



PFR96 / PFR96P

Features

- Microprocessor based intelligent auto switching control
- Automatic C/K and rated step adjustment
- Automatic CT polarity correction
- Display of power factor & current
- Programmable sensitivity
- Last step can be used as alarm/fan output
- Under/over voltage alarm, under/over compensate alarm
- User-friendly setting
- Complies with IEC 61000-6-2 standard

For PFR96

- For single phase system

For PFR96P

- For 3 Phase system

Technical Data

RATINGS AUXILIARY POWER SUPPLY

Model PFR96	: 110~120VAC/220~240VAC
Model PFR96P	: 380~415 V AC
Operating Limits	: -15% + 10%
Consumption	: 10 VA max
Rated frequency	: 50 Hz or 60 Hz

CURRENT INPUT

Rated current (I_n)	: 5 A
Operating Limits	: 0.15 A to 6.5 A
Rated frequency	: 50 Hz or 60 Hz

RELAY OUTPUT

Numbers of outputs	: 6
Contact arrangement	: NO contacts type
Contact rating	: 5 A, 250 V AC ($\cos\phi = 1$)
Contact material	: Silver alloy
Expected electrical life	: 100,000 operations at rated current
Expected mechanical life	: 5×10^6 operations
Max current for the common terminals	: 12 A continuous

CONTROL RANGE

Power factor setting	: 0.8 inductive - 0.8 capacitive
C/K setting	: 0.03 - 1.20 / Automatic
Switching sensitivity	: 5 - 600 s/step
Reconnection time for same step	: 5 - 240 s
Switching Program	: Automatic / Automatic Rotate / 4-quadrant / Manual
Rated step coefficient	: 0 / 1 / 2 / 3 / 4 / 5 / 6 / 8 / 12 / 16 (Automatic if C/K set to Auto)

MECHANICAL

Mounting	: Panel mounting
Dimension (h x w x d)	: 96mm x 96mm x 70mm
Approximate weight	: 0.6 kg

ENVIRONMENTAL CONDITIONS

Temperature	: -5 C to +55 C
Humidity	: 56 days at 93% RH and 40 C non-condensing

TYPICAL APPLICATION DIAGRAM

Diagram 1 - For model PFR96

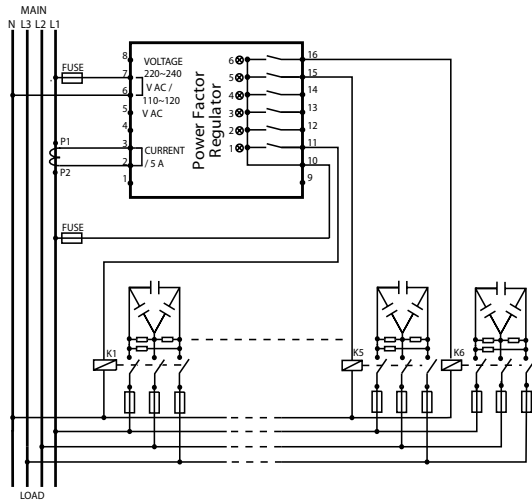
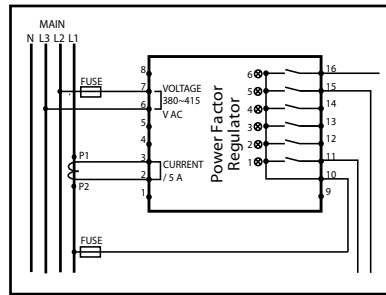


