

Powersaver



Energy Saving by Voltage Optimisation

Powersaver Three 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 three single phase units, where access is 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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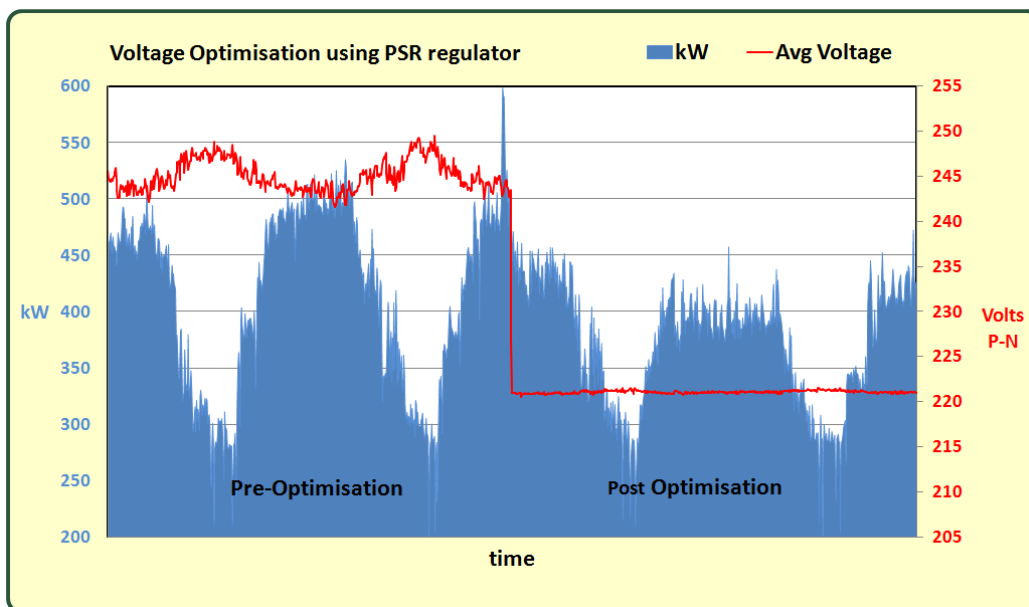
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UK manufacturers of Voltage Stabilisers, Regulators & Conditioners



Three phase Powersaver Regulator specification

Output Voltage	Site determined (Nominal 380Vrms three phase 4 wire star connected)
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 (Energy metering as a option)
Frequency range	47 to 65Hz
Waveform distortion	None
Efficiency	>99% at full load
Transient suppression	IPP @ 8/20 μ 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%			
Three phase models	Ratings (Current per phase/kVA at 380V)			From +10% to +2%	Allow additional 90mm to height for eyebolts (removable)	
PSR-02-3P	60A/40kVA	45A/32kVA	40A/26kVA	0.15	385 x 316 x 675	79
PSR-03-3P	96A/63kVA	77A/51kVA	64A/42kVA	0.20	415 x 630 x 1010	158
PSR-04-3P	180A/119kVA	144A/95kVA	120A/79kVA	0.20	415 x 630 x 1010	190
PSR-06-3P	216A/143kVA	173A/114kVA	144A/95kVA	0.25	335 x 615 x 1210	232
PSR-08-3P	360A/238kVA	288A/190kVA	240A/158kVA	0.60	565 x 1025 x 1605	585
PSR-10-3P	720A/475kVA	576A/380kVA	480A/317kVA	0.60	1200 x 1150 x 1605	900
PSR-12-3P	1081A/713kVA	864A/571kVA	720A/475kVA	0.60	1400 x 1150 x 1605	1450
PSR-14-3P	1441A/951kVA	1153A/761kVA	961A/634kVA	0.60	1705 x 1150 x 1640	1780
PSR-16-3P	2161A/1426kVA	1729A/1141kVA	1441A/951kVA	0.60	1755 x 1150 x 2000	2700
PSR-18-3P	2882A/1902kVA	2305A/1522kVA	1921A/1268kVA	0.60	(3x1050) x 1150 x 1700	3 x 1150
PSR-20-3P	3602A/2377kVA	2882A/1902kVA	2401A/1585kVA	0.60	(3x1050) x 1150 x 2000	3 x 1900

Options	
01	External by-pass switch
02	Internal by-pass switch (some models will increase in dimensions)
03	Enhanced transient suppression
04	Lightning Arrestor
07	Energy metering plus communications
09	Input breaker (some models will increase in dimensions)