

PENTACON
PENTACON ELECTRO-CONTROL (INDIA)

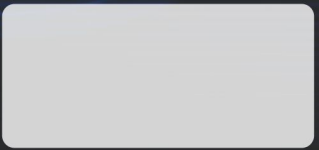
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Authorised Dealer Distributor



- ⚡ APFC RELAY
- ⚡ DIGITAL PANEL METERS & CONTROL DEVICES
- ⚡ THYRISTOR CONTROL MODULE
- ⚡ ALTERNATOR VOLTAGE REGULATORS (AVR)
- ⚡ POWER FACTOR CORRECTION PANEL FOR UNBALANCED LOAD

ver. 2.45

PENTACON
Microcontroller based 360 Power Factor Sensing

Company Profile

Established in the year 1995, we, "Pentacon Electro- Control, India", are the renowned Manufacturers and Suppliers of Electronic Control Devices, Measuring Equipments, Control Panels Power Management Systems and Automatic Power Factor Controller (APFC Relay). Apart from this we also offer our customers a range of Digital Panel Meters like Voltmeter, Ampere Meter, Frequency Meter, Power Factor Meter, AVF Meter, KVA Meter, KW Meter, and Multifunction Meter. Our products are manufactured using optimum quality raw materials at our manufacturing unit. We employ advanced technologies and equipment to manufacture our products. Apart from this, these are widely demanded for their salient features like high performance, low maintenance cost, durable and easy installation.

We have a highly qualified team of professionals at our manufacturing unit, which is well versed with knowledge related to this respective domain. Further, it is equipped with all the latest machines and technologies, which are required to deliver a defect-less line of products to the clients. Apart from this, the finished products are duly tested on certain parameters by the quality checkers as per the set industrial standards. For the convenience of the clients.

Under the able guidance our mentor, "Mr. Sharad Kumar Singh", we have gained growth in this domain. His profound expertise and relevant experience in this domain have enabled us to cater to the business requirements of our esteemed clients.

Automatic Power Factor Controller Model RFCN

SALIENT FEATURES :-

- ④ Available Sequence FIFO/FILO/ STRAIGHT FIFO/BINARY/LIFO
- ④ Selectable Switching
- ④ CT Ratio Programmable
- ④ Auto Manual Operation
- ④ Highly Sensitive
- ④ No Effects of Harmonics
- ④ Standard 144 X 144 mm panel flush mounting arrangement Max depth 75 mm



Model : RFCN

Automatic Power Factor Controller Model Microchip

SALIENT FEATURES :-

- ④ Real time display Suitable for Contacterised capacitor switching panel and for SSR (solid state relay) switched panel on demand
- ④ No effects of harmonics on performance
- ④ Available Sequence FIFO/FILO/STRAIGHT FIFO/BINARY/LIFO
- ④ Input sensing through Individual phase with single CT
- ④ Wide current input range
- ④ Wide working voltage range
- ④ Separate button for desired power factor setting
- ④ Separate button for desired dead band setting
- ④ Separate button for desired switching delay setting
- ④ Output relay contacts up to T2 output available
- ④ AMP indicator for ct fault or very low current
- ④ Slide switch for locking, to avoid pinning
- ④ Standard 144 X 144 mm panel flush mounting arrangement Max. depth 75 mm



Model : Microchip



Automatic Power Factor Controller Model Lunar

SALIENT FEATURES :-

- ④ Real time power factor and other parameter display
- ④ Default display is Power Factor, display of other parameter are on selection basis.
- ④ kw, kva, kvar, voltage and ampere (accuracy of kw, kva and kvar are on balance load, voltage and correct ct ratio basis)
- ④ Suitable for Contacterised capacitor switched panel and for SSR (solid state relay) switched panel on demand.
- ④ No effects of harmonics on performance.
- ④ Available Sequence FIFO/FILO/STRAIGHT FIFO/BINARY/LIFO
- ④ Input sensing through Individual phase with a CT.
- ④ Wide current input range.
- ④ Wide working voltage range.
- ④ Adjustable Parameters i) On delay ii) Off delay) Step delay iv) CT ratio v)
- ④ Adjustable minimum sensing load current in % of CT ratio
- ④ Output relay contacts up to T5 output available.
- ④ AMP led for indication of load current, above than minimum set sensing load current in % of ct ratio.
- ④ H/LV, high/low voltage than normal voltage indication H/L for indication, switching on, off or hold the stage.



Model : Lunar

Power Factor Control Relay (SP_05)

Single CT APFC Relay Size 96 x 96 mm

- ④ Microcontroller based
- ④ Wide working voltage between R-N, 90v to 290v
- ④ Minimum Current sensing 1%
- ④ Straight FIFO switching sequence for bank selection
- ④ No effect of harmonics on performance
- ④ Standard DPM size 96mm x 96mm x 87mm panel flush mounting
- ④ Set Power Factor
- ④ Set Dead Band
- ④ Set Step Delay



Model No. SP_05

Power Factor Control Relay (TP_05)

Three CT APFC Relay Size 96 x 96 mm

- ④ Microcontroller based
- ④ Wide working voltage between R-N, 90v to 290v
- ④ Minimum Current sensing 1%
- ④ Straight FIFO switching sequence for bank selection
- ④ Individual phase and average power factor display on selection
- ④ No effect of harmonics on performance
- ④ Standard DPM size 96mm x 96mm x 87mm panel flush mounting
- ④ Average power factor of all three phase
- ④ Power factor of "R" phase
- ④ Power factor of "Y" phase
- ④ Power factor of "B" phase
- ④ Set Power Factor
- ④ Set Dead Band
- ④ Set Step Delay



