SOLLATEK VOLTAGE STABILISER (SVS)

3 phase models for the Telecommunications and IT applications

SVS3x20-22
SVS3x50-22
SVS3x75-22

3 phase Stabiliser with isolated* clean output and very wide input range (-37% to +24%)

**Isolated output available as an option. See back page.*

THE SOLLATEK VOLTAGE STABILISER (SOLLATEK SVS) has been designed to provide a clean, regulated AC power supply to all equipment in environments with unreliable, fluctuating mains supply.

OPERATION

The Sollatek SVS monitors the mains voltage continuously. If the voltage rises or drops, the SVS will stabilise the output to ensure the voltage reaching your equipment remains constant at 230V, within the operating range of the unit.

If the input voltage falls below 142V* or rises above 295V*, the SVS will disconnect the output, thereby protecting the load. Once the mains voltage returns again within acceptable limits, the SVS will reconnect the output following a start up delay.

APPLICATIONS

The SVS is suitable for all electrical and electronic appliances. It is particularly useful for the following: Fridges, Air conditioners, Freezers, Coolers, TV/HiFi, Computers, Medical Refrigeration, and Telecom Appliances.

FEATURES

- Microprocessor controlled stabiliser
- Very wide input voltage range
- Excellent output voltage stability
- Includes surge and spike suppression
- Full RFI & noise suppression (ER option only)
- Extremely fast response
- Incorporates over-voltage & under-voltage disconnect
- Incorporates TimeSave™ feature
- Available as single and three phase
- British design & manufacture
- 2 year worldwide warranty

THE SOLLATEK SVS HAS THE FOLLOWING ADVANCED FEATURES :

- The Sollatek SVS boosts low voltage.
- The Sollatek SVS reduces high voltage.
- The Sollatek SVS disconnects the load (fridge, TV, PC etc) using its built-in Automatic Voltage Switcher, when mains stabilisation within acceptable limits is outside its capability (available as an option in 3 phase models).
- Automatically reconnects the load, but only after the mains has remained within acceptable limits for a period of three minutes.† This is to allow neutralisation of compressor gases, critical in such applications.
- Has a very wide voltage response range of 140V to 300V.
- Incorporates intelligent delay to reduce off-time when the appliance has been switched off for over three minutes.†
- Uses a unique zero voltage switching technique to achieve clean pure stabilised power.
- Incorporates full spike protection.
- Frequency compensated measurements.
- Frequency and voltage measurement smoothing in software to filter noise.
- Fault detection - senses if the measurements being made are unreasonable and disconnects output. Red and yellow LEDs flash alternately to indicate a fault.

† The duration of the start-up delay period varies between 10 seconds and 6 minutes, depending on the model.

ORDERING

The Sollatek three phase SVS range is easy to order. All units are rated by the number of AMPS per phase and the input/output range. For example:

SVS3x20-22

- Nominal voltage: 22=230/400V 11=115/220V
- Amps per phase
- Three phase

TO CALCULATE THE VA:
VA = Amps x single phase voltage x 3
i.e: 20 (amps) x 230 (voltage) x 3 = 13800VA

TO CONVERT TO kVA:
Divide the VA by 1000:
i.e: 13800 x 1000 = 13.8kVA

OPTIONS

A number of options is available on the SVS:

1) Isolating Transformer

In areas of erratic voltage and accentuated noise problems on the lines, the neutral tends to carry those. The most effective way to remove this problem is by using an isolation transformer.

The Sollatek 3 Phase SVS can be ordered with a D-Y Isolation transformer as an option. This option will be supplied fully integrated and pre-wired. It will provide clean output to the load with a new neutral.

The Isolation Transformer option is available on all 3 models.

2) Automatic Voltage Switcher Option (AVS™)

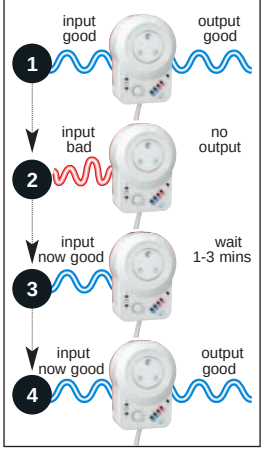
The AVS (a Sollatek UK Patent 2139436) option completes the protection that can be offered by the Sollatek SVS. The AVS simply disconnects the mains when the voltage is 'BAD' and re-connects it automatically when the voltage returns to 'GOOD'. Using this principle, the AVS monitors the output of the AVR. If the AVR can not correct the voltage sufficiently (in cases where the fluctuation is extremely high or extremely low), then the AVS will disconnect the output and thus provide the added protection to the appliance.

When the AVR's output is acceptable, the AVS will monitor the supply for 1 minute to ensure stability and will then reconnect the mains.

The Sollatek AVS has an additional useful feature of Timesave.™ Using its own microprocessor, the AVS will monitor the time.

If the unit has been disconnected for more than 1 minute then the AVS will reconnect within 30 seconds.

THE AVS OPTION



3) DSP option(Additional Surge/Spike Suppression)

Extra surge/spike suppression is available on the Sollatek 3 Phase SVS range, in the form of The Sollatek DSP (Distribution Surge Protector). This unit will provide a high a level of protection from lightning induced voltage surges on the mains supply.

Features:

- Designed to handle surges of up to 20,000 amps
- Auto resetting - no maintenance required
- Full status indication for all protection circuits
- Remote Status indication via volt free contacts
- Can be built-in or ordered separately in a plastic wall mounting enclosure
- Suitable for all current rating as the unit is shunt connected
- Peak Surge Current 20kVA
- Limiting Voltage <900V
- Multiple Discharge Current 20 shots @ 10kA
- Filtered option attenuation 65dB @ 10 Mhz

DSP SPECIFICATION

Maximum let through voltage (8/20 ms)	750V
Response time	10 ns
Peak discharge current	20 kA
Nominal voltage	380/415V
Total energy (DSP1)	1280 J

4) RFI Filter Option for the SVS 3 Phase

Sensitive electronic equipment are at risk from damage due to surges, spikes and RFI (Radio Frequency Interference). Such electrical noise/interference causes equipment either to be damaged or malfunction in an unpredictable manner.

RFI & Noise is generated by equipment such as central heating pumps, lifts, air-conditioners, vacuum cleaners, fluorescent lamps, photocopiers, computers, TV.

The RFI Option removes noise and RFI from the mains.It will attenuate noise typically from 15dB @ 100KHz up to 30dB at 1MHz thus ensuring delivery of pure mains supply to the appliance.

Sollatek™
The Power to Protect

SPECIFICATIONS

SVS 3 PHASE MODELS

MODEL	Amps	kVA@230V/400	Weight (kg)	Dimensions
SVS3 x 20-22	3x20	13.8	50	400 x 400 x 645H
SVS3 x 50-22	3x50	34.5	75	400 x 400 x 645H
SVS3 x 75-22	3x75	51.7	110	550 x 600 x 750H

DELTA STAR ISOLATING TRANSFORMER 20A/PH	130	450 x 300 x 500H
DELTA STAR ISOLATING TRANSFORMER 50A/PH	200	600 x 400 x 600H
DELTA STAR ISOLATING TRANSFORMER 75A	375	1000 x 500 x 1000H/ph

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