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1. INTRODUCTION

Performance to IEC255-3

2. POWER SUPPLY

Auxiliary Supply 110V or 220V a.c. Range 45%-140% of nominal
Burden 3 VA

3. VOLTAGE TRANSFORMERS

Rated voltage 60V to 140V true rms (default 110V)
Burden 3 VA

4. CURRENT TRANSFORMERS

Rated Current 0.5A, 1A or 5A, user selectable
Overload Rating 1.3 times nominal current tap continuous, 20 times for 3s
Current Burden C.T. circuit, 8 VA

5. SETTINGS RANGE

Digital Voltmeter 3kV-52kV & 46kV-88kV (0.1kV steps)
30kV-520kV (1kV steps)
Basic Voltage 95% - 105% continuously adjustable
Bandwidth $\pm 1\%$ to $\pm 2.5\%$ with 0.25% hysteresis on band threshold
Fast Tap Down $> 2\%$ above upper bandwidth, switchable
Initial Delay For first operation after voltage outside deadband 10 - 120 seconds
Inter Tap Delay For all operations after initial delay until voltage restored to within deadband 5 - 60 seconds
Output pulse 1.5 or 4.5 seconds, user selectable
Load Drop
Compensation 0 - 10% continuously adjustable Patented TAPP circuitry independent of number transformers in service
Circulating current correction, Coupling Control 6% to 15% continuously variable Patented TAPP circuitry, fully automatic operation
Undervoltage Inhibit $< 80\%$
Voltage Offset -9% to +4.5% in 1.5% steps
Alarm 15 min.

6. ACCURACY

Setting
Basic $\pm 0.5\%$ of setting at 100%
Bandwidth $\pm 10\%$ of setting
Initial Delay $\pm 2\%$ of setting
Inter Tap Delay $\pm 2\%$ of setting
Output pulse $\pm 5\%$ of setting
Load Drop Compensation $\pm 10\%$ of setting but dependent on relationship between CT and transformer rating

Coupling Control $\pm 5\%$ of minimum setting and $\pm 10\%$ of maximum setting but dependent on relationship between CT and transformer rating
Alarm 15 min ± 10 sec.

7. OUTPUT CONTACTS

Raise/Lower contact rating
10A 240V ac maximum
450mA 110Vdc maximum
Alarm contact rating
5A 240V ac maximum
450mA 110Vdc maximum

8. ENVIRONMENTAL WITHSTAND

Temperature
Operating range -10°C to $+50^{\circ}\text{C}$
Storage range -25°C to $+70^{\circ}\text{C}$
Insulation
Between any terminal and earth 2kV rms for 1 min
Between independent circuits 2kV rms for 1 min
Across normally open contacts 1kV rms for 1 min
Transient Overvoltage
Between all terminals and earth or between any two terminals 5kV 1.2/50 μs
High Frequency Disturbance
2.5kV Common(longitudinal) mode $\leq 3\%$ deviation
1kV Series (transverse) mode $\leq 3\%$ deviation
Electrostatic Discharge
8kV contact discharge no maloperation
Fast Transient
4kV 5/50 μs 2.5kV repetitive $\leq 3\%$ deviation
Mechanical Classification
Durability In excess of 10^6 operations