YIY

Active Harmonic Filter / Static Var Generator / Active Voltage Conditioner

May energy and ecology be more harmonious

ZHEJIANG YIYEN HOLDING GROUP

ZHEJIANG YIYEN HOLDING GROUP is a high-tech company that focuses on researching and manufacturing power electronic technology，integrating design, research and development, manufacturing, sales and service. YIYEN is dedicated to reducing electricity costs, improving electricity efficiency, and providing core power equipment and system solutions for the energy Internet of Things.With electrochemical energy storage and energy efficiency management as its core industry, YIYEN provides energy-saving service for power system, communication system, financial system, education system, medical system, and large industrial and mining enterprises.

Energy storage and energy efficiency management are critical reducing carbon emissions and promoting sustainable development. YIYEN's mission is to help make energy and ecology more harmonious by providing advanced energy storage and power quality solutions which improve efficiency, reduce costs, and promote clean energy.YIYEN will always continue to devote ourselves to the research and development and manufacturing of power electronic technology, and be committed to delivering cutting-edge solutions helping customers meet their energy management goals while contributing to a more sustainable future for all.

300+
Staff

30000m²+
Plant Area

15 year +
Years Experience

100,000+ /year
Unit Shipments

ENTERPRISE ARCHITECTURE

Headquarters

ZHEJIANG YIYEN HOLDING GROUP

Intelligent Manufacturing	Lishui Yiyen Technology CO.,LTD	Factory
Globalization Channel	Wenzhou Yiyen Supply Chain Management CO.,LTD	Marketing/Sales/Sourcing Total Solutions and Technical Services
Investment Operation	Wenzhou Yiyen Energy Development CO.,LTD	EPC Service Provider for New Energy and Energy Storage Plants Contract Energy Management (Domestic Only)
R&D	Nanjing Branch Shenzhen Branch Hangzhou Branch	R&D Center

50+
R&D Staff

130+
Export Countries

100+
Intellectual Properties

Qualification Certification

ISO9001

QUALITY MANAGEMENT SYSTEM CERTIFICATE

Certificate No. : 20222Q21193R0S

We hereby certify that the organization:

LISHUI YIYEN TECHNOLOGY COMPANY LIMITED

Unified social credit code: 91331127MA2E079Y8T

is in conformity with Quality Management System Standard:

GB/T19001-2016 idt ISO9001:2015

The certificate is valid to the following products/service:

The assembling of Voltage Stabilizer、Inverter、Photovoltaic Equipment（MPPT Solar Charger、PCS）、 Uninterruptible Power Supply、Emergency Power Supply、Battery Pack Energy Storage System、Battery Management System（BMS）

Registration Address/Audit Address: No.77,Xiang Long Road,Lian Du Zone,Lishui City,Zhejiang Province, China.

Date of Issue: 26-09-2022
Date of Expiry: 25-09-2025
Date of Initial: 26-09-2022

Issued By

中国认可
国际互认
管理体系
MANAGEMENT SYSTEM
CNAS C197-M

The audit of validity of the certificate, the certificate shall be at least once a year.
The effectiveness of the Certificate is subject to QR Code in the lower left corner.
Meanwhile, you can search the website of certification body: www.qpc.org.cn
or search the CNCA website: www.cnca.gov.cn

ZHEJIANG QUANPIN CERTIFICATION CO.,LTD.
Room 603, Floor 6, Building 1, No.74, Puyan Road, Puyan Street, Binjiang District, Hangzhou City, Zhejiang Province, China 310053 WEB: Http://www.qpc.org.cn

ISO45001

OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM CERTIFICATE

Certificate No.：20222S20467R0S

We hereby certify that the organization:

LISHUI YIYEN TECHNOLOGY COMPANY LIMITED

Unified social credit code: 91331127MA2E079Y8T

is in conformity with Occupational Health Safety Management System Standard：

GB/T45001-2020 idt ISO45001:2018

The certificate is valid to the following products/service：

The assembly and related management activities of Voltage Stabilizer、Inverter、Photovoltaic Equipment（MPPT Solar Charger、PCS）、Uninterruptible Power Supply、Emergency Power Supply、Battery Pack Energy Storage System、Battery Management System（BMS）

Registration Address/Audit Address: No.77,Xiang Long Road,Lian Du Zone,Lishui City,Zhejiang Province, China.

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Room 603, Floor 6, Building 1, No.74, Puyan Road, Puyan Street, Binjiang District, Hangzhou City, Zhejiang Province, China 310053 WEB: Http://www.qpc.org.cn

ISO14001

ENVIRONMENTAL MANAGEMENT SYSTEM CERTIFICATE

Certificate No.：20222E20495R0S

We hereby certify that the organization:

LISHUI YIYEN TECHNOLOGY COMPANY LIMITED

Unified social credit code: 91331127MA2E079Y8T

is in conformity with Environmental Management System Standard：

GB/T24001-2016 idt ISO14001:2015

The certificate is valid to the following products/service：

The assembly and related management activities of Voltage Stabilizer、Inverter、Photovoltaic Equipment（MPPT Solar Charger、PCS）、Uninterruptible Power Supply、Emergency Power Supply、Battery Pack Energy Storage System、Battery Management System（BMS）

Registration Address/Audit Address: No.77,Xiang Long Road,Lian Du Zone,Lishui City,Zhejiang Province, China.

Date of Issue: 26-09-2022
Date of Expiry: 25-09-2025
Date of Initial: 26-09-2022

Issued By

中国认可
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CNAS C197-M

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or search the CNCA website: www.cnca.gov.cn

ZHEJIANG QUANPIN CERTIFICATION CO.,LTD.
Room 603, Floor 6, Building 1, No.74, Puyan Road, Puyan Street, Binjiang District, Hangzhou City, Zhejiang Province, China 310053 WEB: Http://www.qpc.org.cn

KES TESTING CERTIFICATION • • • KES TESTING CERTIFICATION

Certificate of Conformity

Certification No.	:	KESJC2022062501495
Applicant	:	LISHUI YIYEN TECHNOLOGY COMPANY LIMITED
Address	:	No.77,Xiang Long Road,Lian Du Zone,Lishui City,Zhejiang Province, China.
Manufacturer	:	LISHUI YIYEN TECHNOLOGY COMPANY LIMITED
Address	:	No.77,Xiang Long Road,Lian Du Zone,Lishui City,Zhejiang Province, China.
Certification	:	CE-LVD
Product Description	:	Three phase automatic compensation voltage regulator
Model	:	SBW-30kVA, SBW-50kVA, SBW-60kVA, SBW-80kVA, SBW-100kVA, SBW-120kVA, SBW-150kVA, SBW-180kVA, SBW-200kVA, SBW-220kVA, SBW-250kVA, SBW-300kVA, SBW-320kVA, SBW-350kVA, SBW-400kVA, SBW-500kVA, SBW-600kVA, SBW-800kVA, SBW-1000kVA, SBW-1200kVA, SBW-1500kVA, SBW-1600kVA, SBW-2000kVA, SBW-2500kVA
Trademark	:	N/A

The above products have been tested by us with listed standards and found in compliance with the Directive 2014/35/EU. It is possible to use CE marking to demonstrate the compliance with this Directive.

Test Standards	:	EN 62368-1:2020+A11:2020

The certificate is based on a single evaluation of tested samples of above-mentioned product. It does not imply an assessment of the whole production and does not permit the use of the test laboratory logo.

CE

Authorized Signer:

Kevin Liu /Manager

Jul. 16, 2022

Shenzhen KES Testing & Certification Co., LTD
Room 405, Floor 4th, Building C, Yuxing Technology Industrial Park, Xixiang Street, Bao' an District, Shenzhen, Guangdong, China
86-755-23009643 86-755-23009643 http://www.kestest.com

Certificate of Conformity

NO.: ES1703310308E

The following product has been tested by us with the listed standards and found in conformity with the council EMC directive 2014/30/EU. It is possible to use CE marking to demonstrate the conformity with this EMC Directive.

Applicant	:	YUEQING YIYEN ELECTRIC TECHNOLOGY COMPANY LIMITED
Address	:	4th Floor, No.281,Wei 18 Road, Economic Development Zone, Yueqing City, 325600, Zhejiang Province, China
Manufacturer	:	Shenzhen Yiyuan Technology Co., Ltd
Address	:	4th Floor, Building A, Guanghao Industrial Zone, Queshan Road, Longhua Town, Baoan District, Shenzhen City, 518109, China
Trade Mark	:	YIY
EUT	:	Automatic Voltage Regulator
M/N	:	SVR-500VA, SVR-1000VA, SVR-1500VA, SVR-2000VA, SVR-3000VA, SVR-5000VA, SVR-8000VA, SVR-10KVA, SVR-15KVA, SVR-20KVA, SVR-30KVA
Test Standards	:	EN 61000-6-3:2007+A1:2011+ AC:2012 EN 61000-3-12: 2011 EN 61000-3-11: 2000 EN 61000-6-1: 2007

CE

(Manager)

May 03, 2017

The certificate is based on a single evaluation of one sample of above-mentioned products. It does not imply an assessment of the whole production and does not permit the use of the test lab. logo.

Ver.1.0

Certificate of Conformity

NO.: ES1703310308

The following product has been tested by us with the listed standards and found in conformity with the council LVD directive 2014/35/EU . It is possible to use CE marking to demonstrate the conformity with this LVD Directive.

Applicant	:	YUEQING YIYEN ELECTRIC TECHNOLOGY COMPANY LIMITED
Address	:	4th Floor, No.281,Wei 18 Road, Economic Development Zone,Yueqing City,325600,Zhejiang Province, China
Manufacturer	:	Shenzhen Yiyuan Technology Co.,Ltd
Address	:	4th Floor, Building A, Guanghao Industrial Zone, Queshan Road, Longhua Town, Baoan District, Shenzhen City,518109,China
Trade Mark	:	YIY
EUT	:	Automatic Voltage Regulator
M/N	:	SVR-500VA, SVR-1000VA, SVR-1500VA, SVR-2000VA, SVR-3000VA, SVR-5000VA, SVR-8000VA, SVR-10KVA, SVR-15KVA, SVR-20KVA, SVR-30KVA
Technical Data	:	Refer to test report.
Test Standards	:	EN 61558-2-12: 2011

CE

(Manager)

May 25, 2017

The certificate is based on a single evaluation of one sample of above-mentioned products. It does not imply an assessment of the whole production and does not permit the use of the test lab. logo.

Ver.1.0

Certificate of Conformity

NO.: ES1703310309E

The following product has been tested by us with the listed standards and found in conformity with the council EMC directive 2014/30/EU. It is possible to use CE marking to demonstrate the conformity with this EMC Directive.

Applicant	:	YUEQING YIYEN ELECTRIC TECHNOLOGY COMPANY LIMITED
Address	:	4th Floor, No.281,Wei 18 Road, Economic Development Zone, Yueqing City, 325600, Zhejiang Province, China
Manufacturer	:	Shenzhen Yiyuan Technology Co., Ltd
Address	:	4th Floor, Building A, Guanghao Industrial Zone, Queshan Road, Longhua Town, Baoan District, Shenzhen City, 518109, China
Trade Mark	:	YIY
EUT	:	Automatic Voltage Regulator
M/N	:	TR-500VA, TR-1000VA, TR-1500VA, TR-2000VA, TR-3000VA, TR-5000VA, TR-8000VA, TR-10KVA, TR-12KVA, TR-15KVA
Test Standards	:	EN 61000-6-3:2007+A1:2011+ AC:2012 EN 61000-3-12: 2011 EN 61000-3-11: 2000 EN 61000-6-1: 2007

CE

(Manager)

May 03, 2017

The certificate is based on a single evaluation of one sample of above-mentioned products. It does not imply an assessment of the whole production and does not permit the use of the test lab. logo.

Ver.1.0

Certificate of Conformity

NO.: ES1703310309S

The following product has been tested by us with the listed standards and found in conformity with the council LVD directive 2014/35/EU . It is possible to use CE marking to demonstrate the conformity with this LVD Directive.

Applicant	:	YUEQING YIYEN ELECTRIC TECHNOLOGY COMPANY LIMITED
Address	:	4th Floor, No.281,Wei 18 Road, Economic Development Zone,Yueqing City,325600,Zhejiang Province, China
Manufacturer	:	Shenzhen Yiyuan Technology Co.,Ltd
Address	:	4th Floor, Building A, Guanghao Industrial Zone, Queshan Road, Longhua Town, Baoan District, Shenzhen City,518109,China
Trade Mark	:	YIY
EUT	:	Automatic Voltage Regulator
M/N	:	TR-500VA, TR-1000VA, TR-1500VA, TR-2000VA, TR-3000VA, TR-5000VA, TR-8000VA, TR-10KVA, TR-12KVA, TR-15KVA
Technical Data	:	Refer to test report.
Test Standards	:	EN 61558-2-12: 2011

CE

(Manager)

May 25, 2017

The certificate is based on a single evaluation of one sample of above-mentioned products. It does not imply an assessment of the whole production and does not permit the use of the test lab. logo.

Ver.1.0

Certificate of Conformity

NO.: ES1703310289E

The following product has been tested by us with the listed standards and found in conformity with the council EMC directive 2014/30/EU. It is possible to use CE marking to demonstrate the conformity with this EMC Directive.

Applicant	:	YUEQING YIYEN ELECTRIC TECHNOLOGY COMPANY LIMITED
Address	:	4th Floor, No.281,Wei 18 Road, Economic Development Zone, Yueqing City, 325600, Zhejiang Province, China
Manufacturer	:	Shenzhen Yiyuan Technology Co., Ltd
Address	:	4th Floor, Building A, Guanghao Industrial Zone, Queshan Road, Longhua Town, Baoan District, Shenzhen City, 518109, China
Trade Mark	:	YIY
EUT	:	Automatic Voltage Regulator
M/N	:	TSD-500VA, TSD-1000VA, TSD-1500VA, TSD-2000VA, TSD-3000VA, TSD-5000VA, TSD-8000VA, TSD-12KVA
Test Standards	:	EN 61000-6-3:2007+A1:2011+ AC:2012 EN 61000-3-12: 2011 EN 61000-3-11: 2000 EN 61000-6-1: 2007

CE

(Manager)

May 05, 2017

The certificate is based on a single evaluation of one sample of above-mentioned products. It does not imply an assessment of the whole production and does not permit the use of the test lab. logo.

