

Safety precaution to be strictly observed are marked with following symbols in the operating instructions.



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### 1. PLEASE READ FIRST

To operate the unit correctly, it is important that the operating instructions are read carefully. In addition, it is equally critical that the safety warnings are understood and followed completely.

6. Mounting
  7. Electrical connections
  11. Commissioning
- Handling of the unit should be strictly restricted to persons trained and who are familiar in working in electrical installations.

### 2. SCOPE OF SUPPLY

Type PCWT 002-D  
Direction of use

### 3. POWER SUPPLY

Connect 220VAC AC external power supply on terminals 17 & 18.

### 4. BRIEF DESCRIPTION

A speed monitoring unit is set to match different motor speeds ranging between .06-240,000 RPM. setting of the trip speed R.P.M. through programming key.

### 5. APPLICATION :

The unit is used to monitor overspeed, underspeed and zero speed in field on shafts,

## 6. OPERATION :

Input Setting	Condition	Output	Note
Over Speed 1) Ref. - Set Relay - E (Energizes)	if I/P frequency < Ref. Frequency if I/P frequency > Ref. Frequency	E D	in itd speed 0
Over speed Ref. - Set Relay - D (de-Energizes)	if I/P frequency < Ref. Frequency if I/P frequency > Ref. Frequency	D E	
Under speed Ref. - Set Relay - E	if I/P frequency < Ref. Frequency if I/P frequency > Ref. Frequency	D E	if in case of under speed itd must be set
Under speed Ref. - Set Relay - D	if I/P frequency < Ref. Frequency if I/P frequency > Ref. Frequency	E D	

#### 1) Reference frequency- $rEF$

Frequency Set	
Min. frequency	.001 Hz
Max. frequency	4000 Hz

#### 3) Time Delay ITD - $ItD$

ITD (Initial Time Delay)	
Min.	0 sec.
Max.	9999 sec.

#### 4) Time Delay NTD - $nTD$

NTD (New Sense Time Delay)	
Min.	0 sec.
Max.	9999 sec.

#### 5) Relay energised / de- energised - $rE$

S1 S2 S3

Mode set/ Store Digit Increment Digit Shift Relay LED

Mode Set / Store S1

1) Input Frequency  $rEF$  set Reference frq.  
2) Speed  $o0r5$  set over speed  
 $u0d5$  set under speed  
3) Relay status  $rE$  set Relay de-energised  
 $rE$  set Relay energised  
 $ItD$  set initial time delay on under speed  
 $nTD$  set new sense time delay on over speed  
4) Time delay  $rTD$  set relay time delay  
5) Save  $o5nR$  stored OK

16 17 18

Power Supply

15 14 13

Relay-II

12 11 10

Relay-I

9 8 7

PNP Sensor

7. ELECTRIC CONNECTIONS



Make sure the cables are not live when making the connection.

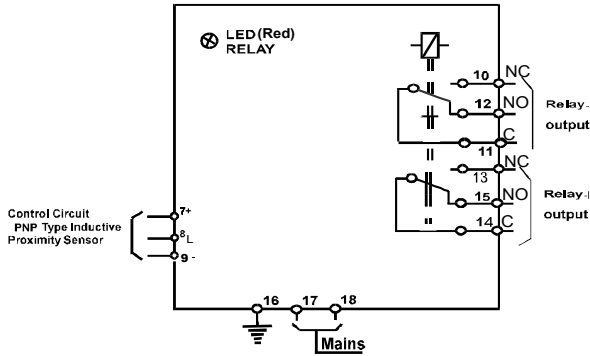


Fig. 2

INPUT

Connect the proximity switch at terminals 7(+)Brown, 9(-)Blue, 8(L) Black. As shown in the figure above

OUTPUT

Relay outputs with changeover contacts rated for 6A at 250V AC, 50Hz.

8. RELEASING THE UNIT

Release the unit from a screw driver shown in Fig. 3.

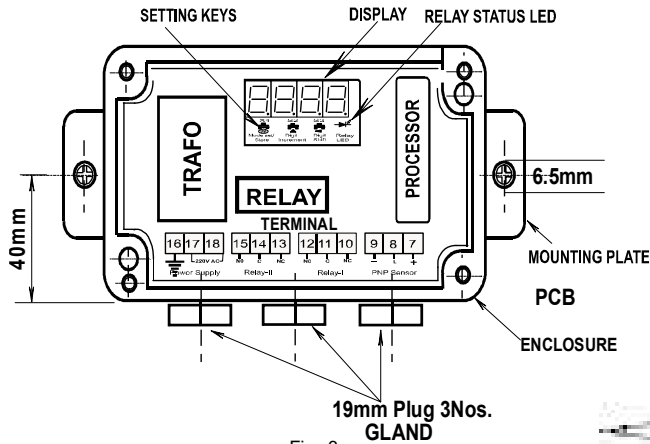


Fig. 3.

9. COMMISSIONING

Kindly read the undermentioned instructor carefully prior to commissioning.

Do not connect any external power supply to terminals other than to 17, 18.

Do not connect input other than terminals 7(+), 8(L) & 9(-)

10. MAINTENANCE

This unit requires no maintenance.



Fig. 5.

The unit can be open while equally pressing both side of the unit.

11. DIMENSIONS

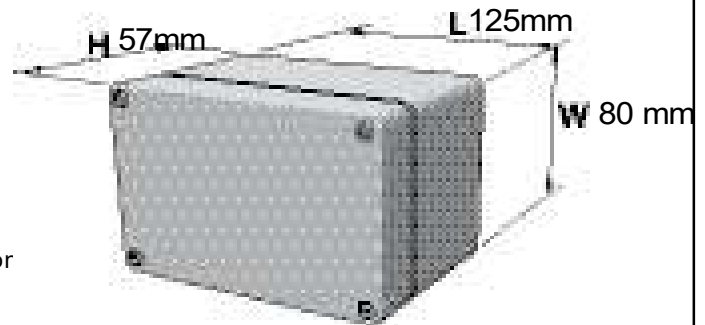


Fig. 5a.