



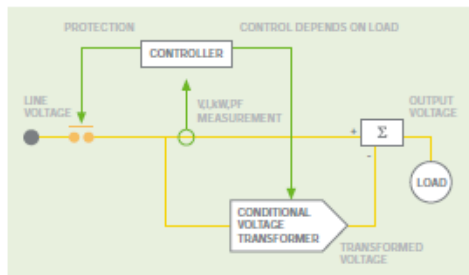
# THE RIGHT voltage

VOLTAGE CONTROL SOLUTIONS  
for Energy Efficiency and  
Environmental Responsibility

## THE RIGHTvoltage TECHNOLOGY



Implementation of energy efficiency practices is the key factor today in reducing operating expenses and contributing to a greener environment. PowerSines has focused its efforts on the developing, manufacturing and marketing of energy efficient systems for lighting and motor applications. These energy efficiency solutions can be installed on existing infrastructure, instantly reducing energy consumption. Built around a proprietary design of transformers and controlled by a microprocessor, PowerSines products provide optimized and pure sinusoidal voltage to the load – the RIGHTvoltage. By controlling the voltage level, PowerSines products deliver the right amount of energy required to maximize efficiency of the lighting systems, electric motors and other systems.



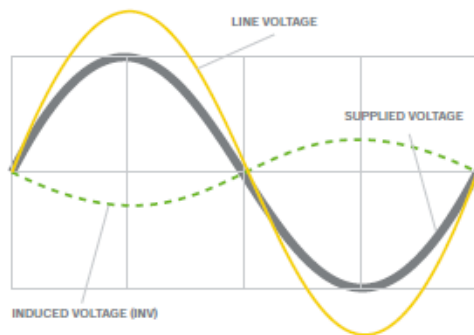
This RIGHTvoltage platform serves as the foundation of the entire product offering and implements the following technologies:

- **IN V** - Induced Negative Voltage - Induces the voltage in the opposite phase to the main voltage enabling the control and stabilization of voltage supplied to the load.
- **VVC** - Voltage Vector Combination - Controls voltage supplied to an electric motor by utilizing the vector and the voltage magnitude of 3-phase electric systems.

### BENEFITS OF POWERSINES TECHNOLOGY

- Pure Sinusoidal voltage waveform
- High efficiency and small footprint
- No harmonic distortions, THD/EMI free
- High Reliability

PowerSines solutions deliver powerful business benefits emphasized by direct electricity savings of up to 35% and reduced total cost of ownership of up to 50%. With clear, measurable results, decision makers can quantify this investment based on expected return.



## THE RIGHTROI

The RIGHTvoltage technology is available through affordable products that achieve a typical ROI of 18-30 months. With field-proven products already deployed around the world, PowerSines clients are benefiting from immediate cost savings in energy, reduced capital costs and maintenance savings, achieving energy efficiency goals and reducing operating expenses.



## THE RIGHTvoltage FOR LIGHTING APPLICATIONS

The industry is rapidly adopting energy efficiency and green practices that can improve their bottom line. PowerSines Lighting Energy Controller (LEC) immediately slashes energy consumption by supplying the RIGHTvoltage to lighting systems while maintaining the standard lighting necessary for the location.

The patented LEC design is compact in size and allows easy installations on walls, electric rooms or electric panels. The wide range of sizes, from 10A/2.5KVA (single phase) to 250A/175KVA (three phase), makes the systems suitable for small, medium, and large scale deployments.

- 15%-35% - direct energy saving
- Voltage stabilization
- Compact size and light weight
- Highly efficient - system losses are less than 1%
- No change to existing infrastructure
- Reduce existing and re-lamping costs

LEC systems improve lighting efficiency at office buildings, logistics centers, fast food and retail chains, gas stations, parking lots, airports, as well as street and road lighting installations throughout the world.

## THE RIGHTvoltage FOR INDUSTRIAL MOTOR APPLICATIONS

SinuMEC (Sinusoidal Motor Efficiency Controller) is a new category of AC motor controllers that uses the RIGHTvoltage to improve efficiency of motors running at constant speeds with variable/partial load. Built around patented technology, the SinuMEC provides a pure SINUSOIDAL voltage waveform when the motor starts and during normal operation.

- Reduction of up to 18% in consumed energy (kWh)
- Reduction of 30%-50% in current and apparent energy (kVA)
- Reduced startup current, typically 1.8-2.2 times the nominal current
- Reduction of up to 75% in network conduction losses
- Reduction of 15%-75% in Reactive energy (kVAR) without using capacitors
- Harmonics free - Complies with EMC standards also during startup sequence
- Extends motor life expectancy and reduces Life Cycle Cost (LCC)

SinuMEC systems can be applied to industrial equipment in manufacturing plants, mines and quarries and process industry. It has been successfully installed in conveyors, bucket elevators, mills, presses, crushers, flakers, grinders and granulators. SinuMEC systems are available in a range of 7.5kW/10HP to 150kW/200HP.



## REFERENCES AND INSTALLATIONS

### RETAIL CHAINS

- McDonald's
- TESCO
- Toys "R" Us
- Carrefour
- ACE
- MAXIMA
- MAKRO

### PUBLIC LIGHTING

- Schiphol Amsterdam Airport
- Over 100 municipalities such as Budapest and Geneva

### OFFICE BUILDINGS

- Microsoft
- IBM
- Motorola
- Amdocs
- Nice

### GAS STATIONS

- OMV
- PAZ
- SONOL

### INDUSTRY

- Coca-Cola
- TimBar
- GM-UMI
- CEMEX
- Intelcamenti
- Stork
- Unilever

### LOGISTIC AND TRANSPORTATION

- FedEx
- Federated
- DHL
- ADIF railways
- Madrid Metro

### INSTITUTIONS AND PUBLIC BUILDINGS

- Hadasa Ein Kerem Hospital, Jerusalem
- University of Groningen
- Noorderport College
- Ecole de Commerce de Geneva



PowerSines is a global provider of energy-efficiency solutions leveraging decades of expertise in voltage regulation and control technologies. Our RIGHTVOLTAGE solutions enable electricity savings in commercial and public lighting systems and improve efficiency of electric motors in industrial applications while contributing towards a greener environment.

Our Lighting Energy Controller (LEC) significantly reduces electricity costs for commercial and public lighting, and our Sinusoidal Motor Efficiency Controller (SinuMEC) improves overall efficiency of electric AC motors. Companies using our products see immediate business benefits with direct electricity savings of up to 35% and reduced total cost of ownership of up to 50%.

With thousands of units already installed in enterprises around the world, our products are proven effective for financial savings while implementing a green strategy.

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