

# AUTOMATIC POWER FACTOR CONTROLLERS-1CT



NIPPEN Model APFC-Pro is used for measurement and control of PF using Reactive power compensation. Capacitor banks are suitably switched ON and OFF automatically to provide necessary compensation. An intelligent switching algorithm (Wear leveling) ensures uniform aging of the capacitors used to achieve the target PF.

## FEATURES

- No user manual settings required. Fit and Forget.
- 1phase sensing Intelligent POWER FACTOR control algorithm .
- Intelligent POWER FACTOR control from switching of banks, based on time switching history (No of operations) thus improves capacitor life.
- Provision of 1 relay to set off alarm for PF under compensation.
- Auto CAPACITOR kVAr detection.
- Target PF factory -Programmable for Unity & Lead/ Lag values.
- Reliable performance at Low Current (>5% of load).
- Potential free contact for driving contactors to switch Capacitor. (5A/250V AC Relay With NO Contact).

## ELECTRICAL SPECIFICATION

- Operating Voltage: 110-500 V AC LL 50/60 Hz.
- Current: 50mA-6A AC.
- Auxiliary supply: 80-265V ACDC ( $\pm 20\%$ ) 50/60Hz.
- Power Consumption: <0.1VA in Current Circuit, < 0.1 VA in Voltage.
- ON/OFF Relay rating: 5A/250VAC - NO Contact.
- Power Factor 0.999Lag Factory Set able.

## MODELS

- APFC-Pro -6R
- APFC-Pro -8R
- APFC-Pro -10R
- APFC-Pro -12R

## DISPLAY

- Single row, 4 digits bright display.

## ENVIRONMENT

- Ambient:  $-10^{\circ}$  C to  $55^{\circ}$  C.
- Storage:  $-20^{\circ}$  C to  $70^{\circ}$  C.
- Humidity: <95% RH ..... Non condensing.

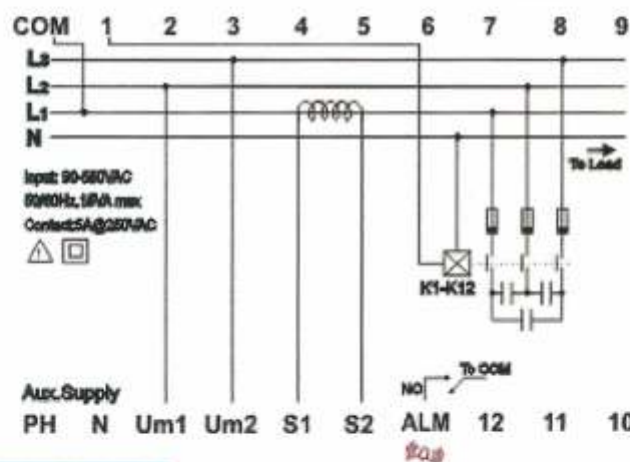
## MECHANICAL DIMENSIONS

Front	96 x 96mm ( Depth 54 mm)
Panel Cut out	91 x 91mm $\pm$ 0.1mm)
Casing	Flame retardant ABS
Connectors	Terminal block ABS
Protection	IP 52 front/ IP 20 Terminal block

## RELEVANT STANDARD

EMC	IEC 61326
Immunity	IEC 61000-4-3
Safety	IEC 61010-1-2001

## WIRING DIAGRAM OF APFC-Pro -12R with Alarm



## OTHER PRODUCT RANGES.,

- 1CT PFCR - 1 Phase sensing improving Power factor.
- 3CT PFCR - 3 Phase sensing improving Power factor with Multi function Meter.
- MDC - Avoid Penalties from Electricity Board.
- DT-108 - 3 & 1 Phase VAF and Multi function Meter.
- EM 34DS - Dual Source Energy Meter & Counter type meter.
- ELR - Earth leakage relay with CBCTs.
- SLM - Smart Load Manager multi function meter
- Analogue Meters, Insulation Testers, Earth Tester, CTs, Shunts.