



DIN 70mm

**Features :**

- 1Ø - 2 Wire Input
- Monitors Over Load (As per NEMA Curve), Over Current, Under Current / Dry Run , Locked Current, Over Voltage, Under Voltage, Phase Failure
- Direct current measurement up to 32A
- LED Indication : Power ON, Trip Relay
- 4 Knob for Variable Setting
- Manual, Auto Reset
- Test & Reset Function Via Front / Remote
- Settable Rated Current

**Display Specifications**

No of LED	3 1 Green LED for Power on Indication 1 <sup>st</sup> Red LED for Current indication 2 <sup>nd</sup> Red LED for Voltage indication
No of Knobs	4 NEMA : NEMA Class Selection Δ T : Trip Time Setting OC : Over Current Setting DR : Dry Run Current
Keys	2 Key's 1 - Test 2 - Reset (Press 3 sec to set rated current)

<b>Accuracy</b>	
Current Accuracy	±5% of rated current
Voltage Accuracy	±1% of 300V
Time Accuracy	±5% ±100msec
<b>Functional Specification</b>	
Over Load	NEMA class 5, 10, 15, 20, 30
Over Current Ranges	10% - 70% of Ir (Rated Current)
Under Current	20% - 80% of Ir (Rated Current)
Locked Current / Stall Current	Fixed : 300% of Ir (Rated Current)
Over Voltage	Fixed (280V)
Under Voltage	Fixed (180V)
Phase Loss	Yes (<160V)

**LED Indication Chart**

Conditions	Power ON (Green)	Current (1 <sup>st</sup> Red LED)	Voltage (2 <sup>nd</sup> Red LED)
Healthy	ON	OFF	OFF
Over Voltage	ON	OFF	BLINKING
Under Voltage	ON	OFF	ON
Over Current	ON	BLINKING	OFF
Under Current	ON	ON	OFF
Phase Loss	ON	BLINKING	BLINKING
Locked Current	ON	BLINKING	ON
Overload	ON	ON	ON

**Output Specifications**

Control Output	1 NO Relay
Relay Rating	30A@277V AC

**Auxiliary Supply Specifications**

Operating Voltage Range	180 to 300V AC (L - N)
Power Consumption	40VA (max)
Frequency	50 - 60Hz

**Environmental Specifications**

Temperature	Operating Temperature : 0°C to 55°C Storage Temperature : -20°C to +70°C
Humidity (non Condensing)	Up to 95% RH

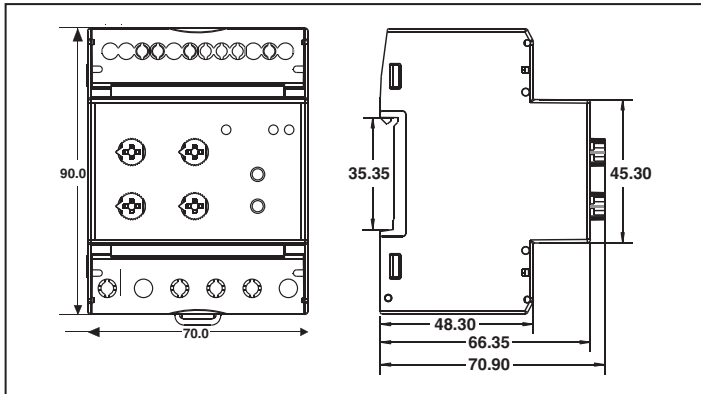
**Input Specifications**

<b>Measuring Range</b>	
A) Motor Rated Current Measuring	1A to 30A
B) Voltage Measuring Range	180 to 300V AC (L - N)
<b>Time Setting</b>	
Power ON Delay	1sec (Fixed)
Trip Time Delay (Current & Voltage parameters)	0, 2, 4, 6, 8 & 10 sec
Auto Reset Time (Current & Voltage parameters)	15min
Phase Loss Trip Time	Instantaneous (<120ms)
Auto Restart Attempts	3 (Fixed)
Restart Attempt Time Frame	Over an interval of 60 min
<b>Hysteresis</b>	
Voltage	Fixed (6V) (Not applicable for current parameters)

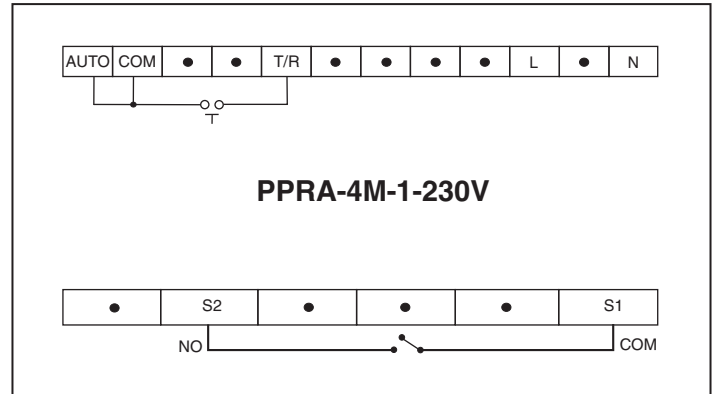
**Mechanical Specifications**

Mounting	DIN Rail Mount
Wire Size (max)	4 sq.mm
Size	66.50 x 70 x 90 (H x W x L)
Screw tightening torque	0.5 N-M
Weight	190gms approx

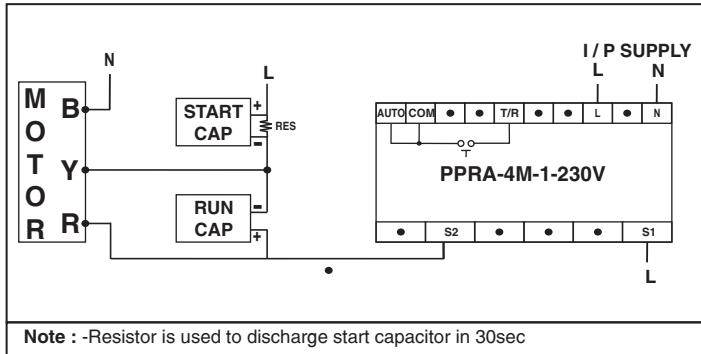
### Dimensions (All are in mm)



### Terminal Connections



### Connection Diagram



**Note :** -Resistor is used to discharge start capacitor in 30sec

Recommended resistor value as per different motor rating

Start Capacitor Value	Resistor Value
Upto 200uF/300VAC	100kOhm/2W

(Minimum 30sec delay required between two consecutive starts.)

### Ordering Information

Product Code	Supply Voltage	Certification
PPRA-4M-1-230V	180 to 300V AC (L - N)	---