Ver.1.0

Certificate of Conformity

NO.: ES1703310288S

The following product has been tested by us with the listed standards and found in conformity with the council LVD directive 2014/35/EU . It is possible to use CE marking to demonstrate the conformity with this LVD Directive.

Applicant	:	YUEQING YIYEN ELECTRIC TECHNOLOGY COMPANY LIMITED
Address	:	4th Floor, No.281,Wei 18 Road, Economic Development Zone,Yueqing City,325600,Zhejiang Province, China
Manufacturer	:	Shenzhen Yiyuan Technology Co.,Ltd
Address	:	4th Floor, Building A, Guanghao Industrial Zone, Queshan Road, Longhua Town, Baoan District, Shenzhen City,518109,China
Trade Mark	:	YIY
EUT	:	Automatic Voltage Regulator
M/N	:	TSD-500VA, TSD-1000VA, TSD-1500VA, TSD-2000VA, TSD-3000VA, TSD-5000VA, TSD-8000VA, TSD-10KVA, TSD-12KVA
Technical Data	:	Refer to test report.
Test Standards	:	EN 61558-2-12: 2011

CE

(Manager)

May 25, 2017

The certificate is based on a single evaluation of one sample of above-mentioned products. It does not imply an assessment of the whole production and does not permit the use of the test lab. logo.

Ver.1.0

EMTEK
Access to the World

TEST REPORT

EN 61558-2-12

Safety of power transformers, power supply units and similar
Part 12: Particular requirements for constant voltage transformers

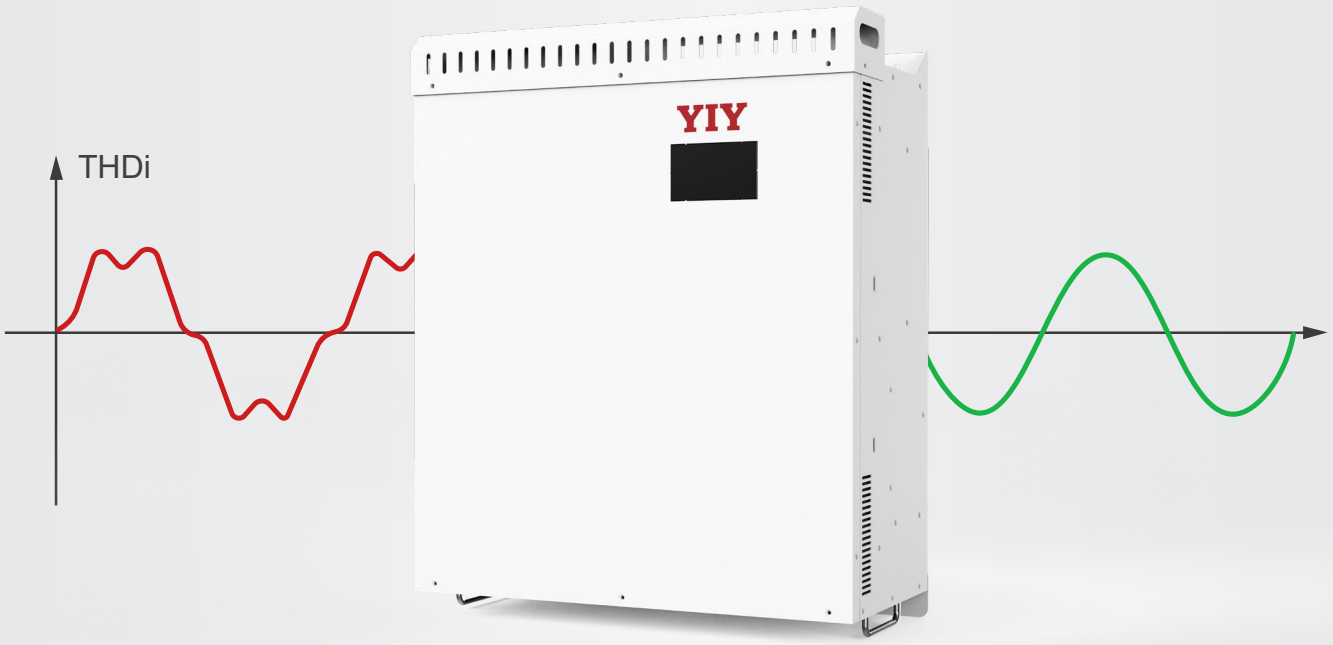
Report reference No	:	ES1703310288
Tested by (+ signature)	:	Agan Gan
Approved by (+ signature)	:	William Guo
Date of issue	:	May 25, 2017
Total number of pages	:	52 pages
Testing Laboratory	:	EMTEK (SHENZHEN) CO., LTD.
Address	:	Bldg 69, Majialong Industry Zone, Nanshan District, Shenzhen City, Guangdong, China.
Testing location/address	:	Same as above
Applicant's name	:	YUEQING YIYEN ELECTRIC TECHNOLOGY COMPANY LIMITED
Address	:	4th Floor, No.281,Wei 18 Road, Economic Development Zone,Yueqing City,325600,Zhejiang Province, China
Test specification:		
Standard	:	EN 61558-2-12: 2011 use in conjunction with EN 61558-1:2005+A1:2009
Test procedure	:	Compliance with EN 61558-2-12: 2011 use in conjunction with EN 61558-1:2005+A1:2009
Non-standard test method	:	N/A
Test item description	:	Automatic Voltage Regulator
Trade Mark	:	YIY
Manufacturer	:	Shenzhen Yiyuan Technology Co.,Ltd
Address	:	4th Floor, Building A, Guanghao Industrial Zone, Queshan Road, Longhua Town, Baoan District, Shenzhen City,518109,China
Model / Type reference	:	TSD-500VA, TSD-1000VA, TSD-1500VA, TSD-2000VA, TSD-3000VA, TSD-5000VA, TSD-8000VA, TSD-10KVA, TSD-12KVA
Ratings	:	See the rating labels.


YIY

PRODUCT CATALOGUE

AHF

Active Harmonic Filters



Active Harmonic Filter (AHF) An active harmonic filter is a type of electronic device that is used to mitigate or eliminate harmonic distortions in electrical power systems. Harmonic distortion refers to the presence of unwanted frequencies in the power system that can lead to issues such as increased heating of equipment, reduced system efficiency, and even equipment failure.

AHF operates by sensing the harmonic currents in the system and generating a counter-current of the same magnitude and opposite phase. This counter-current cancels out the harmonic current and prevents it from being fed back into the power system. Active harmonic filters are designed to be fast and accurate in their response to changing harmonic conditions in the power system.

Active harmonic filters are commonly used in industrial and commercial settings where there are high levels of non-linear loads, such as variable frequency drives, uninterruptible power supplies, and computer equipment. They are also used in power quality improvement applications in residential and commercial buildings.

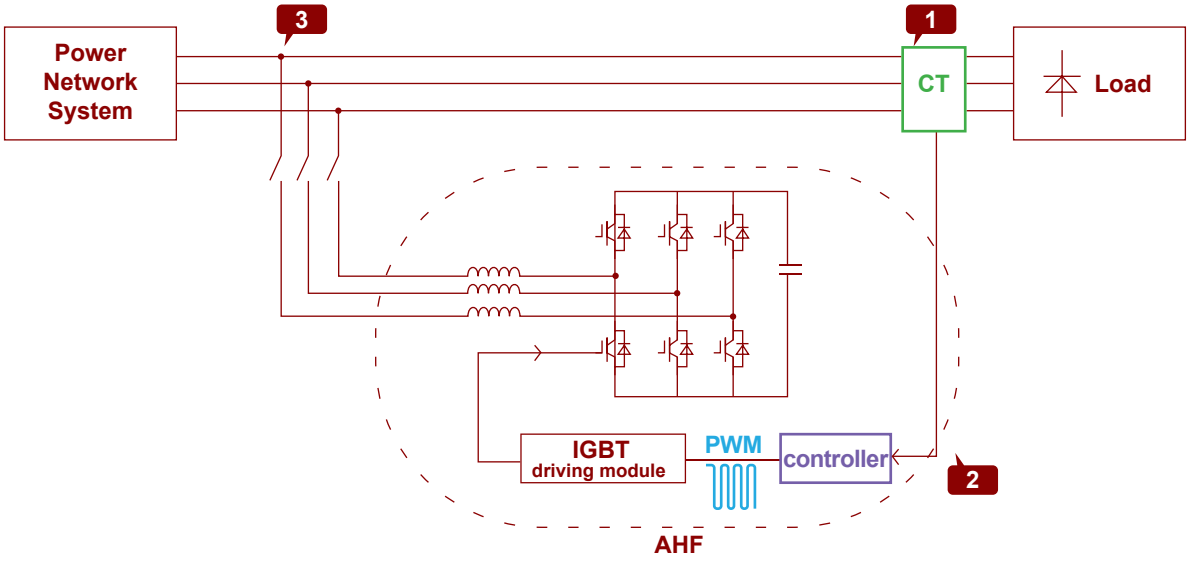
• Product Features

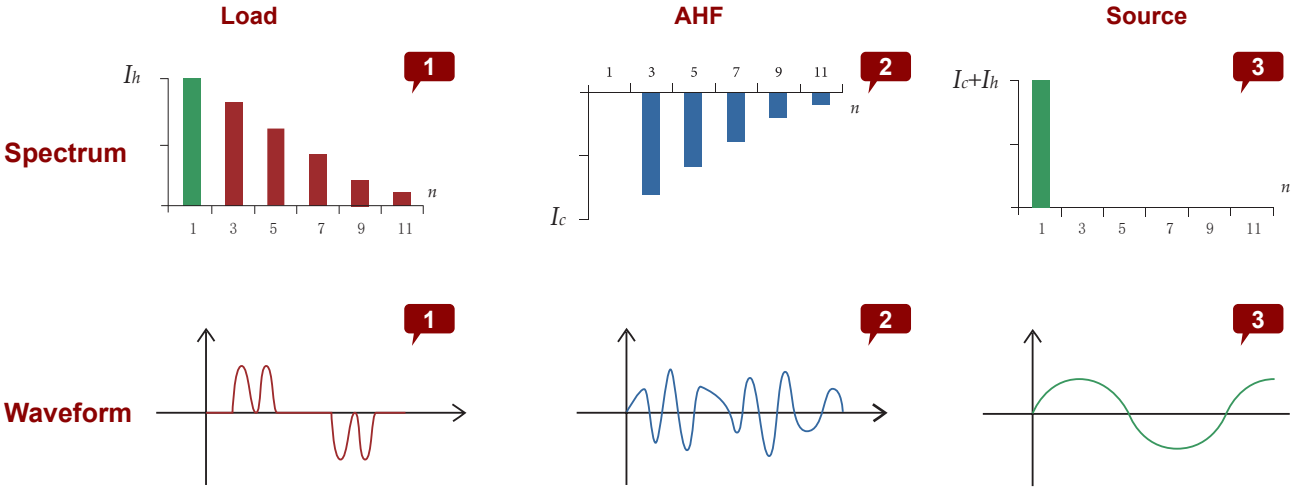
- Modular design
- Real-time compensation
- 2nd to 50th harmonic mitigation
- Three phase balancing
- Prevent equipment from overheating and failure
- Improve equpment working efficiency

• Working Principle

With the load current detected by external CT, DSP as CPU has advanced logic control arithmetic, could quickly track the instruction current, divide the load current into active power and reactive power by using the intelligent FFT, and calculate the harmonic content rapidly and accurately. Then it sends PWM signal to internal IGBT's driver board to control IGBT on and off at 20KHZ frequency. Finally, it generates opposite phase compensation current on inverter induction. In the meanwhile, CT also detects the output current and negative feedback goes to DSP. Then DSP proceeds the next logical control to achieve more accurate and stable system.

Working Principle





• Technical Specifications

Nominal Voltage	220V Series	400V/220V Series	500V Series	690V Series	800V Series
Rated Compensation Current	25A	15/25/50/75/ 100/150/200A	100A	100A	100A
Working Voltage Range	AC220V (-20%~+20%)	AC400V (-20%~+15%) / 220V(-20%~+20%)	AC500V (-20%~+20%)	AC690V (-20%~+15%)	AC800V (-20%~850VAC)
Rated Frequency	50/60Hz(45Hz~63Hz)				
Grid Structure	Single phase	3 phase 3 wire/3 phase 4 wire			3 Phase 3 Wire
Response Time	<40ms				
Harmonics Compensation	2nd to 50th order,8 harmonic orders can be selected and filtered at the same time				
Harmonic Compensation Rate	≥95%				
Neutral Line Filtering Capability	/	The filtering capacity of 3 phase 4 wire neutral line is 1.5 times of that of phase filtering(3 times customized)			/
Machine Efficiency	≥97%				
Switching Frequency	32kHz	16kHz	12.8kHz		
Function	Harmonics filter	Harmonics filter / Three phase balance			Harmonics filter
Numbers In Parallel	No limitation. A centralized monitor can control up to 8 modules				
Communication Methods	Two-channel RS485 communication interface (support GPRS/WIFI wireless communication)				
Altitude Without Derating	<2000m				
Operating Temperature	-20~+50°C (derating above 40°C)				
Humidity	<90% RH,the average monthly minimum temperature is 25°C without condensation on the surface				
Pollution Level	Below level Ⅲ				
Protection Function	Overload protection, hardware/software over-current protection, over-voltage protection, power failure protection, over-temperature protection, frequency anomaly protection, short circuit protection, etc				
Noise	≤60dB	≤65dB			
Installation	Rack/Wall-mounted				
Wiring	Back entry (rack-mounted type), top entry (wall-mounted type)				
Protection Grade	IP20				

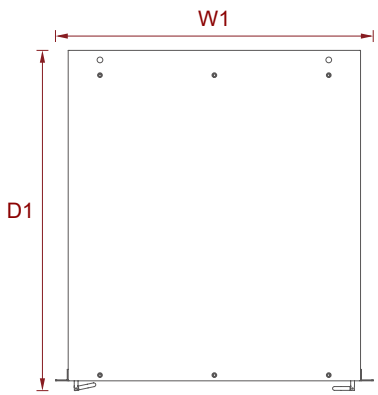
• Type Code

YIY AHF - 75 - 0.4 - 4L -W

- W: Wall-mounted
  R : Rack-mounted
  C : FCL device
- 2L: Single Phase
  3L: 3P3W
  4L: 3P4W
- 0.22 : 220V
  0.4 : 400V
  0.5 : 500V
  0.69 : 690V
  0.8 : 800V
- Nominal Capacity:15/25/50/75/100/150A
- Active Harmonic Filters
- Yiyen Brand Name