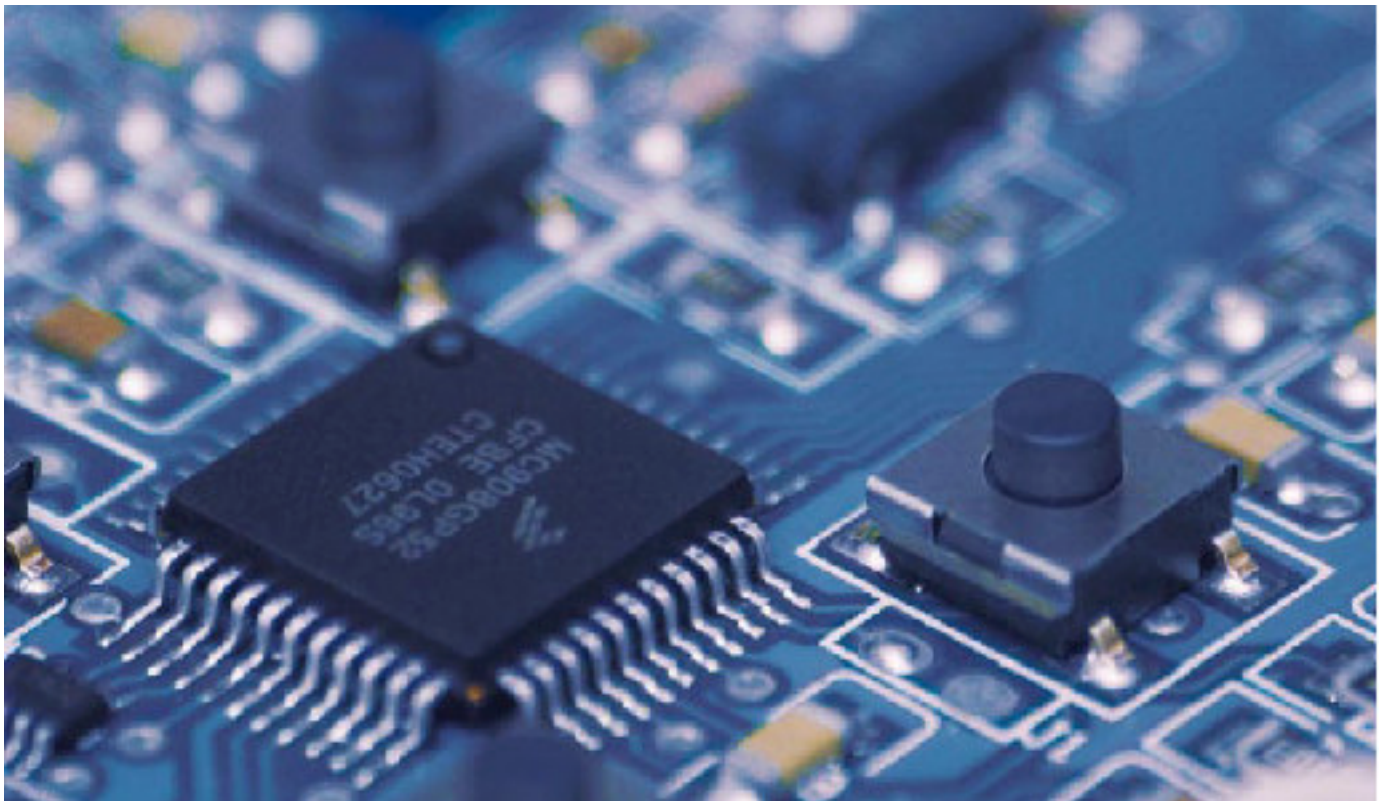
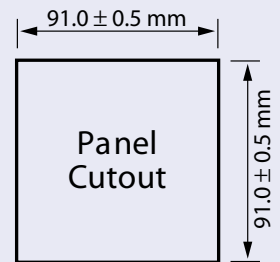
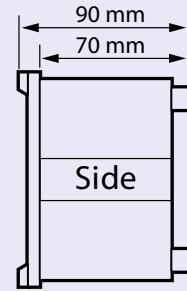
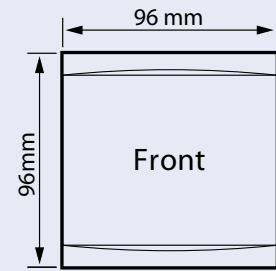
Diagram 2 - For model PFR96P



