Automatic Power Factor Controller

APFC147



144 x 144mm

Features :

- 1-CT Sensing
- Zero Programming
- 4 digits LED display
- 8 & 12 Relay stages available
- Intelligent Algorithm System
- Supports Automatic Capacitor Banks switching
- Alarm Indications

Certifications : CE RoHS compliant

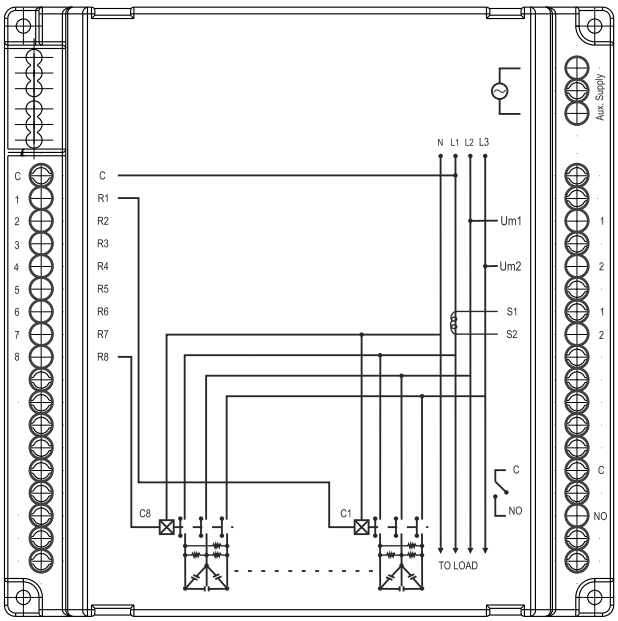
Technical specifications

Display specifications	
Type	7 Segment LED
Digits	4 digits 1 Row
No. of LED	8 + 1 + 1
Operational characteristics	
Rated input voltage	40-300V (L-N), 50-530V (L-L)
Rated input current range	5AAC (Min 50mA, Max 6A)
Frequency	45 - 65 Hz
Burden	20m Ohm
Wiring input	L-L / L-N
Accuracy power factor	±0.01
Measurement range	
Power factor	0.8 lag to 0.8 lead
Alarm indications	Over Voltage, Under Voltage, Under Compensate, Over Compensate, CT Polarity Error, Current Absent indication
CT Primary	1 / 5A to 9999A (Programmable for any value)
CT Secondary	1 or 5A (Programmable)
Output specifications	
Output Contacts	NO, One common point max fuse 6A
Steps:	1 to 8/12
Relay contact	5A @ 250V AC (max)
Auxiliary Supply Specifications	
Input voltage range	90 - 550V AC
Consumption	15VA max
Frequency	50 - 60 Hz
Control specifications	
Target PF	0.8 lag to 0.8 lead
Control Sensitivity	60%
Step time	5 to 999 sec
Discharge time	5 to 999 sec
Switching program	Automatic
Control Mode	Automatic / Manual
Auto initialization	Yes / No

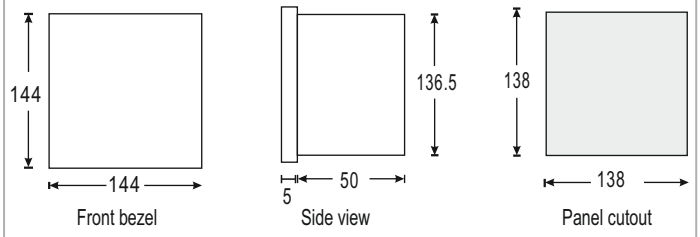
Environmental specifications	
Temperature	Operating : 0°C to 60°C Storage : -20°C to 60°C
Humidity (non - condensing)	0% to 95% without moisture consideration
Mechanical specifications	
Mounting	Panel
Weight	400gms

Terminal connections

Where n - 12 For 12 stage variant.
8 For 8 stage variant.



Dimensions (All are in mm)



Ordering Information

Product Code	Supply Voltage	No. of stages	Certification
APFC147-108-90 / 550V-CE	90/ 550V, 50/ 60Hz	8	CE
APFC147-112-90 / 550V-CE	90/ 550V, 50/ 60Hz	12	CE

Standards Compliance

Applicable EMI / EMC standards		
Product standards : IEC 61326-1		
Category	**Standards**	**Standards compliance**
ESD immunity	IEC 61000-4-2	Level III (Air discharge : 8kV), Level II (Contact Discharge : 4kV)
Surge Immunity	IEC 61000-4-5	2kV common mode, (Line to ground) 1kV common 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 (150KHz to 80MHz) (3V/m)
Voltage Dips and Interruptions	IEC 61000-4-11	**Dips :** 0% during 1 cycle (Criteria B), 40% during 10/12 cycles (Criteria C), 70% during 25/30 cycles (Criteria C) **Interruptions :** 0% during 250/300 cycles (Criteria C)
Conducted Emission	CISPR 11	Group 1, Class A (150kHz to 30 MHz)
Radiated Emission	CISPR-11	Group 1, Class A (30MHz to 1 GHz)
Electrical Fast Transient	IEC 61000-4-4	Level III (2kV)
Power frequency magnetic field	IEC 61000-4-8	Level IV 30 A/m