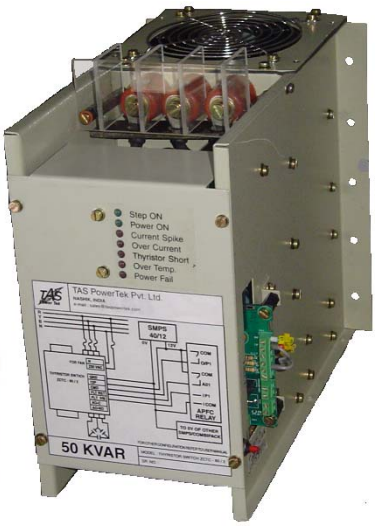
TAS PowerTek

ISO-9001-2008

TÜV NABCB

Leading Through Technology

Power Quality Instrumentation & Conditioning Products for Industries & Electrical Utilities



Your Search for Power problems ends here.

TAS Powertek Pvt. Ltd., Nasik, India.

Our Factory Building, Nasik

What's The Need?

Energy Conservation and Power Quality Improvement.

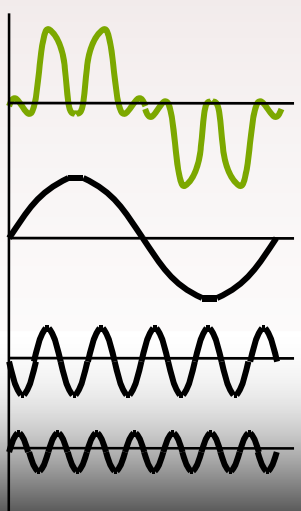
The industrial, commercial and agricultural growth are putting an immense demand on Electrical Energy requirements. Need of the time is to meet the levels of Demand and Supply with good Power quality.

Along with the enhancement of the generation capacity, minimizing the Transmission and Distribution losses becomes mandatory. In fact, reduction in T&D losses is an economical way of creating extra Energy availability. In addition to T&D losses, to meet the peak demand (MD – Maximum Demand) is another challenge. This too is to be kept at minimum level.
Both these tasks (reducing T&D losses and Minimizing MD) can be achieved by maintaining the Electrical system Power Factor (PF) near unity as well as additional wastage of resources due to harmonics.

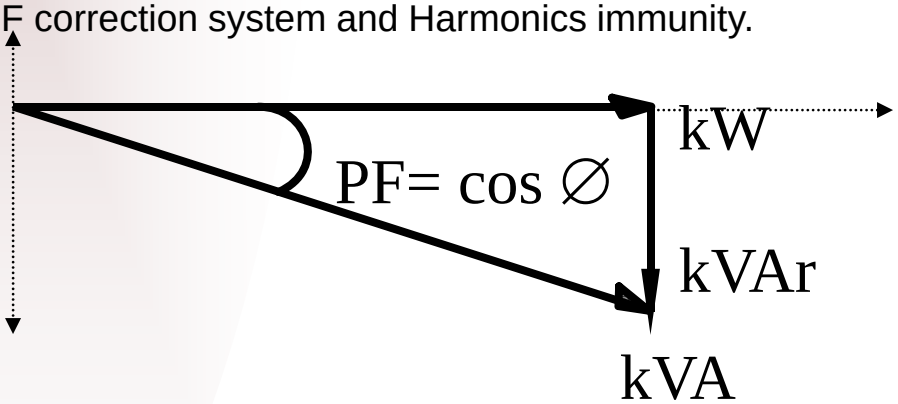
Our Dedicated Team members
In Designing/Engineering
At TAS Powertek Pvt. Ltd.

Thus, Electrical supply utilities are trying their level best to maintain the Power Factor close to unity with minimum harmonic contents.

We are able to give you the product to every type of need in PF correction system and Harmonics immunity.



Harmonic Waveforms and Further Analysis with compensation & Protection.



Power Parameters Representation Diagram.

Our PF correction Measuring Instruments
Automatic PF correction Relays.

TAS has wide range of PF Correction Controllers:

These are Broadly Catagorised into 4 Types.