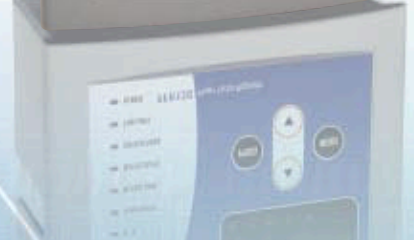
Ordering Information

MODEL	DESCRIPTION
PFR96 - 220 - 50	6 Steps, for 50 Hz system, auxiliary voltage 220~240V AC
PFR96 - 220 - 60	6 Steps, for 60 Hz system, auxiliary voltage 220~240V AC
PFR96 - 110 - 50	6 Steps, for 50 Hz system, auxiliary voltage 110~120V AC
PFR96 - 110 - 60	6 Steps, for 60 Hz system, auxiliary voltage 110~120V AC
PFR96P - 415 - 50	6 Steps, for 50 Hz system, auxiliary voltage 380~415V AC
PFR96P - 415 - 60	6 Steps, for 60 Hz system, auxiliary voltage 380~415V AC

CASE DIMENSIONS



PFR140/120/80/60



Features

- Microprocessor based intelligent auto switching control
- Automatic C/K and rated step adjustment
- Automatic CT polarity correction
- Display of power factor, current & total harmonic distortion of current
- Programmable sensitivity
- Last step can be used as alarm/fan output
- Under/over voltage alarm, under/over compensate alarm & high harmonic distortion alarm
- User-friendly setting
- Complies with IEC 61000-6-2 standard

Technical Data

RATINGS AUXILIARY POWER SUPPLY

Current Supply voltage	: 220~240VAC/380~415VAC
Operating Limits	: -15% + 10%
Consumption	: 10 VA max
Rated frequency	: 50 Hz or 60 Hz

CURRENT INPUT

Rated current (I_n)	: 5 A
Operating Limits	: 0.15 A to 6.5 A
Rated Frequency	: 50 Hz or 60 Hz

RELAY OUTPUT

Numbers of outputs	: 6 / 8 / 12 / 14 (PFR60 / PFR80 / PFR120 / PFR140)
Contact arrangement	: NO contacts type
Contact rating	: 5 A, 250 V AC ($\cos\phi = 1$)
Contact material	: Silver alloy
Expected electrical life	: 100,000 operations at rated current
Expected mechanical life	: 5×10^6 operations
Max current for the common terminals	: 12 A continuous

CONTROL RANGE

Power factor setting	: 0.8 inductive - 0.8 capacitive
C/K setting	: 0.03 - 1.20 / Automatic
Switching sensitivity	: 5 - 600 s/step
Reconnection time for same step	: 5 - 240 s
THD threshold	: 0.20 - 3.00 (20% - 300%) / OFF
Switching Program	: Automatic / Automatic Rotate / 4-quadrant / Manual
Rated step coefficient	: 0 / 1 / 2 / 3 / 4 / 5 / 6 / 8 / 12 / 16 (Automatic if C/K set to Auto)

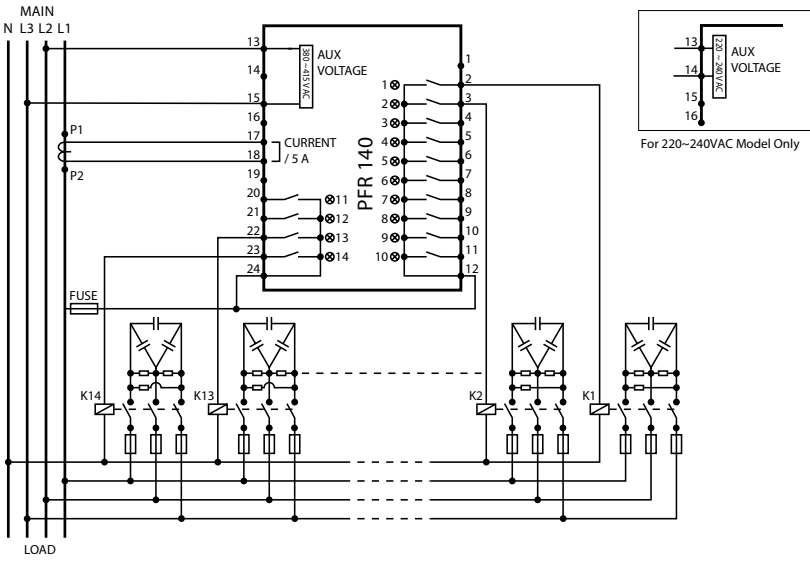
MECHANICAL

Mounting	: Panel mounting
Dimension (h x w x d)	: 144mm x 144mm x 90mm
Approximate weight	: 1 kg

