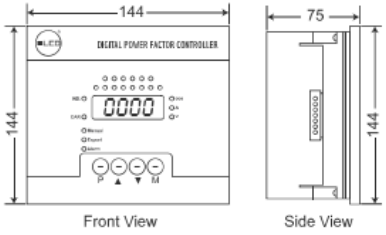
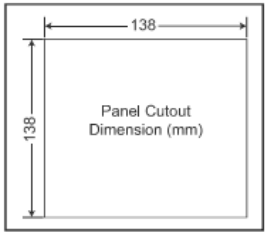
DIGITAL POWER FACTOR CONTROLLER

PFR5NRC-0006
PFR5NRC-0014

DIMENSION (MM)





MEASUREMENT

- Full Measurement Range of Cos ϕ (0.8L - 0.8C)
- Phase To Neutral Voltage & Current
- Reactive Power
- Total Harmonic Distortion (THD) For Voltage & Current
- Harmonic Spectrum Info Up To 19th Order For Voltage & Current
- Capacitor Harmonic Load Factor (CHL)
- Switching Sensitivity From Range Of 5 - 1200 Seconds
- Ambient Temperature

Power Factor Compensation For Inductive & Capacitive

Programmable Cos ϕ Desired (0.8 Inductive - 0.8 Capacitive)

Step Switching Operation Mode

- Auto (Rotational, Linear, Four-Quadrant)
- Manual

Automatic Connection Configuration Detection

Automatic Step Power Recognition For Both Capacitor & Choke

Automatic CT Polarity Correction

Two Tariff Setting For Power Import & Export Mode

Control Bandwidth (Anti-Hunting Function)

Programmable Fixed Steps & LED Indication For Individual Step

Programmable Fan, Alarm Relay & Error Message

Working Temperature -40ºC To +60ºC

Alarm Trigger Setting

- Over / Under - Voltage & Current, Voltage Failure
- THDI / THDU / CHL Higher Than Limit Set
- Number of Switching Operations Exceeded
- Cooling & Heating Threshold, Overheated
- Step Error, Compensation Error, Export Error

TECHNICAL SPECIFICATION

	Parameters	PFR5NRC - 0006	PFR5NRC-0014
Adjustable Parameters	Power Factor Desired	0.80 Inductive – 0.8 Capacitive	
	Connection Time	5 - 1200 Seconds	
	Reconnection Delay Time	5 - 1200 Seconds	
	Operating Mode	Automatic Mode (Rational, Linear, Four-Quadrant), Manual Mode	
Ranges, Accuracy	Power Supply and Voltage Measurement	90 – 275 VAC; 43 – 67Hz; 7VA	
	Voltage Measurement Accuracy	±1% of Range, ± 1 Digit	
	Measuring Voltage Loss Response Time	≤ 20 ms	
	Measurement Current	0.02 – 7 A	
	Current Input Serial Impedance	≤ 10 mΩ	
	Current Measurement Accuracy • Range 0.5 – 7 A • Range 0.02 – 0.5 A	 ± 0.02A , ± 1 Digit ± 0.002A , ± 1 Digit	
	Maximum Phase Angle Error (Power Factor and Powers Measurement)	±1º at I > 3 % of Range; Otherwise ±3º	
	Voltage and Current Harmonic Measurement	Up to 19th Harmonic	
	Harmonic Components and THD Measurement Accuracy	±5%, ±1 Digit (For U, I > 10% of Range)	
	Temperature Measurement Range and Accuracy	-30 to +60ºC , ±5ºC	
	Number of Output Relays	6	14
	Output Relay Load Rating	250 VAC / 4 A	
	Installation Category / Level of Pollution	In Compliance With Standard: EN61010-1, III-2	
Operating Conditions	Operating Temperature	-40ºC to +60ºC	
	Relative Humidity	5 – 100%	
In Compliance with Standards	Noise Suppression Level	EN 50081-2 EN 55011 Class A EN 55022 Class A	
	Electromagnetic Compatibility (EMC) – Immunity Test	IEC61000-6-2 : 2016, IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-6, IEC61000-4-8, IEC61000-4-11	
	Electromagnetic Compatibility (EMC) – Emission	IEC61000-6-4 : 2018 EN55011 Ed.3:2010 Class A, EN55022 Ed.3:2011 Class A	
	Product Safety Requirement	IEC60255-27 : 2013 Clause 10.6.4.2 & 10.6.4.3	
Physical	Enclosure • Front Panel	IP 40	
	• Back Panel	IP 20	
	Dimension • Front Panel	144 x 144 (mm)	
	• Built-in Depth	75 mm	
	• Installation Cutout	138^{+1} x 138^{+1} (mm)	
	Mass	Max 0.7 Kg	