

Advanced Static Var Generator

ASVG-50kVAR



Features :

- Real time, dynamic step-less compensation
- Instant response time of 50 μ sec & full response in less than 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

Main

| | |
|---------------------------|-------------------------------|
| Product name | ASVG |
| Product or component type | Advanced Static Var Generator |

System Parameter

| | |
|--|---|
| Line - Line Voltage | 308V to 450V |
| Operating voltage range (P-N) | 178V to 262V |
| Frequency | 50 / 60 Hz (\pm 2.5 Hz) |
| Power efficiency | >97% |
| Compensation efficiency | > 98% |
| Power grid structure | 3P3W/3P4W |
| Incomer protection | External MCCB or ACB Mandatory |
| CT ratio | Settable through HMI up to 10000/5A |
| CT location | Load side (default)/ Grid side |
| Rated RMS Current | 70A |
| Reactive power compensation and load balancing | As Per Priority & based on site (Q+B,Q+H) |
| Circuit topology | 3 level IGBT Inverter Topology |

Performance

| | |
|---------------------------------|---|
| Response time | < 50 μ sec and full response less than 1 Cycle. |
| Target power factor | Adjustable from -1 to +1 |
| Cooling mode | Forced air cooling |
| Operating modes | Power Factor Correction, Harmonic Mitigation, Load Balancing |
| Noise level | < 65 dB |
| Normal spectrum of compensation | Up to 15 th order of Harmonics |
| Harmonic mitigation | 35A |
| Overall response time | < 5ms |
| Protection Functions | Over Current, Over Voltage, Over Temperature, IGBT Saturation, Grid Fault, Surge, DC Bus protection, EEPROM Fault, CT Detection fault |

Communications and Monitoring Capabilities

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|-------------------------|--|
| Local monitoring | 4.3"HMI Display |
| Communication ports | RS485 (Default), Ethernet & WiFi (Optional) |
| Communication protocols | MODBUS-RTU (Default), MODBUS TCP-IP (Optional) |
| Software updates | Through RS485 port using Customised utility |

