5 Three-phase Unbalanced Automatic Regulating Device Series (HY-SPC)

Three-phase Unbalanced Automatic regulating Device Series

HY-SPC three-phase unbalanced automatic regulating device is a power quality integrated control device with high power turn-off power electronic switching technology. This series of products can be integrated to solve the unbalanced three-phase power system, reactive power, power quality problems such as harmonics, voltage flicker, so as to reduce loss, improve the efficiency of transformer, reduce the line current, voltage stability, ensure the safety of power system. The device is suitable for three phase unbalanced power supply lines, low power factor and harmonics in the low voltage distribution platform or in the three-phase power supply network with a large number of unidirectional loads.

MODEL

HY-SPC-0.4/□-4L

- **Method of connecting wire**:3L
  Three-phase three-wire system/4L
  Three-phase four-wire system
- **Rated compensation capacity** (Unit : kVar)
- **Voltage classes:**0. 4kV
- **Three-phase unbalanced automatic regulating device**
- **Huayi LV electric brand name**

PRODUCT FEATURE

Powerful functions

- Three phase unbalanced compensation
- Capacitive, inductive reactive compensation
- Low harmonic filter

Excellent performance

- Unbalanced compensation < 3%
- Power factor: 0.99
- Voltage distortion rate < 5%

Better reliability

- High reliability core components
- Self-detection, fault diagnosis, self - recovery function
- Overvoltage, under voltage, over temperature, overload and other protections

Easy to install

- Support pole-mounted and horizontal mounting

Response quickly

- The total response time≤10ms

Man-machine coordination

- Real-time display waveform and data of power quality

Intelligent monitoring

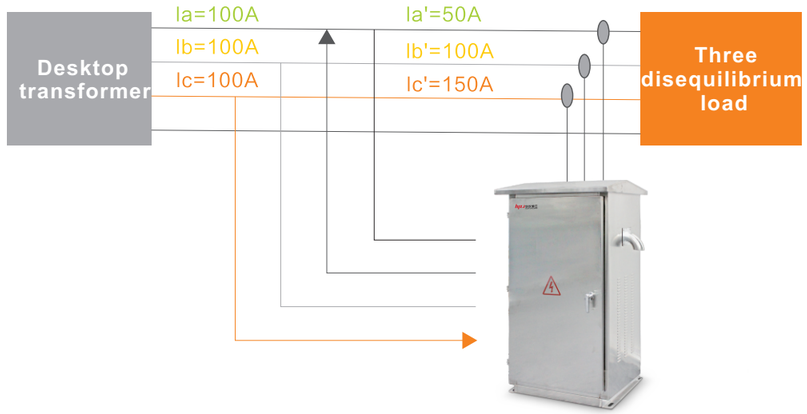
- Multiple communication interface (RS485/RS232/WIFI/ bluetooth), standard communication protocol
- PC and mobile terminal can monitor the equipment state

Easy to install, debug and maintain

- Reasonable structure design of the equipment, is easy to operate and maintain
- Phase sequence automatic identification, no need to distinguish positive sequence
- The current transformer direction can be automatically identified

WORKING PRINCIPLE

HY-SPC through potential transformer (PT), current transformer (CT) to real-time detect voltage, current, by internal DSP processing analyzing, form the instruction current signal, and then drive device to act, compensate unbalanced, reactive power and harmonic current, realize the comprehensive treatment of power quality.



TECHNICAL PARAMETERS

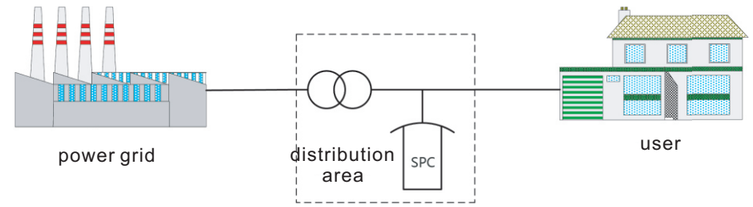
Item	Parameters
Rated Voltage	AC400V ± 20%
Rated frequency	50Hz
Method of connecting wire	three-phase three-wire/three-phase four-wire
Single module compensation capacity	35kVar、50kVar、75kVar、100kVar
Unbalanced compensation	Imbalances ＜3%
Objective power factor	-1~1 (can be set)
The filter scope	supports harmonic current compensation for low times (3, 5, 7, 9, 11, 13).
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	IP54
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
Installing form	derrick installation, H rod installation, F rod installation
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℃~+40℃
Storage Temperature	−20℃~+70℃
Altitude	≤2000m,Other elevations are used according to the national standard

PRODUCT DIMENSION

Capacity /kVar	Dimension(W*D*H)/mm
35	600*400*1050
50	600*400*1050
75	600*600*1050
100	600*600*1050

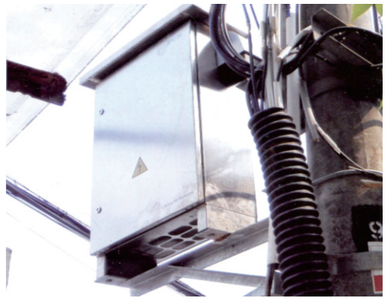
Note: The above dimensions are for reference only

INSTALLATION SITE



TYPICAL APPLICATION

Installed capacity of a certain station area in Zhejiang: 75 kVar



Installed capacity of a certain station area in Anhui: 100 kVar

Installed capacity of a certain station area in Guangdong: 100 kVar

Installed capacity of a certain station area in Henan: 100 kVar