

PROTIME®



## N96 Digital Relays

**N96D-FR**

### Special Features

- Programmable Digital Power Protection Relays with LCD displays
- Wide Time delay ranges with precise settings
- Designed using latest 12 bit Micro controllers
- True RMS Measurement
- 2 selectable tripping ranges with user programmable Under &/or Over Frequency tripping
- RS 232/485 output-(Optional)
- 0-5V Analog output-(Optional)
- Wide power supply range from 90-270V AC/DC

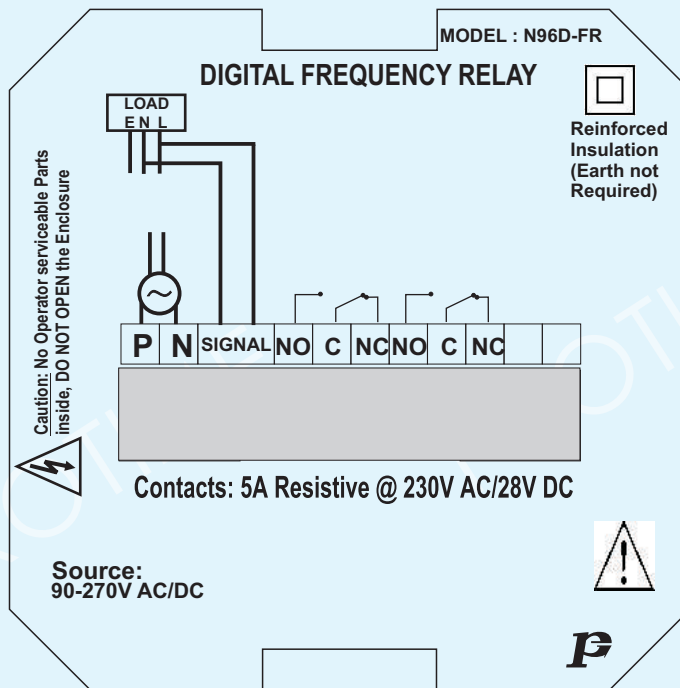
### Technical Data

- |                        |  |
|------------------------|--|
| 1) Supply Voltage      | - 90-270V AC/DC  |
| 2) Output Contacts     | - Two change over (potential free)   |
| 3) Switching duty      | - 6A resistive at 250V AC or 24V DC  |
| 4) Electrical Life     | - 10 <sup>5</sup> operation at designed switching duty                                       |
| 5) Relay Status        | - Normal - De-energised in normal conditions<br>Fail Safe - De-energised in fault conditions |
| 6) Signal              | - 240V AC, 415V AC (2 wire)  |
| 7) Range               | - UF = 30-49%<br>- OF = 52-60%   |
| 8) Time Delays         | - Trip 0 - 10 Sec in steps of 100ms  |
| 9) Mode of operation   | - Under &/or Over Frequency  |
| 10) Reset              | - User selectable Auto/Manual Reset  |
| 11) Mounting           | - Panel Mounting (Flush) CUTOUT=92 X 92mm  |
| 12) Approximate Weight | - 200gm  |
| 13) Dimension          | - 96mm(W) X 96(H) X 80mm(D)  |

## OPERATION

The **N96-Digital Frequency** relay monitors the Frequency of the circuit continuously . When it goes out of the range selected , the relay status will change .The relay checks for its healthiness first & then starts monitoring voltage signal. The relays are provided with time delays .Digital FR has a facility for user to program AUTO/MANUAL RESET and NORMAL/FAIL SAFE TRIPPING of relays. Also it has connectivity of RS232/485 as an additional option.User can program the relay for Under , or Over Frequency or both combined protections.

## Connection Details



## HOW TO ORDER ?

Ordering Pattern (example)- **N96D-FR-A**

N96D-VR

A

Code

**N96D-FR1** = for 1-Ph.

AC Voltage

**N96D-FR2** = for 2-Ph.

AC Voltage

**Tripping Range**

UV-70-95%

OV- 105-120%