

TRINITY ENERGY SYSTEMS PVT. LTD.

386, Savli – GIDC Estate, Manjusar – 391775, Dist. VADODARA

Gujarat, INDIA. Telephone No. +91 – 9228004452/53/54

 Email: info@trinityenergy.co.in,

Web:

www.trinityenergy.co.in


CASE STUDY

COMPANY INFORMATION

NAME	TRINITY ENERGY SYSTEMS PVT. LTD.
Address	386, SAVLI, GIDC ESTATE, MANJUSAR
City, state, ZIP Code	VADODARA, GUJRAT, 391775
Phone number	9228004452/53/54
Contact name	MR. YOGESH KUMAR
Tit	MANAGER – SALES (NORTH)
Phone number	9718702929
E-mail address	yogesh.kumar@trinityenergy.co.in
Website address	www.trinityenergy.co.in
Solution offering	MANUFACTURING OF DIGITAL PANEL METERS, ENERGY METERS, MULTIFUNCTION METERS, MAXIMUM DEMAND CONTROLLERS, APFC RELAYS, RTPFC PANELS, CTs, POWER CAPACITORS, EMS

CUSTOMER PROFILE

Customer name	UDYOG SHAKTI ENGINEERS INDUSTRIES
Address	KHASRA NO. 314/2, BASAI- GARHI ROAD, OPP. GALI NO. 1
City, state, ZIP Code	GURGAON, HARYANA, 122001
Phone number	9810015390
Industry Type	ELECTRICAL PANELS MANUFACTURING
Number of employees	
Contact name	MR. GS SODHI
Title	DIRECTOR
Phone number	9810015390
E-mail address	udyogshaktiengineers@gmail.com

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CHALLENGE

- Udyog Shakti wants to **Minimize their Energy Consumption** which is costing them to pay the Extra amount in their Electricity Bills.
- Their Energy (KVAH) consumption was very high owing to **Energy Losses because of Very Low Power Factor (around 0.55 LG – 0.58 LG)**
- Their monthly **Electricity Bill was 35000/- to 38000/-**
- **Maximum Demand was 18KVA.**, for 19KVA sanction load.
- They used Fixed Capacitors for Power Factor Improvement but did not get any improvement.
- They were **using Conventional Power Factor Correction Panel** which was not giving satisfactory results.

Photo – Conventional PF Corection Panel:-



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SOLUTION

- To understand the nature of the problem Trinity did an Electrical Audit in their Factory.
- After that Audit, Trinity came to know the nature of Electrical Load.
- Their Electrical Load was Imbalance and Very Momentary or Jerking and in such Electrical Load condition, Conventional Power Factor Correction Panel could not work.
- After understanding the actual Load condition Trinity Design a **Tailor Made** Product for them, and which is, **RTPFC (Real Time Power Factor Correction) Panel with Single Phase Compensation Feature.**
- **RTPFC Panel** installed parallel to their factory Load.

Photo – RTPFC Panel- Trinity



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BENEFITS

- Their Average PF achieved to 0.99 LG.
- Maximum Demand Reduced to 11.5 KVA
- Their Energy Consumption reduced up to 40%.
- Their monthly Electricity Bill amount reduced to about 21000/- to 23000/-, so they are saving 14k to 15k every month.
- Since RTPFC Panel is consist of Zero Crossing Cards and Thyristors for switching, irrespective of Normal Apfc Controller and Contactors, its Maintenance cost reduced to almost 1/3 of Conventional PF Correction Panel.