

PRELIMINARY DATASHEET



Features:

- 3 CT Sensing
- LCD Type with dual colour backlight
- Supports Intelligent Algorithm
- Automatically switches between various capacitive bank
- 08 / 12 / 14 steps output
- Alarm linked signal contact
- Programmable fan control
- ModBus - RTU communication (only for 12 Relay option)
- Password Protected

Size: 144mm x 144mm

Technical Specifications

Display

| | |
|------|--|
| Type | LCD with dual colour backlight 3 line 4 digit to show electrical parameters |
|------|--|

Input Specifications

| | |
|---------------------|---|
| Measurements | Power Factor, Power (kW, kVA, kVA _r), Energy (kWh, kVA _r h), Phase voltage and Phase current, Frequency, Temperature, Up to 31 st order Harmonics measurement |
| Wiring input | 3 Phase 4 Wire / 3 Phase 3 Wire / 2 Phase 2 Wire / 1 Phase 2 Wire |
| Rated Input Voltage | 11 to 300V AC (L-N) 50 to 520V AC (L-L) |
| Rated Input Current | Nominal 5A AC (Min- 11mA, Max – 6A) |
| Frequency | 45 - 65Hz |
| Display scrolling | Auto/ Manual/ Default (Programmable) Scrolling Time: 5Sec |
| Resolution | For Energy: 0.01k,0.1k, 1k,0.01M, 0.1M, 1M For Power Factor: 0.01 For Voltage, Current, Power: Auto resolution |
| Accuracy | Voltage (L-N/L-L), Current: ±0.5% of full range Frequency: ±0.1% of full range Power (kW, kVA, kVA _r): ±1% of full range Energy (kWh, kVA _r h): ±1% of full range |

Resettable Parameters

| | |
|--------------|---|
| CT Primary | 1A/5A Up to 9999A (Programmable for any value) |
| CT Secondary | 1/5A (Programmable for any value) |
| PT Primary | 100V to 500kV (Programmable for any value) |
| PT Secondary | 100 V - 500V (Programmable for any value) |

Alarm Indications

| | |
|------------------|--------------------------------------|
| % THDI | 20 - 100 % or OFF |
| Over Voltage | 250 - 290V (L-N) 490 - 520V (L-L) |
| Under Voltage | 195 - 210V (L-N) 400 - 415V (L-L) |
| Under Compensate | ON/OFF |
| Over Compensate | ON/OFF |

| | |
|-------------------|------------------------|
| CT Polarity Error | ON/OFF |
| Step Error | 20 - 80 % or OFF |
| Temperature | 0 - 100°C or ON or OFF |
| Fan Settings | ON/OFF |

Output Specifications

| | |
|-----------------|---|
| Output Contacts | NO, One common point Max fuse 6A |
| Steps | 3 to 08/12/14* |
| Relay Contact | 5A@250V AC Note*: When 14 relay option selected, fan & alarm relay will be used to control PF (only available in 12 relay option) |

Communication

| | |
|-------------------------|--------------------|
| Communication Interface | RS485 & Modbus RTU |
|-------------------------|--------------------|

Auxiliary Supply

| | |
|---------------------|--------------|
| Input voltage range | 90 - 550V AC |
| Consumption | >15VA |
| Frequency | 50 / 60 Hz |

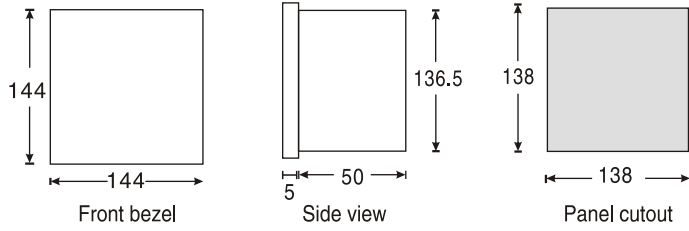
Control Specification

| | |
|---------------------|---------------------------------|
| Target PF | 0.8 lag - 0.8 lead |
| Control Sensitivity | 55 - 100% |
| Step time | 5s - 240s |
| Discharge time | 5s - 9999s |
| Switching program | Automatic / Linear / Rotational |
| Control Mode | Automatic / Manual |

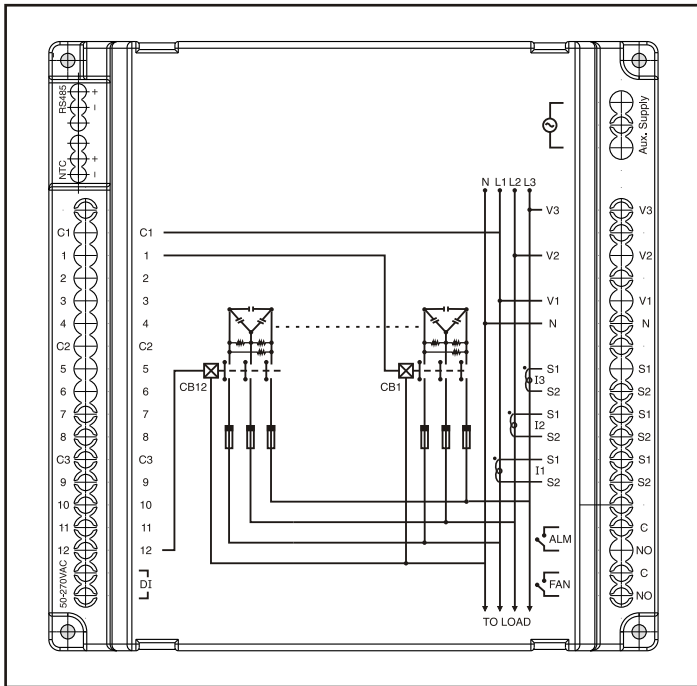
Mechanical Input

| | |
|----------|----------------|
| Mounting | Panel mounting |
| Weight | Approx. 420gms |

Dimensions



Terminal Connections



Ordering Information

| Product Code | Supply Voltage | No. of stages |
|---------------------|-----------------------|---------------|
| APFC148-308-90/550V | 90 - 550V AC, 50/60HZ | 8 |
| APFC148-312-90/550V | 90 - 550V AC, 50/60HZ | 12 |