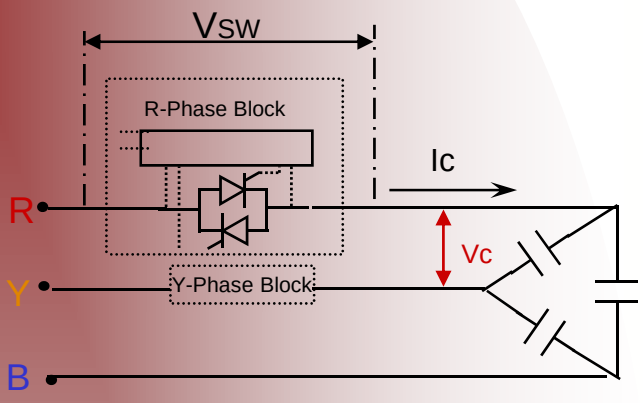
LT Auto PF Correction Relays

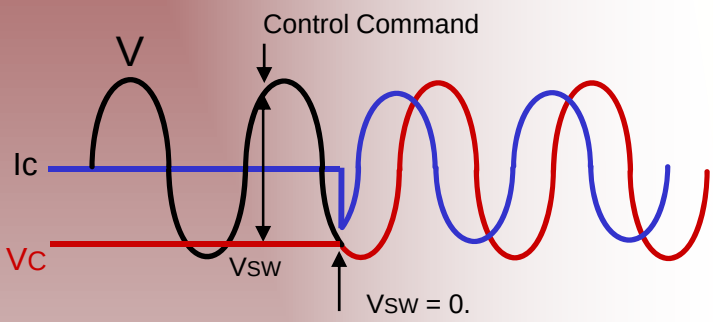
- **Single Phase Sensing**
  - **Conventional Contactor Switching**
    - LCPF-02
    - APFC-02
  - **High-Speed Thyristorised Switching**
    - TRPF-02
- **Three Phase Sensing**
  - **Conventional Contactor Switching**
    - SPF-25
    - SPF- 35
    - SPF- 45
  - **High-Speed Thyristorised Switching**
    - TPF-35

Features:

- Capacitor Banks Control Outputs – 4, 8, 12, 16 Nos.
- VAR control through Intelligent Micro-Processor based design.
- Capacitor Current Monitoring and Protection against high Harmonics.
- Display of measurement parameters like, V, A, A-cap, kW, kVAR, kVA, kWH, kVARH, kVAH, THD-V, THD-A, THD-A-cap and many more.
- Models available with GSM and MODBUS connectivity for SCADA system interface.
- Models Available to suit the various supply systems for 50/60Hz with 3-phase supply system – 3-Wire, 4-Wire. And with voltage ranges from 63.5Vac, 110Vac, 220Vac, 240Vac, 380Vac, 415Vac, 480Vac

Thyristorised Cap. Switching Modules:

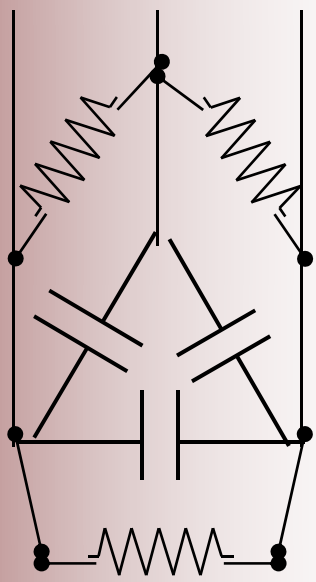




Features:

- ❖ Replacement for traditional Contactors for capacitor switching.
- ❖ High Speed Switching of Capacitor Banks with Hot response time upto one mains cycle.
- ❖ Zero differential voltage switching, providing zero switching surge currents and providing increased capacitor life expectancy.
- ❖ Avoiding the usage of semiconductor fuses by protection features to the thyristors.
- ❖ Fault monitoring and protection against Over-Current, Spike-Current, Thyristor short and Over temperature
- ❖ Digital fault feedback to APFC relay.
- ❖ Intelligent microcontroller based design.
- ❖ No Harmonics generated due to thyristors in continuous on mode.

