



46585A Transmission Line Trainer is a rugged training system for the Electrical laboratories mounted on Aluminum 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 Transmission Line Trainer.

### Specifications

- Trainer having control panel should provided in 40X40mm Aluminum profile rack with sturdy table top flat panel.
- Should have 8 no's of ABS plastic panel mounted on the aluminum rack with mimic diagram  
All input & output are terminated in 4mm shrouded connector, Should provide 4mm banana cable for experiments.
- Should have 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
- Should have 3 phase multifunction meter panel (2nos) . - 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
- Should have FWD/REV Switch panel. - FWD/REV, 3 pole 3 way switch, 6A/440V.
- Should have Transmission Line Compensation panel.
  - 7 numbers of capacitors for compensation are 2,4,6,8,10 & 15uF.
  - 3 Pole 7 way Cam switch for selection
- Should have 3 Phase Resistive Load panel.
  - 10K/5K/3.5K/2.5K/2K/1.5K/OFF 200W Load.

- 7 Way Selector switch for selection of load resistors
- Should have 3 Phase Inductive Load panel.
  - 0-0.75-3H Inductive Load.
- Should have 3 Phase Capacitive Load panel.
  - 0-2.5uf capacitive Load.
- Should have table top Simulated Transmission Line.
  - Short range Transmission line using RLC (10E,0.15H,2,2uF)
  - Medium range(125Km/200Km Transmission line Pie & T model).
- Should have table top Dimmer.
  - 3 phase dimmer input 415V, 50Hz
  - Output 0-450V/ 6A

### Experiment Motor List

- Study of No Load Test.
- Study of VAR compensation.
- Study of Symmetry & un-symmetry faults in transmission line.
- Determination of transmission line constants ABCD.
- Study of flow of real & reactive power.
- Load test calculation of regulation, efficiency of transmission line.

Note: Specifications are subject to change.

### Tesca Technologies Pvt. Ltd.

IT-2013, Ramchandrapura Industrial Area, Sitapura Extension,  
Near Bombay Hospital, Vidhani Circle, Jaipur-302022, Rajasthan, India,  
Tel: +91-141-2771791 / 2771792; Email: info@tesca.in, tesca.technologies@gmail.com  
Website: www.tesca.in