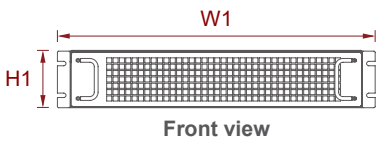
• Product Dimensions

Rack-Mount

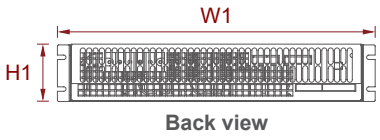


Rear view

Side view



Front view



Back view

• Models

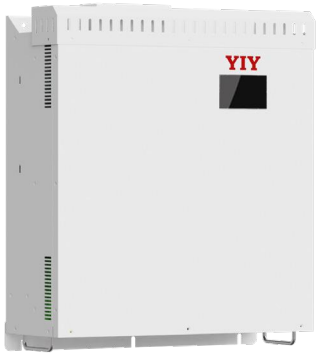
Model	Capacity	System Voltage	Size(W1*D1*H1)	Cooling Mode
YIY AHF-23-0.22-2L-R	23A	220V	220*375*167mm	Forced air cooling
YIY AHF-15-0.4-4L-R	15A	400V	500*535*89mm	Forced air cooling
YIY AHF-25-0.4-4L-R	25A	400V	500*535*89mm	Forced air cooling
YIY AHF-50-0.4-4L-R	50A	400V	500*535*89mm	Forced air cooling
YIY AHF-75-0.4-4L-R	75A	400V	550*584*190mm	Forced air cooling
YIY AHF-100-0.4-4L-R	100A	400V	550*624*240mm	Forced air cooling
YIY AHF-150-0.4-4L-R	150A	400V	550*624*240mm	Forced air cooling
YIY AHF-100-0.5-4L-R	100A	500V	550*722*275mm	Forced air cooling
YIY AHF-100-0.69-4L-R	100A	690V	550*752.5*275mm	Forced air cooling
YIY AHF-100-0.8-3L-R	100A	800V	550*752.5*275mm	Forced air cooling

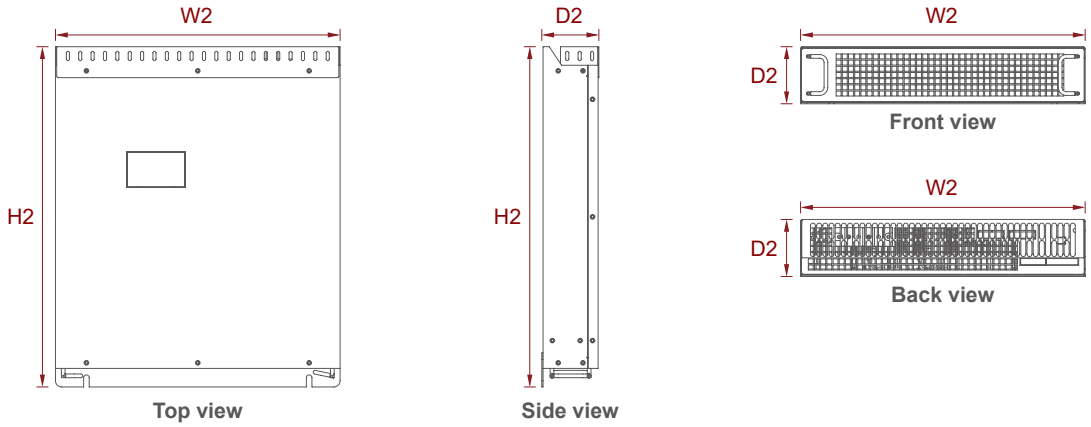
Model	Capacity	System Voltage	Size(W1*D1*H1)	Cooling Mode
YIY AHF-15-0.22-4L-R	15A	220V	500*535*89mm	Forced air cooling
YIY AHF-25-0.22-4L-R	25A	220V	500*535*89mm	Forced air cooling
YIY AHF-50-0.22-4L-R	50A	220V	500*535*89mm	Forced air cooling
YIY AHF-75-0.22-4L-R	75A	220V	550*584*190mm	Forced air cooling
YIY AHF-100-0.22-4L-R	100A	220V	550*624*240mm	Forced air cooling
YIY AHF-150-0.22-4L-R	150A	220V	550*624*240mm	Forced air cooling

*If you need any other sizes, please contact us for customization.

• Product Dimensions

Wall-Mounted





• Models

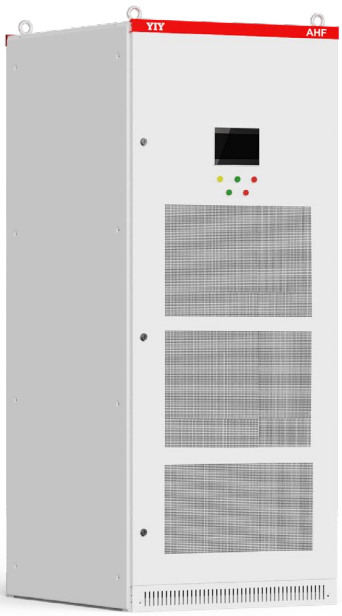
Model	Capacity	System Voltage	Size(W2*D2*H2)	Cooling Mode
YIY AHF-23-0.22-2L-W	23A	220V	220*167*375mm	Forced air cooling
YIY AHF-15-0.4-4L-W	15A	400V	500*89*535mm	Forced air cooling
YIY AHF-25-0.4-4L-W	25A	400V	500*89*535mm	Forced air cooling
YIY AHF-50-0.4-4L-W	50A	400V	500*89*535mm	Forced air cooling
YIY AHF-75-0.4-4L-W	75A	400V	550*190*584mm	Forced air cooling
YIY AHF-100-0.4-4L-W	100A	400V	550*240*624mm	Forced air cooling
YIY AHF-150-0.4-4L-W	150A	400V	550*240*624mm	Forced air cooling
YIY AHF-100-0.5-4L-W	100A	500V	550*275*722mm	Forced air cooling
YIY AHF-100-0.69-4L-W	100A	690V	550*275*752.5mm	Forced air cooling
YIY AHF-100-0.8-3L-W	100A	800V	550*275*752.5mm	Forced air cooling

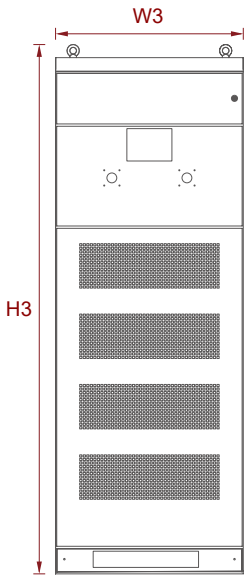
Model	Capacity	System Voltage	Size(W2*D2*H2)	Cooling Mode
YIY AHF-15-0.22-4L-W	15A	220V	500*89*535mm	Forced air cooling
YIY AHF-25-0.22-4L-W	25A	220V	500*89*535mm	Forced air cooling
YIY AHF-50-0.22-4L-W	50A	220V	500*89*535mm	Forced air cooling
YIY AHF-75-0.22-4L-W	75A	220V	550*190*584mm	Forced air cooling
YIY AHF-100-0.22-4L-W	100A	220V	550*240*624mm	Forced air cooling
YIY AHF-150-0.22-4L-W	150A	220V	550*240*624mm	Forced air cooling

*If you need any other sizes, please contact us for customization.

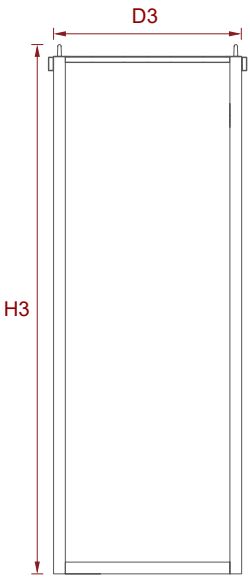
• Product Dimensions

FCL

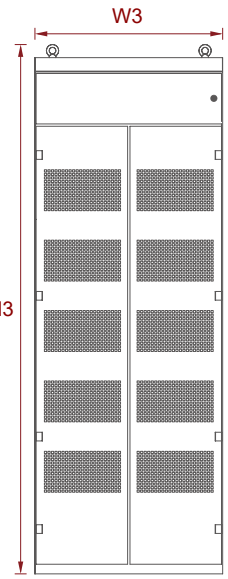




Front view



Side view



Back view

• Models

Model	Capacity	System Voltage	Size(W3*D3*H3)	Cooling Mode
YIY AHF-100-0.4-4L-C	100A	400V	800*1000*2200mm 800*1000*1600mm optional	Forced air cooling
YIY AHF-150-0.4-4L-C	150A	400V	800*1000*2200mm 800*1000*1600mm optional	Forced air cooling
YIY AHF-200-0.4-4L-C	200A	400V	800*1000*2200mm 800*1000*1600mm optional	Forced air cooling
YIY AHF-250-0.4-4L-C	250A	400V	800*1000*2200mm 800*1000*1600mm optional	Forced air cooling
YIY AHF-300-0.4-4L-C	300A	400V	800*1000*2200mm 800*1000*1600mm optional	Forced air cooling
YIY AHF-400-0.4-4L-C	400A	400V	800*1000*2200mm 800*1000*1600mm optional	Forced air cooling
YIY AHF-300-0.5-4L-C	300A	500V	800*1000*2200mm	Forced air cooling
YIY AHF-300-0.69-4L-C	300A	690V	800*1000*2200mm	Forced air cooling
YIY AHF-300-0.8-3L-C	300A	800V	800*1000*2200mm	Forced air cooling

*Cabinet 1 can accommodate 5 modules. Cabinet 2 can accommodate 3 modules.

*If you need any other sizes, please contact us for customization.

SVG

Static Var Generator

Static Var Generator(SVG) Static Var Generators (SVGs) are devices used in electrical power systems to control voltage, power factor and stabilize the system. They are a type of Static Synchronous Compensator (STATCOM) that use a voltage source converter to inject reactive power into the grid. SVGs are able to provide fast-acting reactive power compensation, which improve power quality and help to prevent voltage instability. SVGs are commonly used in industrial plants, wind farms and other applications where reactive power compensation is required. It is a reliable and efficient solution for maintaining the stability and quality of electrical power systems.

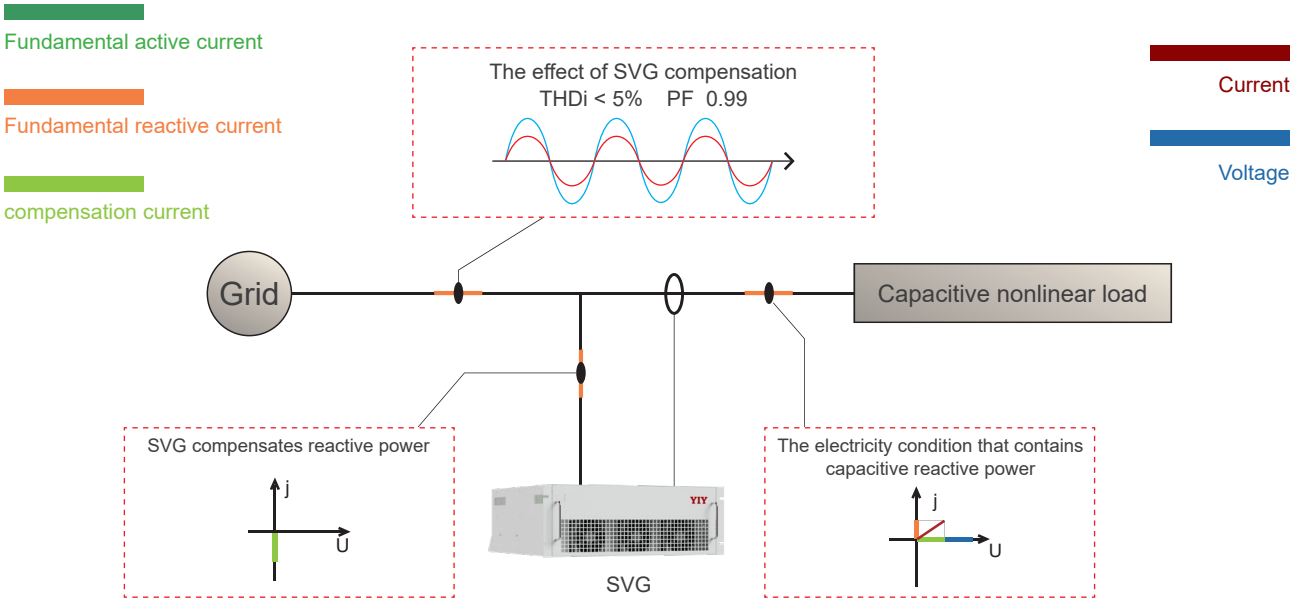
• Product Features

- Modular design
- Read time Capacitive and Inductive Compensation: -1 to +1
- No over compensation, no under compensation, no resonance
- Three-phase balancing
- Can be used to replace traditional capacitor bank

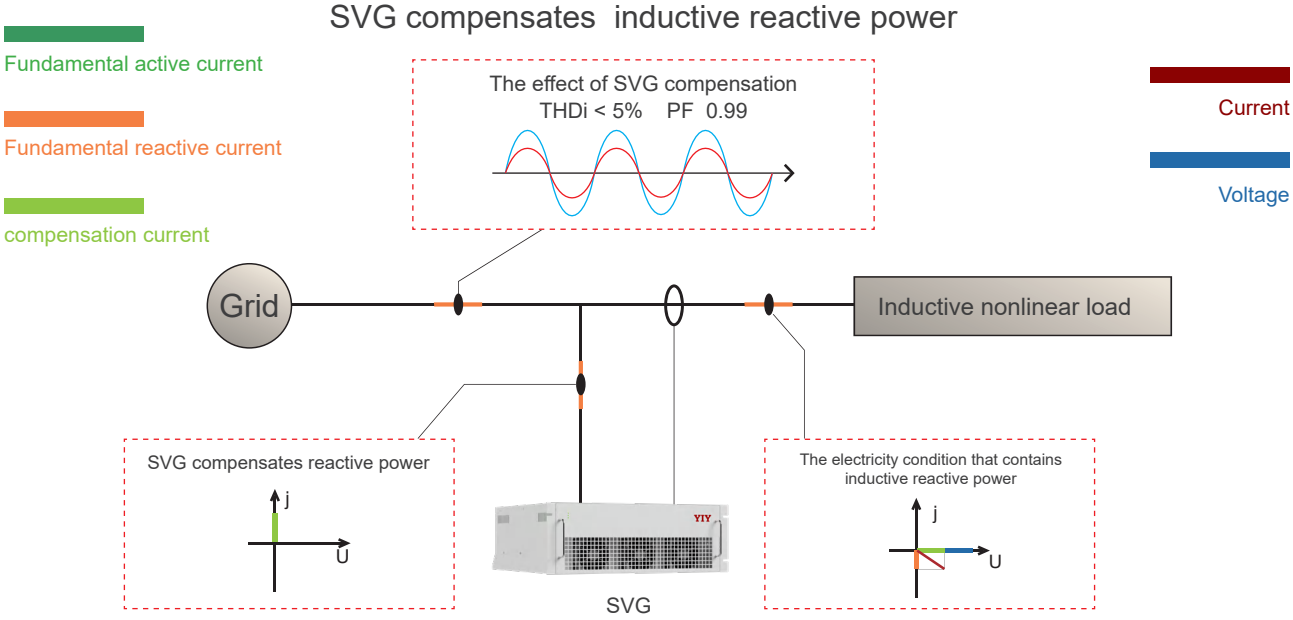
• Working Principle

The principle of the SVG is very similar to that of Active harmonic Filter, When the load is generating inductive or capacitive current, it makes load current lagging or leading the voltage. SVG detects the phase angle difference and generates leading or lagging current into the grid, making the phase angle of current almost the same as that of voltage on the transformer side, which means fundamental power factor is unit. YIY-SVG is also capable of correcting load imbalance.

