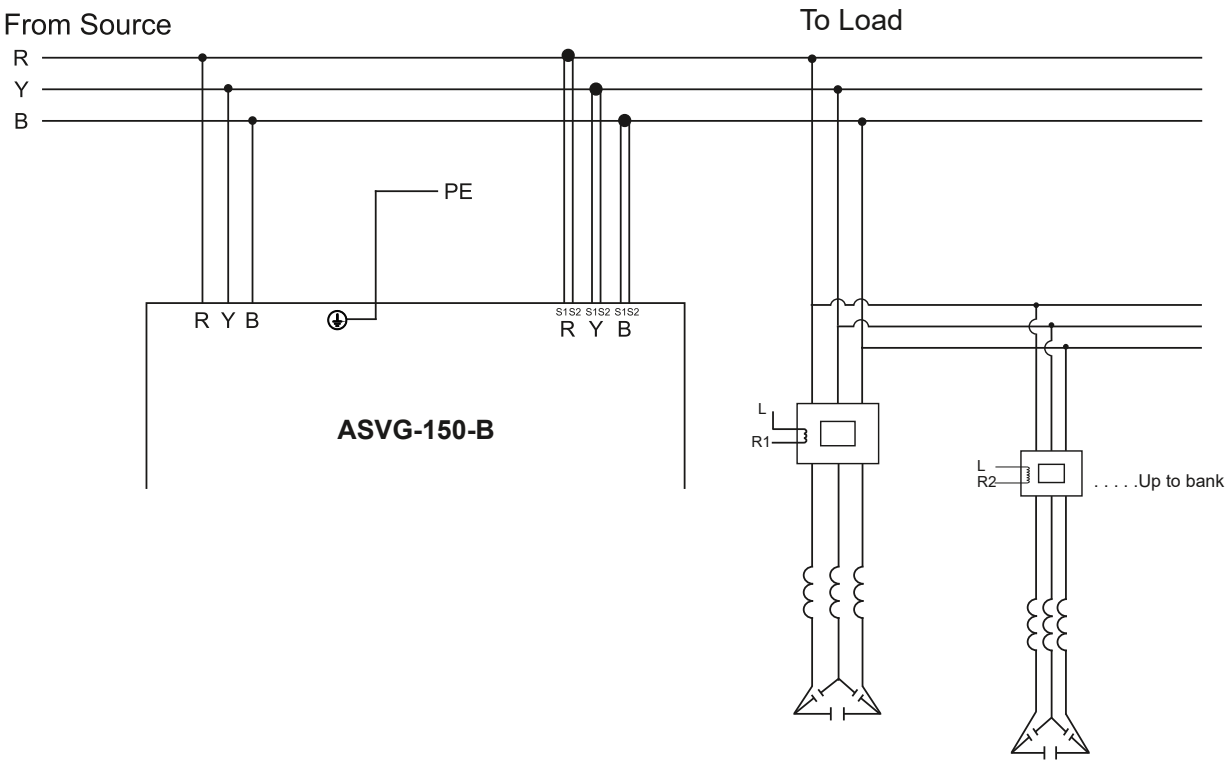

ISOMETRIC VIEW

Terminal diagram





Terminal connection



Ordering information

Product code	Description
ASVG-150-RCK-3P-04-B	Advance Static Var Generator 150kVAR B, Rack mounted, 3P-3W with 4.3 inch HMI
ASVG-150-WLL-3P-04-B	Advance Static Var Generator 150kVAR B, Wall mounted, 3P-3W with 4.3 inch HMI
ASVG-150-WLL-3P-XX-B	Advance Static Var Generator 150kVAR B, Wall mounted, 3P-3W without display

Note : For XX Model seperate common controller is mandatory