



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: **CE**

**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 <sup>st</sup> order Harmonics measurement
<b>Measurement Range</b>	
Power Factor	0.8 lag - 0.8 lead
<b>Alarm Indications</b>	
	Over Voltage, Under Voltage, Under Compensate, Over Compensate, CT Polarity Error, Current Absent indication
<b>Resettable Parameters</b>	
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

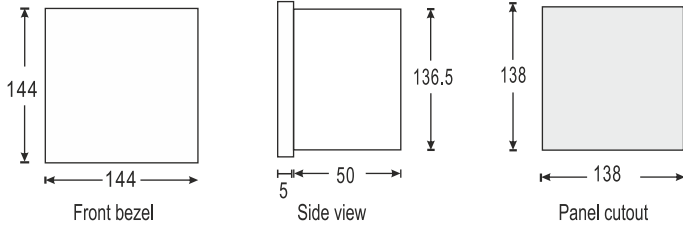
**Environmental Specifications**

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

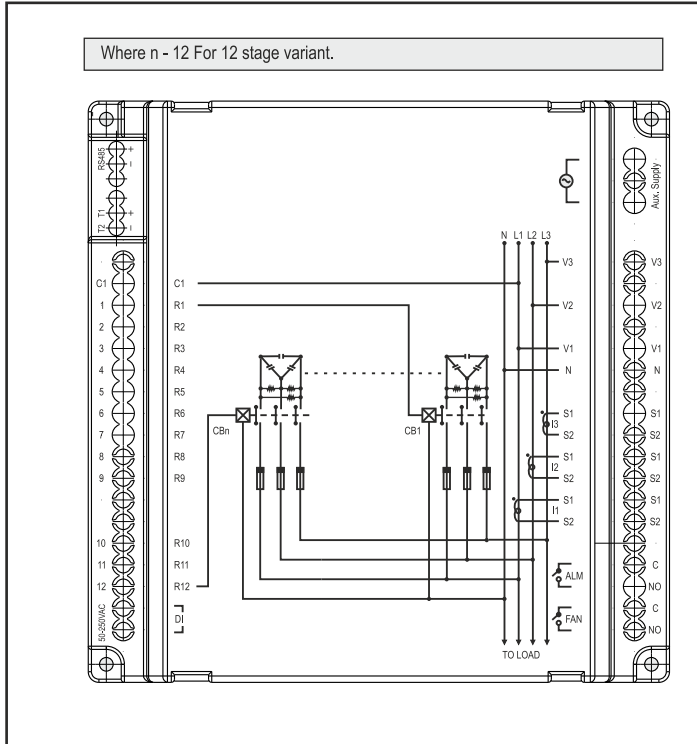
**Mechanical Specifications**

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

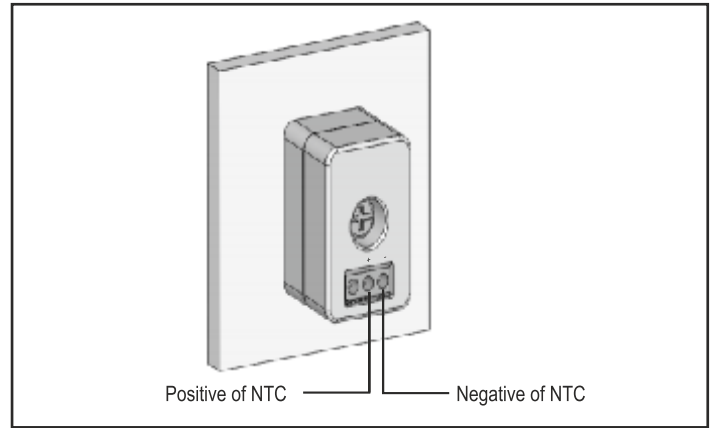
### Dimensions (in mm)



### 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	<b>Dips</b> : 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) <b>Interruptions</b> : 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)