## **TECHNICAL DATA SHEET FOR VPG D1**



**VPG D1** is phase failure relay operating on negative sequence voltage sensing principle and also have a built in water level guard(for single level) operating on electrical conductivity principle.

**VPG D1** offers protection against

- \* Unbalanced voltage condition.
- \* Phase failure condition.
- \* Phase sequence reversal condition.
- \* Dry running condition for submercible pumps.

## **INPUT SENSOR**

VPG D1 is to be used with MINILEC sensor prod only. The sensor prod is of stainless steel material (For specific & typical application you may use a sensor prod of suitable electrically conductive material in case MINILEC sensor prod does not suit your requirement). Consult MINILEC before using modified sensor prod. The MINILEC sensor prod has bolting arrangement for connecting a suitable cable & it is suspended from top opening of the bore Well.

## TECHNICAL SPECIFICATIONS OF VPG D1

1. Voltage

System Supply: 415 VAC±20%, 50Hz±3%

**2. Frequency**: 50 Hz±3%

3. Power Consumption  $\mbox{3 VA Max}.$ 

**4. Output Relay Contacts**: 1 Changeover

**5. Output Contact Rating:** 5 A, 240 VAC (Resistive)

6. Trip settings : Phase to phase Unbalance :

40V±6V (Fixed) **Dry Running** 'As Per Sensor Prod

Positioning As Per Sensor Prod

7. Trip Time Delay For Unbalance & Dry Running: 3.5sec.±1.5 sec.

8. Resetting: Auto Reset

9. Unbalance Reset Gap 10 - 18 V

10. Enclosure: ABS

11. Dimensions (mm):

Overall: 76 x 30.5 x 117.5

Mounting: 68 [Center To Center]

12. Mounting:

Panel Mounting And 35 mm Rail Mounting

13. Weight (gms):300

14. Level Sensor:

a) Quantity 1 No.Stainless Steel Prod b) Dimensions (mm) Ref. Fig.3

c) Weight (gms.) 15

15. Operating Conditions:

Temperature :-  $-5^{\circ}$  C to  $60^{\circ}$ C Humidity :- Upto 95 % R.H.

16. Life Expectancy:

0.5 x 10 6 Operations At 100% Rating

17. Liquid Resistnce: 150 K. Ohms

## minilec



