



specialist in AC Voltage Stabilisers

# Claude Lyons

## TSO Industrial Voltage Stabilisers



Using the Claude Lyons TSO Industrial Voltage Stabiliser is the optimal way to regulate poor quality mains supply in adverse environmental conditions. Protecting industrial equipment from Voltage Fluctuations and Line Voltage Drops is frequently ignored causing equipment damage and failure resulting in downtime, delayed deliveries, lost custom and lost of revenue.

Being a totally enclosed unit, available up to **IP65**, makes the TSO Industrial Voltage Stabiliser suitable for outdoor operation or where protection from ingress including dust, sand, insects and moisture is a prime consideration.

The TSO range of Industrial Stabilisers are also available with Energy Saving features, these are for either general or lighting applications. In its basic mode the output voltage is set to a stabilised lower voltage enabling machinery to work at optimum efficiency thus lowering power consumption and running costs.

Attested designs of unequalled build quality provide the highest level of reliability, durability and versatility, with the units' robust electrical and physical construction making them suitable for all areas of industry.

## Industry Applications

### Voltage Fluctuations

### Voltage Drop Correction

### Energy Saving

- ◆ Pharmaceutical
- ◆ Warehousing
- ◆ Transport Depots
- ◆ Process Control
- ◆ Paper & Printing Processing
- ◆ Supermarkets
- ◆ Hospitals

- ◆ Food Processing, Manufacturing & Packing
- ◆ Mining
- ◆ Quarrying
- ◆ Maintenance Depots
- ◆ Petro-chemical
- ◆ Office Blocks

# TSO Industrial Voltage Stabilisers

## Features

- .. **Totally enclosed design. Up to IP65.**
- .. **Suitable for outdoor operation.**
- .. **High efficiency**
- .. **Wide operational temperatures range**
- .. **Independent correction on three phase models**

## Specification

Stabilised Output Voltage	Selectable: 220V, 230V, 240V (3 Phase, 380V, 400V, 415V)
Input Voltage Range	Given as a percentage relative to output setting.
(Standard Range)	Tap A -17.5% +7.5%, Tap B $\pm$ 12.5%, Tap C -7.5% +17.5%
(Extended Range)	Tap A -21% +9%, Tap B $\pm$ 15%, Tap C -9% +21%
	Alternative tap ranges are available
Supply Frequency	47-65Hz
Output Voltage Accuracy	Better than $\pm$ 0.5% of set output voltage, zero to full load.
Waveform Distortion	Negligible
Efficiency	98% at full load
Effect of Load PF	None
Surge Rating	1000% for 2 seconds, 300% for 2 minutes
Surge Voltage	Meets IEEE 587 Cat A test
Environment	Current ratings apply -5°C to +45°C. Derate by 2% for each additional °C up to 60°C Altitude, above 1000m derate by 2.5% for each 500m Humidity, 95% non-condensing
Options	A wide range of customer specific options are available



## Model Ranges

E&OE issue 2005/a Due to continuous improvements Claude Lyons reserve the right to change specifications without notice

- ◆ Single Phase: 5kVA upwards.
- ◆ Three Phase: 30kVA upwards.

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