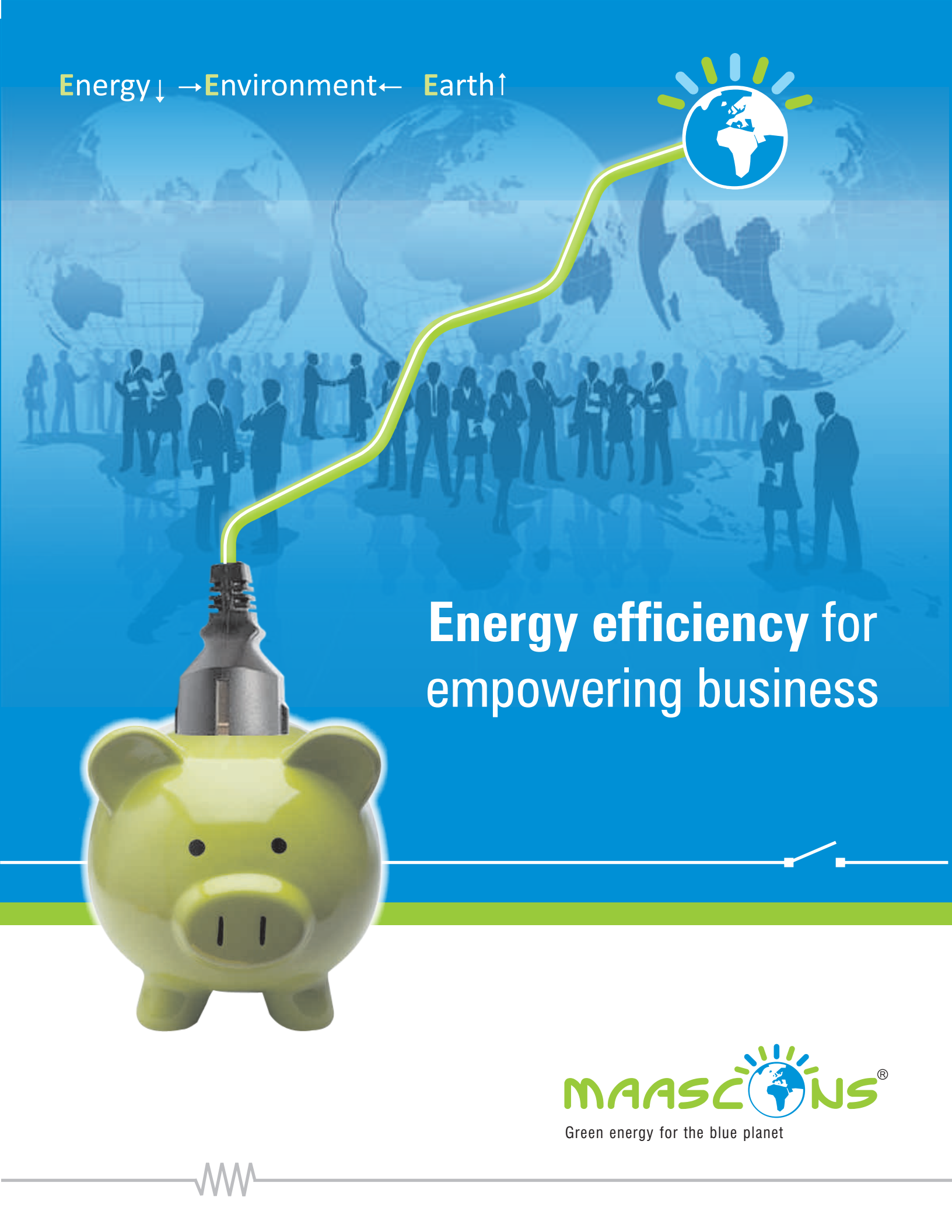
Energy↓ →Environment← Earth↑



Energy efficiency for empowering business

MAASCONS®

Green energy for the blue planet

Energy↓ →Environment← Earth↑

MAASCONS® Power Saver

Professionally managed Company with dedicated & qualified team constantly innovating to provide latest cutting edge technology to its clients.

QUALITY
PERFORMANCE
SUPPORT

WORKING PRINCIPLE

Critical Reactive Power Management with Impedance matching

- 15 to30% savings in lighting consumption
- 10 to 15% savings in Mixed Load consumption
- 10 to 12% savings in Air Conditioners and Motor load consumption

*Subject to site conditions

TECHNICAL BENEFITS

- Increase and enhance the Quality & Performance of electrical devices
- Prolong the life span of your electrical devices with minimum maintenance cost
- Reduce electrical power loses
- Reduces temperature, noise and surge
- Safe guard circuits for the devices
- Reduces Carbon Emission
- Reduces maximum demand
- Designed as per standard codes

FINANCIAL BENEFITS

- Early payback period
- Earns profits and pay by itself
- 80% tax depreciation on capital cost

