

## PROTON - Three Phase Voltage Monitoring Relay - VMR 3P



Protection of 3 Phase devices against Over voltage, Under voltage, Single Phasing, Reverse Phasing & unbalance supply are one of the major issue in electrical systems. For safe running of 3-phase devices, special protections that keep a continuous watch on supply conditions are very essential. The major cause of maximum load burn-out is overloading which occurs due to unbalance supply, Single Phasing & Reverse Phasing conditions.

VMR3P detects such Conditions & protect the load from burn out. 'PROTON's LVM 3P' offer above protections along with 3 digit display showing R-Y, Y-B, BR voltages in scanning mode with precise accuracy. LOW/HIGH voltage tripping to ensure trouble free running of 3-phase Loads.

### SALIENT FEATURES :

- Microcontroller based technology.
- Wide range of supply variation.
- Unit will also work if any one phase is present.
- Protection against Under voltage, Over Voltage, Single Phasing, Phase Unbalance and Reverse Phasing
- All the set points settable by keys.
- Trip Delay for Under voltage & Unbalance is settable
- Reverse Phasing Protection can be able to bypass through settings.
- Indications for Low voltage , High Voltage, SPP & Relay ON .
- Message Display for SPP, Reverse Phasing & Unbalance Faults.
- No separate auxiliary supply required.
- Hold feature:- Press INC key in Running condition to observe particular supply voltage.

### TECHNICAL SPECIFICATION :

Supply voltage	3 Phase 415 VAC, 50 Hz (R,Y,B &N) (No auxilliary supply)
Output Contacts	Two changeover ( C-NO), Rating 5A at 230VAC
Voltage trip setting	: Lower Limit is 340 for Under voltage (Resolution of 1 Volt) : Upper Limit is 460 Volts for OV (resolution of 1 V) ( Hysterisis between cut off & cut in is 10V)
Trip Time delay	Trip time Less than 100msec. for SPP, Reverse Phasing & Over Voltage Trip Time is settable for Under Voltage & Unbalance..
ON Delay	Selectable by keys from 1 to 60 sec.
Reset Mode	Auto reset.
Indications	SPP : RED LED OVER VOLTAGE : RED LED UNDER VOLTAGE: RED LED RELAY ON : GREEN LED
Operating Temperature range	-5 °C to 60 °C.
Relative Humidity	10 to 95%
Mounting	Din rail. : Base mounting dimensions 55 (W) x 65 (L) x 125 (D) mm.

#### Marketed By:

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