SVG compensates capacitive reactive power



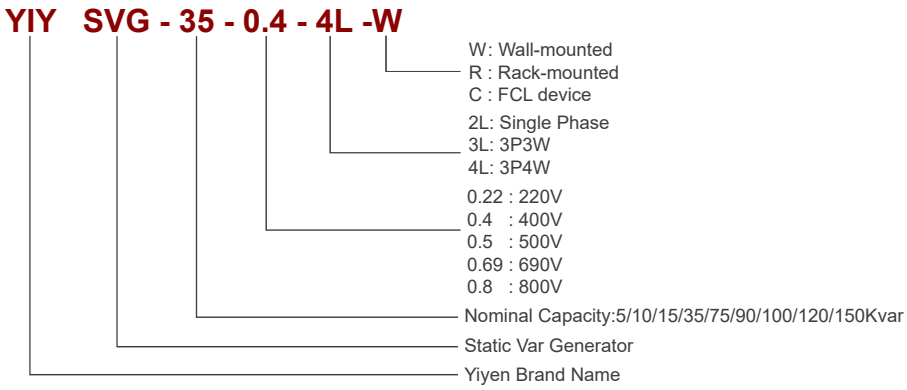
SVG compensates inductive reactive power



• Technical Specifications

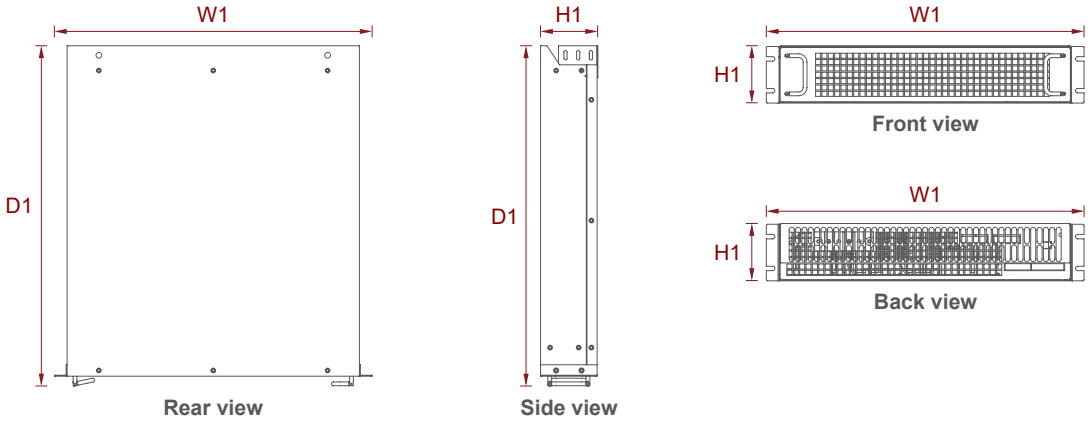
Nominal Voltage	220V Series	220V Series	400V Series	500V Series	690V Series	800V Series
Rated Compensation Capacity	5Kvar	5/7/10/17/25/ 37/50Kvar	10/15/20/35/ 50/75/100Kvar	90Kvar	100/120Kvar	150Kvar
Working Voltage Range	AC220V (-20%~+20%)	AC220V (-20%~+20%)	AC400V (-20%~+15%)	AC500V (-20%~+20%)	AC690V (-20%~+15%)	AC800V (-20%~850VAC)
Rated Frequency	50/60Hz(45Hz~63Hz)					
Grid Structure	Single phase	3 phase 3 wire/3 phase 4 wire				3 Phase 3 Wire
Response Time	<10ms					
Reactive Power Compensation Rate	≥98%					
Machine Efficiency	≥97%					
Switching Frequency	32kHz	16kHz		12.8kHz		
Function	Reactive power compensation	Reactive power compensation / Three phase balance				Reactive power compensation
Numbers In Parallel	No limitation. A centralized monitor can control up to 8 modules					
Communication Methods	Two-channel RS485 communication interface (support GPRS/WIFI wireless communication)					
Altitude Without Derating	<2000m					
Operating Temperature	-20~+50°C (derating above 40°C)					
Humidity	<90% RH, The average monthly minimum temperature is 25°C without condensation on the surface					
Pollution Level	Below level Ⅲ					
Protection Function	Overload protection, hardware/software over-current protection,over-voltage protection,power grid voltage protection, power failure protection,over-temperature protection,frequency anomaly protection, short circuit protection, etc					
Noise	≤60dB	≤65dB				
Installation	Rack/Wall-mounted					
Wiring	Back entry (rack-mounted type), top entry (wall-mounted type)					
Protection Grade	IP20					

• Type Code



• Product Dimensions

Rack-Mount



• Models

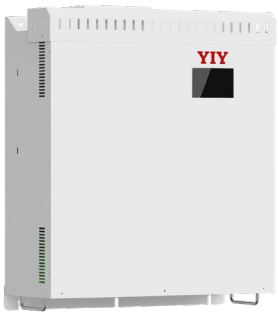
Model	Capacity	System Voltage	Size(W1*D1*H1)	Cooling Mode
YIY SVG-5-0.22-2L-R	5Kvar	220V	220*375*167mm	Forced air cooling
YIY SVG-10-0.4-4L-R	10Kvar	400V	500*535*89mm	Forced air cooling
YIY SVG-15-0.4-4L-R	15Kvar	400V	500*535*89mm	Forced air cooling
YIY SVG-20-0.4-4L-R	20Kvar	400V	500*535*89mm	Forced air cooling
YIY SVG-35-0.4-4L-R	35Kvar	400V	500*535*89mm	Forced air cooling
YIY SVG-50-0.4-4L-R	50Kvar	400V	550*584*190mm	Forced air cooling
YIY SVG-75-0.4-4L-R	75Kvar	400V	550*624*240mm	Forced air cooling
YIY SVG-100-0.4-4L-R	100Kvar	400V	550*624*240mm	Forced air cooling
YIY SVG-90-0.5-4L-R	90Kvar	500V	550*722*275mm	Forced air cooling
YIY SVG-100-0.69-4L-R	100Kvar	690V	550*752.5*275mm	Forced air cooling
YIY SVG-120-0.69-4L-R	120Kvar	690V	550*752.5*275mm	Forced air cooling
YIY SVG-150-0.8-3L-R	150Kvar	800V	550*752.5*275mm	Forced air cooling

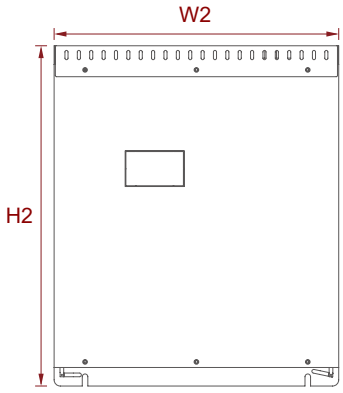
Model	Capacity	System Voltage	Size(W1*D1*H1)	Cooling Mode
YIY SVG-5-0.22-4L-R	5Kvar	220V	500*535*89mm	Forced air cooling
YIY SVG-7-0.22-4L-R	7Kvar	220V	500*535*89mm	Forced air cooling
YIY SVG-10-0.22-4L-R	10Kvar	220V	500*535*89mm	Forced air cooling
YIY SVG-17-0.22-4L-R	17Kvar	220V	500*535*89mm	Forced air cooling
YIY SVG-25-0.22-4L-R	25Kvar	220V	550*584*190mm	Forced air cooling
YIY SVG-37-0.22-4L-R	37Kvar	220V	550*624*240mm	Forced air cooling
YIY SVG-50-0.22-4L-R	50Kvar	220V	550*624*240mm	Forced air cooling

*If you need any other sizes, please contact us for customization.

• Product Dimensions

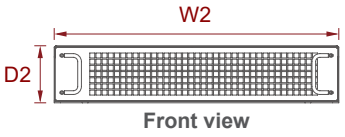
Wall-Mounted



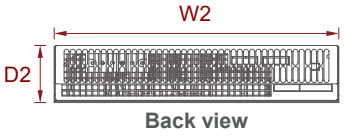


Top view

Side view



Front view



Back view

• Models

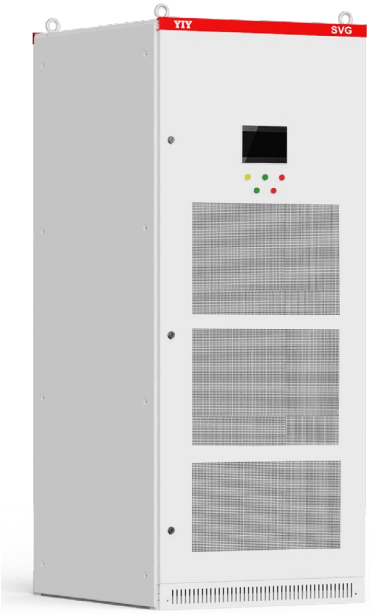
Model	Capacity	System Voltage	Size(W2*D2*H2)	Cooling Mode
YIY SVG-5-0.22-2L-W	5Kvar	220V	220*167*375mm	Forced air cooling
YIY SVG-10-0.4-4L-W	10Kvar	400V	500*89*535mm	Forced air cooling
YIY SVG-15-0.4-4L-W	15Kvar	400V	500*89*535mm	Forced air cooling
YIY SVG-20-0.4-4L-W	20Kvar	400V	500*89*535mm	Forced air cooling
YIY SVG-35-0.4-4L-W	35Kvar	400V	500*89*535mm	Forced air cooling
YIY SVG-50-0.4-4L-W	50Kvar	400V	550*190*584mm	Forced air cooling
YIY SVG-75-0.4-4L-W	75Kvar	400V	550*240*624mm	Forced air cooling
YIY SVG-100-0.4-4L-W	100Kvar	400V	550*240*624mm	Forced air cooling
YIY SVG-90-0.5-4L-W	90Kvar	500V	550*275*722mm	Forced air cooling
YIY SVG-100-0.69-4L-W	100Kvar	690V	550*275*752.5mm	Forced air cooling
YIY SVG-120-0.69-4L-W	120Kvar	690V	550*275*752.5mm	Forced air cooling
YIY SVG-150-0.8-3L-W	150Kvar	800V	550*275*752.5mm	Forced air cooling

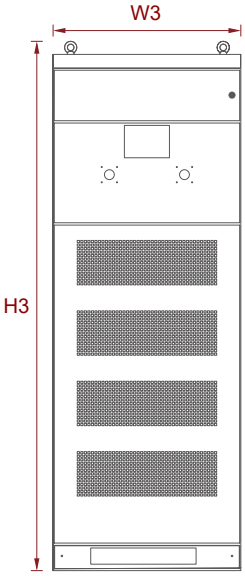
Model	Capacity	System Voltage	Size(W1*D1*H1)	Cooling Mode
YIY SVG-5-0.22-4L-W	5Kvar	220V	500*535*89mm	Forced air cooling
YIY SVG-7-0.22-4L-W	7Kvar	220V	500*535*89mm	Forced air cooling
YIY SVG-10-0.22-4L-W	10Kvar	220V	500*535*89mm	Forced air cooling
YIY SVG-17-0.22-4L-W	17Kvar	220V	500*535*89mm	Forced air cooling
YIY SVG-25-0.22-4L-W	25Kvar	220V	550*584*190mm	Forced air cooling
YIY SVG-37-0.22-4L-W	37Kvar	220V	550*624*240mm	Forced air cooling
YIY SVG-50-0.22-4L-W	50Kvar	220V	550*624*240mm	Forced air cooling

*If you need any other sizes, please contact us for customization.

