



PRO SM POWER
SOLUTIONS PVT. LTD.

CONSERVING ENERGY,
GENERATING SOLUTIONS

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About Us

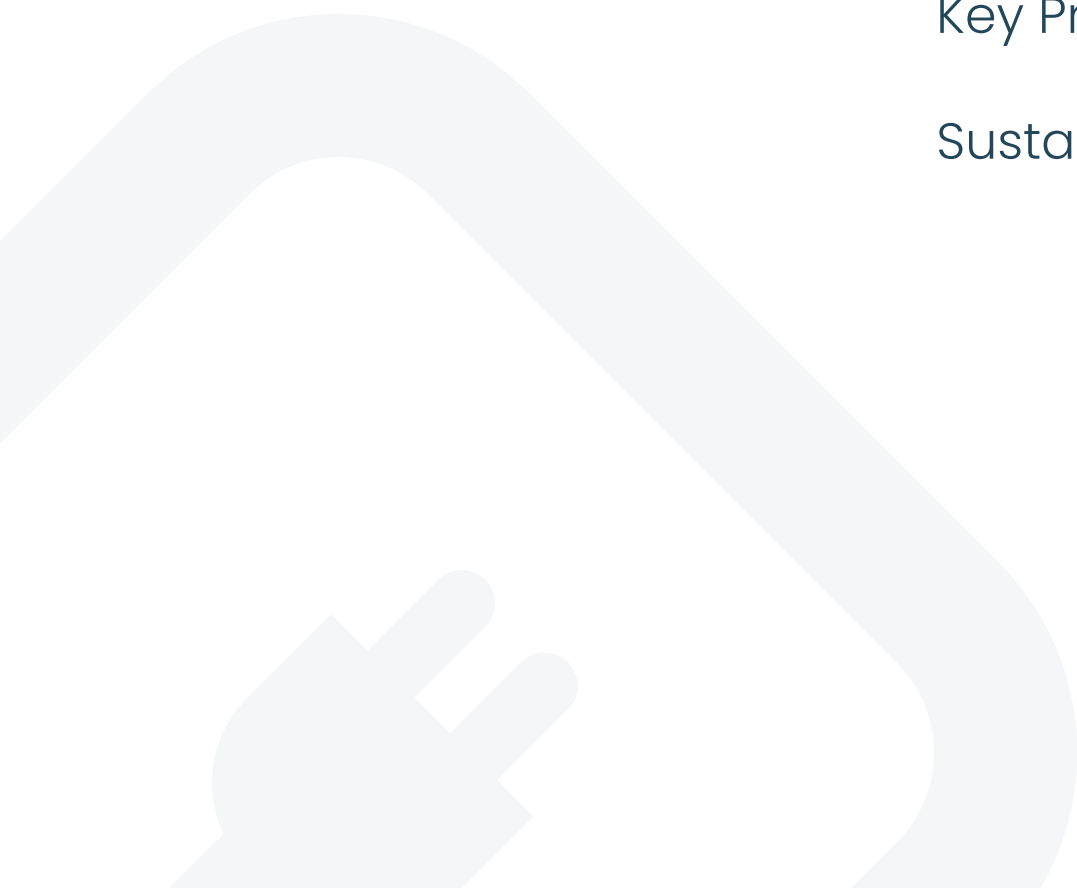
Vision & Purpose

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ABOUT US

SM Power Solutions, a proud group company of Diplomat Electricals Pvt Ltd, has been delivering excellence in electrical contracting and energy solutions since 1988. With a robust presence across Western India, we specialize in turnkey projects and cutting-edge energy management services, consistently aiming to conserve energy while generating effective solutions.

Why Choose Us?

- ▶ A legacy of 35+ years of expertise in the electrical contracting domain.
- ▶ A comprehensive portfolio of energy-efficient products and services tailored to diverse industries.
- ▶ A commitment to sustainability, innovation, and customer satisfaction.

VISION & PURPOSE

VISION

Empowering the future with sustainable energy solutions.

PURPOSE

To deliver reliable, efficient, and innovative power solutions that drive growth and protect the environment.



OUR SERVICES



Turnkey Electrical Solutions



Solar Power Solutions



EV Charging Solutions



Power Quality Solutions

*Each of our services is designed to provide reliability, efficiency, and sustainability, empowering you to optimize resources and achieve long-term growth.

