



## The Sollatek three phase voltage switcher range

Voltage protection for all three phase commercial, industrial plants and machinery, air conditioning, and refrigeration



**Sollatek™**  
the power to protect



## The Sollatek three phase voltage switcher range

Protection for all three phase equipment

### Protection for:

- Air conditioners
- Industrial refrigeration
- Industrial plant and production lines
- Industrial machinery including pumps, lifts, cranes, compressors, and transformers

The Sollatek Voltshield range of three phase switchers prevents damage to electrical and electronic equipment / appliances from power fluctuations, specifically over and under voltage.

When the mains power supply fluctuates outside pre-set limits (nominally 190V and 260V) the power to your equipment is disconnected by the Switcher. The Switcher then monitors the voltage for a short period to ensure the power has stabilised before re-connecting.

In addition, a start-up delay period provides protection against power-back surges commonly experienced after resumption of power after a power cut. Surge and spike protection is also incorporated to ensure protection.

### Main features and benefits

- Microprocessor controlled - high speed response.
- Under voltage blind time to prevent false starts.
- Fully automatic in operation - requires no user intervention.
- In- built start-up delay - prevents rapid on/off switching.
- Includes surge and spike and power-back surge protection.
- Adjustable delay.
- Adjustable voltage limits.
- Five LED indicators show status.
- Intelligent time delay 'TimeSave™'
- Detection of missing phase and phase duplication.
- Independent phase to neutral measurements.
- Wall mount enclosure.
- Volt-free change over contacts (AVS3P-0).
- 'Fast-off' feature to catch motor stalling.

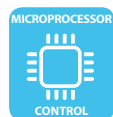
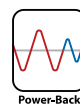
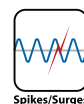
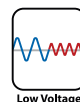
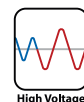
## 3 Phase Automatic Voltage Switcher (AVS303-xx) (xx=Amps per phase)

Protection for all three phase equipment where a contactor is not already fitted.

The AVS303 incorporates a contactor to switch the full load current (see the AVS3P-0 if you already have switching mechanism in place). The AVS303-xx is available in different sizes ranging from 23 amps to 1250 amps (the -xx relates to the current rating, i.e. AVS303-23 is a 23 amp per phase AVS303).



|                            |                                                                                                              |
|----------------------------|--------------------------------------------------------------------------------------------------------------|
| <b>Max power</b>           | From 23 amps per phase up to 1250 amps                                                                       |
| <b>Wait time</b>           | User adjustable from 10 secs to 10 mins                                                                      |
| <b>Ideal for</b>           | 3 Phase air conditioning, industrial refrigeration, pumps, motors, compressors and machinery                 |
| <b>Tip</b>                 | At a reasonable cost and almost a fraction of that of the equipment, the AVS303 will provide full protection |
| <b>Socket availability</b> | Direct wiring – 3 phase and neutral connections                                                              |
| <b>Weight</b>              | Dependent on model number                                                                                    |
| <b>Dims</b>                | Dependent on model number                                                                                    |





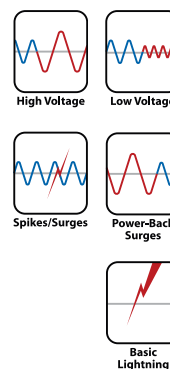
## 3 Phase Automatic Voltage Switcher control (AVS3P-0)

Protection for all three phase equipment where a contactor is already available to use.

Unlike the AVS303, The AVS3P-0 is designed to operate an external control circuit or contactor which may be part of a motor starter or other equipment. The AVS3P-0 has a volt-free changeover contact as an output.



