Power Factor Controller

APFC146

144 x 144mm

Features :

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

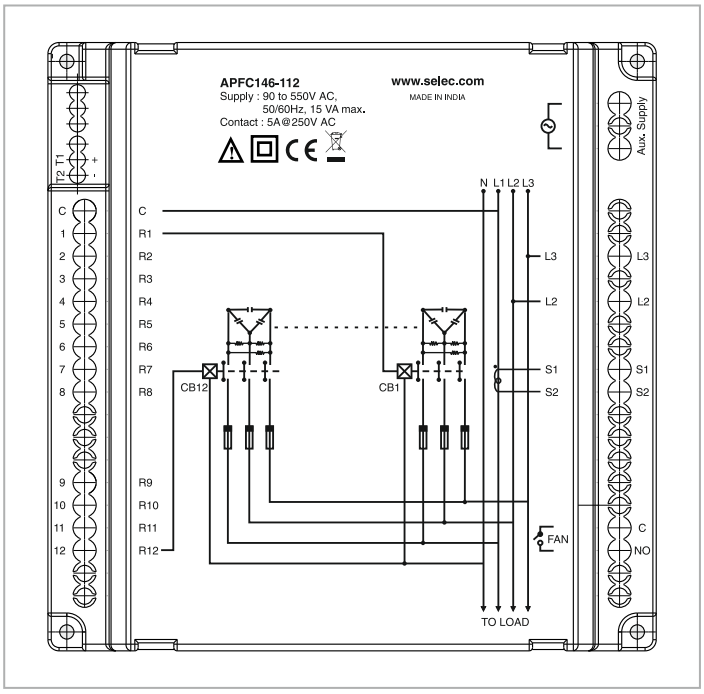
Certifications : CE RoHS compliant

Technical specifications

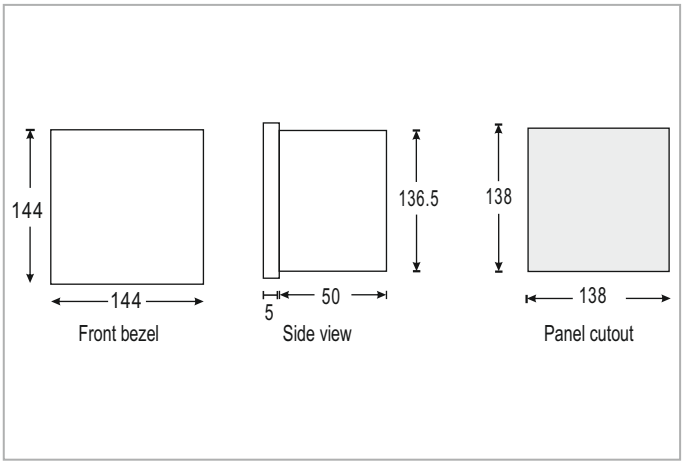
Display specifications	
Type	LCD with backlight
Digits	4 digits 1 Row
Operational characteristics	
Rated input voltage	50 - 520V (L - L)
Rated input current range	Nominal 5A AC (Min 50mA, Max 6A)
Frequency	45 - 65 Hz
Burden	20m Ohm
Electrical connection	2ø - 2 wire (Voltage - L2 L3, Current - L1)
Accuracy	Power factor : ±0.01 Temperature : ±3° of full scale
Measurement range	
Power factor	0.8 lag to 0.8 lead
Error indication	Curr (Current less than 50mA)
Alarm indication	Over temperature
Settable parameters	
Target PF	0.8 lag to 0.8 lead
Max number of steps	1 to 12
Step time	1 to 999 sec
Discharge time	1 to 999 sec
Over temperature settings	10°C to 70°C
Output specifications	
Output Contacts	NO, One common point max fuse 6A
Steps	1 to 12
Relay contact	5A @ 250V AC (max)
Auxiliary Supply Specifications	
Input voltage range	90 - 550V AC
Consumption	15VA max
Frequency	50 - 60 Hz
Settable parameters	
CT Primary 1	5A to 10kA (Programmable for any value)
CT Primary 2	5A to 10kA (Programmable for any value)
CT Secondary	330mV
PT Primary	100V to 10kV (Programmable for any value)
PT Secondary	100V to 10kV (Programmable for any value)
Control specifications	
Target PF	0.8 lag to 0.8 lead
Step time	1 to 999 sec
Discharge time	1 to 999 sec
Control mode	Automatic / Manual

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



Dimensions (All are in mm)



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

Ordering information

Product code	Supply voltage	No. of stages	Certification
APFC146-112-90/550V-CE	90 - 550 VAC, 50 / 60Hz	12	CE