

SVS

IGBT based PWM Static Voltage Stabilizer



Precision fast-PWM AC mains voltage correction

Normally, Automatic Voltage Regulators (AVR) which are used in countries with inadequate infrastructure and resources have failed to match pace with the requirements of the sophisticated electronics it protects. The high speed SVS recently developed is a boon to the industry. The most prevalent technologies in use are of the servo and tap switching types, and the most economical way to mitigate problems is using a modern SVS. It is the end users responsibility to assess whether the mains supply is of sufficient quality to provide power for the sensitive equipment.

Again, the end user has to select a proper solution that meets technical requirements.

Why SVS instead of other AVRs?

Servo-motor based or tap-switching AVRs are not suitable for sensitive load equipment such as power supplies, rectifiers using solid state devices and air-conditioners because of their slow response time and inherent performance limitations.

SVS IGBT based PWM voltage stabilizers can be used to protect any electronic equipment, particularly in countries with inadequate infrastructures for the generation and distribution of AC power.

SVS is superior, thanks to its fast 1-1.5 cycle response time and cycle-by-cycle voltage regulation, without interrupting the load current.



Key Features

- High dynamic response
- Automatic Bypass
- Quite Operation
- Light weight design
- No need to oversize-handles crest factor 5:1
- Unit starts up on sine wave zero crossing
- Wide input voltage range
- Fast regulation
- Under voltage cut off with automatic restart
- No moving parts

Non-isolated SVS are available for those applications that do not require an isolation transformer. For special applications SVS with inbuilt isolation transformer is also available.

Technical Specifications (Single Phase SVS)

Model	Power Rating		3KVA	5KVA	7.5KVA	10KVA	15KVA
Input Voltage	Nominal voltage Rating	V	230V, 1- Phase, 2 wire + Earth				
	Voltage Range	V	170-290 Ph-N (other range available on request)				
	Frequency	Hz	Nominal -50/60Hz, Range 45- 65Hz				
	Input MCB / MCCB	A	~20A	~30A	~40A	~50A	~75A
	Terminal block		Yes				
Output voltage	Voltage	V	230V +/-1%				
	Correction time		1-1.5 Cycle				
	Voltage Regulation	%	+/- 1				
	Dynamic Regulation	%	+/- 5				
	Output voltage Regulation in Relaxed input voltage range		210 - 250V +/-1% (Optional)				
	Output Wave form distortion		Nil				
	Effect of Power factor		Nil				
	Output Overload	%	100 / Continuous, 100> & <110 / 60Min				
		%	>110 & 125 / 10 Min, >125 & 150 / 1Min				
		%	>150&<300 / 250ms, >300 Immediate trip				
Protection	Terminal block		Yes				
	Output Contactor	A	~15A	~20A	~30A	~45A	~65A
	Automatic bypass		Yes				
	Manual bypass		(Optional)				
	Input Under voltage	V	165 +/-1%				
	Input Over voltage	V	295 +/-1%				
	Output Under Voltage	V	230 + 5%				
	Output Over Voltage	V	230 - 5%				
Display / Indication	Frequency Out of Range	Hz	< 45 or > 65				
	LED / LCD		LCD (Optional)				
	Output Healthy	LED	Green LED				
	Input and Output Under voltage / Input Over voltage	LED	Green LED - Blink				
	Overload / Short circuit	LED	Red LED - Blink				
	Trip Indication		Red LED				
	I/O port		2 Output One input IO (Optional)				
	Communication		RS232/485 (Optional)				
Overall	IT/UIT		(Optional)				
	Efficiency	%	Better Than 96%				
	Cooling method		Forced cooling				
	Ingress Protection		IP20 (other range available on request)				
	Temperature	%	0 - 45 Deg C (other range available on request)				
	Humidity	%	0 - 95 (RH - Non Condensing)				
	Noise	dB	<60				
	Dimension	mm	330x485x410 (H x W x D) in mm				
Weight	Kg	32Kg	38Kg	40Kg	42Kg	50Kg	

Our policy is one of continuous improvement and the company reserves the right to amend design and specification without notice.

AN ISO 9001 : 2008 Company

suvik

www.suvik.com

SUVIK ELECTRONICS PVT. LTD.

Plot No. 102/A, GIDC Engineering Estate, Sector-28, Gandhinagar-382 028, Gujarat. INDIA

Phone: +91-79-23212001/2/3, Fax: +91-79-23212006, Email: info@suvik.com, mktg@suvik.com