Model No. TP_05

Maximum Demand Controller

FEATURES :

- ④ Micro controller based with three trip output
- ④ Wide working voltage between R-N, 150 v to 240 v
- ④ Default display KVA/MVA
- ④ Display of phase Ampere and Voltage of individual phase is on selection.
- ④ Current sensing through up to 5 A / 5000A CT
- ④ Auto range selection 99.9 KVA to 999 KVA to MVA range
- ④ CT ratio selection 5 A, up to 995 and 50A in KA range 1.00 KA
- ④ Auto range selection 99.9 KVA to 999 KVA to MVA range
- ④ 200% over load capacity
- ④ Resolution 0.1 KVA



Model No. MDC_TP06

Digital Ampere Meter Single Phase/Three Phase

FEATURES :

- ④ Microcontroller Based
- ④ Wide Working Voltage 100 to 400 v
- ④ On site 5A to 1000A CT ratio selection
- ④ Accuracy Class 1



Model No. DPM_SP102



Model No. DPM_SP102

Digital Volt Meter Single Phase/three Phase

FEATURES :

- ④ Microcontroller Based
- ④ Wide Working Voltage 100 to 600 v
- ④ Common Terminal for Measurement & Auxiliary Supply
- ④ Accuracy Class 1

Power Factor Indicator

Features :

- ④ Individual phase and average power factor display
- ④ Real time power factor indication
- ④ Scrolling and hold selection facility by single key
- ④ Power factor display range 0.01 lag to 0.01 lead



Model No. TPF_06

Alternator Voltage Regulator for Jyoti Alternator (Replacement for CT Choke)

SPECIFICATIONS :

- ⊕ **Input voltage :** up to 475 ac, two phase & neutral at U, V & N
- ⊕ **Input frequency :** 50 Hz & 60 Hz, adjustable through trim-pot
- ⊕ **Output voltage :** up to 110v DC at terminal F+ & F-
- ⊕ **Output current :** 55 amps continuous/ 110 amps transient for 10 sees.
- ⊕ **Regulation :** +/- 1%
- ⊕ **AVR response :** 20 ms
- ⊕ **Build-up voltage :** 5 volts at AVR terminals
- ⊕ **Under Frequency Protection :** 47 Hz (resettable) at factory setting
- ⊕ **Protection fuse :** 25 amps fast blowing HRC fuse



Alternator Voltage Regulator for Brushless Type Alternator



Model : DP-201

SPECIFICATION :

- ⊕ **Input Voltage :** up to 475 ac, two phase & neutral at U, V & N
- ⊕ **Input Frequency :** 50 hz & 60 hz, adjustable through trim-pot
- ⊕ **Output Voltage :** up to 110 v DC at terminals F+ & F-
- ⊕ **Output Current :** 8 amps continuous/12 amps transient for 10 sees.
- ⊕ **Regulation :** +/-1%
- ⊕ **AVR response :** 20ms
- ⊕ **Build-up Voltage :** 5 volts at AVR terminals
- ⊕ **Under Frequency Production :** 47 hz (resettable) at factor setting
- ⊕ **Protection Fuse :** 4 amps fast blowing glass fuse 19mm x 5 mm

Alternator Voltage Regulator for Brushed Type Alternator

SPECIFICATION :

- ⊕ **Input Voltage :** up to 475 ac, two phase & neutral at U, V & N
- ⊕ **Input Frequency :** 50 hz & 60 hz, adjustable through trim-pot
- ⊕ **Output Voltage :** up to 400 v DC at terminals F+ & F-
- ⊕ **Output Current :** 16 amps continuous/25 amps transient for 10 sees.
- ⊕ **Regulation :** +/-1%
- ⊕ **AVR response :** 20ms
- ⊕ **Build-up Voltage :** 5 volts at AVR terminals
- ⊕ **Under Frequency Production :** 47 hz (resettable) at factor setting
- ⊕ **Protection Fuse :** 6 amps fast blowing glass fuse 19 mm x 5 mm



Model : DP-203

Thyristor Switching Module

SPECIFICATIONS :

- ⊕ No transient penetration in power supply during switching
- ⊕ Faster response time (5ms)
- ⊕ Suitable for power factor correction in Welding set load
- ⊕ Automatic Thermal cut-off
- ⊕ No auxiliary power supply needed
- ⊕ Module available for switching 5 kvar to 50 kvar capacitor



Power Factor Control Panel for Unbalance Load (Power Saver)

Power Rating - 10Kw to 25 Kw

(Any other rating on request)

Load Type - Three Phase Unbalanced

Rated Voltage - 415v/440v AC

Full Load Current - 22.4 Amp



Pentacom Power Saver is designed for power factor correction in 3 phase unbalanced load system.

The Panel is equipped with three single phase power factor correction system in single unit.

LCD display has been used for display the following parameters

- i) Power factor of each phase
- ii) Phase current of each phase
- iii) capacitor bank switching status of each phase

Ferrite core ct is used for sensing purpose, which is more accurate and calibrated with the control unit, hence no need to setting the targeted power factor accept in special case.

Power saver control unit is detachable on site for maintenance purpose

Applications :

- Residential - Banglow, Kothi, Farm Houses etc with the three phase power supply
- Commercial - Restaurants, Hotels, Motels, Offices, Shopping Malls etc.

Size : 580mm x 420mm x 220mm Weight :