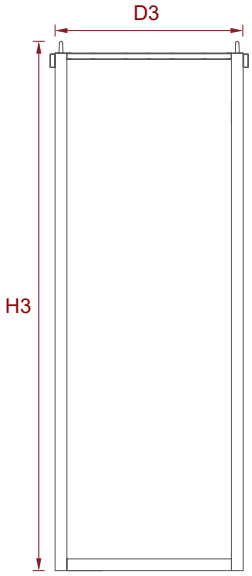
• Product Dimensions

FCL

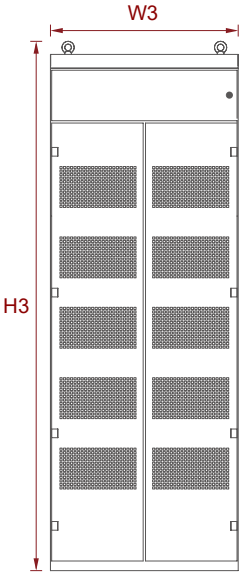




Front view



Side view



Back view

• Models

Model	Capacity	System Voltage (V)	Size(W3*D3*H3)	Cooling Mode
YIY SVG-50-0.4-4L-C	50Kvar	400V	800*1000*2200mm 800*1000*1600mm optional	Forced air cooling
YIY SVG-100-0.4-4L-C	100Kvar	400V	800*1000*2200mm 800*1000*1600mm optional	Forced air cooling
YIY SVG-200-0.4-4L-C	200Kvar	400V	800*1000*2200mm 800*1000*1600mm optional	Forced air cooling
YIY SVG-250-0.4-4L-C	250Kvar	400V	800*1000*2200mm 800*1000*1600mm optional	Forced air cooling
YIY SVG-300-0.4-4L-C	300Kvar	400V	800*1000*2200mm 800*1000*1600mm optional	Forced air cooling
YIY SVG-400-0.4-4L-C	400Kvar	400V	800*1000*2200mm 800*1000*1600mm optional	Forced air cooling
YIY SVG-270-0.5-4L-C	270Kvar	500V	800*1000*2200mm	Forced air cooling
YIY SVG-360-0.69-4L-C	360Kvar	690V	800*1000*2200mm	Forced air cooling
YIY SVG-450-0.8-3L-C	450Kvar	800V	800*1000*2200mm	Forced air cooling

*Cabinet 1 can accommodate 5 modules. Cabinet 2 can accommodate 3 modules.

*If you need any other sizes, please contact us for customization.

ASVG

Advanced Static Var Generator

Reactive Power Compensation, Harmonic Control, Three Phase Balance

Advanced Static Var Generator (ASVG) is a new type of dynamic reactive power compensation product, combining power factor correction harmonic mitigation and three phase balance in one unit. It provides the same dynamic performance for compensating reactive power as the SVG with the added benefit of combining harmonic mitigation and controlling three phase unbalance. Advanced static var generators (ASVGs) are high-performance, compact, flexible, modular, and cost-effective to provide immediate and efficient responses to power quality problems in high and low voltage power systems.

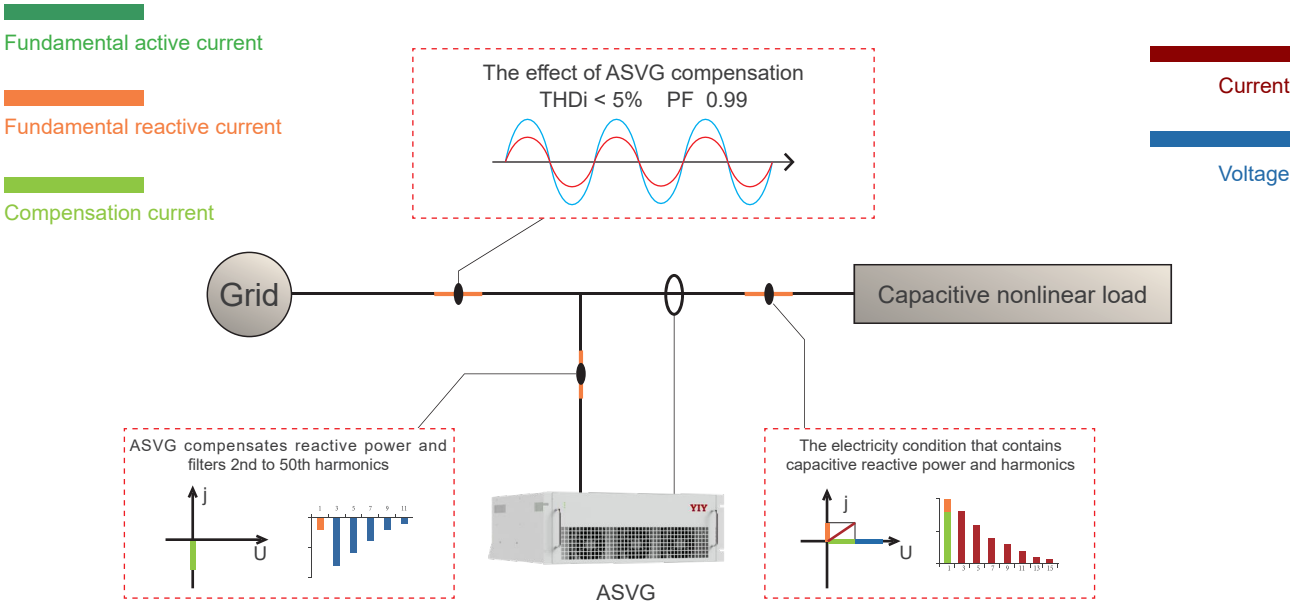
• Product Features

- All the features and benefits of SVG and AHF
- Different working modes for options
- 2nd to 50th harmonic mitigation
- Real time Compensation Range: -1 to +1 (capacitive to inductive)
- Three phase balancing
- Efficiency ≥97%

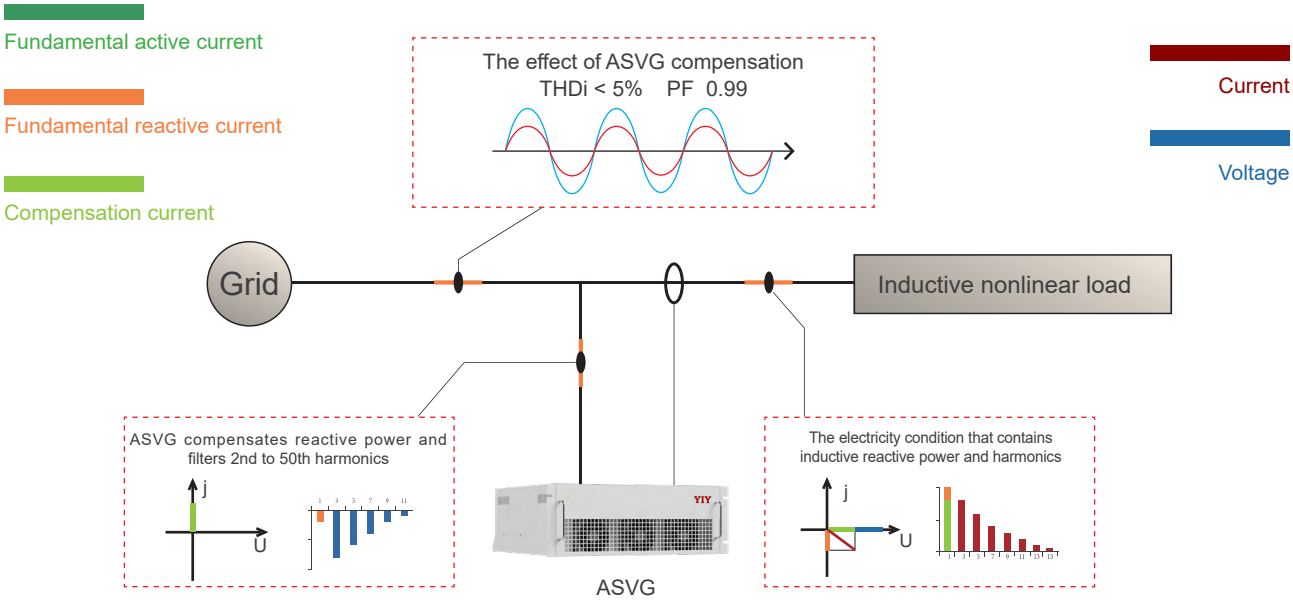
• Working Principle

With external CT detecting the load current in real time, internal DSP calculate and abstract the reactive power and harmonic content of load current, then send the PWM signal to internal IGBT and adjust the phase and amplitude of the output voltage on the AC side of the inverter or directly control the phase and amplitude of the current on the AC side of the inverter, so as to quickly absorb or emit the required reactive power and harmonic current, and realize the purpose of fast dynamic adjustment of reactive power and harmonic compensation. Not only the reactive current of the load , but also the harmonic current can be tracked and compensated.

ASVG Compensates capacitive reactive power and harmonics



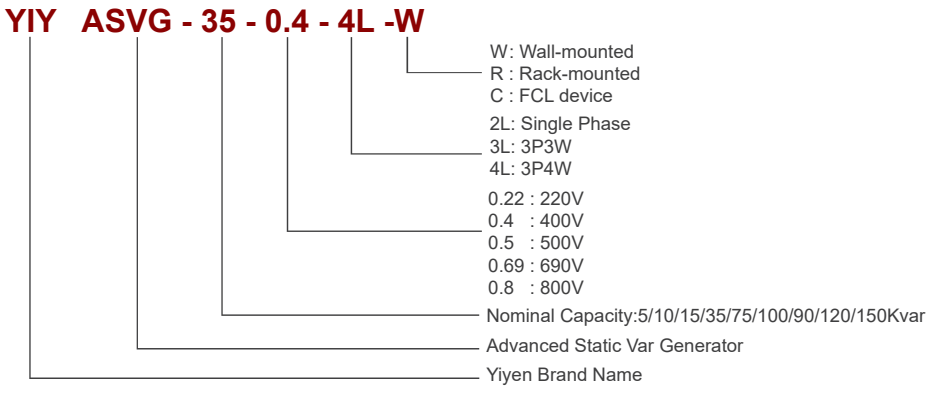
ASVG Compensates inductive reactive power and harmonics



• Technical Specifications

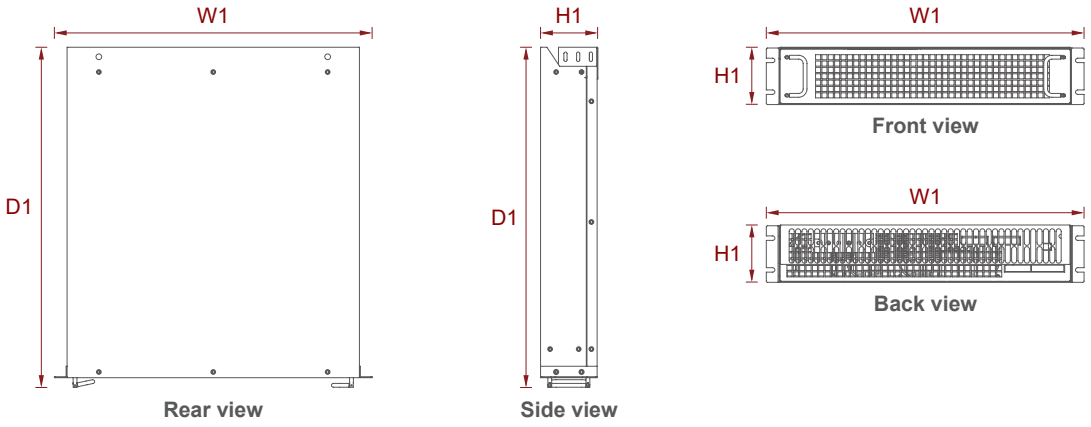
Nominal Voltage	220V Series	220V Series	400V Series	500V Series	690V Series	800V Series
Rated Compensation Capacity	5Kvar	3/5/7/10/17/ 25/37/50Kvar	5/10/15/20/35/ 50/75/100/150Kvar	90Kvar	100/120Kvar	150Kvar
Working Voltage Range	AC220V (-20%~+20%)	AC220V (-20%~+20%)	AC400V (-20%~+15%)	AC500V (-20%~+20%)	AC690V (-20%~+15%)	AC800V (-20%~850VAC)
Rated Frequency	50/60Hz(45Hz~63Hz)					
Grid Structure	Single phase	3 phase 3 wire/3 phase 4 wire				3 Phase 3 Wire
Number Of Parallel	No limitation. A centralized monitor can control up to 8 modules					
Machine Efficiency	>97%					
Switching Efficiency	32kHz	16kHz		12.8kHz		
Function	Reactive power compensation / Harmonics filter	Reactive power compensation / Harmonics filter / Three phase balance				Reactive power compensation / Harmonics filter
Compensation Rate	Reactive power compensation ≥98%,Harmonics filter ≥95%,Three phase balance ≥95%					
Harmonic Compensation	2nd to 50th order					
Response Time	<10ms					
Noise	≤60dB	≤65dB				
Communication Method	Two-channel RS485 communication interface (support GPRS/WIFI wireless communication)					
HMI	4.3 inch HMI / 7 inch external HMI					
Protection	Over load protection, hardware/software over current protection, over grid power protection /under grid power protection, grid power voltage imbalance protection, power failure protection, over temperature protection, frequency anomaly protection, short circuit protection, etc					
Altitude Without Derating	<2000m					
Operating Temperature	-20~+50°C (derating above 40°C)					
Relative Humidity	<90% ,The average monthly minimum temperature is 25°C without condensation on the surface					
Pollution Level	Below level Ⅲ					
Installation	Rack/Wall-mounted					
Wiring	Back entry (rack-mounted type),Top entry (wall-mounted type)					
Protection Grade	IP20					

• Type Code



• Product Dimensions

Rack-Mount



• Models

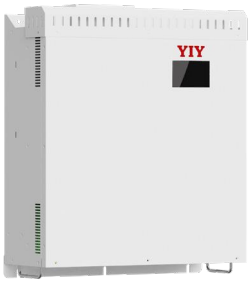
Model	Capacity	System Voltage	Size(W1*D1*H1)	Cooling Mode
YIY ASVG-5-0.22-2L-R	5Kvar	220V	220*375*167mm	Forced air cooling
YIY ASVG-5-0.4-4L-R	5Kvar	400V	500*535*89mm	Forced air cooling
YIY ASVG-10-0.4-4L-R	10Kvar	400V	500*535*89mm	Forced air cooling
YIY ASVG-15-0.4-4L-R	15Kvar	400V	500*535*89mm	Forced air cooling
YIY ASVG-20-0.4-4L-R	20Kvar	400V	500*535*89mm	Forced air cooling
YIY ASVG-35-0.4-4L-R	35Kvar	400V	500*535*89mm	Forced air cooling
YIY ASVG-50-0.4-4L-R	50Kvar	400V	550*584*190mm	Forced air cooling
YIY ASVG-75-0.4-4L-R	75Kvar	400V	550*624*240mm	Forced air cooling
YIY ASVG-100-0.4-4L-R	100Kvar	400V	550*624*240mm	Forced air cooling
YIY ASVG-150-0.4-4L-R	150Kvar	400V	550*785*250mm	Forced air cooling
YIY ASVG-90-0.5-4L-R	90Kvar	500V	550*722*275mm	Forced air cooling
YIY ASVG-100-0.69-4L-R	100Kvar	690V	550*752.5*275mm	Forced air cooling
YIY ASVG-120-0.69-4L-R	120Kvar	690V	550*752.5*275mm	Forced air cooling
YIY ASVG-150-0.8-3L-R	150Kvar	800V	550*752.5*275mm	Forced air cooling

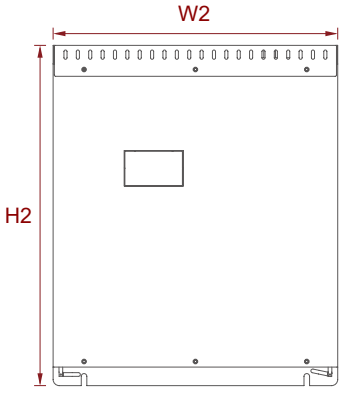
Model	Capacity	System Voltage	Size(W1*D1*H1)	Cooling Mode
YIY ASVG-3-0.22-4L-R	3Kvar	220V	500*535*89mm	Forced air cooling
YIY ASVG-5-0.22-4L-R	5Kvar	220V	500*535*89mm	Forced air cooling
YIY ASVG-7-0.22-4L-R	7Kvar	220V	500*535*89mm	Forced air cooling
YIY ASVG-10-0.22-4L-R	10Kvar	220V	500*535*89mm	Forced air cooling
YIY ASVG-17-0.22-4L-R	17Kvar	220V	500*535*89mm	Forced air cooling
YIY ASVG-25-0.22-4L-R	25Kvar	220V	550*584*190mm	Forced air cooling
YIY ASVG-37-0.22-4L-R	37Kvar	220V	550*624*240mm	Forced air cooling
YIY ASVG-50-0.22-4L-R	50Kvar	220V	550*624*240mm	Forced air cooling

*If you need any other sizes, please contact us for customization.