|                            |                                                                                                                                                                                |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Max power</b>           | Controls an external 3 phase controller or contactor of <b>any size</b>                                                                                                        |
| <b>Wait time</b>           | User adjustable from 10 secs to 10 mins                                                                                                                                        |
| <b>Ideal For</b>           | 3 phase air conditioning, industrial refrigeration, pumps, motors, compressors, and machinery                                                                                  |
| <b>Tip</b>                 | The AVS3P-0 has an uncommitted changeover relay output providing a changeover contact rated at 16 amps that can be used to drive external alarms, contactors and control loads |
| <b>Socket availability</b> | Direct wiring – standard 3 phase and neutral connections                                                                                                                       |
| <b>Weight</b>              | 500 gm                                                                                                                                                                         |
| <b>Dims</b>                | 205 x 135 x 55 mm                                                                                                                                                              |



| Model                           |               | AVS303                                                    | AVS3P-0                                                   |
|---------------------------------|---------------|-----------------------------------------------------------|-----------------------------------------------------------|
| Current rating                  |               | 23-1250 3 phase                                           | 16A single output                                         |
| Mains surge/spike response time |               | <10ns                                                     | <10ns                                                     |
| Mains max spike/surge discharge |               | 6.5kA                                                     | 6.5kA                                                     |
| Frequency                       |               | 50/60Hz                                                   | 50/60Hz                                                   |
| Spike protection                |               | 160J                                                      | 160J                                                      |
| Mains disconnect response time  | Over-voltage  | 20ms                                                      | 0.5 sec                                                   |
|                                 | Under-voltage | 1.0 sec                                                   | 1.0 sec                                                   |
| Reconnect wait                  |               | 10 sec to 10 min (adjustable)                             | 10 sec to 10 min (adjustable)                             |
| Over voltage disconnect         | 230V<br>110V  | 265V (230-300V adjustable)<br>130V (115 -150V adjustable) | 265V (230-300V adjustable)<br>130V (115 -150V adjustable) |
| Under voltage disconnect        | 230V<br>110V  | 190V (150 -230V adjustable)<br>95V (75-115V adjustable)   | 190V (150 -230V adjustable)<br>95V (75-115V adjustable)   |
| Dimensions                      | Unpacked      | Dependent on model                                        | 185 x 132 x 53 mm                                         |
|                                 | Packed        |                                                           | 232 x 134 x 53 mm                                         |
| Socket availability             |               | Direct wiring                                             | Direct wiring                                             |
| High voltage hysteresis         |               | 3V                                                        | 3V                                                        |
| Low voltage hysteresis          |               | 7V                                                        | 7V                                                        |

### TIMESAVE™ description\*



The Voltshield has a built-in micro-processor which adds the advanced feature TimeSave.™ TimeSave™ means that when the mains returns to normal, the Voltshield checks the duration of the OFF time. If the unit has been off for more than 3 minutes then it will reconnect the mains within 10 seconds rather than the standard 3 minutes. This means the Sollatek Voltshield will give you more vital working time than any other switcher!

### The VOLTSHIELD features

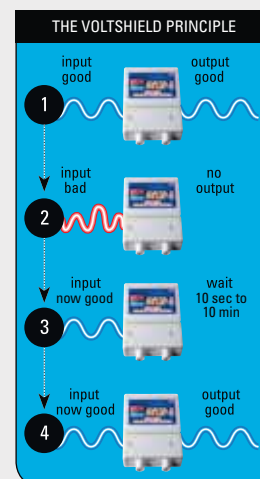
- Protects and prolongs the useful life of electrical appliances
- Eliminates the need to switch off appliances every time the electricity fails
- Safeguards valuable electrical appliances at all times
- Very low cost protection in relation to the value of appliances
- Different models available

### The VOLTSHIELD principle

For complete protection simply connect the Voltshield into the mains before your appliances. When the mains power supply fluctuates outside pre-set tolerances (nominally 190V and 260V) the power to your equipment is disconnected.

The Voltshield monitors the voltage for a short period to ensure the power has stabilised before re-connecting. In addition, the start-up delay provides protection against power-back surges commonly experienced after resumption of power after a power cut.

Surge and spike protection is also incorporated to ensure protection against these events which are very common. Surges and spikes are generated by lightning and nearby switching off and on of other equipment such as lighting, pumps, motors, compressors, elevators etc.



### Sollatek (UK) Ltd

Unit 10 Poyle 14 Newlands drive,  
Poyle, Slough SL3 0DX, U K.

### Tel:

International: +44 1753 688300

National: 01753 688300

### Fax:

International: +44 1753 685306

National: 01753 685306

### E-mail:

sales@sollatek.com

### Internet:

www.sollatek.com



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### ISO9001: 2008 accredited company

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