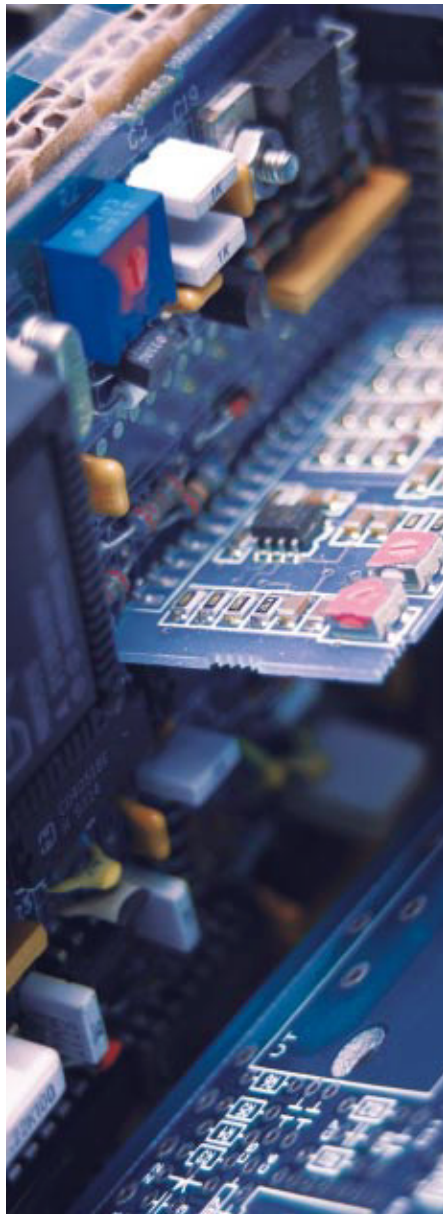
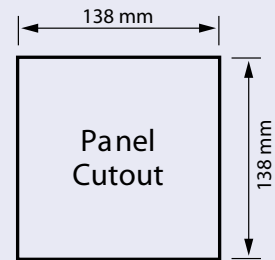
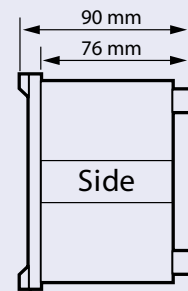
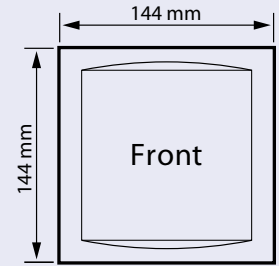
ENVIRONMENTAL CONDITIONS

Temperature	: -5 C to +55 C
Humidity	: 56 days at 93% RH and 40 C non-condensing

TYPICAL APPLICATION DIAGRAM



CASE DIMENSIONS



Ordering Information

MODEL	DESCRIPTION
PFR60 - 415 - 50	6 Steps, 50 Hz system, auxiliary voltage 380~415VAC
PFR80 - 415 - 50	8 Steps, 50 Hz system, auxiliary voltage 380~415VAC
PFR120 - 415 - 50	12 Steps, 50 Hz system, auxiliary voltage 380~415VAC
PFR140 - 415 - 50	14 Steps, 50 Hz system, auxiliary voltage 380~415VAC
PFR60 - 220 - 60	6 Steps, 60 Hz system, auxiliary voltage 220~240VAC
PFR80 - 220 - 60	8 Steps, 60 Hz system, auxiliary voltage 220~240VAC
PFR120 - 220 - 60	12 Steps, 60 Hz system, auxiliary voltage 220~240VAC
PFR140 - 220 - 60	14 Steps, 60 Hz system, auxiliary voltage 220~240VAC