• Product Dimensions

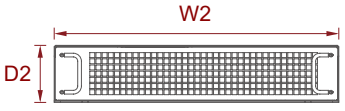
Wall-Mounted



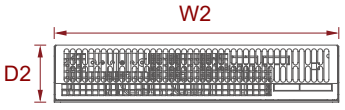


Top view

Side view



Front view



Back view

• Models

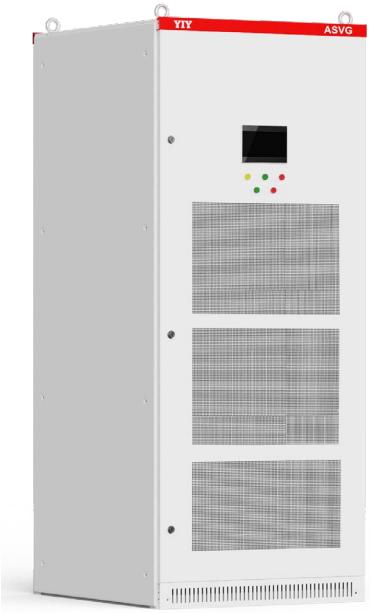
Model	Capacity	System Voltage	Size(W2*D2*H2)	Cooling Mode
YIY ASVG-5-0.22-2L-W	5Kvar	220V	220*167*375mm	Forced air cooling
YIY ASVG-5-0.4-4L-W	5Kvar	400V	500*89*535mm	Forced air cooling
YIY ASVG-10-0.4-4L-W	10Kvar	400V	500*89*535mm	Forced air cooling
YIY ASVG-15-0.4-4L-W	15Kvar	400V	500*89*535mm	Forced air cooling
YIY ASVG-20-0.4-4L-W	20Kvar	400V	500*89*535mm	Forced air cooling
YIY ASVG-35-0.4-4L-W	35Kvar	400V	500*89*535mm	Forced air cooling
YIY ASVG-50-0.4-4L-W	50Kvar	400V	550*190*584mm	Forced air cooling
YIY ASVG-75-0.4-4L-W	75Kvar	400V	550*240*624mm	Forced air cooling
YIY ASVG-100-0.4-4L-W	100Kvar	400V	550*240*624mm	Forced air cooling
YIY ASVG-150-0.4-4L-W	150Kvar	400V	511*252*785mm	Forced air cooling
YIY ASVG-90-0.5-4L-W	90Kvar	500V	550*275*722mm	Forced air cooling
YIY ASVG-100-0.69-4L-W	100Kvar	690V	550*275*752.5mm	Forced air cooling
YIY ASVG-120-0.69-4L-W	120Kvar	690V	550*275*752.5mm	Forced air cooling
YIY ASVG-150-0.8-3L-W	150Kvar	800V	550*275*752.5mm	Forced air cooling

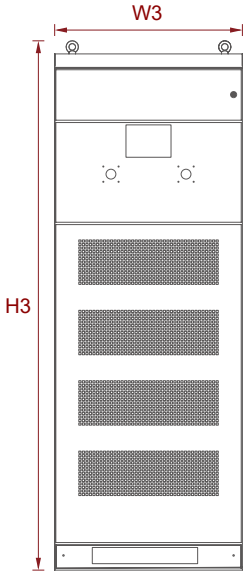
Model	Capacity	System Voltage	Size(W1*D1*H1)	Cooling Mode
YIY ASVG-3-0.22-4L-W	3Kvar	220V	500*535*89mm	Forced air cooling
YIY ASVG-5-0.22-4L-W	5Kvar	220V	500*535*89mm	Forced air cooling
YIY ASVG-7-0.22-4L-W	7Kvar	220V	500*535*89mm	Forced air cooling
YIY ASVG-10-0.22-4L-W	10Kvar	220V	500*535*89mm	Forced air cooling
YIY ASVG-17-0.22-4L-W	17Kvar	220V	500*535*89mm	Forced air cooling
YIY ASVG-25-0.22-4L-W	25Kvar	220V	550*584*190mm	Forced air cooling
YIY ASVG-37-0.22-4L-W	37Kvar	220V	550*624*240mm	Forced air cooling
YIY ASVG-50-0.22-4L-W	50Kvar	220V	550*624*240mm	Forced air cooling

*If you need any other sizes, please contact us for customization.

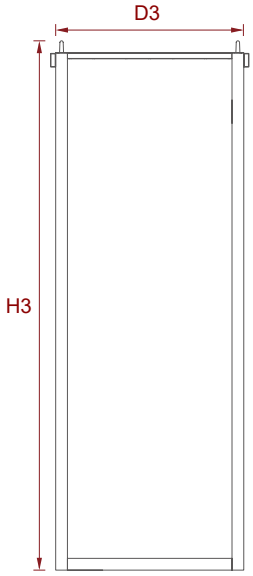
• Product Dimensions

FCL

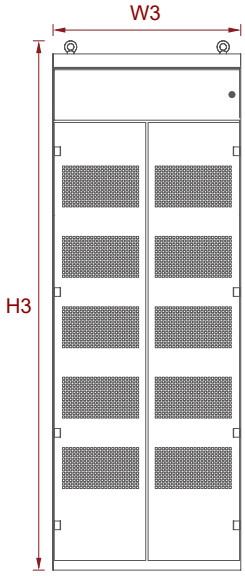




Front view



Side view



Back view

• Models

Model	Capacity	System Voltage (V)	Size(W3*D3*H3)	Cooling Mode
YIY ASVG-50-0.4-4L-C	50Kvar	400V	800*1000*2200mm 800*1000*1600mm optional	Forced air cooling
YIY ASVG-100-0.4-4L-C	100Kvar	400V	800*1000*2200mm 800*1000*1600mm optional	Forced air cooling
YIY ASVG-200-0.4-4L-C	200Kvar	400V	800*1000*2200mm 800*1000*1600mm optional	Forced air cooling
YIY ASVG-250-0.4-4L-C	250Kvar	400V	800*1000*2200mm 800*1000*1600mm optional	Forced air cooling
YIY ASVG-300-0.4-4L-C	300Kvar	400V	800*1000*2200mm 800*1000*1600mm optional	Forced air cooling
YIY ASVG-400-0.4-4L-C	400Kvar	400V	800*1000*2200mm 800*1000*1600mm optional	Forced air cooling
YIY ASVG-270-0.5-4L-C	270Kvar	500V	800*1000*2200mm	Forced air cooling
YIY ASVG-360-0.69-4L-C	360Kvar	690V	800*1000*2200mm	Forced air cooling
YIY ASVG-450-0.8-3L-C	450Kvar	800V	800*1000*2200mm	Forced air cooling

*Cabinet 1 can accommodate 5 modules. Cabinet 2 can accommodate 3 modules.

*If you need any other sizes, please contact us for customization.

ASVG CW

Advanced Static Var Generator CW

Reactive Power Compensation, Harmonic Control, Three Phase Balance

- Less than 45 dB
- Built-in Grid-side CT
- 20% Volume Less

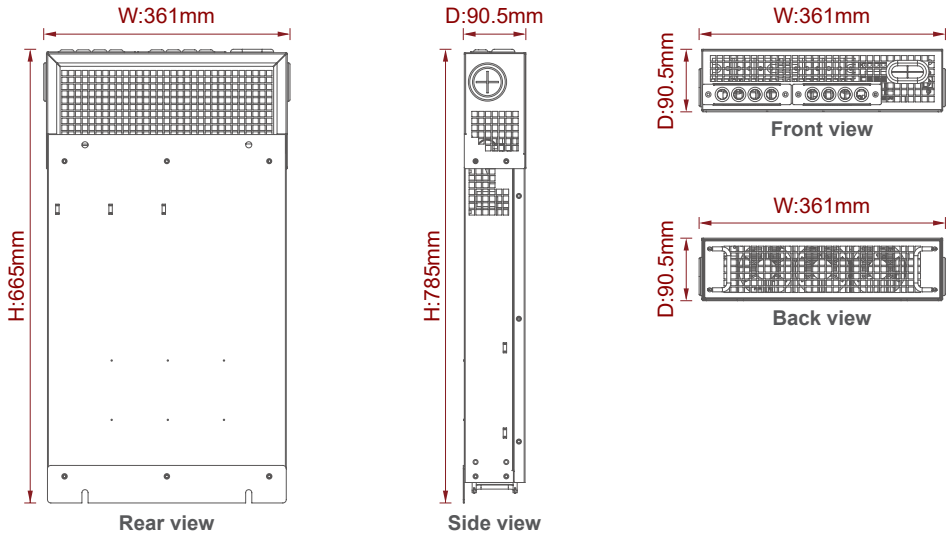
This series features a compact design and low-noise operation technology, with standard capacity ratings covering 3kVar, 5kVar, and 10kVar. Its core advantage lies in the integrated grid-side current transformer (CT) solution, which eliminates the need for external installation. This low noise fucntion makes it particularly well-suited for noise-sensitive environments such as offices and homes.

• Product Features

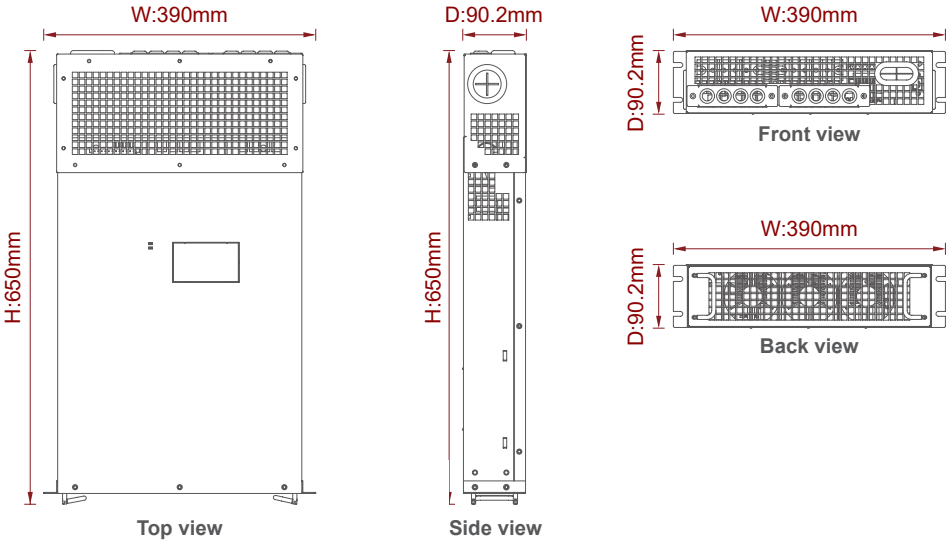
- Compact Design
- Low Noise Level ≤45dB
- Built-in Grid-side current transformer(CT)
- Real time Compensation Range: -1 to +1 (capacitive to inductive)
- 2nd to 50th harmonic mitigation
- Three phase balancing

• Product Dimensions

Wall-Mounted



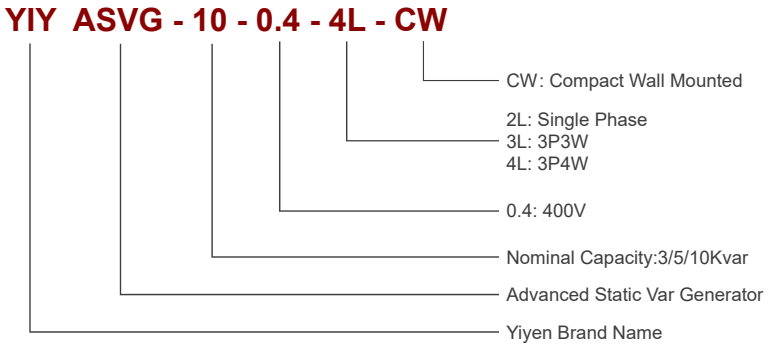
Rack-Mount



• Technical Specifications

Nominal Voltage	400V Series		
Rated capacity	3kvar	5kvar	10kvar
CT inside	100/1	100/5	100/5
Working Voltage range	304-456V		
Frequency range	45Hz~63Hz		
Grid structure	3-Phase 3-Wire / 3-Phase 4-Wire		
Current range	0-100A		
Switching frequency	16kHz		
Altitude	<2000m, above 2000 m, use GB/T3859.2 derated		
Ambient temperature	-20°C +50°C (will derate above 40°C)		
Relative humidity	≤90%, monthly minimum temperature 25°C No condensation on the surface		
Pollution level	Below class III		
Protection class	IP20		
Cooling mode	Intelligent air cooling		
Functional performance parameter			
Function selection	Reactive power, harmonic, unbalance, reactive power + unbalance, harmonic + unbalance, reactive power + harmonic, Reactive power + imbalance + harmonics		
Parallel connection	No	Yes, no limit	
Overall efficiency	Full load>97%		
Comprehensive compensation rate	Reactive power compensation ≥98%, three-phase unbalance compensation ≥95%, 2nd to 50th order comprehensive harmonic compensation ≥95%		
Reactive power compensation time	<10ms		
Harmonic compensation response time	<40ms		
Neutral filter capability	The neutral filtering capability is 1.5 times that of the phase filtering capability		
Noise	≤38dB	≤40dB	≤45dB
Protection function	Overload, software/hardware overcurrent, power grid overvoltage and undervoltage, power grid voltage imbalance, power supply failure, overtemperature, abnormal frequency, short circuit protection, etc		
Overload ability	Rated 1.2 times overload for 60 seconds		
Communication interface	Two RS485 communication ports (WIFI support)		
Communication protocol	Modbus		
HMI	Supports 4.3 inch HMI and 7 inch external HMI		
Dimensions (W*D*H)	390*90.2*525mm		
Installation mode	Wall mounted		
Incoming mode	Top entry (wall mounted)		

