



**VERITEK**

## LCD Voltage Relay



**VIPS-VFT-LD**

### TEST CERTIFICATE

Type : LCD Voltage Relay (VIPS-VFT LD)

Accuracy : Class 0.5%  
0.1% of FS for Hz

Accuracy Test :

VOLTAGE		FREQUENCY
10%	100%	100%
+/- 0.5%	+/- 0.5%	+/- 0.1%
OK	OK	OK

#### Note :

- A) For Digital Readouts the error is Computed in Counts.
- Class 1.0 = ± 1% of Full Scale ± 1 Count
- Class 0.5 = ± 0.5% of Full Scale ± 1 Count

Tested By : Mr. Devendra chaurasiya

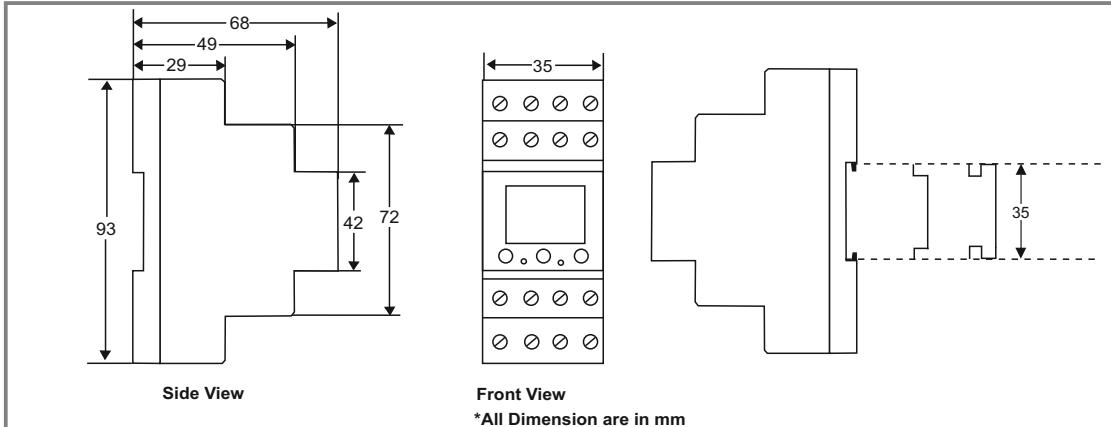
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### MECHANICAL DIMENSION



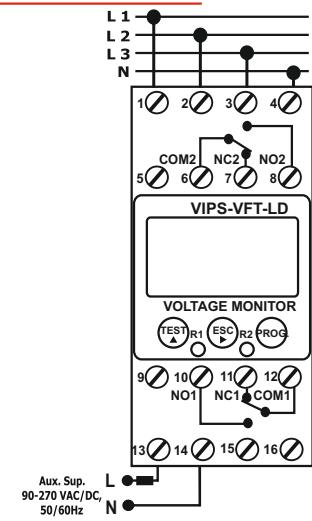
### FEATURES

- Autoranging voltage display
- User settable trip level and time delay
- Din rail mounting
- Password protection
- Two Relays Output
- Auto / Manual Reset
- Protection under voltage, over voltage, Under frequency, over frequency, phase loss phase reversal and voltage asymmetry

### PARAMETER DISPLAYED

- V L-N (Individual / Average), V L-L (Individual)
- Frequency
- Phase Asymmetry (L-L Individual)

### CONNECTION DETAILS



### SPECIFICATION

- |                  |  |
|------------------|--|
| System           | : 3P4W / 1P2W / 3P3W   |
| Aux. Supply      | : 90-270V AC/DC 50/60 Hz   |
| Burden on Supply | : < 3 VA   |
| Display          | : LCD (Displays Voltage (L-L/L-N), Frequency & Voltage Asymmetry)                      |
| Set Point        | : UV, OV, UF, OF, Hys, Voltage Asymmetry   |
| Accuracy         | : ± 0.5% of set point, ± 2 counts  |
| Relay Contacts   | : 2 Potential Free Contact (NO, C, NC), (Energise or De-Energise on trip programmable) |
| Contact Rating   | : 5 Amps / 230 VAC/ 28 VDC   |
| Temperature      | : Operating : - 10°C to 55°C<br>Storage : - 20°C to + 75°C                             |
| Humidity         | : < 95% RH (non condensing)  |
| Dimension        | : 93x35x68 mm (L x B x H)  |
| Mounting         | : Din Rail mounting  |
| Weight           | : 200 gms  |
| Operating Range  | : 160V-300V (3P4W & 1P2W); 280V- 520V (3P3W)   |

### CONFIGURATION MENU

Press (PROG) for programming mode password is 200 to enter or exit configuration menu

#### MAIN MENU

Network selection Press key go to Relay (RL 1) from network selection (NWK)

Over voltage	Set Over voltage	Under voltage	Set Under voltage	Over frequency
Set Over frequency	Under frequency	Set under frequency	Phase Asymmetry	Phase Asymmetry setting
Phase reverse	Phase loss	Relay Mode	Fault Reset	

