

KMG-04

MOTOR GENERATOR TRAINER-IV



KMG-04 Motor Generator 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 a Motor Generator Trainer.

Specifications

- Motor Generator Trainer having control panel should be 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 1 phase multifunction meter panel.
 - Bidirectional Multifunction
 - LED display, Aux supply 230V, 45-65 Hz, 5W
 - V, A, Hz, Pf, KVA, KW, KWH
- Should have 1 ph. Motor, Voltmeter & Ammeter Panel.
 - 1 ph. MCBs of 4A.
 - 1 no. 0-300V DC Voltmeter & 0-5A DC Ammeter.
- Should have SCR controlled variable DC panel.(3nos)
 - Full bridge SCR based 0V-195V / 3 Amp cosine firing.
 - Fixed 220V DC Excitation output
 - 0-300V Voltmeter & 0-2A Ammeter
- Should have Instrumentation panel.
 - Signal conditioning circuit for speed to give output 0-2.5Vdc.

- Should have 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
- 1/2hp 1 Phase DC Motor Coupled with 1 Phase Synchronous Motor

Experiment Motor List

- DC motor : Speed torque curve of i) Shunt motor, ii) DC series motor, iii) separately excited DC motor, iv) DC compound motor.
- DC generator : V-I, Efficiency curve for i) DC shunt generator, ii) DC series generator, iii) DC separately excited generator, iv) DC compound generator, v) OCC of shunt generator.
- 1 Phase Synchronous Motor : i) Speed torque curve of synchronous motor ii) Efficiency & input power factor measurement, iii) Study of V-curve.
- Synchronous Generator : i) Output volt-amp characteristics, ii) Efficiency of Synchronous generator, iii) Performance with R, L, C load.

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