



Cabinet-mounted

Wall-mounted

Rack-mounted

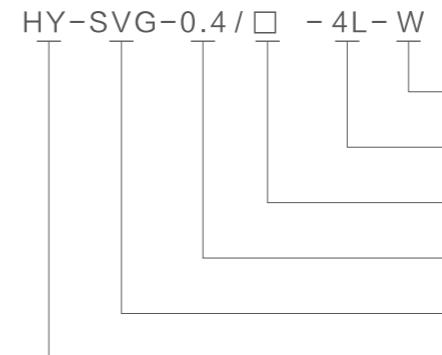
1 Static Var Generator Series (HY-SVG/ASVG)

Static Var Generator Series

HY-SVG static var generator based on power electronics as the core technology of the most advanced reactive power compensation device, able to quickly provide capacitive and inductive reactive power continuously, avoid over-compensation, under-compensation, resonance and other phenomena, such as to improve the power factor, current harmonics, voltage stability, ensure the safety of power system. The device is suitable for the situation where the reactive power is changing rapidly and the power supply is higher.

HY-SVG series is divided into common type and enhanced type. Among them, the enhanced type HY-ASVG adds filtering function on the common type, and can filter out 2~13 times harmonics.

MODEL ➤



Installation method: W Wall-mounted / R Rack-mounted / C Cabinet-mounted

Wiring system: 3L Three-phase three-wire system / 4L Three-phase four-wire system

Rated compensation capacity (Unit : kVar)

Voltage classes: 0. 4kV

SVG(common type) ASVG(enhanced type)

Huayi LV electric brand name

PRODUCT FEATURE ➤

Double directions compensation

- Both capacitive and inductive can carry out stepless compensate

Response quickly

- The total response time $\leqslant 10\text{ms}$

High precision

- $\text{Cos } \phi \geq 0.99$,
No over-compensation,
under-compensation

No resonance

- Controlled voltage source, no resonance risk

RMON

- Various communication interfaces (RS232/WIFI/bluetooth), standard communication protocol
- Cloud monitoring platform, big data analysis

Man-machine coordination

- Real-time display waveform and data of power quality

Better reliability

- The core components are imported
- Performance parameters online automatic proofreading
- Over voltage, under voltage, over temperature, overload

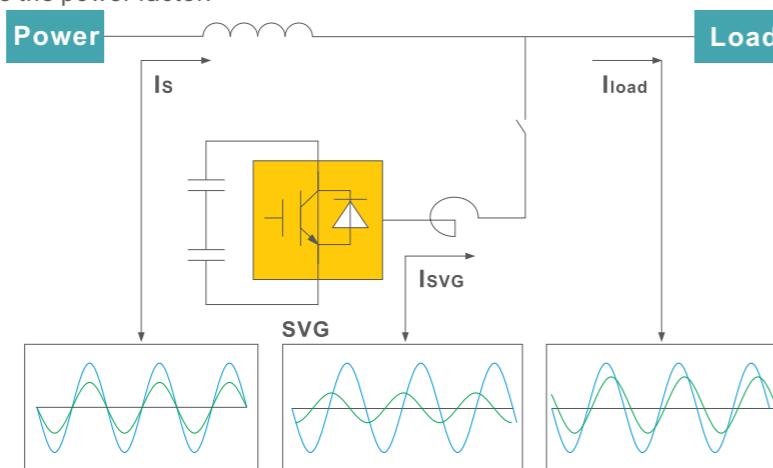
Good expansibility

- Can be expanded by adding modules

- Modular design, wall-mounted or rack-mounted or cabinet-mounted installation
- Phase sequence automatic identification, no need to distinguish positive sequence and other protection
- The current transformer direction can be automatically identified

WORKING PRINCIPLE ➤

HY-SVG static var generator uses a self-commutated bridge circuit composed of high-power power electronics (IGBT). After the reactor is connected in parallel to the power grid, the amplitude and phase of the output voltage of the AC side of the bridge circuit are adjusted. Alternatively, by directly controlling the AC side current, the circuit can absorb or issue a compensation current that satisfies the requirement and increase the power factor.



Note: Blue represents the voltage, green represents the current

TECHNICAL PARAMETERS ➤

Item	Parameters
Rated Voltage	AC400V±20%
Rated frequency	50Hz
Method of connecting wire	three-phase three-wire/three-phase four-wire
Single module compensation capacity	35kVar、50 kVar、75 kVar、100 kVar
Objective power factor	-1~1 (can be set)
The filter scope	supports harmonic current compensation for low times (3, 5, 7, 9, 11, 13). For ASVG with harmonic filtering function only
Fast response time	<50us
Total reponse time	<10ms
Active power loss	<3%
Noise	≤65dB
In parallel operation mode	up to 10 sets in parallel operation
IP Grade	IP20
Cooling mode	intelligent air cooling
Protection function	overvoltage, undervoltage, over temperature, overload, phase loss , short circuit, lightning protection, anti-jamming and other hardware and software protection
Communication function	RS485/232, Ethernet, WIFI/ bluetooth, GPRS (optional); use M odbus protocol (optional for other protocols)
Equipment weight	20 ~ 50 kg (according to the model)
Display function	touch liquid crystal display
Ambient temperature	-10°C~+40°C
Storage Temperature	-20°C~+70°C
Altitude	≤2000m, Other elevations are used according to the national standard

PRODUCT DIMENSION ➤

Capacity /KVar	Rack-mounted	Wall-mounted	Cabinet-mounted
	Dimension (W*D*H)/mm	Dimension (W*D*H)/mm	
35	359*557*200	379*200*522	
50	399*612*200	419*200*545	
75	484*646*232	500*232*611	
100	554*656*250	570*250*621	

The standard model is GGD cabinet,dimension(W*D*H)/mm: 800*800*2200,If the user has other requirements, it is customizable.

Note: The above dimensions are for reference only

COMMON SELECTION CONTROL TABLE ➤

Transformer capacity/KVar	200	315 (400)	500	630	800	1000	1250	1500	2000	2500
Capacity /KVar	50	100	150	200	250	300	400	450	600	750
Module combination form	50	100	100+50	100*2+50	100*3+100	100*3+100	100*4+50	100*6+50	100*7+50	
Installation form	wall-mounted									
Dimension (W*D*H)/mm	480*560*200 (50 modules) 480*560*300 (100 modules) 800*800*2200									
Income line type	Upper income line (wall hanging module) Upper income line/Bottom income line (cabinet-mounted)									
Liquid crystal	optional									
The cabinets	optional									
The switches	optional									
Lightning protection	optional									
Cloud services	optional									
Filter wave	optional									
Mutual inductor transformer	optional									
Cable installation	optional									

Note: Please contact our engineers for specific selection