



AC VOLTAGE CONTROLLER VC9090

PROTECTION AGAINST

- Unbalance
- Over Voltage
- Under Voltage
- Phase Reversal
- Phase Failure

FEATURES

- Micro controller based design
- IDMT and definite time characteristics
- High pickup and drop off ratio
- Non-Volatile memory for data storage
- True RMS voltage reading of phase and line
- Bright LED Indication
- Fault condition store and replaying
- Calibrated for Full scale direct reading
- Six digit LED display
- Front Panel membrane keypad
- 96 x 96 ABS plastic enclosure

APPLICATION

- Protection against over voltage and under voltage in power plants and distribution systems
- Protection of AMF panels and generators
- Various points in Sugar mills, Food processing, Chemical, Cement, Fertilizer



GENERAL DESCRIPTION

ICD AC Voltage Controller is a Protection device for Power System equipments, feeders, and machines against 3 phase system Voltage disturbances. ICD Microcontroller based AC Voltage Controller is designed to measure True RMS voltage of all 3 phase and line voltages. From the samples taken it accurately detect the phase reversal and single phasing. From the measured RMS voltage, unbalance between lines, under voltage and over voltage of each line is computed. All these three parameters are compared with set point, settable in percentage. During fault condition the relay will be deenergized after a definite time delay which is also settable.

The 3 line voltages, control settings and time delay are shown on six digit 0.39" seven segment red LED. When the fault has occurred, the display shows respective fault details with readings. Normal operation can be restored by manual reset or automatically when the fault is cleared. This device is designed to operate on SMPS suitable for 90-275V AC supply.

TECHNICAL SPECIFICATION

Voltage Input : 80 - 520V AC line to line for LT

25 - 140V AC line to line for HT

Frequency range : 45 to 55 Hz.

Display : 6 digit 0.39" seven segment Red LED

Resolution : 0.1V for LT, 0.01KV for HT

Indicating Accuracy : $\pm 0.5\% + 1$ LSD

Operating Range : 25% to 150% of full scale
Displayed parameters : R, Y, B, RY, YB, BR voltages

Faulty condition display : The last reading at which fault occurred is stored and

displayed

PT ratio for HT : Programmable through keypad

CONTROLLER

Under voltage setting : 0.99 to 0.5 of full scale
Over voltage setting : 1.01 to 1.3 of full scale

Unbalance setting : 1 to 30%

Time delay set 1 : 1 - 150 secs in steps of 1 seconds for unbalance,

over voltage and under voltage

Time delay set 2 : 1-60 secs in steps of 1 seconds for Phase failure and

phase reversal

Relay action : Relay is energized for normal operation and deenergized

under fault condition

Output : 1 C/o Potential free relay contact

Contact rating : 5Amps at 230V AC

Relay reset on fault1 condition : Relay reclosed on reaching the percentage set value

Relay reset on fault2 condition : Manually reset

Fault 1 category : Under voltage, Over voltage and Unbalance

Fault 2 category : Phase reversal and Phase failure Pickup : Over voltage – 95% of set value

Under voltage – 105% of set value

Dropout : Over voltage – 3% after set value

Under voltage -3% before set value

Status Indication : Available for UV, OV, UB, Phase Reversal, Phase failure

Aux. Power Supply : 90 - 275VAC Box dimension : $96 \times 96 \times 120$ mm

Mounting : Panel

PLEASE PROVIDE THE FOLLOWING DETAILS WHILE PLACING YOUR ORDER / ENQUIRY

1. Voltage Input 2. HT / LT Application 3. PT Primary 4. Self Powered / External Supply.

OUR RANGE OF PRODUCTS

Volt Meter, Ammeter, VAF Meter, Energy Meter, Dual Source Meter, Load Manager, Power Multimeter, Trivector Meter, Maximum Demand Controller, Harmonic Indicator, Power Factor Controller, Smart PF Controller, Power Factor Correction Panel, AC Voltage Controller, AC Current Controller, Motor Protection System, Voltage/Current/Power/Frequency Transducer, Power Transmitter, Energy Management and Billing Systems etc...



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