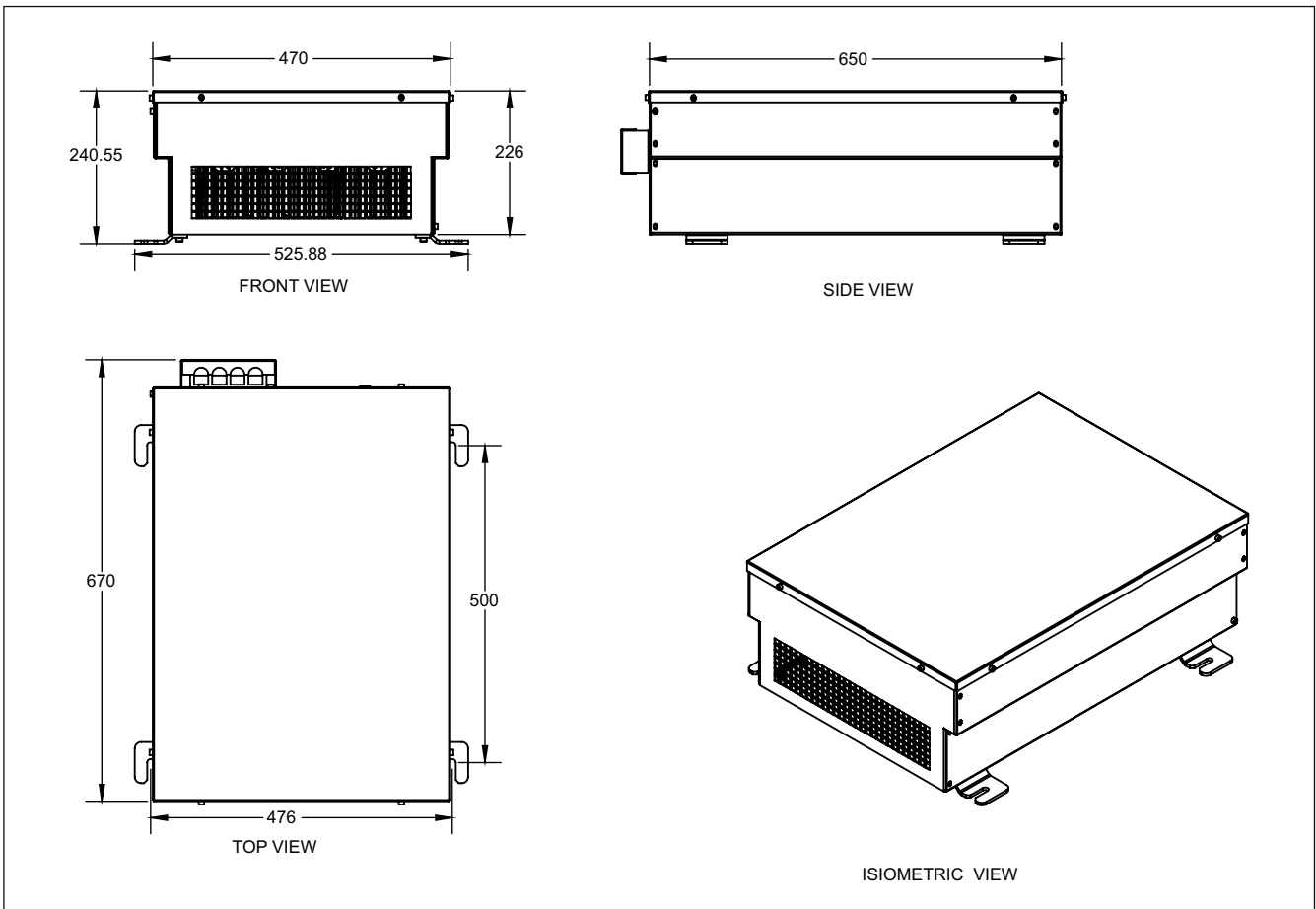
Mechanical Properties

| | |
|---------------------------|-----------------|
| Mounting type | Wall/Rack Mount |
| Dimensions (W × D × H) mm | 470*240*670 |
| MCCB | 100A |
| Colour | RAL7035 |

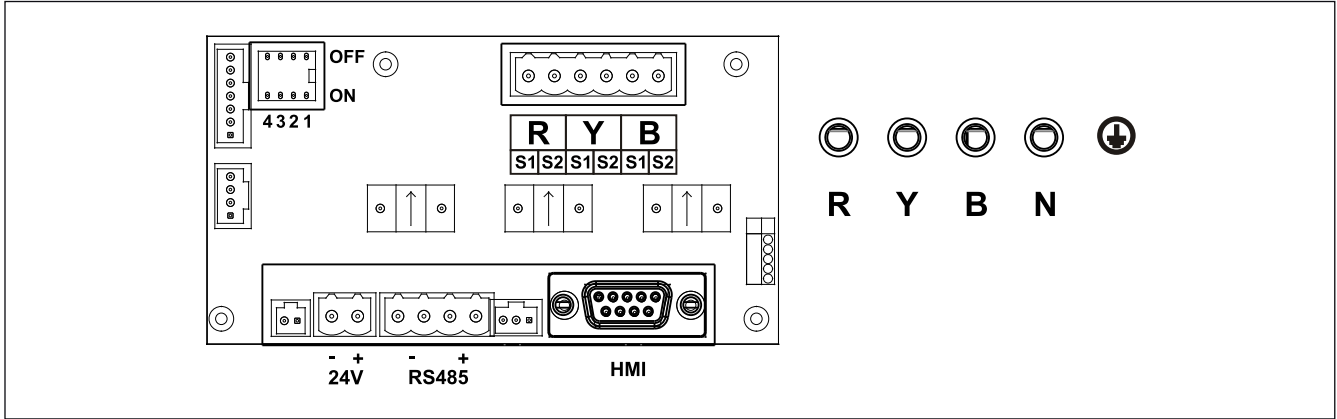
Environment Conditions

| | |
|-------------------------------------|--|
| Altitude | <2000m |
| Operating temperature | -10 to 45°C |
| Relative humidity | 95% RH; Non condensing |
| Protection class | IP 20 |
| 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) |

