

# Powersaver



## Energy Saving by Voltage Optimisation

### Powersaver Single phase regulators



**A** saving of up to 20% on your electricity bills can be achieved simply by reducing your incoming supply voltages from the UK average level of 242V to a more modest 220V or lower dependent on the site loads.

In 1995 the statutory supplies voltages across the EU were to be harmonized to 230V  $\pm 10\%$  (207V to 253V). The full implementation has not yet taken place. However, the present UK statutory supply is 230 Volts -6% +10% (216.2V to 253.0V).

The **Powersaver** advantage over any other method of voltage optimisation is that each phase is independently and linearly controlled to a site predetermined level. The adaptive control maintains this level, eliminating voltage fluctuations, allowing the full potential savings to be achieved. Additionally, by balancing the phase voltages, direct drive motors will also improve their efficiency.

**Powersaver** has as standard a digital voltmeter and external output voltage adjustments allowing further reductions and therefore potentially more savings to be made on site, whilst on-line and load.

To meet all site requirements, **Powersaver** is available with a number of correction ranges to accommodate the actual site voltage levels and loadings.

**Powersaver** is also available as a single three phase unit, where access is not so difficult.



- Save up to 20% of your electricity costs
- Reduces Carbon Footprint
- Contributes to CSR and CRC
- 18-24 months return on investment
- Balances phase voltages
- Eliminates voltage fluctuations
- Outputs adjustable whilst on-line & load
- Reduces maintenance costs
- Linearly regulates your supply voltages
- Increases equipment life

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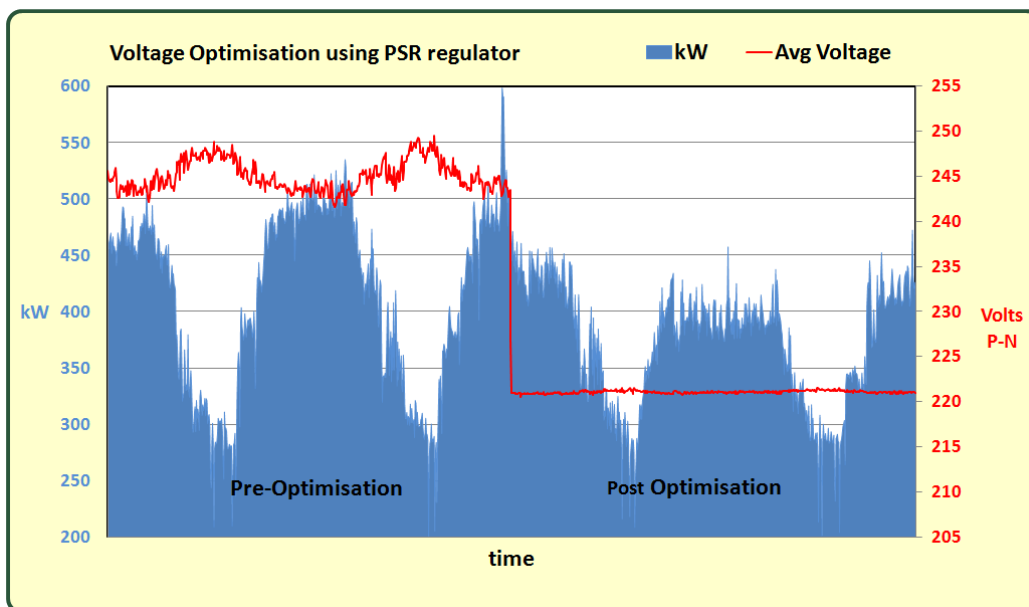
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UK manufacturers of Voltage Stabilisers, Regulators & Conditioners



## Single phase Powersaver Regulator specification

Output Voltage	Site determined (Nominal 220Vrms single phase)
Output Accuracy	1% or better
Output Settings	External, linear site adjustment whilst on-line and load
Maximum input voltage	265V phase to neutral
Indication	Digital Voltmeter
Frequency range	47 to 65Hz
Waveform distortion	None
Efficiency	>99% at full load
Transient suppression	IPP @ 8/20 $\mu$ s : 8000A Clamping max 840V
Surge rating	1000% for 2 seconds, 300% for 1 minute, 200% for 5 minutes
Surge Withstand Capability	BS EN61000-4-5
Electro Magnetic Compatibility	BS EN61000-6-3 (EN50081-1) & BS EN61000-6-2 (EN50082-2)
Audible Noise	Approx 45dBA @ 1 metre
Operational environment	0°C to 45°C / 95% rh (non-condensing)
Working Altitude	1000 metres (derate by 2.5% per additional 500 metres)
Enclosure	IP20 to BS60529 (others upon request)
Warranty	2 years

Powersaver	Correction range (R) (expressed as % of output set voltages)			Speed of correction (seconds)	Approx dimensions W x D x H (mm)	Approx weight kg
	+10%	+12.5%	+15%			
Single phase models	Ratings (Phase current/kVA at 220V)			From +10% to +2%	Allow additional 90mm to height for eyebolts (removable)	
PSR-02-1P	60A/13kVA	45A/9.9kVA	40A/8.8kVA	0.15	395 x 245 x 213	27
PSR-03-1P	96A/21kVA	77A/17kVA	64A/9.2kVA	0.20	295 x 420 x 395	60
PSR-04-1P	180A/40kVA	144A/32kVA	120A/26kVA	0.20	295 x 420 x 395	60
PSR-06-1P	216A/48kVA	173A/38kVA	144A/32kVA	0.25	320 x 550 x 360	76
PSR-08-1P	360A/79kVA	288A/63kVA	240A/53kVA	0.60	525 x 765 x 430	160
PSR-10-1P	720A/158kVA	576A/127kVA	480A/106kVA	0.60	580 x 1150 x 815	260
PSR-12-1P	1081A/238kVA	864A/190kVA	720A/158kVA	0.60	565 x 1150 x 1605	500
PSR-14-1P	1441A/317kVA	1153A/254kVA	961A/211kVA	0.60	565 x 1150 x 1640	593
PSR-16-1P	2161A/475kVA	1729A/380kVA	1441A/317kVA	0.60	565 x 1150 x 2000	900
PSR-18-1P	2882A/634kVA	2305A/507kVA	1921A/423kVA	0.60	1050 x 1150 x 1700	1150
PSR-20-1P	3602A/792kVA	2882A/634kVA	2401A/528kVA	0.60	1050 x 1150 x 2000	1900

Options	
01	External by-pass switch
03	Enhanced transient suppression
04	Lightning Arrestor