• Type Code



SiC ASVG

SiC Advanced Static Var Generator

Reactive Power Compensation, Harmonic Control, Three Phase Balance

SiC MOSFET

Efficiency >99%

Ultra-slim Design

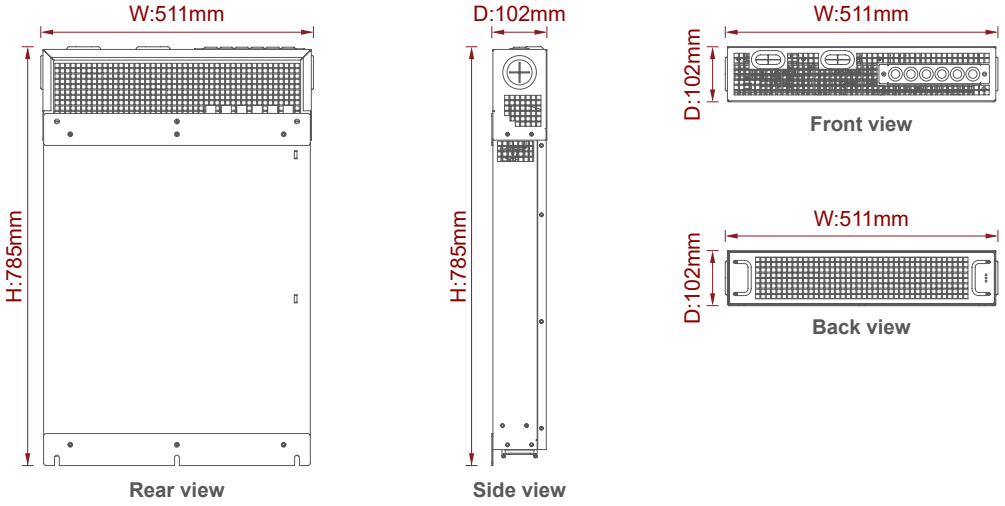
Advanced Static VAR Generator (ASVG) with SiC technology offers high-efficiency power factory correction, harmonic mitigation, and three phase balance. Featuring SiC power devices, it achieves over 98.5% efficiency, higher power density, faster dynamic response, and enhanced reliability, ensuring comprehensive power quality management.

• Product Features

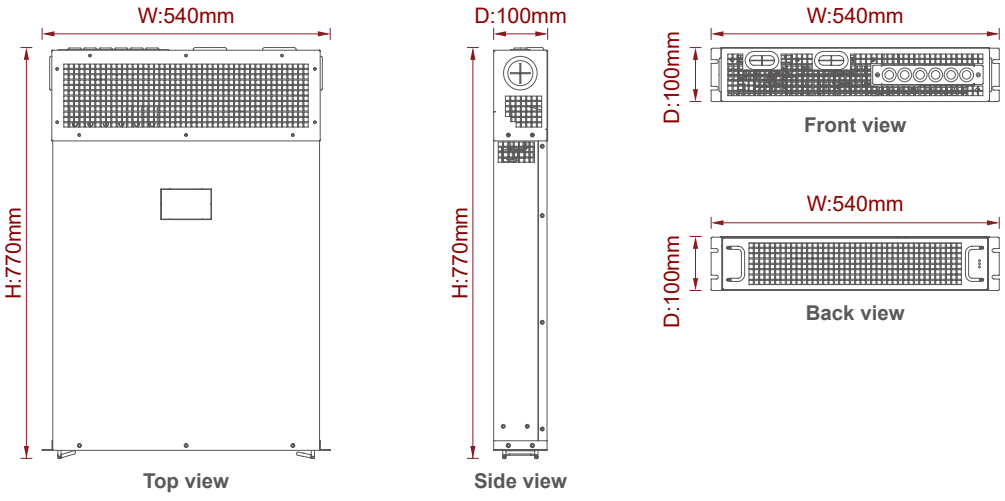
- Three-level topology technology
- Triple neutral-line filtering capacity
- >99% peak efficiency with lower losses from SiC
- Compact size enabled by high-density SiC power modules
- Real time Compensation Range: -1 to +1 (capacitive to inductive)
- 2nd to 50th harmonic mitigation
- Three phase balancing

• Product Dimensions

Wall-Mounted



Rack-Mount



• Technical Specifications

Nominal Voltage	220V Series	400V Series
Rated Compensation Capacity	37KVar / 50Kvar	75KVar / 100Kvar
Working Voltage Range	AC220V (-20%~+20%)	AC400V (-20%~+20%)
Rated Frequency	50/60Hz (45Hz-63Hz)	
Grid Structure	3 phase 3 wire/3 phase 4 wire	
Number of parallel	No limitation. A centralized monitor can control up to 8 modules	
Machine Efficiency	>99%	
Switching Efficiency	30kHz	
Function	Reactive power compensation / Harmonics filter / Three phase balance	
Compensation Rate	Reactive power compensation ≥98%,Harmonics filter ≥95%,Three phase balance ≥95%	
Neutral Line Filtering Capability	The filtering capacity of 3 phase 4 wire neutral line is 3 times of that of phase filtering	
Harmonic Compensation	2nd to 50th order	
Response Time	<10ms	
Noise	≤65dB	
Communication Method	Two-channel RS485 communication interface (support GPRS/WIFI wireless communication)	
HMI	4.3 inch HMI / 7 inch external HMI	
Protection	Over load protection, hardware/software over current protection, over grid power protection /under gridpower protection, grid power voltage imbalance protection, power failure protection, over temperature protection, frequency anomaly protection, short circuit protection, etc	
Altitude Without Derating	<2000m	
Operating Temperature	-20℃ ~+50℃ (derating above 40℃)	
Relative Humidity	<90% ,The average monthly minimum temperature is 25℃ without condensation on the surface	
Pollution Level	Below level Ⅲ	
Installation	Rack/Wall-mounted	
Wiring	Back entry (rack-mounted type),Top entry (wall-mounted type)	
Protection Grade	IP20	

• Type Code

YIY SiC ASVG - 100 - 0.4 - 4L -W

- W: Wall-mounted
  R : Rack-mounted
  C : FCL device
- 2L: Single Phase
  3L: 3P3W
  4L: 3P4W
- 0.22 : 220V
  0.4 : 400V
- Nominal Capacity:50/75/100Kvar
- SiC Advanced Static Var Generator
- Yiyen Brand Name

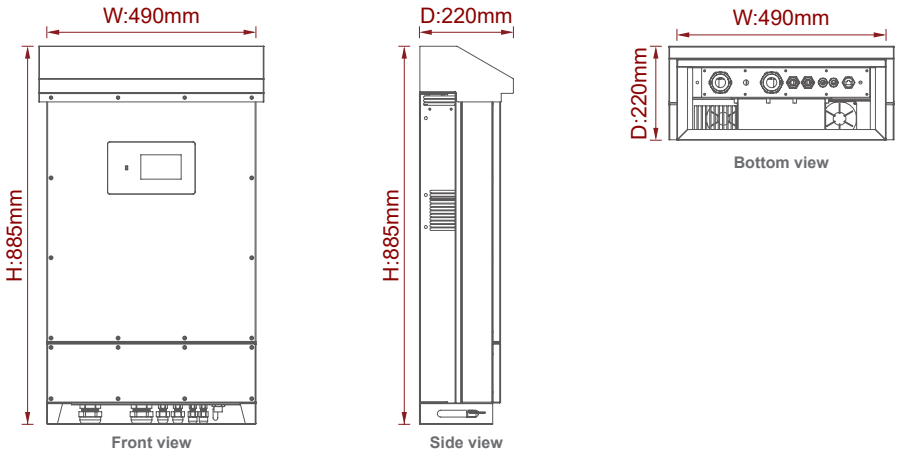
ASVG IP66

Advanced Static Var Generator IP66

Reactive Power Compensation, Harmonic Control, Three Phase Balance

The **Advanced Static VAR Generator (ASVG IP66)** is a new dynamic reactive power compensation product with IP66 protection and a self-cooling system， combining power factor correction, harmonic mitigation and three phase balance in one unit.

• Product Dimensions



• Product Features

- IP66 Enclosure (suitable for outdoor installation)
- Self-Cooling System
- Built-in Grid-side current transformer(CT)
- Real time Compensation Range: -1 to +1 (capacitive to inductive)
- 2nd to 50th harmonic mitigation
- Three phase balancing

• Technical Specifications

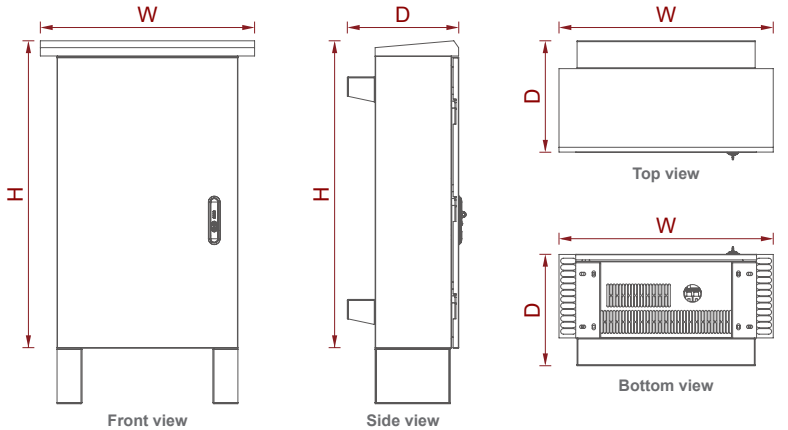
Nominal Voltage	400V Series
Rated Compensation Capacity	15Kvar
Working Voltage Range	AC400V (-20%~+20%)
Rated Frequency	50Hz/60Hz (45Hz-63Hz)
Grid Structure	3 phase 3 wire/3 phase 4 wire
Number Of Parallel	No limitation. A centralized monitor can control up to 8 modules
Machine Efficiency	>97%
Switching Efficiency	16kHz
Function	Reactive power compensation / Harmonics filter / Three phase balance
Compensation Rate	Reactive power compensation ≥98%,Harmonics filter ≥95%,Three phase balance ≥95%
Harmonic Compensation	2nd to 50th order
Response Time	<10ms
Noise	<60dB
Communication Method	Two-channel RS485 communication interface (support GPRS/WIFI wireless communication)
HMI	4.3 inch HMI / 7 inch external HMI
Protection	Over load protection, hardware/software over current protection, over grid power protection /under grid power protection, grid power voltage imbalance protection, power failure protection, over temperature protection, frequency anomaly protection, short circuit protection, etc
Altitude Without Derating	<2000m
Operating Temperature	-20~+50℃ (derating above 40°C)
Cooling Method	Natural cooling
Relative Humidity	<90% ,The average monthly minimum temperature is 25℃ without condensation on the surface
Pollution Level	Below level Ⅲ
Installation	Wall-mounted
Wiring	Top entry (wall-mounted type)
Protection Grade	IP66

TPQR

Terminal Power Quality Regulator

The **Terminal Power Quality Regulator (TPQR)** is applied at the end of low-voltage distribution lines with high new energy penetration, long transmission lines, or heavy loads. It addresses issues such as three-phase voltage imbalance caused by new energy integration, voltage fluctuations for end-users, and three-phase current imbalance. Featuring a modular design and standard energy interfaces, it enables convenient installation and maintenance. The TPQR provides multiple functions, including reactive power compensation, harmonic filter, three-phase imbalance compensation, and precise terminal voltage regulation.