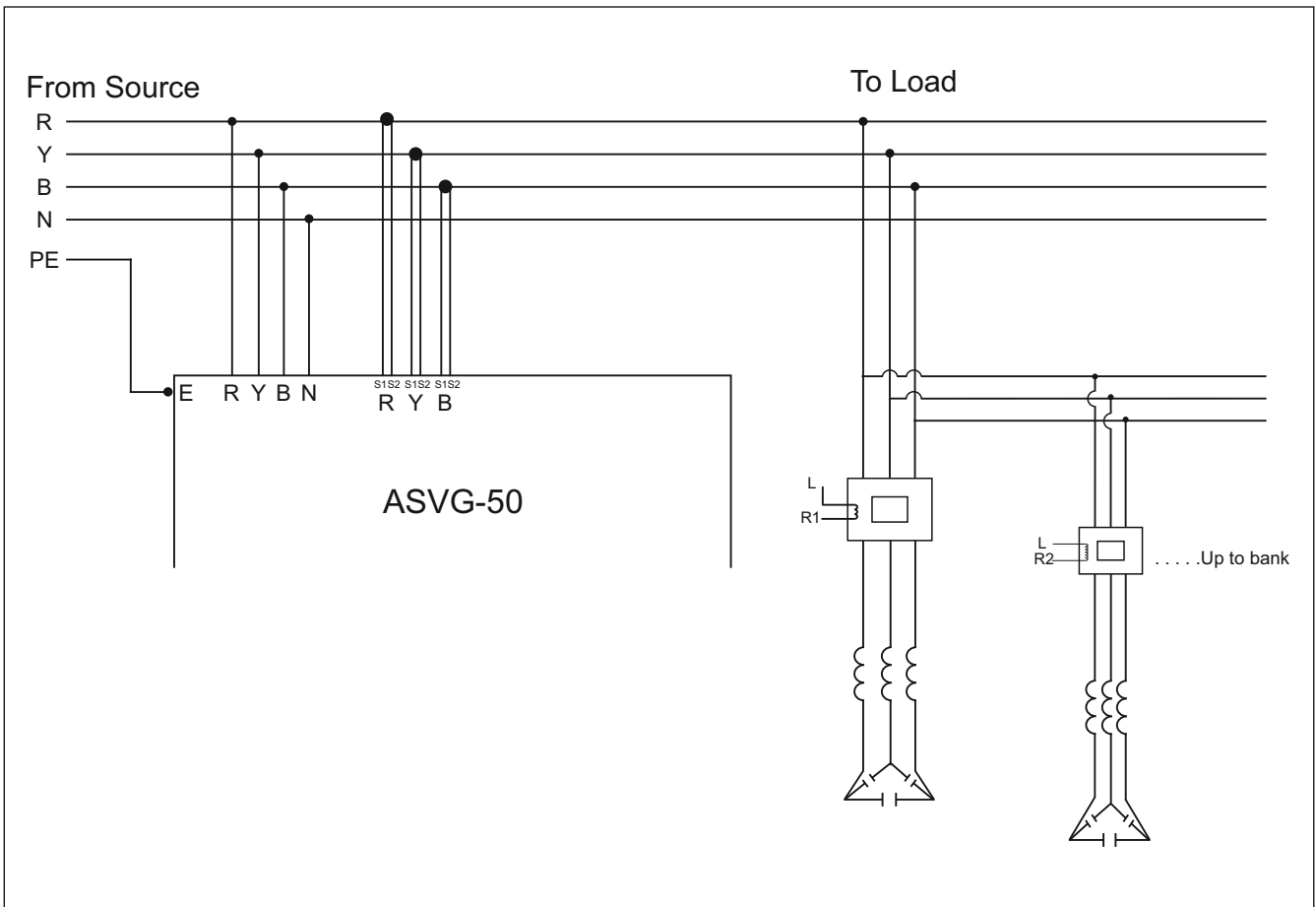
Mechanical dimensions



Terminal diagram



Terminal connection



Ordering information

| Ordering information | Description |
|----------------------|--|
| ASVG-050-RCK-4P-04 | Advance Static Var Generator 50kVAR, Rack mounted, 3P-4W with 4.3 inch HMI |
| ASVG-050-WLL-4P-04 | Advance Static Var Generator 50kVAR, Wall mounted, 3P-4W with 4.3 inch HMI |
| ASVG-050-WLL-4P-XX | Advance Static Var Generator 50kVAR, Wall mounted, 3P-4W without display |

Note : For XX Model separate common controller is mandatory

ELECTRICAL MEASUREMENT | ELECTRICAL PROTECTION & CONTROL | POWER QUALITY SOLUTION | SOLAR | PROCESS MEASUREMENT & CONTROL | INDUSTRIAL AUTOMATION

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