



Cambridge Instruments
& Engg. Co.

EST. 1963 · HOWRAH, INDIA

RELAY TEST SET · THREE PHASE

RTS-33

3-phase relay test set · full 0–360° phase control · two-unit system

01 KEY FEATURES

- Full 0–360° phase angle control
- Two-unit system with phase shifter
- Phase-to-phase fault mode
- Digital timer, two ranges
- Built-in phase sequence check



RTS-33 · RELAY TEST SET

02 TECHNICAL SPECIFICATIONS

PARAMETER	SPECIFICATION
INPUT & OUTPUT	
Input	415 V $\pm 10\%$, 3 phase, 4 wire, 50 Hz A.C.
Burden	250 VA (current and voltage circuits)
Test Current Taps	0–1/5/10/25/50A (0–100% regulation per tap)
Duty	Continuous up to 10A; 25A & 50A: intermittent (5 min ON, 10 min OFF)
Test Voltage	0–110% of 110V ph-ph (63.5V ph-N), 3-phase, continuously variable
Fixed DC Voltage	Isolated 30V / 110V / 220V at 100 VA, available for 30 min
PHASE & TIMING	
Phase Angle	0–360° - coarse 60° steps + fine $\pm 30^\circ$ (Unit 2, static phase-shifter)
Phase Angle Meter	360° range, 1° resolution
Time Measurement	0–9.999 sec (0.001s res.) and 0–99.99 sec (0.01s res.)
METERING	
Current Metering	CT-operated ammeter per phase, 0–1A, 0–100% scaled, $\pm 1\%$ accuracy
Voltage Metering	0–200V, $\pm 1\%$ accuracy, 0.1V resolution, phase selector
GENERAL	
Construction	Two-unit system; 1m interconnection cable; 4-core 5m mains cable
Warranty	12 months against manufacturing defects only

03 APPLICATIONS

- Distance relay commissioning
- Directional and differential protection relay testing
- Over-current, earth fault, over/under-voltage relay testing
- Phase-to-phase fault simulation
- Indian Railways traction protection relay testing

04 WHAT'S IN THE BOX

- ✓ Operation manual
- ✓ Schematic circuit diagram
- ✓ Works test report
- ✓ 1m interconnection cable (Unit 1 to Unit 2)
- ✓ 4-core, 5m mains input cable

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All specifications are subject to change without prior notice. © Cambridge Instruments & Engg. Co. - RTS-33 Product Catalogue.