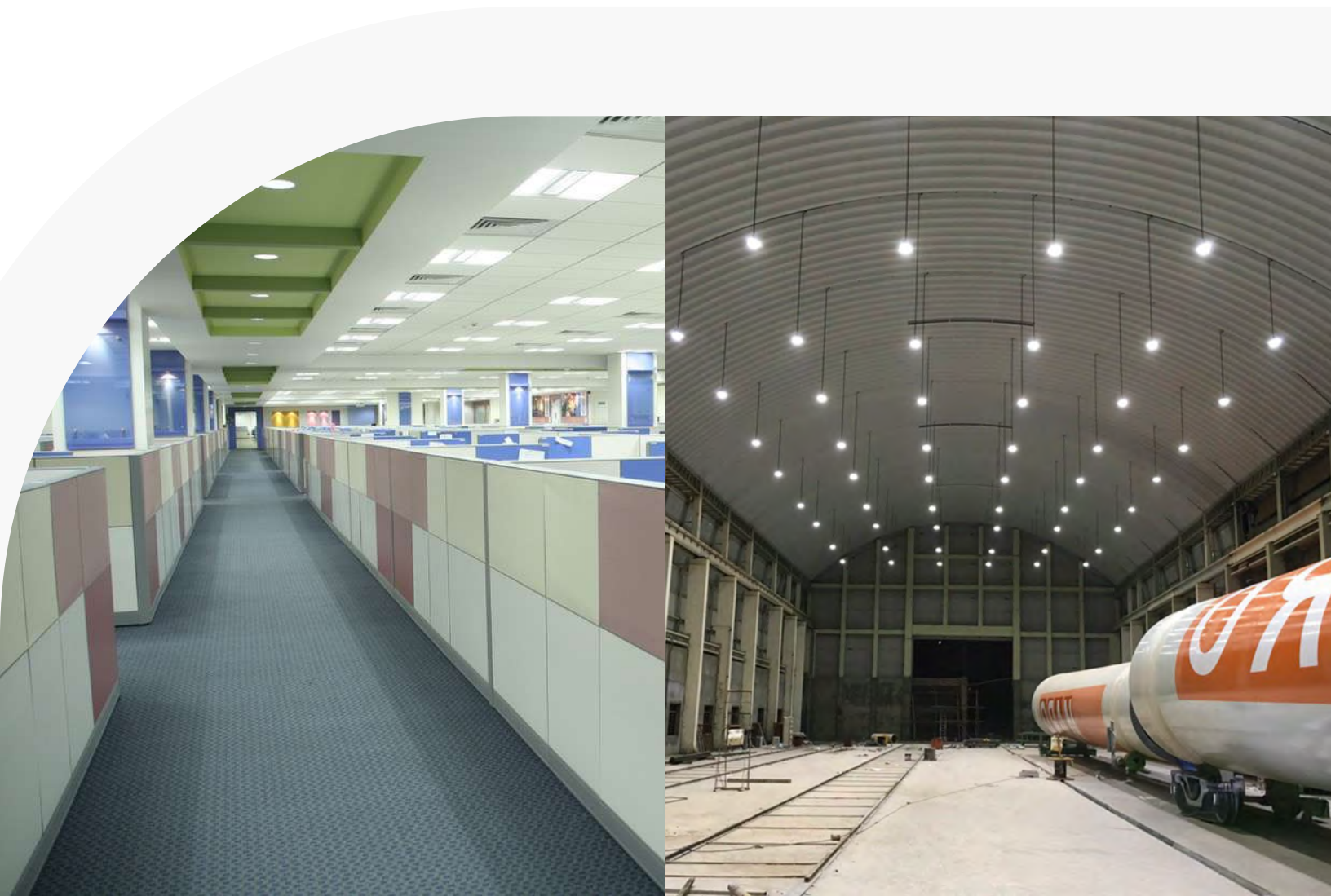
Turnkey Electrical Solutions

What We Offer

End-to-end electrical contracting services for HT and LT installations, electrical system design, and engineering.

Benefits

- ▶ **Seamless Execution:** Hassle-free end-to-end project management from design to completion.
- ▶ **Customized Solutions:** Tailored electrical systems for industrial, commercial applications.
- ▶ **Guaranteed Safety:** Adherence to high safety standards ensures secure installations.



Solar Power Solutions

What We Offer

Rooftop and ground-based solar installations, including design, engineering, testing, and commissioning.

