

KEE-01 ELECTRICAL TRAINER



KEE-01 Electrical Trainer is a rugged training system for the Electrical laboratories mounted on Alluminium profile rack with sturdy table top flat panel. Each panel has ABS molded plastic sturdy enclosure with 4mm shrouded connectors showing circuit diagram & its connection tag numbers for easy understanding and connections. The product helps you to get fully acquainted with the basic concepts and functioning of an Electrical Trainer.

Specifications

- Trainer control panel is provided in 40X40mm Aluminum profile rack with sturdy table top flat panel.
- It has 8 no's of ABS plastic panel mounted on the aluminum rack with mimic diagram of components
- All input & output are terminated in 4mm shrouded connector and 4mm banana cable is provided for experiments.
- 3phase DOL starter 4pole MCB, contractor & relay panel
 - 4 pole MCB of 415 V/4A
 - DOL 9A Contactor with 230V / 50 Hz / 11VA COIL
 - Bimetallic thermal O/L relay with range 1.4A - 2.3A
 - R-Y-B Input display Indicators.
 - Manual start / stop with local trip contact
- 3 phase multifunction meter Panel (2 Nos)
 - Bidirectional Multifunction
 - 3 Phase $\frac{3}{4}$ wire, 415V, CT Input 5A
 - LCD/LED display, Aux supply 230V, 45-65 Hz, 5W
 - V, A, Hz, Pf, KVA, KW, KWH
 - Modbus RTU RS485 connections
- AC Voltmeter panel
 - 0-500V AC Voltmeter
 - Selector switch for 3 phase voltage measurement.

- AC Ammeter panel
 - 0-5A AC Ammeter
 - Selector switch for 3 phase current measurement.
- FWD/REV, STAR/DELTA Switch panel
 - FWD/REV, 3 pole 3 way switch, 6A/440V
 - Star/Delta switch 3 pole, 3 way, 6A/440V
- Lamp Load panel
 - 3 Lamp Load socket with 15/40/60/100W Bulb.
 - On/OFF toggle should be provided for each bulb socket.
- 1 Ph Motor, Alternator & Sync Panel
 - 1ph 230V/2A & 230V/4A AC output supply.
- Consist of 1 Phase AC/DC Resistive Load panel
 - 750E/600E/300E/212E/162E/125E/112E/100E 200W Load.
 - 9 Way Selector switch for selection of load resistors
- Table Top 1 Phase Transformer 500VA (2Nos)
 - Transformer with 500VA Primary Input (0-230V) and secondary Output (200V)
- Table Top 3 Phase Transformer 500VA
 - $3\emptyset$ Transformer with 300VA RYB Primary Input (230V/415V) and $3\emptyset$ 300VA RYB Secondary Output (230V/415V)

Accessories:

- Set of Shrouded Cables
- Set of Manuals with Experiments.
- Demo CD showing Experiments

Optional Accessories:

- Variac
 - 0-270V /2A Variac (1 phase Transformer)
 - 0-470V /6A Variac (3 phase Transformer)
- Working Table (KWT-01)....1 No
- Multimeter ... 1 No
- Tool Kit... 1 No

Experiment List

1. Study of Manufacturing Quality Tests.
2. Study of Insulation resistance test.
3. Study of Single Phase Transformer and calculate it's Turn's Ratio
4. Study the Polarity Test of Single Phase & 3 phase Transformer
5. Study of Performance tests.
6. Study the Open Circuit Test of Single Phase & 3 phase Transformer
7. Study the Short Circuit Test of Single Phase & 3 phase Transformer
8. Scott connection : Using 2 nos. of 1 ph. Transformer

Note : Specifications & Photos can be altered without notice in our constant efforts for improvement.

9. Study of Load regulation test.
10. Study of Back to back test (sumpner test)
11. Study & measure winding Temperature of the Single Phase & 3 phase Transformer
12. Measurement of winding resistance by DC V-I method.
13. Study the working of Single Phase & 3 phase Transformer with load & Effect of type of load on transformer output waveform
14. Study the working of Single Phase Transformer and measure secondary output Voltage in series & parallel connection
15. Study of Scott connection for 3phase to 2 phase conversion
16. Three phase transformers - basic configurations — their effect on capacity utilization regulation.
17. Study of Phasor Groups in 3 Phase Transformer connections
18. Study of using Tertiary winding on 3 ph. transformers for suppressing harmonics.
19. Study of Load regulation, efficiency & Temp. rise test on 3 ph. Transformers
20. Study of Manufacturing Quality Tests on 3 phase transformers
21. Determination of zero sequence reactance of 3 ph. transformer.
22. Determination of equivalent circuit of 3 ph. Transformer
23. Self & mutual inductance measurement of 1 phase transformer
24. Determination of equivalent circuit of 3 ph. transformer.
25. Effect of variety of three phase connections on regulation and current carrying capacity of transformers.
26. Harmonic cancellation & shift in phasor diagram due to different connections, Working of Teaser transformer
27. Back to back test (sumpner test) on two identical single phase transformers.

Note : Specifications & Photos can be altered without notice in our constant efforts for improvement.