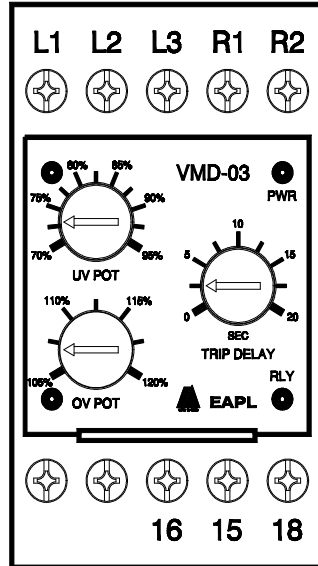




**OPERATING INSTRUCTIONS**  
**Model : VMD-03**

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Front Panel Layout :



Terminal Details:

L1, L2, L3: R, Y, B Lines  
of a 3 phase supply.

15, 16, 18: C, NC, NO

R1, R2 : Auto/Manual Restart

VMD-03 is an Under voltage and Over Voltage monitoring Device for 3 phase Power Supply system. The unit monitors the supply voltage and cuts off the supply if mains voltage exceeds or drops beyond the preset limit.

The unit is also provided with variable delay facility for the output relay to trip after the fault occurs.

Features:

**Indication:** The 'PWR' LED indicates the presence of three phase supply, while Green 'RLY' LED indicates the status of out put relay. Red LED (for UV) glows if the supply voltage drops below the preset limit. Similarly Red LED (for OV) glows if supply voltage shoots up above the preset limit

**Under Voltage Trip Setting:** 'UV POT' is used to set the Under Voltage cut off limit. The setting range is 70% - 95% of 440V. eg. Setting the knob at 95% makes the o/p relay to trip if the mains voltage drops below 418V (within the unit specifications).

**Over Voltage Trip setting:** 'OV POT' is used to set the Over Voltage cut off limit. The setting range is 105% -120% of 440V. eg. Setting the knob at 105% makes the o/p relay to trip if the mains voltage exceeds 462V (within the unit specifications).

**Delay time setting:** The 'Trip Delay' knob is used to set the delay time. The Output relay will trip after the set delay time, once the voltage crosses the set limits. Setting Range is 0 Sec. to 20 Sec.

**Auto / Manual Restart:** Terminals R1 & R2 provided on the front panel can be used for automatic restart of load by keeping them permanently shorted ( potential free shorting).

Alternatively, R1 & R2 can be connected to a normally open contact which when shorted externally restarts the load, when the fault condition is cleared.

**Caution:**

Ⓢ If the source voltage shoots beyond the prescribed rated voltage, the units will be damaged beyond repairs. Suitable protection for incoming voltage is recommended.

ⓈEAPL does not take responsibility for any consequential damages.

**How to Operate:**

Ⓢ Set the Under Voltage Limit and Over Voltage Limit by using the respective pots. Set trip delay time using 'Trip delay' pot.

Ⓢ Connect R.Y.B. Phase of a 3 Phase System to terminals L1, L2 & L3. Switch On the 3 phase supply.

Ⓢ If all the phase Voltages are within the set limit, then Power On LED and Output Relay (hence 'RLY' LED) will be ON.

Ⓢ When one of the phase voltages crosses the set limit then, after the set delay the respective fault indication occurs. The o/p relay will trip.

For instance, Let the Under voltage limit be set at 95%. If the Phase voltage drops below 418 V, the Under voltage fault will occur. The o/p relay trips; consequently, the Red LED for UV will glow and 'RLY' LED goes off.

Wiring Details:

