



DIN 70mm

**Features :**

- 1Ø - 2 wire input
- Automatic start & stop as per water level detection (Float switch)
- Monitors Dry/Under Current, Over Current, Locked Current, Over Voltage, Under Voltage, Phase Failure and Overload
- LED indication : Power ON, Trip relay
- Test & Reset function via key & terminal
- Direct Current measurement upto 32A
- Capacitor cut off feature

**Display Specifications**

|            |  |
|------------|--|
| Display    | 3 Digits, 7 Segment LED display  |
| No of LED  | 2<br>LED 1- Red LED for relay status indication<br>LED 2- Green LED for pump status indication |
| No of keys | 3<br>1- Set<br>2- Up / Test<br>3- Down / Reset   |

**Output Specifications**

|                |             |
|----------------|-------------|
| Control output | 2 NO relay  |
| Relay rating   | 30A@277V AC |

**Auxilliary Supply Specifications**

|                         |                        |
|-------------------------|------------------------|
| Operating voltage range | 180 to 300V AC (L - N) |
| Power consumption       | 40VA                   |
| Frequency               | 50 - 60Hz              |

**LED Indication Chart**

| Condition          | Trip LED (Red) | 'PUMP' LED (Green) |
|--------------------|----------------|--------------------|
| Healthy            | OFF            | OFF                |
| Healthy & motor ON | OFF            | ON                 |
| Fault present      | ON             | OFF                |

**Environmental Specifications**

|                           |   |
|---------------------------|---|
| Temperature               | Operating temperature : 0°C to 55°C<br>Storage temperature : -20°C to +70°C |
| Humidity (non-condensing) | Upto 95% RH   |

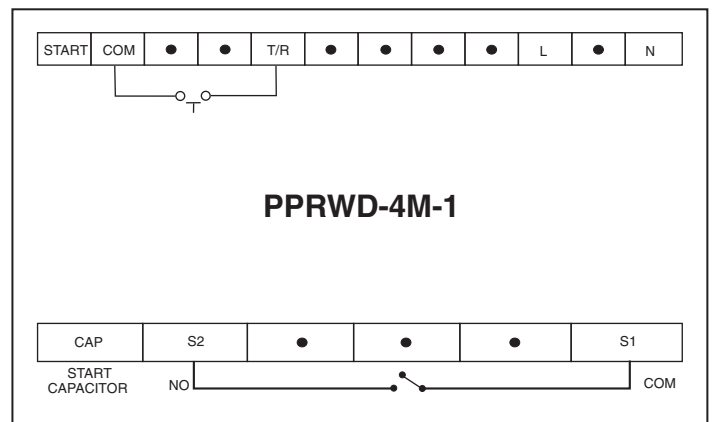
**Input Specifications**

|  |  |
|--|--|
| <b>Measuring range</b>                         |  |
| A) Motor Rated Current                         | 1A to 30A                                    |
| B) Voltage measuring range                     | 180 to 300V AC (L - N)                       |
| <b>Time settings</b>                           |  |
| Power ON delay                                 | 1sec (Fixed)                                 |
| Trip time delay (Current & Voltage parameters) | 0 - 999sec                                   |
| Recovery time (Current & Voltage parameters)   | 1 - 999sec                                   |
| Reset attempts                                 | 3 (fixed)                                    |
| Reset Attempt Time Frame                       | 1 - 999 mins                                 |
| <b>Hysteresis</b>                              |  |
| Voltage  | 0 - 10V (NA for current parameters)          |
| <b>Accuracy</b>                                |  |
| Current accuracy                               | ±5% of rated current ±1 digit                |
| Voltage accuracy                               | ±1% of 300V ±1 digit                         |
| Time accuracy                                  | ±5% ±100msec                                 |
| <b>Functional specification</b>                |  |
| Over load                                      | NEMA class curve 5, 10, 15, 20, 30           |
| Over current ranges                            | [I <sub>r</sub> (Rated current) + 1 to 32A]  |
| Under current                                  | [0.2A to I <sub>r</sub> (Rated current) - 1] |
| Locked current / Stall current                 | [I <sub>r</sub> (Rated current) + 1 to 32A]  |
| Over voltage                                   | 180 - 300V AC (L - N)                        |
| Under voltage                                  | 180 - 300V AC (L - N)                        |

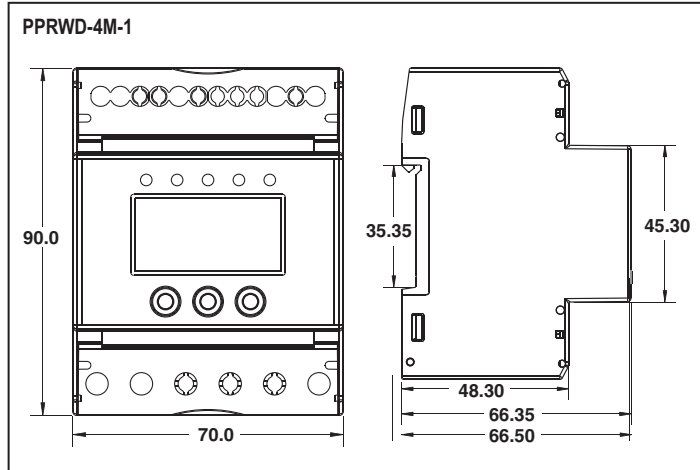
**Mechanical Specifications**

|                         |                               |
|-------------------------|-------------------------------|
| Mounting                | DIN rail mount                |
| Wire size (max)         | 4sq.mm                        |
| Size                    | 66.50 x 70 x 90 x (H x W x L) |
| Screw tightening torque | 0.5 NM                        |
| Weight                  | 224 g approx                  |

**Terminal Connections**



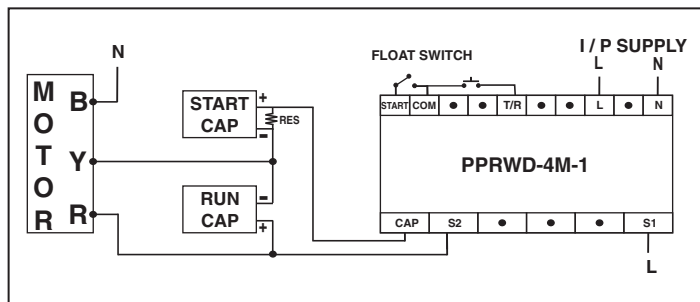
Dimensions (All are in mm)



Ordering Information

| Product code | Supply voltage         | Certification |
|--------------|------------------------|---------------|
| PPRWD-4M-1   | 180 to 300V AC (L - N) | ---           |

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.)