

Model: LT-13

Brand: LabTech

Country of Origin: China Assembled in Bangladesh.



Item: AC CIRCUIT AND NETWORK TRAINER

(Series, Parallel, Series-Parallel, Star, Delta, Modified Circuit)

Features:

The Trainer should have at least the following Facilities:

- Study the characteristics of pure resistive, inductive, pure capacitive circuit as individual, series, parallel connected condition.
- Measuring current and voltage in a R-L, R-C and R-L-C series circuit, parallel circuit and drawing vector diagram.
- Determining the value of resistance, inductance, capacitance of R-L, R-C, R-L-C series circuit, Parallel circuit and drawing vector diagram.
- Determining the effective or AC resistance of a coil.
- Measuring the active power, reactive power, apparent power of an electrical load and drawing Power Triangle.
- Measuring the energy consumed by electric load.
- Determining power factor of R-L, R-C R-L-C series and parallel circuit.
- Determining phase sequence of 3-phase voltage EMF source.
- Measuring line and phase voltage & current of 3-phase star connected inductive load and capacitive load.
- Measuring line and phase voltage & current of a 3-phase delta connected inductive load and capacitive load.
- Measuring three phase power by 3-wattmeter method and 2- wattmeter method of a balanced 3-phase star connected and delta connected load.
- Measuring Phase voltage, phase current, line voltage, line current, neutral point voltage, neutral point current, power of a $3\phi 4$ wire balanced and unbalanced star connected load, and drawing vector diagram.
- Measuring resonant frequency, Q factor of R-L-C series circuit and parallel circuit.
- Study the characteristics of PFI device and improving power factor of a plant or a load.
- Special Protection system of 440 V direct short-circuit condition
- Three phase supply indication system

Power Supply:

Power source: Input voltage $1\phi = 220V$ AC, 50Hz; $3\phi = 380 - 400V$ AC;

Output Capacity:

Resistive Load: 220V, Capacity 1- $\varphi = 1000 \text{ W (min)}$; 3- $\varphi = 1000 \text{ W}$;

Inductive Load: 220V, 50 Hz. Capacity 1- $\varphi = 120VAR-300VAR$, $3\varphi = 350VAR$;

Capacitive Load: 220V, 50 Hz. Capacity 1- φ = 200VAR, 3- φ = 200 VAR;

Accessories: Standard accessories, Manual, experiment book