Benefits

- ▶ **Sustainable Energy:** Transition to clean, renewable power sources.
- ▶ **Cost-Effective:** Long-term savings through reduced electricity bills.
- ▶ **Efficient Maintenance:** Advanced monitoring systems for smooth operations.



EV Charging Solutions

What We Offer

Comprehensive services for setting up electric vehicle charging stations, including infrastructure, testing, and commissioning.

Benefits

- ▶ **Future-Ready:** Equip your facility with state-of-the-art EV charging stations.
- ▶ **Seamless Integration:** Easy incorporation into existing setups for personal or commercial use.
- ▶ **Compliance Support:** Liaison with authorities for hassle-free installation.



Power Quality Solutions

The Static Var Generator (SVG) is a revolutionary power factor correction system designed to address the limitations of traditional Automatic Power Factor Correction (APFC) systems. Unlike APFC, which uses capacitor banks and is slow to react to load changes, the SVG employs a high-speed three-level inverter that dynamically and accurately adjusts reactive power in real-time. This results in stable and precise power factor correction without the drawbacks of capacitor-based systems, such as system resonance and reduced lifespan. The SVG can correct both inductive and capacitive loads, ensuring a unity power factor under various conditions, including low voltage. It offers low maintenance, high reliability, and advanced monitoring capabilities, making it a superior solution for modern power factor correction needs.

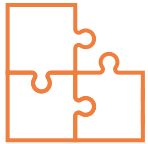


Comparison between Automatic Power Factor Correction (APFC) And Static Var Generator (SVG)

APFC	SVG
With Steps: Employ Switching IN and OUT fixed value capacitor banks and there by achieves the desired PF at the grid end of the supply	Stepless: Uses scalable IGBT based inverter to produce infinitely achieve desired set Point
Single Phase Sensing: Normally APFC Relay Works on R Phase current Sensing & Provide 3 Phase Equal compensation based on R Phase Reactive Power requirement	Three Phase sensing: SVG works on all three phases R, Y & B) current sensing & provide individual compensation based on respective Phase reactive power requirement
LV Sensing: Normally APFC senses the current on LV side & reactive power of MV Transformer is not taken into consideration	MV/HV SENSING: SVG System senses the three phase current on MV/HV side & hence reactive power of transformer is taken into consideration
Slow in Response: Generally slow to respond and are an electro mechanical system and may take considerable time to achieve the desire result	Fast & Dynamic: Takes 15msec to completely respond to the need and only 50ms to dynamically respond
Unidirectional: Only corrects inductive load PF	Bidirectional: Correct both an inductive (lag) and capacitive (lead) load
High Maintenance: Require frequent switching of the stages to achieve correction for changing power factor and are subjected to frequent failures	Low Maintenance: Needs Little maintenance & monitoring. The service life expected to be greater than 11 years.
Less Reliability: No Assurance of power factor	High Reliability: Assures 0.99 power factor for any kind of load
Monitoring on Panel: No monitoring possible due to lack of communication	App based Monitoring: Dynamic monitoring using lot with Wi-Fi connectivity (optional)
No Phase Balancing Option: Not possible to balance Phases	Phase Balancing Possible: Current in three phases can be balanced

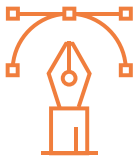
CORE COMPETENCIES

What Powers Us?



Innovation

Integration of advanced technologies into our projects to deliver future-ready solutions.



Expertise

Decades of experience across industries ensure tailored, reliable solutions.



Sustainability

A dedicated focus on renewable energy and eco-friendly practices.



Customer Centric Approach

Collaboration and customization to align with client goals.



Operational Excellence

Proven project management for timely and precise delivery.

KEY PROJECTS & CLIENTS

Successful execution of projects for renowned clients like Siemens, Capgemini, and Symbiosis College. Expertise in handling diverse projects across IT, textiles, malls, and industrial domains.



SUSTAINABILITY & SAFETY

At SM Power Solutions, sustainability and safety go hand in hand. Our zero-accident approach, eco-friendly initiatives, and compliance with global standards reflect our commitment to creating a better future.

Key Highlights

- Renewable energy solutions with minimal environmental impact.
- Advanced safety protocols to ensure secure operations across all projects.





**PRO SM POWER
SOLUTIONS PVT. LTD.**

Pro SM Power Solutions Pvt Ltd

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