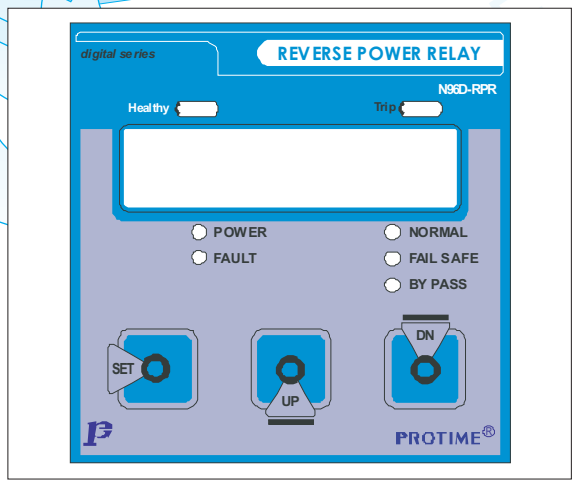
PROTIME



N96 Digital Relays

N96D - RPR

Special Features

- Designed using latest Micro-controller
- Alphanumeric LCD display with keypad for easy of operation
- Monitors Current, Voltage & Phase
- LED indication for power ON, Fault, Normal, Failsafe, By pass, Healthy, Trip status
- Flexibility of Setting MTA
- Auto/Manual modes of Operation
- Wide Power supply range from 90V to 270V AC/DC

Technical Data

1) Auxiliary supply: -	230 V AC
2) Display	16 Characters x 2 Rows LCD
3) Indications: -	Power ON / Healthy / Fault / Trip / Normal / Fail safe / Bypass
4) Input current	CT 20A
5) Input Voltage	P/N (230 V AC)
6) Mode	Normal / Fail safe / By pass / Test Normal: - Relay energized after fault occur Fail safe: -Relay De-energized after fault occur
7) Reset	Auto / Manual
8) Current setting	2 to 20 %
9)MTA Setting	10 to 355 Deg.
10)Trip time	0.1-10 Sec
11)Pickup time	0.1-10 Sec
12)Led's	Healthy Auxiliary supply ON Fault: - To indicate fault condition Trip: - Relay energized condition after trip time delay
13) Switching duty	6A resistive at 24V DC or 240 V AC
14) Mounting	Door (Flush)96mm X 96mm
15) Panel Cutout	92mm (L) X 92mm (H) Depth 70mm

OPERATION:

The Reverse Power relay is used to monitor direction of flow of power in the system . It measures TRMS Current & Voltage of the system ,and phase Angle.Thus using this parameters it analyses the direction of power flow in the system.

Protime's RPR has two parameters to set, which decides the limit of Reverse Power in system. That is MTA (maximum torque Angle) & reverse current limit . When power flow in reverse direction the current increases if current goes beyond set limit relay will trip after pre-defined tripping time delay. The relay has also provision of phase angle compensation. In reverse power flow direction phase angle increases between Voltage & current, if phase angle increases beyond MTA setting, relay will trip. RPR can be configured in four modes, i.e Normal , Fail safe ,By pass & Test modes.

Normal mode: When fault occurs fault led shall glow. After Pre-defined time delay relay energises with trip led glowing.

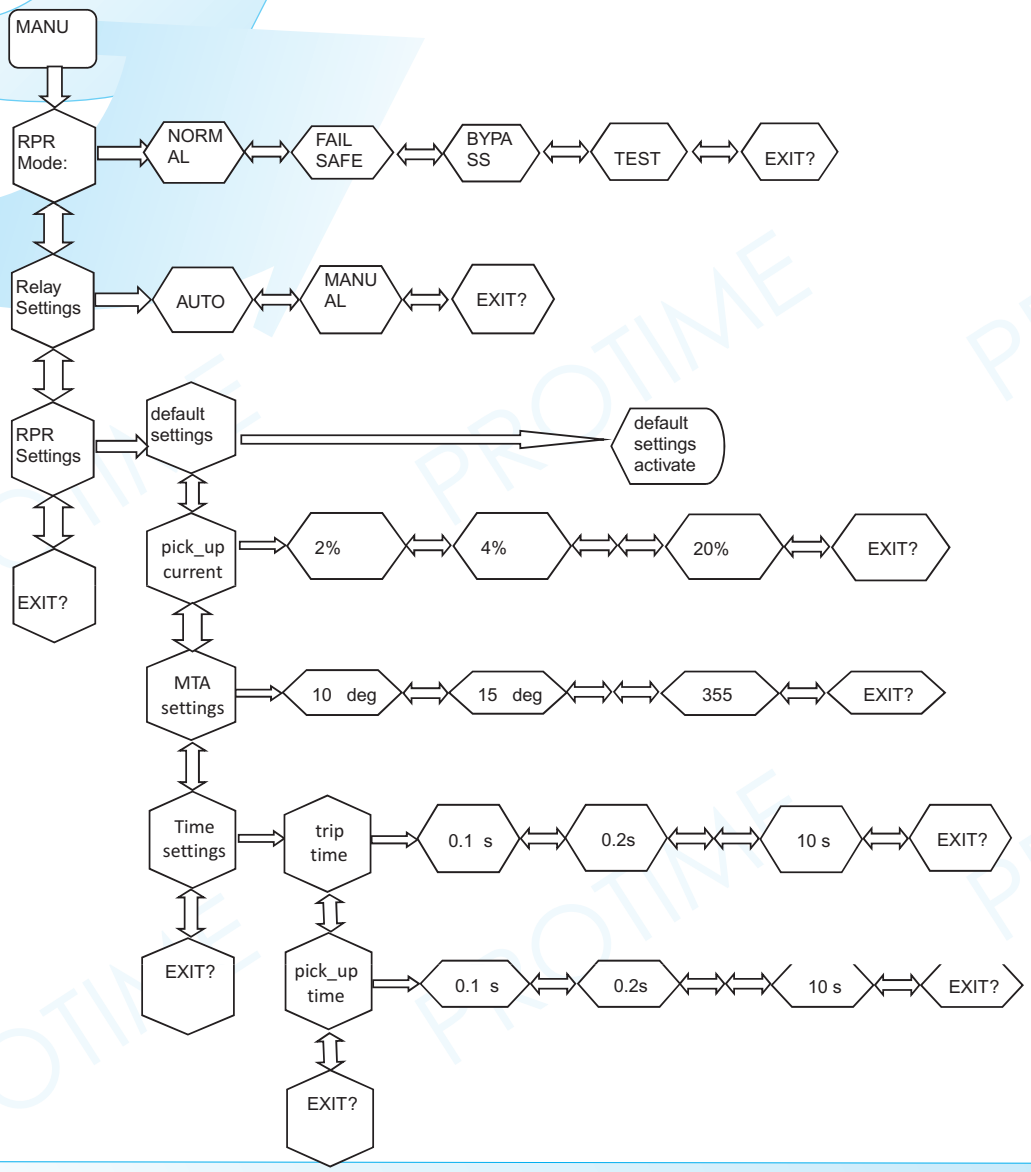
Fail Safe mode: In this mode relay remains energised in normal condition & de-energises after the trip delay, when fault occurs.

By pass mode: Relay shall not trip in fault stage.

Test Mode: It is mode to simulate fault condition at the time of installation or maintenance.

In Manual RESET mode fault led & relay remains in trip condition until user Resets the relay.

To go in to program press SET key. The Program flow chart is as follows-



Connection Details