

# VOLTAGE POWER OPTIMISER

For more than 80 years Wilson Transformer Company has been designing and building superior transformer products and providing life-time management services. We are committed to support our local and global customers by delivering the most reliable and high quality products that meet our customers' requirements.



THE TRANSFORMER  
PEOPLE

## KEY FEATURES

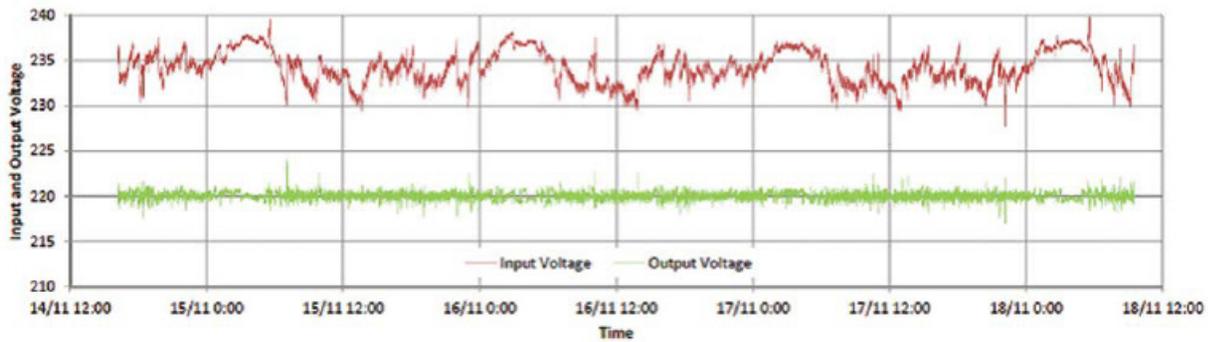
- > Reduces power consumption by 5-20%
- > Compact, safe and high reliability of supply
- > Provides connectivity status
- > Protects and increases the service life of sensitive equipment



Wilson Transformer Company manufactures a range of associated products or features for special applications that may add significant value to the end customer depending on their own unique requirement.

Our Voltage Power Optimiser produces a three phase regulated output voltage from a variable three phase input voltage supply. It is an auto-transformer with an automatic tap changer. The Voltage Power Optimiser regulates the system output voltage across all three phases by automatically adjusting taps to maintain the set voltage under all load and supply conditions.

The desired output voltage is set by the user between 210V/Ph-N (364V Ph-Ph) and 250V/Ph-N (433V Ph-Ph). The solid state switching provides both ultrafast voltage correction and eliminates maintenance needs of mechanical parts.



The above is an actual log of input voltage (widely fluctuating red graph) and controlled output voltage (green graph) in a large fabrication workshop fed by our Voltage Power Optimiser.

## REDUCES POWER COSTS BY UP TO 5-20%

Motors running overvoltage produce heat rather than more power resulting in a significant waste of energy.

Lights running brighter than necessary waste energy.

## HIGH RELIABILITY OF SUPPLY

The control system has several protection modes that provide bumpless (uninterrupted) supply during Voltage Power Optimiser start up and shut down. This bumpless bypass also takes place automatically in the unlikely event of a Voltage Power Optimiser control system failure.

We can also provide an independent, bumpless, by-pass switching module that permits the Voltage Power Optimiser to be taken out of service. This module can be provided with a circuit breaker for additional overall facility protection.

## COMPACT & SAFE

With over 80 years of transformer design and manufacturing experience the Wilson's Voltage Power Optimiser incorporates a custom design "Dry Type" transformer minimizing the risk of fire by reducing combustible materials to a minimum.

Due to its compact design, installation into an existing plant room, where floor space may be at a premium, can be more straightforward.

## STATUS CONNECTIVITY

The Voltage Power Optimiser's control and monitoring system has, as standard, a terminal port that provides for remote interrogation, status and parameter change.

## PROTECT & INCREASE LIFE OF SENSITIVE EQUIPMENT

The Life for tungsten filament lamps can be increased by 30%.

Computers and electronic systems can expect greater service life operating at a regulated voltage. Electric motors can expect greater life by operating at their design voltage.

The Wilson's Voltage Power Optimiser has a unique (subject to patent design) regulation system with a voltage regulation switching system that produces negligible switching transients.

Coupled with a delta connected tertiary winding the Wilson's Voltage Power Optimiser improves power quality by minimising harmonics with a slightly improved power factor.



Wilson's 750 kVA Voltage Power Optimiser installed in Melbourne

For information about our products please visit:  
<http://www.wtc.com.au/your-requirements/products/>

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