



46710 Power Electronic Training Board has been designed specifically for the study of Three phase firing circuit for three phase ac voltage controller (without Neutral Configuration). Practical experience on this board carries great educative value for Science and Engineering Students.

Object

- 01 To study of Three phase firing circuit.
- 02 To Study of Three Phase AC Voltage Controller with Resistance Load.

Features

The board consists of the following built-in parts:

1. Three Phase line commuted Full wave bridge converter.
2. Three pole Miniature Circuit Breaker (MCB) .
3. Three separate identical cards consisting of Zero Crossing Detector, Integrator, Comparator and Pulse Generator one for each phase, for controlling the triggering angles of the positive group of three thyristors. Angles of the negative group of three diodes.
4. Firing angle control potentiometer.
5. Three 415:50V at 0.2Amp transformer for rectifications & 6V AC supply for Triggering
6. $\pm 12V$ at 100mA, IC regulated Power Supply for Triggering Circuits.
7. Three nos. Driver Circuits with Pulse Transformers.
8. High Frequency Gated Dual Gate Firing 3 nos.
9. Three Phase Inbuilt Resistive Load.
10. Two $3\frac{1}{2}$ digital panel meter (DPM) for measurement of AC voltage 0 - 200V.
11. Adequate no. of other Electronic Components.
12. