Pump Protection Relay

PPRD-4M-3-415V



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

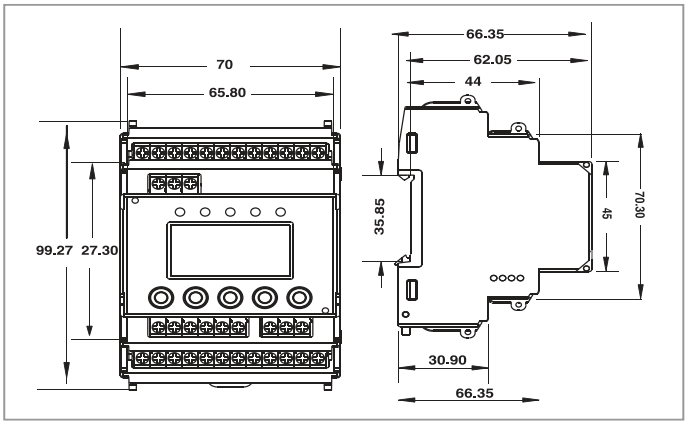
Certifications : CE

Technical specifications

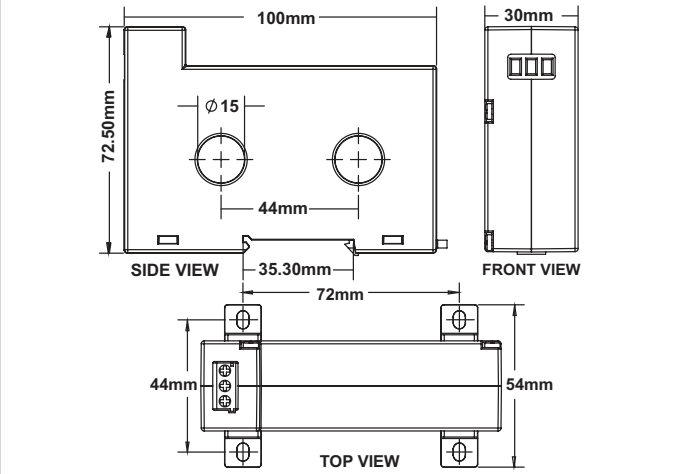
Display specifications		
Display	3 Digits, 7 Segment LED display	
No of LED	2 - LED1 (Red): Relay (Continuously ON after trip), LED2 (Green): Pump(ON when pump ON)	
No of keys	1- Set, 2- Up / Test, 3- Down / Reset	
LED Indication chart		
Conditions	**Trip LED (Red)**	**Pump LED (Green)**
Healthy	OFF	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	Auto / Manual / Remote	
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)	
Current asymmetry	280V - 500V (L - L)	
Voltage asymmetry	10V to 50V	

Output specifications	
Control output	1 C/O (SPDT)
Relay rating	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	
Operating temperature	0 to 55°C
Storage temperature	-20 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

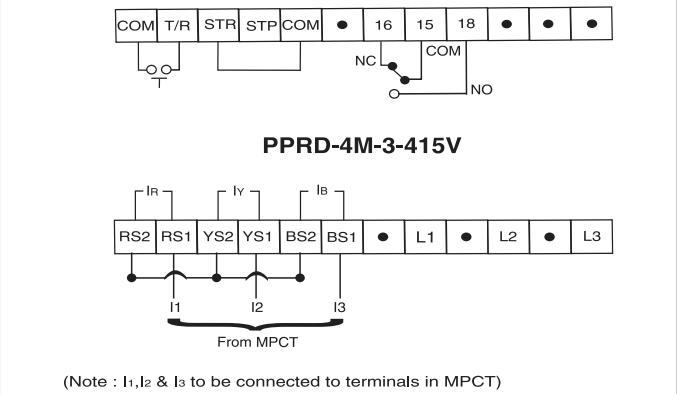
Dimensions (All are in mm)



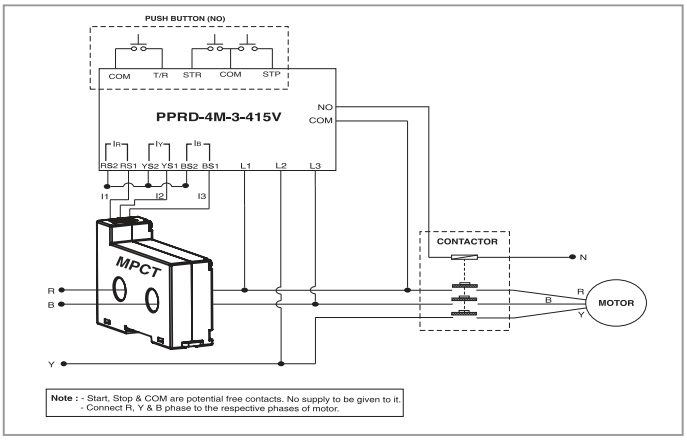
CT Dimensions



Terminal Connections



Connection Diagram



Accesories

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

Ordering Information

Product code	Supply voltage	Certification
PPRD-4M-3-415V	415V	---