High Speed response Modules:

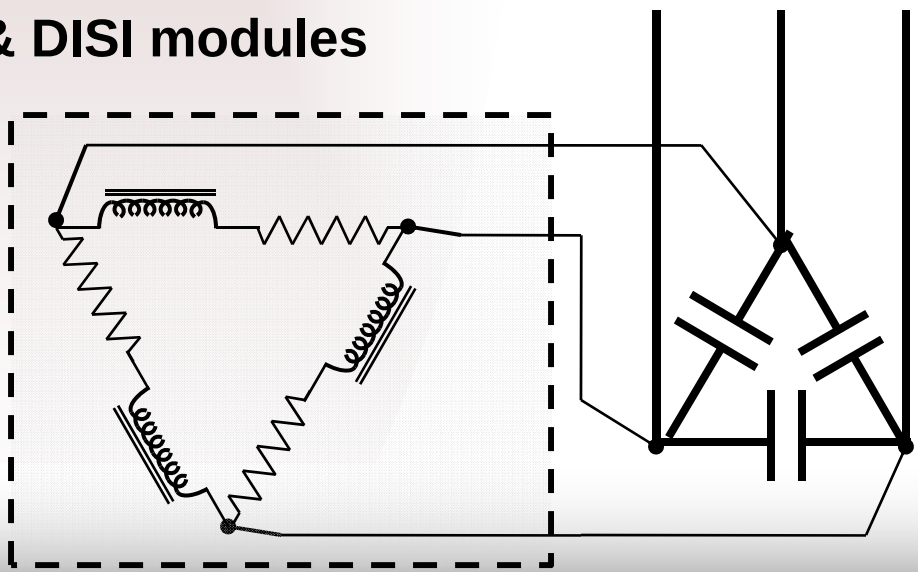


Capacitor Discharge Modules

Features:

- ❖ Models available from 2sec to 60milli-sec hot response time for high speed Reactive Power correction.
- ❖ Complete discharge pack as per customer design , suitable for entire RTPFC panel.
- ❖ Modules with low on-state losses by usage of discharge inductor + resistor combination.

DISR & DISI modules



Detuned & Tuned Reactors for Harmonics affected supply systems & Series Reactors for AC/DC Drives:

Features:

- **Magnetic Reactors for Various applications like:**
  - **Detuned reactors for Capacitor protection and control harmonic enhancement.**
  - **Tuned reactors for Harmonic filtering with L-C series tuned filters.**
  - **Split winding Reactors for Harmonics Suppression with AC/DC drives and UPS systems to comply with IEEE-519-1992 standards for supply system harmonics.**
  - **Series reactors for AC/DC drives for transient suppression and harmonics reduction.**

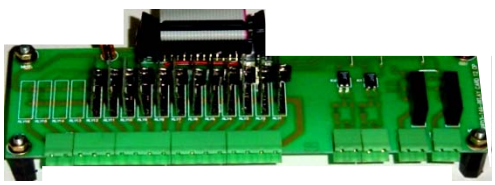
- **High Efficiency, High Q-factor Design. (Q > 25)**
- **Suitable for Electrical panel mounting design.**
- **Cu and Al Windings with Class-F insulation with isolation levels exceeding 3KV-ac/1min.**
- **Models available for suitable supply systems with 50/60Hz and with wide range of Voltages.**
- **Ratings for the loads suitable from fractional kW/kVAr to 350kW/200kVAr.**

HT (upto 33kV) kVAr switching controller.

HTPF-01/08

Features:

- Totally Micro-processor controlled Digital Signal processing logic.
- All measurements with 1 class accuracy.
- Automatic Synchronisation
- Measurement are frequency / THD compensated.
- Load V,I and Cap. current THD measurement with odd harmonic coeff. upto 15th harmonic.
- Upto 8 no. of capacitor bank control.
- Every output individually programmable for:
  1. Output type: VCB/contactor
  2. Min off and on time.
- Fault feedback for every bank from protection system.
- 2 Auxiliary Outputs and 2 Auxiliary Inputs. All user defined. Galvanically Isolated.
- Data logger built in (optional).
- RS-232 port. (TAS & MODBUS protocol compatible). Optional RS-485.
- Optional GSM connectivity with battery backup arrangement.
- Standard 144 X 144 cabinet for panel door flush mounting.



