

# ACTIVECOMP

Intelligent Real-Time Thyristor Switched Power Factor Correction and Harmonic Filtration System



**CONTROLLER**  
3 phase 3 CT controller with inbuilt load & harmonic analyzer



**SWITCHING**  
SCR-SCR Type Solid State, transient free switching module for capacitor groups



**INDUCTORS**  
Class-H insulation and exceptionally low temperature rise



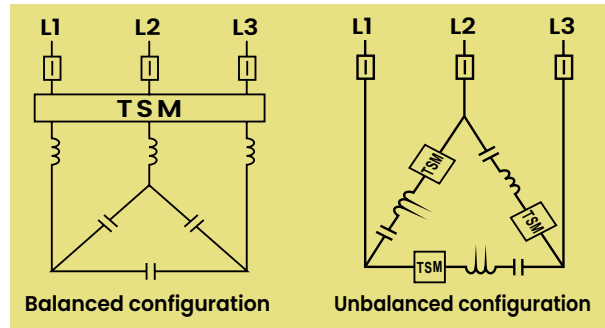
**CAPACITORS**  
Low loss Duca Power Super Heavy Duty type in a 3 phase cylindrical aluminum case



## Background

The ACTIVECOMP System is a State of the Art, Real Time Thyristor Switching System designed for Power Factor Correction & Harmonic Filtration of fast changing / Dynamic loads.

Connection and disconnection of the capacitors to and from the network occurs in real time at zero current crossing. This smooth connection avoids the transient effects typically created by electro mechanically switched PFC Systems.



The Activecomp systems are available in both BALANCED and UNBALANCED configuration to cater to various load requirements of industries. Unbalanced configuration is typically used in compensation of single phase Welding Loads, whereas balanced is used for all other applications.

Many successful Activecomp installations are working satisfactorily all over India and many countries since last many years.

## Some of the major advantages of Activecomp system are :

- Fast Real Time Switching
- Transient-Free Switching
- Fixed Capacity & Filter Characteristics over long period of time
- Fast and Accurate Compensation
- Simultaneous Group Connection
- Long Life & Reduced Maintenance Cost

**INTELLIGENT CONTROL AND MONITORING**



NFC



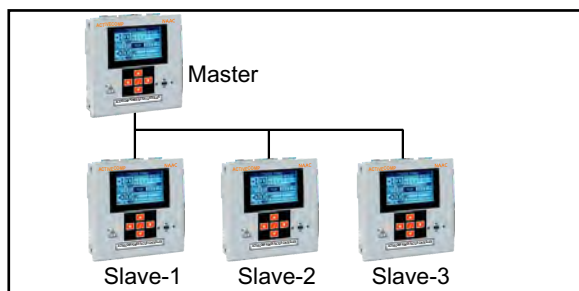
**Some of major Activecomp system Applications are :**

- Welding Machines
- Plastic Injection Moulding
- Industries with Non-Linear Loads
- Hospitals and Other Medical Centres
- Data Centres
- Extrusion
- Office Buildings
- Generator (emergency stand-by, parallel and stand-alone operation)

**Activecomp Controller**

The Activecomp Controller is capable to compensate the loads where the reactive power varies quickly with time i.e. to compensate for power factor and Harmonics in real time.

The Controller has most advanced features. It is expandable with pluggable type modules. It has an optical port on the front for data downloading.



**Some of the Important features of Activecomp controller are:**

- Back light graphics 128x80 pixel LCD
- 3CT current sensing for optimal performance
- Master-Slave function for easy addition of System in future
- Optional communication port on front
- Option of 5A or 1A secondary CT current
- Inbuilt load manager function with wide range of voltage measurement from 100 to 750V
- Optional capacitor protection module
- Optional GSM / GPRS modem modules
- Dual Power Factor settings for DG & Mains
- Automatically creates maintenance alarm
- Extreme reduction of the number of switching operations
- Over Temp. protection by internal sensor
- Current and Voltage harmonic analysis
- Harmonic analysis of current and voltage waveforms recorded for overload events
- Quick CT programming function
- SMS sending for alarm conditions with expansion modules

**Specifications**

Design	: Standardized bolted Modular Sheet Steel Enclosures-Non compartmentalized / Compartmentalized
Enclosure Finish	: Epoxy powder coated, in grey (RAL 7035) structure finish
Rated Voltage	: 415V-440V/50Hz (Design available for 380V, 480V, 690V, 750V - 50/60Hz)
Output Rating	: 50 KVAR to 5000 Kvar
Capacitors	: DUCA POWER Super Heavy Duty Series used are rated at 525V, 690V & 800V, 50/60Hz as per network voltage
Reactors	: H-Class, 5.6%, 6%, 7%, 12.5% , 14% or any other Tuning / Detuning rating on request
Incoming / Outgoing	: MCCB / ACB as Incomer and HRC Fuses for backup protection (other combinations on request)
Dimension	: Contact our Sales Office
Ambient Temperature	: 50°C max short time : 40°C average in 24 hours : 35°C annual average : -10°C low limit
Protection class	: IP 40
Unbalanced Activecomp System	: For Unbalanced Activecomp System ratings & specifications contact our Sales Office

\*Specifications are subject to change without notification.