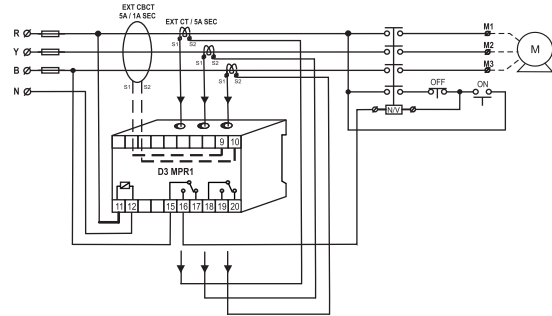


# TECHNICAL DATA SHEET FOR D3 MPR1

## MICRO CONTROLLER BASED MOTOR PROTECTION RELAY

**minilec®**



It is micro-controller based motor protection relay. It uses state of the art digital technology to measure various parameter of the motor and take corresponding corrective actions. The system consists of hardware design to provide high degree of accuracy and reliability. The micro-controller based protection ensures high accuracy and disturbance free operation.

Packing of your D5 MPR1 will include following -

1. D5 MPR1 unit.
2. Installation manual.

### FUNCTIONS:

| SR.NO. | PROTECTIONS            | SR.NO. | FEATURES                                             |
|--------|------------------------|--------|------------------------------------------------------|
| 1.     | Over load              | 1.     | Password Protection                                  |
| 2.     | Current Unbalance      | 2.     | Full load Current settable                           |
| 3.     | Current Single Phasing | 3.     | Ext. CT selectable                                   |
| 4.     | Phase reverse          | 4.     | IDMTL curve selection                                |
| 5.     | Lock Rotor             | 5.     | 2 CO potential free contact outputs                  |
| 6.     | Under Current          | 6.     | Reverse Phase Protection with bypass facility        |
|        |                        | 7.     | LED indication for power on & trip                   |
|        |                        | 8.     | Status mode showing load current                     |
|        |                        | 9.     | Parameter setting through LCD & key board            |
|        |                        | 10.    | Operation on wide range auxiliary supply             |
|        |                        | 11.    | Default factory setting or site selectable Parameter |
|        |                        | 12.    | Fault logging of last 1                              |

### TECHNICAL SPECIFICATION:

- 1)SYSTEM SUPPLY:380-440 VAC 20%,45-55 HZ±
- 2)AUXILIARY SUPPLY:90-270 VAC/DC,415 VAC
- 3)INTER CTF OR D3 MPR1 :-5 Amp OR 20Amp. OR 50Amp
- 4)OUTPUT CONTACTS: 2 CO

### 5)TRIP SETTING

| Sr. No. | Parameters             | Range                   | Resolution | Fact Setting | Trip Delay Range                | Fact Setting | Bypass Facility          | Reset Time  |
|---------|------------------------|-------------------------|------------|--------------|---------------------------------|--------------|--------------------------|-------------|
| 1       | * Ext. CT              | 50-600                  | 5 Amp      | 100 Amp      | NA                              | NA           | NA                       | NA          |
| 2       | ** Set current (FLC)   | 20 to 100% of FLA       | 1 Amp      | 100 Amp      | NA                              | NA           | NA                       | NA          |
| 3       | Over load              | Above 115% of set value | NA         | NA           | IDMTL class 2,5,10,15,20,30 sec | 2 sec        | Yes                      | Auto/Manual |
| 4       | Start up delay         | 0-60 sec.               | 1 sec.     | 10 sec.      | NA                              | NA           | NA                       | NA          |
| 5       | Under current          | 30-90%                  | 5%         | 50%          | 1-60 sec                        | 5 sec        | Yes                      | Auto/Manual |
| 6       | Over current           | 110-350%                | 5%         | 200%         | 1-10 sec                        | 2 sec        | Yes                      | Auto/Manual |
| 7       | Current unbalance      | 20-60%                  | 5%         | 50%          | 4 sec fixed (+/- 1 sec)         | 4 sec        | Yes (Password Protected) | Auto/Manual |
| 8       | Current single phasing | Yes                     | NA         | NA           | 4 sec fixed (+/- 1 sec)         | 4 sec        | Yes                      | Auto/Manual |
| 9       | Reverse phase          | Yes                     | NA         | NA           | Instant(< 2sec)                 | NA           | Yes                      | Auto/Manual |
| 10      | Rotor lock             | 200-800%                | 50%        | 700%         | Instant(< 2sec)                 | NA           | Yes                      | Auto/Manual |
| 11      | Earth fault (optional) | 10-100%                 | 10%        | 30%          | 0.5-10 sec                      | 0.5 sec      | Yes                      | Auto/Manual |

6)FAULT MEMORY):last 10 faults

7)RESETTING MODE:AUTO/MANUAL

8)DISPLAY:- 8 X 2 AN LCD

9)WEIGHT : 400 gms (APPROX)

10)DIMENSION (mm) : OVER ALL (L X W X D)100 X 73 X 113  
MOUNTING (L X W )35 mm DIN RAIL

### Suitable for panels following applications:

Heavy duty motors  
Crane motors  
Screw compressors  
AHU fan motors  
Ht motors  
Pump protection  
Pump house automation

### Our Other Products

Alarm Annunciator, Motor/Pump Protection Relays, EOGR,  
Phase Failure Relay + UV / OV Relays, Voltage/Current/ Frequency/Reverse Power Monitoring Relays,  
Earth Fault/ Leakage Relays, Pump Automation Management system & Controllers, Water Level Controller,  
Electronic Timers, Power Line Transducers (V/I/KW/Multi-function/DC-DC Isolators or Barrier/Temp/Resistance/Tap position etc.),  
Multi-function Meter, Twin Window/Split AC Controller, Bearing temp Monitoring relays(PT-100)