



The Sollatek AVS provides complete protection

Is your valuable equipment protected?

Electricity is a vital commodity in running our daily lives, and we expect it to be reliable, constant and free from problems. Unfortunately however, this is not always the case. Electricity supply falters and fails, and damage occurs, often to our most expensive and valuable appliances. The damage done is sometimes irreparable and can be very costly in both time and money.

Yet by using a Sollatek AVS, unreliable electricity supplies can be corrected or protected against to minimise or sometimes to entirely prevent any damage to appliances, at minimal cost. Now we can rest easy and have one less thing to worry about!

The damage

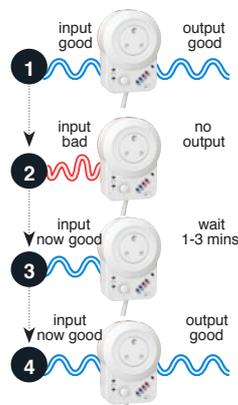
- **POWER CUTS** - can be caused by accidental interruption, thunder storms and power rationing etc.
- **SAGS** (under voltage, dip and brown out) are caused by large inductive loads being used (photocopiers, computers etc) and large power draining equipment like lifts and air conditioners, or simple overloading of the local electricity grid. Sags are particularly harmful to motors as they cause increased current flow and eventual burning out due to overheating. Therefore fridges, freezers, air conditioners photocopiers and fax machines are particularly at risk. Electronic equipment is also at risk, as sags cause long term damage due to inadequate power supply.

"The damage done is sometimes irreparable and can be very costly"

- **OVER-VOLTAGES** are caused by an increase in voltage over normal limit (more than 260V). Over voltage can cause some of the most serious damage to appliances and especially sensitive electronic equipment.
- **POWER-BACK SURGES** typically happen when the mains supply returns after a power cut. This is usually accompanied by a massive surge which can be very damaging to equipment. For this reason we are all familiar with the concept of unplugging our appliances as soon as there is a power cut.
- **IMPULSES** (spike, surge) are very short duration rises in voltage which can be up to thousands of volts. Many events can generate impulses, (which are damaging to all electronic equipment), such as lightning, switching of inductive loads, and utility grid switching.

The protection -The AVS

Since 1983 Sollatek has been manufacturing



equipment to protect against all these problems. Invented and patented by Sollatek UK, the AVS (Automatic Voltage Switcher) is the only sure protection against all the aforementioned events.

The AVS principle

The diagram above illustrates the simple but effective function of the AVS. The AVS will automatically disconnect the mains supply to the connected equipment when the supply voltage level exceeds set parameters (usually 190V to 260V). It will then reconnect the equipment when the mains power returns inside parameters, for a pre-set period.

"The AVS will continue to protect as it is continuously monitoring the mains supply"

Therefore, if the mains supply suddenly surges, dips, or drops, the AVS will immediately disconnect the connected equipment, thereby completely protecting against this disruptive and potentially damaging event. Meanwhile the AVS continues to monitor the mains.

The AVS will then reconnect automatically only if

the mains returns to normal for a minimum of 1 minute (or longer, depending on model selected). This is to ensure stabilisation of mains supply.

Does the AVS disconnect on spikes (impulses)?

No. This is not required as the AVS has built-in surge and spike protection. Any incoming spikes will simply be clamped to a safe level.

Isn't the AVS simply just a surge or spike protector?

Absolutely NOT. A low cost surge/spike protector plug will only protect against one event: impulses. (commonly known as spikes, and though wrongly, as surges). A surge/spike plug will provide zero protection against any other voltage problem.

Can I connect more than one appliance to an AVS?

Yes you can. The AVS is rated at 13amps, so if you connect a multi way adapter or socket strip to the AVS, you can protect all outlets. However you must not exceed 13 amps.

Stabiliser or an AVS?

Stabilisers are vital in providing a useable voltage range to work with. So, can they replace an AVS? The answer is definitely not. A stabiliser will attempt to correct the incoming mains if it dips or surges. Some stabilisers do this better than others. The Sollatek range of stabilisers (SVS) have probably the widest input range available, and with microprocessor control, they achieve correction in a clean fast way to provide a clean accurate output. However if the voltage fluctuates widely then the correction of the stabiliser may not be sufficient to bring the output voltage to a safe level. In these cases, protection is incomplete. Therefore to provide the best possible protection, use a combination of stabiliser and AVS. Furthermore, the AVS is rated at 13amps, weighs 500grams and fits in the palm of your hand. A similarly rated stabiliser would weigh about 10kg!

Other Sollatek products which operate the AVS principle



HiVoltGuard
Ideal for computers, laptops, TV, VCR



FridgeGuard
Ideal for fridges, freezers, coolers



LightningGuard
Ideal for computers, telecoms equipment



VoltGuard
Ideal for computers, fridges, freezers, coolers

AVS30
complete office/building protection



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The Power to Protect