



144 x 144mm

Features:

- 3 CT Sensing
- LCD Type with dual colour backlight
- Supports Intelligent Algorithm
- Automatically switches between various capacitive bank
- 12 / 14* steps
- Configurable Alarm Settings
- Alarm Indication on Display
- Programmable fan control
- ModBus - RTU communication
- Dual Password Protection

Certifications:

Display Specifications

Type	LCD with dual color backlight
Digits	3 lines 4 digits to show electrical parameters

Input Specifications

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
Burden	20 mOhms
Wiring input	1Ø2W / 2Ø2W / 3Ø3W / 3Ø4W
Accuracy	Voltage (L-N/L-L), Current: ±0.5% of full scale Frequency: ±0.1% of full scale Power (kW, kVA, kVAR): ±1% Energy (kWh, kVArh, kVAh): Class 1
Resolution	For Energy: 0.01k,0.1k, 1k,0.01M, 0.1M, 1M For Power Factor: 0.001 For Temperature: 0.1 For Voltage, Current, Power: Auto resolution
Display scrolling	Auto/ Manual/ Default (Programmable) Scrolling Time: 5 Sec
Measurements	Power Factor, Power (kW, kVA, kVAR), Energy (kWh, kVArh, kVAh), Phase voltage and Phase current, Frequency, Temperature, Up to 31 st order Harmonics measurement
Measurement Range	
Power Factor	0.8 lag - 0.8 lead
Alarm Indications	
	Over Voltage, Under Voltage, Under Compensate, Over Compensate, CT Polarity Error, Current Absent indication
Resettable Parameters	
CT Primary	1A / 5A to 9999A (Programmable for any value)
CT Secondary	1A / 5A (Programmable)
PT Primary	100V to 500kV (Programmable for any value)
PT Secondary	100V - 500V (Programmable for any value)

Output Specifications

Output Contacts	NO, One common point Max fuse 6A
Steps	1 to 12/14*
Relay Contact	5A@250V AC Note*: When 14 relay option selected, fan & alarm relay will be used to control PF

Communication

Communication Interface	RS485 & Modbus RTU
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Auxiliary Supply Specifications

Input voltage range	90 - 550V AC
Consumption	15VA Max.
Frequency	50 - 60 Hz

Control Specifications

Target PF	0.8 lag - 0.8 lead
Switching program	Automatic / Linear / Rotational
Control Sensitivity	55 to 100%
Step Time	1 to 999 sec
Discharge Time	1 to 9999 sec
Control Mode	Automatic / Manual
Auto initialization	Yes / No

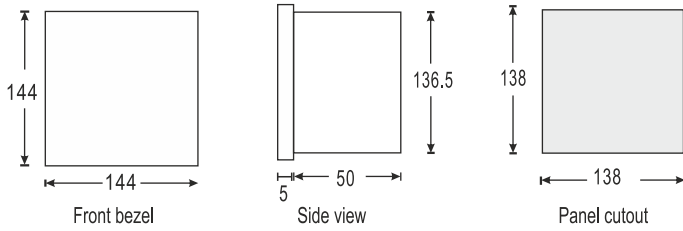
Environmental Specifications

Temperature	Operating : 0 °C to 60 °C Storage : -20 °C to 60 °C
Humidity	Up to 95% RH without moisture consideration

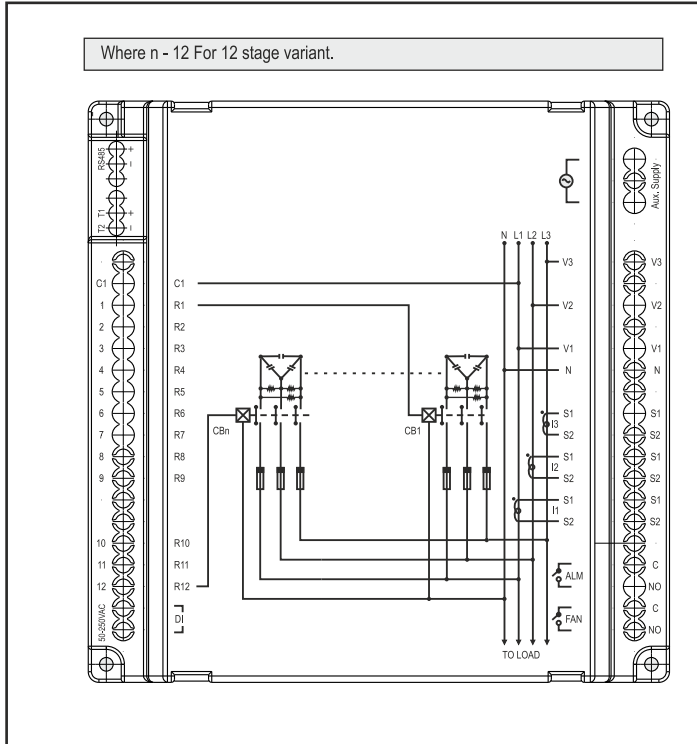
Mechanical Specifications

Mounting	Panel mount
Weight	528gms (For 12 stage variant) 508gms (For 8 stage variant)

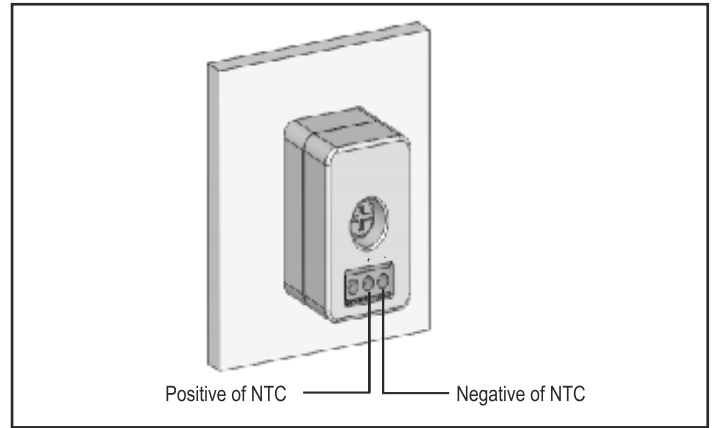
Dimensions (in mm)



Terminal Connections



NTC Temperature Sensor



Ordering Information

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

Compliance

Applicable EMI / EMC Standards		
Product Standard : IEC 61326-1		
Category		Standards Compliance
ESD Immunity	IEC 61000-4-2	Level IV (Air discharge : 15kV), (Contact Discharge : -8kV)
Surge Immunity	IEC 61000-4-5	+/- 2kV common mode, (Line to ground) +/- 1kV differential mode, (Line to Line)
Radiated Susceptibility	IEC 61000-4-3	Level III, 80 to 1000MHz (10V/m) Level II, 1.4GHz to 2GHz (3V/m) Level I, 2GHz to 2.7GHz (1V/m)
Conducted Susceptibility	IEC 61000-4-6	Level II (3V/m)
Voltage Dips and Interruptions	IEC 61000-4-11	Dips : 0% residual voltage / 1 cycle (Criteria B), 40% residual voltage / 10 cycles 50Hz / 12 cycles 60Hz (Criteria C) 70% residual voltage / 25 cycles 50Hz / 30 cycles 60Hz (Criteria C) Interruptions : 0% residual voltage / 250 cycles 50Hz / 300 cycles 60Hz (Criteria C)
Conducted Emission	CISPR-11	
Radiated Emission	CISPR-11	
Electrical Fast Transient	IEC 61000-4-4	Level III (2kV)