APPLICATIONS

- All types of Industries
- Techno parks, SEZ & SME Clusters
- Street Lighting & Indoor Lightings
- Hotels & Hospitals
- Schools, Colleges & Cinemas
- Office Buildings & Commercial complex
- Shopping Malls, Garment, Jewellery show rooms & Retail chains
- Petrol pumps, Gated Housing Ventures
- Airports & Railway Stations

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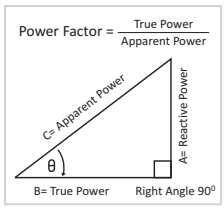
APFC PANEL

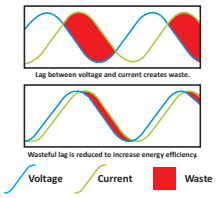
Micro Processor, Based Technology

MAASCONS APFC Panel caters to Commercial Industrial and corporate sector for improving Power Factor, which is statutory requirement of all State Power Distributor Companies in India.

Power factor involves a relationship between two types of power. Working Power and Reactive Power. Most loads in Modern electrical distribution systems are Inductive, which means that they require an Electromagnetic field to operate. Inductive Loads require two kinds of current.

Working Power, which performs the actual work of creating heat, light, motion etc.





Reactive Power, which sustains the electromagnetic field. Working Power is measured in kilowatts (KW). It does the "WORK" for the system-providing the motion, heat , or whatever else is required. Reactive power is measured in kilovolt-amperes-reactive (KVAR), doesn't do useful "WORK". It simply sustains the electromagnetic field. Working Power and reactive power together make up Apparent Power. Apparent Power is measured in kilovolt-amperes (KVA). The following right "POWER" triangle illustrates the relationship between these three types of power. The square of apparent power equals the square of working power plus the square of reactive power. Finally, Power Factor is the ratio of working power to apparent power or KW/ KVA.

Power Factor = Working Power /Apparent Power

$$\text{COS0 (PF)} = \frac{\text{KW}}{\text{KVA}}$$

Benefits of Installing "Maascons™" Automatic Power Factor Controller Panels

- Reduced Electricity utility Bills
- Increased Installation capacity
- Improved Voltage regulation due to reduced line voltage drop
- Less heating of cables, transformers, switch gears & other equipments
- Reduction in KVA Demand
- More Power for the same KVA
- Low Pay Back Period

80% tax depreciation on capital cost

Control Circuit

Micro Processor based Electronic Circuit, Which will sense Real time reactive power and up-date the system to give the maximized performance.

Technical Specifications and silent features Maascons APFC Panel

- Microprocessor based intelligent auto switching control
- Automatic C/ K and rated step adjustment
- Auto CT polarity correction.
- Mains Voltage : 440V
- Frequency: 50 Hz / 60 Hz
- Current path: --/5 A
- Input & each Capacitor bank Protection with MCCB/MCB
- Display of Power Factor , Voltage, Current & total harmonic distortion of Current (THD)
- Programmable sensitivity
- System selection based on load and operational analysis
- Proper selection of Components to achieve uninterrupted cohesive operation
- A modular system for easy installation, operation & maintenance
- LED indication for Capacitor Bank / Stages selected

Centralized Voltage Regulator

Centralized Power Quality regulator for Offices & Residences

Corporate offices and residences use several expensive Electrical & Electronic devices which require proper and conditional Power Quality. They will malfunction or become defective when exposed to extreme high/low voltage and surge. Further the level of performance and ambience is adversely affected. To avoid malfunctioning of expensive equipment, install a Centralized Voltage Regulator at the incoming power source itself which will provide regulate the Power Quality to the connected equipment.

Centralized Voltage Regulator	Air-cooled, indoor type, Centralized Voltage Regulator Suitable for single phase loads. Standalone Quality Regulation & Protection in each phase.	
Model	Input regulation range in each phase	Nominal output voltage in each phase
Maa-170/270	170V to 270V	230V ± 1%
Maa-190/270	190V to 270V	230V ± 1%
Maa-200/255	200V to 255V	230V ± 1%
Efficiency	Above 97%	
Protection	MCCB/MCB	
Voltage indication	Digital voltmeter	
Overload Capacity	120% for 30min	
Bypass switch	Change over switch provided at input for each phase	
Fault annunciation indications	Input present, output normal, input high, input low, output high cutoff, output low cut-off, output overload cut-off	
Resetting mode	Auto restart with adjustable time delay	
Construction	16Swg CRCA Sheet	
Range	1Phase 2KVA to 10KVA 3Phase 9KVA to 100KVA	

CORE SEGMENTS

- Energy Efficient & Renewable Energy Solutions
- Power Quality, Safety Automation & Management Solutions
- Energy & Power Quality Audits

MAASCONS®
Green energy for the blue planet

Maascons Core Technologies Pvt. Ltd.

An ISO 9001:2008 Company

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