VAR compensator With Load Manager

Lighting Controller for Energy Conservation
SLC-04 / SLC-05 / SLC-06

SLC-04	Contactorised.
SLC-05	Individual ph control
SLC-06	Servo Control.

Features:

- Total unmanned intelligent operation with Energy saving.
- Micro-Controller based instrument with front keys programmable parameters.
- User Programmable Dimming control and Staggering control gives energy saving up-to 50%.*
- Models suitable for Auto-Transformer dimming or Servo control dimmers.
- Multiple Schedule for On/Off and Energy saving control along with intelligent load sensing guaranteed lamp turn-on.
- Measurement of Parameters like:
  - RMS values: V, I, PF, freq., THD, I-neutral.
  - Power values: kW, kVA, kVAr.
  - Energy values: kWH, kVAH, kVArH, Maximum Demand.
  - Harmonics: Odd harmonics up-to 15th for V, I & I-n.
- Zero Voltage switching control for guaranteed blink free operation.
- RS-232 / 485 port. (For GSM & MODBUS connectivity.)
- Providing Automatic Power Factor Control too.

* Conditions Apply.

Our Power Quality & Energy Conservation Electrical Systems:

Automatic PF correction and Real Time PF correction systems.
Harmonics Tuned Filter Systems.

- Ratings from 9kVAr to 2000kVAr at 415Vac and 1000kVAr at 220Vac.
- Enclosure Class upto IP-56.
- Custom Built Design.
- System Short Circuit rating upto 65KAmp.AC.

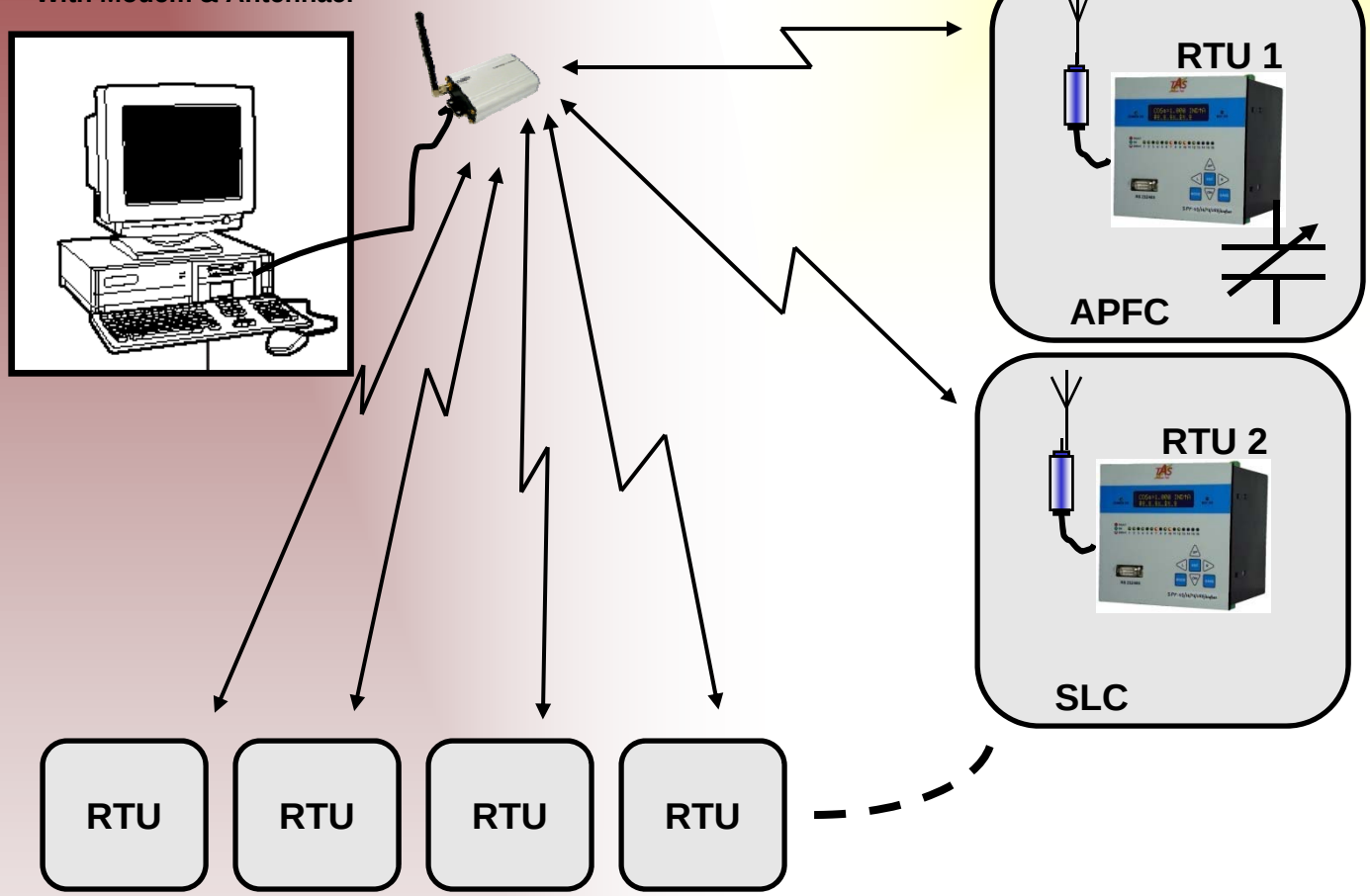
Lighting Control Energy Saver Products /Systems:

