An ISO 9001-2000

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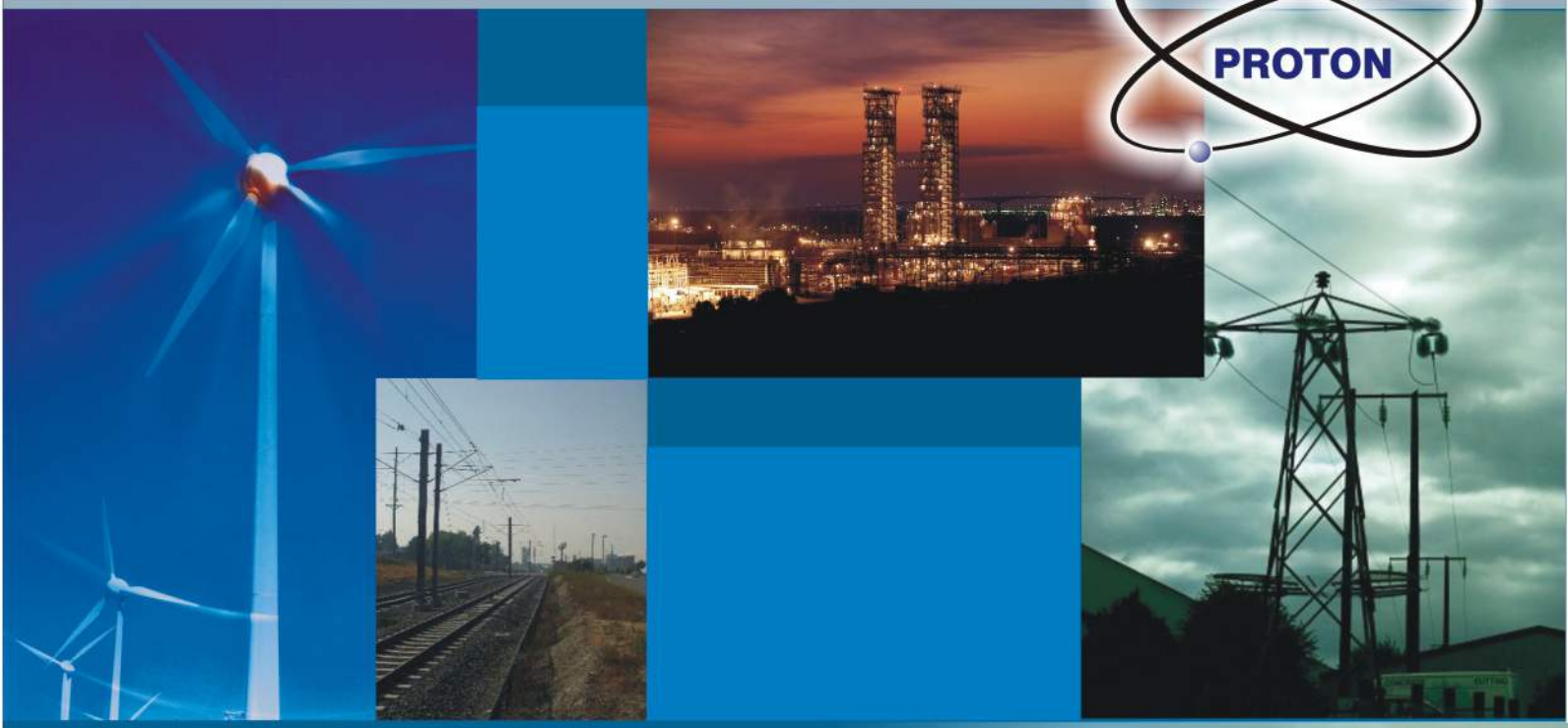

VMR 3P

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 maxium 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.

VOLTAGE MONITORING RELAY- VMR 3P

SALIENT FEATURES

- Microcontroller based technology.
- Voltage protection along with digital voltage readout.
- Wide range of supply variation.
- Unit will also work if any one phase is present.
- Protection against Under voltage.
- Protection against Over voltage.
- Single Phasing & Reverse Phasing protection.
- All the set points stable by keys.
- Phase unbalance protection.
- Trip Delay for Under voltage & Unbalance is stable
- 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 SPECIFICATIONS

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 VoltageTrip 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

KEYS

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.
96(W) x 96(L)

WORKING

- In the normal run mode, display shows Voltages Vry,Vyb,Vbr for 10 sec. each If the supply is within the range then On Timer starts decrementing on display & after Set On Time over Relay will be ON. If Over voltage,Under voltage or spp/reverse phasing/unbalance occurs in the supply then Relay will be OFF &corresponding fault LED starts blinking. Hysterisis betwen Cut off & cut in is 10V
- Hold feature:- Press INC key in Running condition to observe particular supply voltage. To go into scroll mode press INC key again.

SET POINTS:

- To set Under voltage set point press SET key once,now user can change UV set point using arrow keys.
- To set Over voltage set point press SET key twice,now user can change OV set point using arrow keys.
- To set ON Delay press SET key thrice,now user can change ON delay using arrow keys.
- To set Unbalance press SET key four times, now user can change Unbalance set point using arrow keys.
- To set Trip Delay for Under Voltage & Unbalance press SET key five times , now user can change Trip delay set point using arrow keys.
- To enable/disable Reverse Phase protection press SET key six times, now user can set 'YES' to enable or 'no' to disable this prot ection using arrow keys. IMP.NOTE: After set point entered,the system goes into Run mode automatically after 5 sec.