PPRD-4M-3-415V

Pump Protection Relay

DIN 70mm

Features :

- 3Ø - 3 Wire Input
- Monitors Over Load (As per NEMA Curve), Over Current, Dry Run/Under Current, Locked Current, Current Asymmetry
- Phase Sequence, Phase Failure, Over Voltage, Under Voltage, Voltage Asymmetry
- LED Indication : Power ON, Trip Relay
- Test & Reset Function Via Front / Remote
- Start & Stop Function by Push Button

Display Specifications

Display	3 Digits, 7 Segment LED Display
No of LED	2 LED1 (Red): Relay (Continuously ON after trip) LED2 (Green): Pump(ON when Pump ON)
No of Keys	1- Set 2- Up / Test 3- Down / Reset

LED Indication Chart

Conditions	Trip LED (Red)	Pump LED (Green)
Healthy	OFF	OFF
Healthy & Motor ON	OFF	ON
Fault Present	ON	OFF

Input Specifications

Measuring Range	
A) Motor Rated Current Measuring	3A to 80A - External CT (MPCT) for R, Y, B phase measurement - (3A - 10A) for 10A CT - (11A - 40A) for 40A CT - (24A - 80A) for 80A CT
B) Voltage Measuring Range	280V AC to 500V AC (L - L)
Time Setting	
Power ON Delay	1sec (Fixed)
Trip Time Delay (Current & Voltage parameters)	0 - 999sec
Recovery Time (Current & Voltage Parameters)	1 - 999sec
Phase Loss	Instantaneous (<240ms)
Phase Reversal	Instantaneous (<240ms)
Reset Attempt Time Frame	1 - 999mins for current & voltage parameters
Reset Attempts	3 (fixed)
Hysteresis	
Voltage	0 - 10V
Accuracy	
Current Accuracy	±5% of rated current ±1 digit
Voltage Accuracy	±1% of 500V ±1 digit
Time Accuracy	±5% ±100msec

Functional Specification

Over Load	NEMA class 5, 10, 15, 20, 30
Over Current Ranges	For 10A CT : (Ir + 1) A to 60A For 40A CT : (Ir + 1) A to 240A For 80A CT : (Ir + 1) A to 480A
Under Current	For 10A CT : 1A to (Ir - 1)A For 40A CT : 5A to (Ir - 1)A For 80A CT : 10A to (Ir - 1)A
Current Asymmetry	[1A to Ir-1]
Locked Current / Stall Current	For 10A CT : (Ir + 1)A to 60A For 40A CT : (Ir + 1)A to 240A For 80A CT : (Ir + 1)A to 480A
Over Voltage	280V - 500V (L - L)
Under Voltage	280V - 500V (L - L)
Voltage Asymmetry	10V to 50V

Output Specifications

Control Output Relay Rating	1 C/O (SPDT) NO 5A@250V AC / 28VDC NC 3A@250V AC / 28VDC

Auxiliary Supply Specifications

Operating Voltage Range	280 - 500V AC (L - L)
Power Consumption	40VA
Frequency	50 - 60Hz