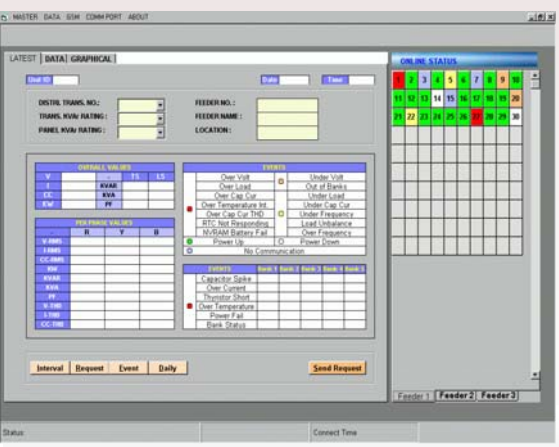
Features:

- Energy Saving Upto 42%.
- Single Phase (upto 15kVA) and Three phase (upto 210kVA) models.
- High efficiency design – 99% at full load.
- Suitable for Street Lighting, Industrial Lighting, Domestic and Office area Lighting applications.
- Suitable for various types of Lamps with even some % of mixed load applications.
- MODBUS & GSM communicating SCADA software for remote monitoring and control.
- Various models to suit your applications.

SCADA
Supervisory Control And Data Acquisition
With PF controller, Load Manager & Lighting control

GSM-SMS-Server.
Master Station
With Modem & Antennae.





Communication with GSM / MODBUS

User Friendly Windows Software.
(Free upto 50Nos nodal points)

Remote control operation

Graphical Report & Exception report.

Resistance Power control Thyristor Control Pack

AHCM-01/02/03

Features:

- Suitable for high speed smooth power control.
- Models available with 0-10Vdc, 0-24Vdc, 4mA-20mA as control signal.
- Modular design for easy panel mounting.
- Forced Air Cooled thyristor block for compact design.
- In built Current Limit.
- Annunciation for
  - Current Limit
  - Current Unbalance
  - Thyristor Short
- Over-temperature Protection
- External Enable/Disable command.
- Bus-bar type terminal connection.

Our Contact Details:

India:

Mumbai: Marketing Head office and after sales service.
Tel: +91-22-32108961.
Email: sales@taspowertek.com
Nasik: Manufacturing & Designing center and after sales service.
Tel-Fax: +91-253-2381090 / 2384038.
Email: tas@taspowertek.com
Delhi: After sales service.
Email: delhi@taspowertek.com
Bangalore: After sales service.
Email: bangalore@taspowertek.com

Correspondence Address:

Nasik: TAS Powertek Pvt. Ltd.
W-61, MIDC, Ambad,
Nasik –422010, Maharashtra, India.
Mumbai: TAS Powertek Pvt. Ltd.
A-58, Kamal Pushpa Soc., K.C. Marg, Bandra Reclamation area,
Bandra (West), Mumbai-400050, M.S., India.

Visit our Web site:
www.taspowertek.com

Authorised Representative: