

ACTIVE POWER QUALITY SOLUTIONS

selec[®]



	ASVG	AHF
Range	15 / 30 / 50 / 100 kVAr	50 / 100 A
Harmonics	Upto 15 th order	Upto 51 st order

- ▶ Harmonic correction
- ▶ Parallel operation up to 8 Module

- ▶ Dynamic step-less compensation
- ▶ Instant response time of 50 μ sec & full response within 1 cycle

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Technical Specification for ASVG

SYSTEM PARAMETER	15kVAr	50kVAr	100kVAr
NETWORK RATED VOLTAGE	308V to 456V		
FREQUENCY	50 / 60 Hz (±2.5 Hz)		
NETWORK	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	20A	70A	140A
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	< 50µsec and full response less than 1 Cycle		
PARALLEL OPERATION	Up to 8 modules		
TARGET POWER FACTOR	Adjustable from -1 to +1		
EFFICIENCY	≥ 97%		
COMPENSATION EFFICIENCY	> 98%		
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	10A	35A	75A
REACTIVE POWER	15kVAr	50kVAr	100kVAr
PROTECTION			
PROTECTION TYPE	MCB	Built in Surge arrester & Semi Conductor fuse. External MCCB Mandatory	
PROTECTION FUNCTIONS	Over Current, Over Voltage, Over Temperature, IGBT Saturation, Grid Fault, Surge, DC Bus protection, EEPROM Fault, CT Detection fault		
COMMUNICATION			
LOCAL MONITORING	Monochrome Display	4.3"HMI Display / Without HMI	
COMMUNICATION PORTS	RS485 (Default), Ethernet & WiFi (Optional through converter)		
COMMUNICATION PROTOCOLS	MODBUS-RTU (Default), MODBUS TCP-IP (Optional through converter)		
INPUT / OUTPUT			
DIGITAL INPUTS	—	1 DI - Programmable for DG Input	
DIGITAL OUTPUTS	8DO - For CAP Control	2 DO - Programmable for alarms	
MECHANICAL			
MOUNTING TYPE	Wall Mount	Wall / Rack Mount	
DIMENSIONS (W × D × H) MM	280*227*485	500*194*705	500*204*795
COLOUR	RAL9004		
ENVIRONMENT			
ALTITUDE	<2000m		
OPERATING TEMPERATURE	-10 to 45°C (current derating of 2 % per °C beyond 45°C)		
RELATIVE HUMIDITY	95% RH; Non condensing		
PROTECTION CLASS	IP 20		
CERTIFICATION			
STANDARDS	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)		

Note : 1. For detailed dimensions visit website
2. Colour is subject to change

Technical Specification Active Harmonic Filter

SYSTEM PARAMETER	50A	100A
NETWORK RATED VOLTAGE	308V to 456V	
FREQUENCY	50 / 60 Hz (± 2.5 Hz)	
NETWORK	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	50A	100A
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	
PARALLEL OPERATION	Up to 8 modules	
TARGET POWER FACTOR	Adjustable from -1 to +1	
EFFICIENCY	$\geq 97\%$	
COMPENSATION EFFICIENCY	> 98%	
COOLING MODE	Forced air cooling	
OPERATING MODES	Power Factor Correction, Harmonic Mitigation, Load Balancing	
NOISE LEVEL	< 65 dB	
NORMAL SPECTRUM OF COMPENSATION	Up to 51 st order of Harmonics	
HARMONIC MITIGATION	50A	100A
REACTIVE POWER	36kVAr at 415V	72kVAr at 415V
PROTECTION		
PROTECTION TYPE	External MCCB Mandatory	
PROTECTION FUNCTIONS	Over Current, Over Voltage, Over Temperature, IGBT Saturation, Grid Fault, Surge, DC Bus protection, EEPROM Fault, CT Detection fault	
COMMUNICATION		
LOCAL MONITORING	4.3"HMI Display / Without HMI	
COMMUNICATION PORTS	RS485 (Default), Ethernet & WiFi (Optional through converter)	
COMMUNICATION PROTOCOLS	MODBUS-RTU (Default), MODBUS TCP-IP (Optional through converter)	
MECHANICAL		
MOUNTING TYPE	Wall / Rack Mount	
DIMENSIONS (W x D x H) MM	470 x 240 x 670	571 x 236 x 858
COLOUR	RAL7035	
ENVIRONMENT		
ALTITUDE	<2000m	
OPERATING TEMPERATURE	-10 to 45°C (current derating of 2 % per °C beyond 45°C)	
RELATIVE HUMIDITY	95% RH; Non condensing	
PROTECTION CLASS	IP 20	
CERTIFICATION		
STANDARDS	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)	