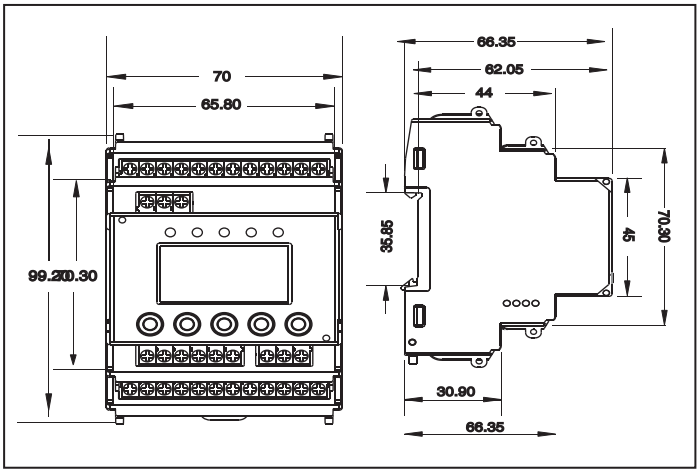
Environmental Specifications

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

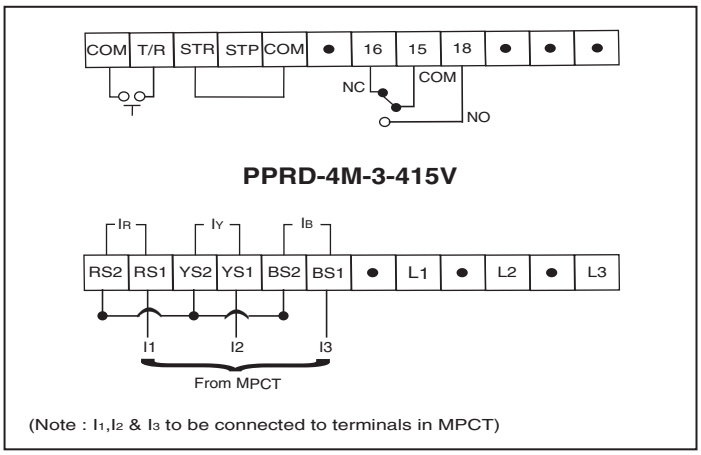
Mechanical Specifications

Mounting	DIN Rail Mount
Size	66.50 x 70 x 90 (H x W x L)
Wire Size (max)	4 sq.mm
Screw tightening torque	0.5 N-M
Weight	220gm apporox

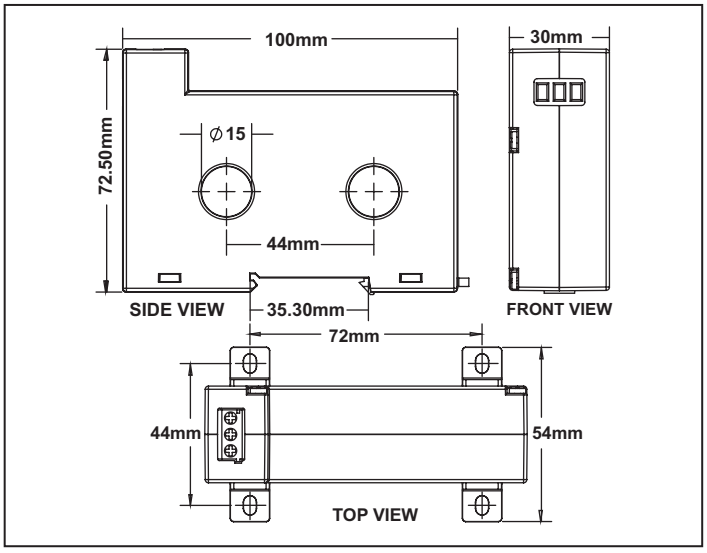
Dimensions (All are in mm)



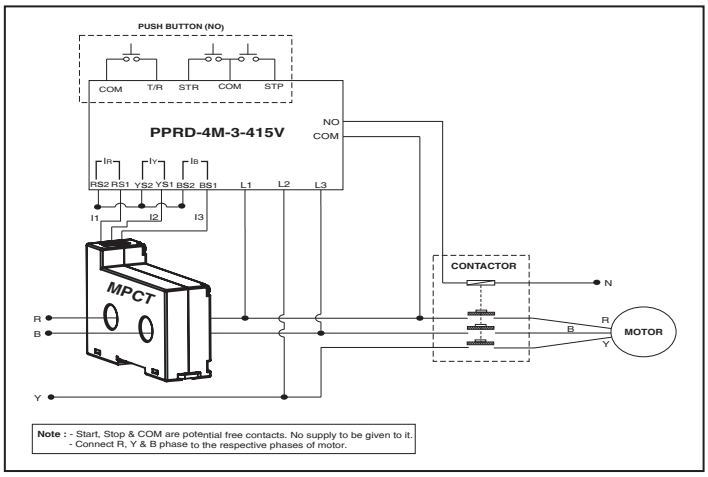
Terminal Connections



CT Dimensions



Connection Diagram



Ordering Information

Product Code	Supply Voltage	Certification
PPRD-4M-3-415V	415V	---

Accesories

Product Code	Input Current	Certification
MPCT D15 10 A	10 A	---
MPCT D15 40 A	40 A	---
MPCT D15 80 A	80 A	---