• Product Dimensions

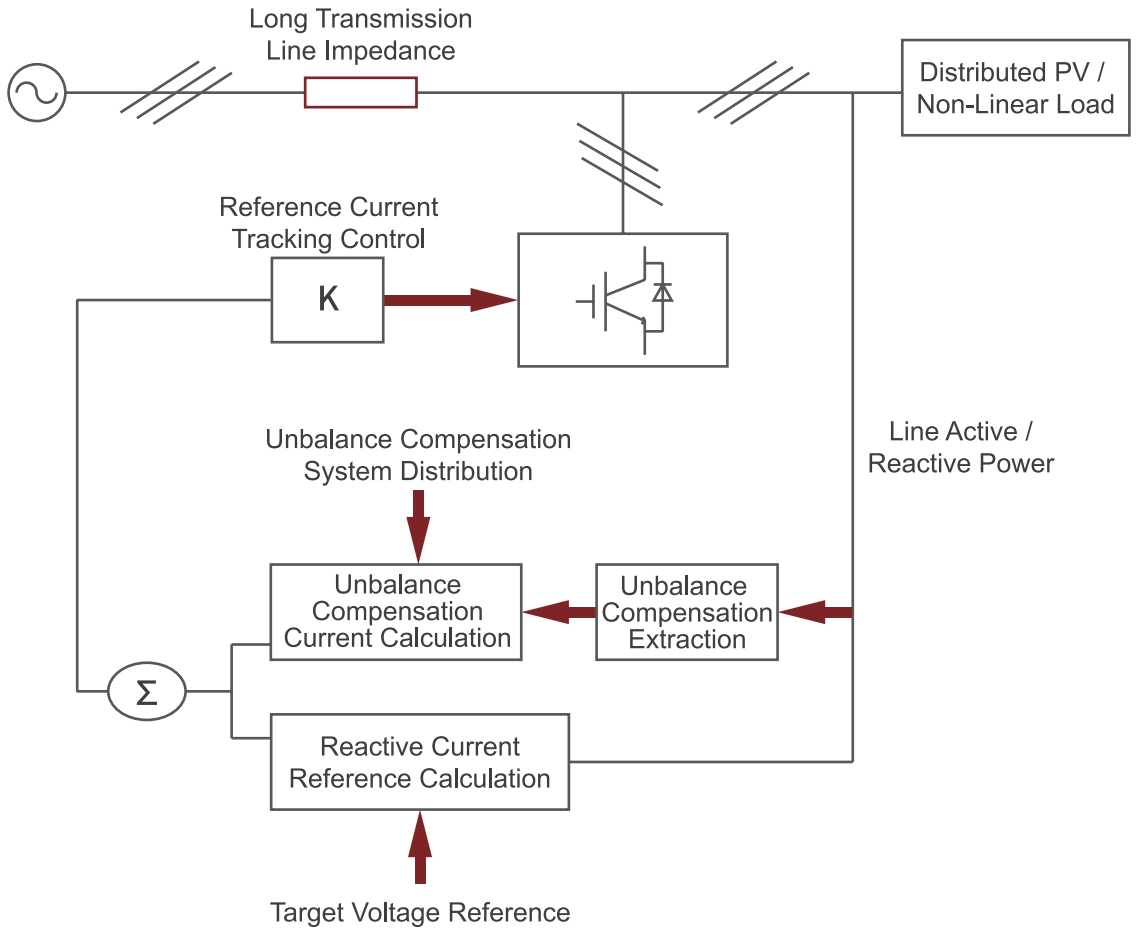


Model	Size(W*D*H)(mm)
TPQR 30KVA	770*400*1105
TPQR 75-100KVA	790*450*1285

• Product Features

- Full-digital control core with DSP+CPLD, three-level topology, and advanced PWM control strategy for comprehensive regulation of power quality at the line terminal.
- Modular design facilitates easy parallel connection of multiple modules, occupies a small footprint, and allows convenient maintenance.
- Independent air duct and separate board compartment structure ensure reliable equipment operation.
- Real-time three-phase imbalance detection and active power transfer between phases prevent single-phase overvoltage and grid disconnection.
- Automatic self-restart upon power recovery ensures continuous operation.
- Multiple functions for option, including reactive power compensation, harmonic filter, three-phase imbalance compensation, and precise terminal voltage regulation.
- Various communication interfaces, such as RS485 (with optional 4G/Wi-Fi support), enable easy integration of equipment operation data into monitoring systems.
- Comprehensive protection features, including overvoltage, undervoltage, overcurrent, short circuit, and phase loss protection, as well as system self-diagnostic functions.

• Working Principle



• Technical Specifications

Nominal Voltage	400V Series		
AC parameters			
Rated Capacity	30kVA	75kVA	100kVA
Working Voltage Range	304~456V		
Frequency	50Hz/60Hz±1.5Hz		
Frequency	75A	100A	150A
THDi	≤3%		
Power Factor	-1~+1		
System Parameters			
Maximum System Efficiency	≥97.5%		
Grid Structure	3-Phase 3-Wire / 3-Phase 4-Wire		
Cooling Method	Forced Air Cooling		
Noise	≤65dB		
Ambient Temperature	-10°C to 50°C (Derating required above 40°C)		
Protection Class	IP54		
Altitude Without Derating	≤2000m		
Relative Humidity	0 ～ 95%		
Cabinet Dimensions (W*D*H)	770*400*1105mm	790*450*1285mm	
Voltage Unbalance After Compensation	≤3%		
Reactive Power Compensation Rate	≥98%		
Reactive Power Control Accuracy	≤ 2.5% of rated capacity		
Line Voltage Regulation Range	≥15% (provided capacity is sufficient)		
Communication Modes			
Communication Protoccol	ModBusTCP/IP		
Communication Interface	2-Channel RS485 Communication Interface (Supports 4G/Wi-Fi)		

• Applications

Integration of Renewable Energy into the Distribution Grid

To address issues such as three-phase voltage imbalance and overvoltage caused by the large-scale integration of distributed photovoltaic systems, hydropower, and other new energy sources into low-voltage lines.

Distribution transformer station or industrial production

To address issues such as low voltage at the end of the line and three-phase current imbalance caused by long transmission lines in low-voltage distribution networks, as well as single-phase loads or drive-type loads at the terminal end.

Traffic tunnel

To address issues such as low voltage at the end of the line and three-phase current imbalance caused by low grid input voltage, long power supply lines, and frequent load variations.

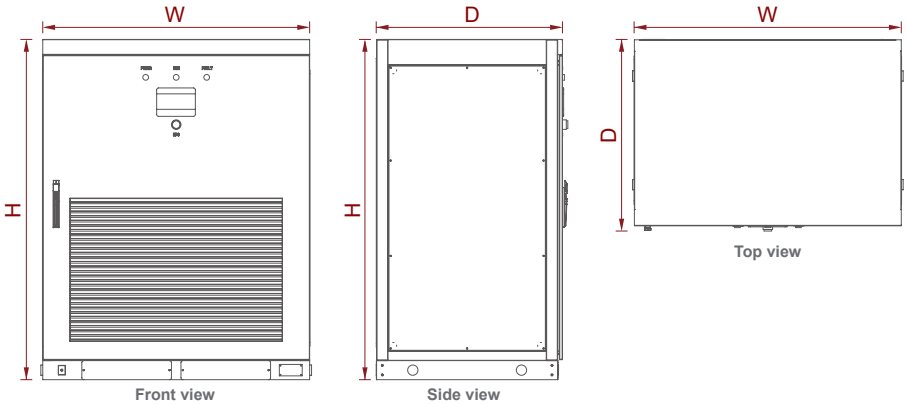
AVC

Active Voltage Conditioner

Voltage Sag Correction, Surge Correction ,Continuous Voltage Regulation and Load Voltage Compensation.

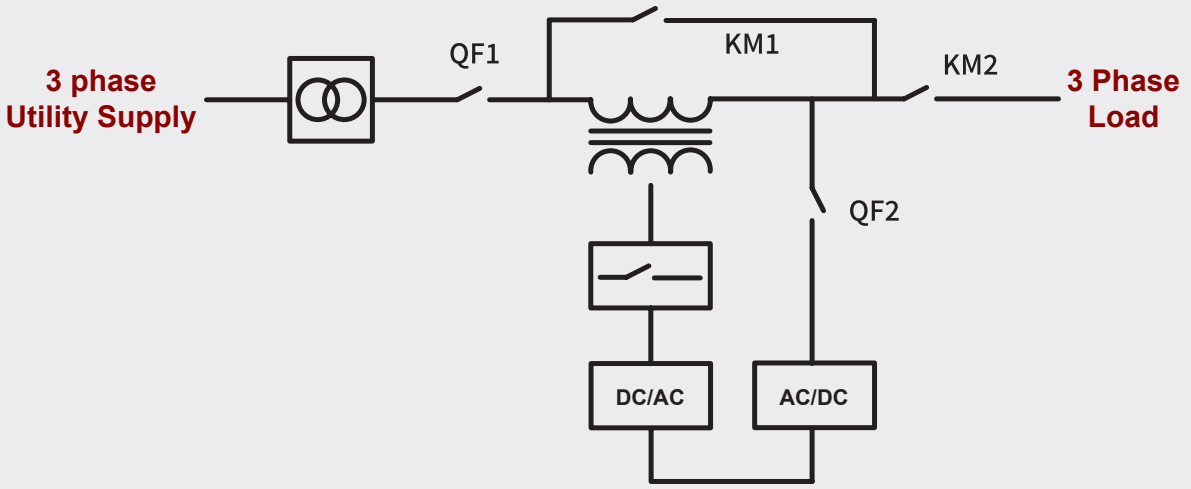
Active Voltage Conditioner (AVC) mainly consists of a rectifier, inverter, compensation transformer, monitoring system, and AC/DC power distribution. This comprehensive power quality management device, equipped with functions such as voltage fluctuation (-40%~+30%) control, reactive power compensation, harmonic filter, and three-phase imbalance compensation, improves the power quality of the grid while ensuring stable power supply to the load, thus preventing economic losses caused by voltage fluctuations.

• Product Dimensions



Model	Size(W*D*H) (mm)
AVC-3-150KVA	850*800*1400
AVC-3-250KVA	1400*975*1785
AVC-3-500KVA	1400*975*1785
AVC-3-1000KVA	2800*975*1785

• Working Principle



• Applications

● New energy

● Traffic tunnels

● Industrial production

● Continuous process

● Pharmaceutical industry

● Medical industry

• Technical Specifications

Active Voltage Conditioner		
AC parameters		
Rated capacity	15/20/30KVA	45KVA-2000KVA
Rated Voltage	AC220V	AC380V
Voltage range	-40%~+30%	-40%~+30%
Rated frequency	50Hz/60Hz	50Hz/60Hz
Grid structure	Single phase	3 phase 4 wire
AC overload	1.1 times	1.1 times
Output voltage accuracy	±1%	±1%
Function Selection	Voltage compensation + (reactive power compensation, harmonic compensation, reactive power compensation + harmonic compensation)	Voltage compensation + (reactive power compensation, harmonic compensation, three-phase imbalance compensation, reactive power compensation + harmonic compensation, reactive power compensation + three-phase imbalance compensation, reactive power compensation + three-phase imbalance + harmonic compensation)
Compensation voltage range	AC 220±20% (-40%~+30% can be customized)	AC 380±20% (-40%~+30% can be customized)
Transformer ratio	5:1	5:1
Harmonic compensation rate	3rd-13th order comprehensive harmonic compensation ≥95%	3rd-13th order comprehensive harmonic compensation ≥95%
Reactive Power Compensation Rate	Reactive power compensation ≥ 98%	Reactive power compensation ≥ 98%
Three-phase imbalance compensation rate	/	Three-phase imbalance compensation ⩾ 95%
Total current harmonic distortion rate	≤3%	≤3%
Output voltage harmonic distortion rate	＜ 1.5%	＜ 1.5%
Compensation response time	＜ 20ms	＜ 20ms
Transformer parameters		
Rated capacity	6KVA	12KVA~400KVA
Type	Dry type, the magnetic core is made of laminated silicon steel sheets, and the frame is grounded.	Dry type, the magnetic core is made of laminated silicon steel sheets, and the frame is grounded.
Overload	1.1x Extended Operation	1.1 times longer running time
Insulation	Insulation class H	Insulation class H
Transformation ratio	220:44	220:44
Design temperature	Temperature rise ≤90K	Temperature rise ≤90K
Implementation standards	IEC 726	IEC 726
System parameters		
Altitude	For distances less than 2000m and above 2000m, use the equipment with reduced rating according to GB/T3859.2.	For distances less than 2000m and above 2000m, use the equipment with reduced rating according to GB/T3859.2.
Ambient temperature	-10 ～ +50℃ (derating above 40℃)	-10 ～ +50℃ (derating above 40℃)
Relative	≤90%, no condensation on the	≤90%, no condensation on the surface
Humidity	surface at the lowest monthly temperature of 25℃	at the lowest monthly temperature of 25℃
Pollution Level	Below level III	Below level III
Noise	≤70dB	≤70dB
Protection level	IP20/IP54	IP20/IP54

CVCF

IGBT Type Single Phase AVR

Voltage and Frequency Stabilisers

Input voltage range:

♦ 85-270VAC,1Phase, 2Wire,+Earth

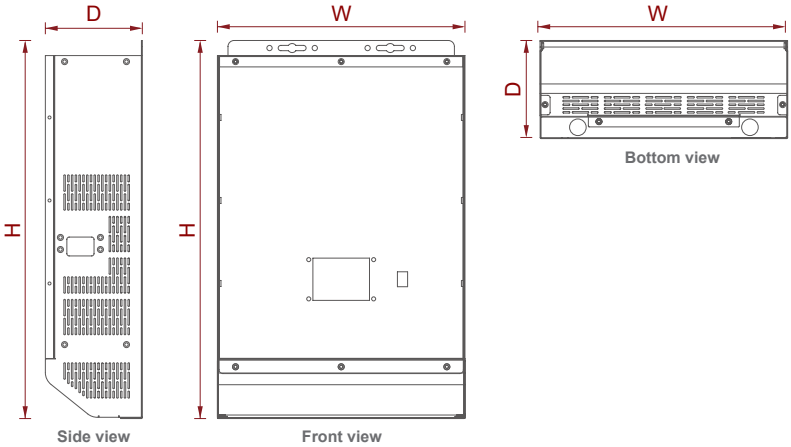
Input frequency range:

♦ 35-70Hz

• Features

♦ Correction time 10ms
♦ Output accuracy +/-0.5%
♦ Output wave form distortion THD<3%
♦ Effect of Power factor PF>0.99
♦ Frequency protection
♦ Compatible with generator

• Product Dimensions



Model	Size(W*D*H)(mm)
CVCF 5KVA	501*328*128.5
CVCF 10KVA	580*358*128.5

• Technical Parameter

Parameters		5KVA	10KVA
Input Voltage	Nominal Voltage Rating	230VAC 1Phase, 2Wire,+Earth	
	Voltage Range	85-270VAC	
	Frequency	35-70Hz	
Output Voltage	Voltage	220V/230V/240V ± 0.5%	
	Correction Time	10ms	
	Voltage Regulation	±0.5%	
	Output Wave Form Distortion	THD<3%	
	Output Frequency	50/60Hz	
	Power Factor	PF>0.99	
Protection	Automatic Bypass	Yes	
	Manual Bypass	Yes	
	Input Under Voltage	80±1V	
	Input Over Voltage	280±3V	
	Output Under Voltage	184V/@220V 192V/@230,201V/@240V	
	Output Over Voltage	246V/@220V,250V/@230V,260V/@240V	
	Over-temperature	Module: 80℃ Protection/Recovery at 65℃	
	Output Overload	110%>&<120%-5S,(3 times) 120%>&<150%-2S (3 times)	
		>150% cut off immediately	
Display/Indication	Display Mode	LCD/LED	
	Communication	RS485	
Physical Parameter	Efficiency	>95%	
	Cooling Method	Forced cooling	
	IP	IP20	
	Temperature	0-45℃	
	Humidity	0-95%(RH-Non Condensing)	
	Noise	<60dB	
	Product Size	501*328*128.5 mm	580*358*128.5 mm
	Shipping Size	590*440*240 mm	670*470*240 mm
	Product Weight	10KG	12KG
	Shipping Weight	12KG	14KG

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