Relay 1 settings

Time Settings for Relay 1	Trip Time Delay	Recovery time	Power on Delay		
Relay 2 Setting	Function	Over voltage	Set Over voltage	Under voltage	Set Under voltage
Over frequency	Set Over frequency	Under frequency	Set under frequency	Phase Asymmetry	Phase Asymmetry setting
Phase Asymmetry setting	Phase reverse	Phase loss	Relay Mode	Fault Reset	
Time Settings for Relay 2	Trip Time Delay	Recovery time			
Hysteresis	Voltage	Frequency	Asymmetry		
Password	Password Enable / Disable	Set Password			
Factory set	Factory set Yes/No				
Scrolling	OFF/ON				
Sub Menu					
Network selection(NWK)					
Press  to scroll through sub menu					
DISPLAY (for 1 sec)	DEFAULT VALUE	RANGE			
Network selection			3P4/1P2/3P3		

## Relay 1 (RL1) Settings

Press **PROG** to enter sub menu from menu  
Press **TEST** to scroll through sub menu

DISPLAY (for 1 sec)	DEFAULT VALUE	RANGE
Over voltage		<b>ON/OFF</b> This option will be prompted only when OV option is made ON
Set Over voltage		282-520V(Default:498) 3P3W System 162-300V(Default:288) 3P4W System
Under voltage		<b>ON/OFF</b> This option will be prompted only when UV option is made ON
Set Under voltage		280-518V(Default:332) 3P3W System 160-298V(Default:192) 3P4W System
Over frequency		<b>ON/OFF</b> This option will be prompted only when OF option is made ON
Set Over frequency		47.0-65.0Hz
Under frequency		<b>ON/OFF</b> This option will be prompted only when UF option is made ON
Set under frequency		45.0-63.0Hz
Asymmetry		<b>ON/OFF</b> This option will be prompted only when AS option is made ON
Phase Asymmetry setting		5.0-50%
Phase reverse		<b>ON/OFF</b>
Phase Failure		<b>ON/OFF</b>
Relay Mode		<b>ON/OFF</b> ON: Relay Energised at Power ON OFF: Relay De-energised at Power ON
Reset		<b>MAN/AUT</b> Fault Reset Manual / Auto

## Time Setting for Relay 1 (TM1)

Press **PROG** to enter sub menu from menu  
Press **TEST** to scroll through sub menu

Trip time Delay			0.0-99.9s
Recovery Time			0.0-99.9s
Power ON delay			0.0-99.9s

## Relay 2 (RL2)

Press **PROG** to enter sub menu from menu  
Press **TEST** to scroll through sub menu

Relay		<b>PRE/RL1</b> If RL 1 is selected, all the settings same as RL 1 & TM1 -will be automatically set for RL2 and no other parameter of RL 2 & TM 2 will be prompted
Over voltage		<b>ON/OFF</b> This option will be prompted only when OV option is made ON
Set Over voltage		282-520V(Default:498) 3P3W System 162-300V(Default:288) 3P4W System
Under voltage		<b>ON/OFF</b> This option will be prompted only when UV option is made ON
Set Under voltage		280-518V(Default:332) 3P3W System 160-298V(Default:192) 3P4W System
Over frequency		<b>ON/OFF</b> This option will be prompted only when OF option is made ON
Set Over frequency		47.0-65.0Hz
Under frequency		<b>ON/OFF</b> This option will be prompted only when UF option is made ON
Set under frequency		45.0-63.0Hz
Asymmetry		<b>ON/OFF</b> This option will be prompted only when AS option is made ON

## Phase Asymmetry setting

Press **TEST** to scroll through sub menu

<b>SAS</b>		5.0-50%
Phase reverse		<b>ON/OFF</b>
Phase Failure		<b>ON/OFF</b>
Power on Delay		<b>ON/OFF</b> ON: Relay Energised at Power ON OFF: Relay De-energised at Power ON
Reset		Manual / Auto

## Factory set (RST)

Press **PROG** to enter sub menu from menu  
Press **TEST** to scroll through sub menu

Factory Reset			<b>SURE</b> Factory Reset
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## Scrolling (SCR)

Press **PROG** to enter sub menu from menu  
Press **TEST** to scroll through sub menu

<b>SCR</b>		ON/OFF
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PARAMETER	SYMBOL
Average Voltage	L1 L2 L3
Voltage (L1-phase)	L1
Voltage (L2-phase)	L2
Voltage (L3-phase)	L3
Voltage (L1-L2 phase)	L1 L2
Voltage (L2-L3 phase)	L2 L3
Voltage (L1-L3 phase)	L1 L3
Frequency	Hz
Voltage Asymmetry (L1-L2 phase)	L1 L2 As%
Voltage Asymmetry (L2-L3 phase)	L2 L3 As%
Voltage Asymmetry (L3-L1 phase)	L1 L3 As%

## SAFETY PRECAUTIONS :

All safety related codifications, symbols and instructions that appear in this operating manual or on the equipment must be strictly followed to ensure the safety of the operating personnel as well as the instrument.

If the equipment is not used in a manner specified by the manufacturer it might impair the protection provided by the equipment.

If there is physical damage to the unit then do not use it.

Read complete instruction prior to installation and operation of the unit.

## WIRING GUIDELINES :

### Warning

1) To Prevent the risk of electric shock power supply to the equipment must be kept OFF while doing the wiring arrangement.

2) Wiring shall be done strictly according to the terminal layout with shortest connection. Conform that all connection are correct.

### CAUTION :



1) To ensure the safe operation of unit, check the wiring and connections.

The Documents are subject to change without notice.

**NOTE:** PWD option will be asked when the user enter the con?g. Menu if PWD option is enabled in the con?g. Menu and the user has to enter the password which he has set the S.PWD (Set password) option.