Note : 1. For detailed dimensions visit website
2. Colour is subject to change

Ordering information

MODULE ORDER CODES :

PRODUCT CODE	DESCRIPTION
ASVG-015-WLL-4P-00-8R	Advanced Static VAR Generator, 15kVAr, Wall mounting, 3P-4W, 8Relay Output, Monochrome display
AHF-50-WLL-4P-XX	Active Harmonic Filter, 50A, Wall / Rack mounting, 3P-4W, Without Display
AHF-50-WLL-4P-04	Active Harmonic Filter, 50A, Wall mounting, 3P-4W, with HMI display 4.3 Inch
AHF-50-RCK-4P-04	Active Harmonic Filter, 50A, Rack Mounting, 3P-4W, with HMI display 4.3 Inch
AHF-100-WLL-4P-04	Active Harmonic Filter, 100A, Wall mounting, 3P-4W, with HMI display 4.3 Inch
AHF-100-RCK-4P-04	Active Harmonic Filter, 100A, Rack mounting, 3P-4W, with HMI display 4.3 Inch
AHF-100-WLL-4P-XX	Active Harmonic Filter, 100A, Wall / Rack mounting, 3P-4W, without display

PRODUCT CODE	DESCRIPTION
ASVG-050-WLL-4P-XX-B	Advanced Static VAR Generator, 050kVAr, Wall / Rack Mounting, 3P-4W, Without Display
ASVG-050-WLL-4P-04-B	Advanced Static VAR Generator, 050kVAr, Wall Mounting, 3P-4W, with HMI Display 4.3 Inch
ASVG-050-RCK-4P-04-B	Advanced Static VAR Generator, 050kVAr, Rack Mounting, 3P-4W, with HMI Display 4.3 Inch
ASVG-100-WLL-4P-XX-B	Advanced Static VAR Generator, 100kVAr, Wall / Rack Mounting, 3P-4W, Without Display
ASVG-100-WLL-4P-04-B	Advanced Static VAR Generator, 100kVAr, Wall Mounting, 3P-4W, with HMI Display 4.3 Inch
ASVG-100-RCK-4P-04-B	Advanced Static VAR Generator, 100kVAr, Rack Mounting, 3P-4W, with HMI Display 4.3 Inch



ASVG

PANEL ORDER CODES :

Product Type	Rating	Mounting	Network	Display
ASVG	150/200/250/300/350/400/450/500/700/800	PNL	3P-3W (3P) 3P-4W(4P)	07- 7 INCH HMI
AHF				



AHF

Power Quality Hybrid Solution



FEATURES

- Hybrid Solution - Combination of Step based and stepless compensation
- Improved capacitor life due to minimum switching
- Instant response time of 50 μ sec & full response in less than 5 msec
- Capacitive (Leading) & Inductive (Lagging) reactive power mitigation
- Detuned reactor with every capacitor Advance feature- Harmonic correction up to 15th order with ASVG & 51st order with AHF
- Reputed make switchgear
- Easy to expand using common controller
- 18 step relay output / Transistor output

HYBRID ORDER CODE :

Product Type	Rating	ASVG Rating	Capacitor Rating	Display
HYASVG-XXX-ASVGXXXx1-CAP50xX-07	150/200/250/300/350/400/450/500	50 / 100	50	07- 7 INCH HMI

ACCESSORIES - COMMON CONTROLLER

Eg : HYHMI-7-18-S

Product Type	Product Series	Display Screen	Relay Output	Transistor Output	Communication
Common Controller	HYHMI	7"	18	---	S
			9	9	R / T
			---	18	T

Subsidiaries : **Selec GmbH** | **Selec USA** | **Selec Australia**

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