

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. RAMAN DUA
Tite	MANAGER – SALES (NORTH)
Phone number	9999640509
raman	raman.dua@trinityenergy.co.in
Website address	www.trinityenergy.co.in

	MANUFACTURING OF DIGITAL PANEL METERS,
	ENERGY METERS, MULTIFUNCTION METERS, MAXIMUM
Solution offering	DEMAND CONTROLLERS, APFC RELAYS, RTPFC
	PANELS, CTs, AMF RELAY, POWER CAPACITORS,
	HARMONIC DETUNE REACTORS, TSMs, EMS

CUSTOMER PROFILE

Customer name	xxxxxxxxx
Address	xxxxxxxxx
City, state, ZIP Code	FARIDABAD, HARYANA
Phone number	XXXXXXXXX

Industry Type AUTOMOBILE COMPONENTS MA	ANUFACTURING
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Number of employees	30 APPROX.
Contact name	xxxxxxxxxx
Title	xxxxxxxxxx
Phone number	xxxxxxxxxx
E-mail address	xxxxxxxxxx

CHALLENGE

- xxxxxxxxx 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 0.80 LG − 0.85 LG) □ Their monthly **Electricity Bill was 1,50,000/- to 2,00,000/-** □ **Maximum Demand was 50KVA**. For 49KVA sanction load.
- They were using Conventional (contactor based) Power Factor Correction Panel which was not giving satisfactory results.
- And that conventional Panel having very high maintenance cost, owing to Contactor and Capacitors failure.



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Photo – Conventional PF Correction Panel:



SOLUTION

- To understand the nature of the problem Trinity did a Load Audit at site.
- After that Audit, Trinity came to know the nature of Electrical Load.
- Their Electrical Load was Imbalance and Very Momentary or jerkin, 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, **60 kvar RTPFC** (**Real Time Power Factor Correction**) **Panel with Single Phase Compensation Feature.** □ **RTPFC Panel** installed parallel to their factory Load.



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Photo -60 kvar RTPFC Panel- Trinity









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BENEFITS

- Their Average PF achieved to 0.99 LG.
- Maximum Demand Reduced to 42 KVA
- Their Energy Consumption reduced up to 20%.
- Their monthly Electricity Bill amount reduced to approx.. 30000/-
- 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.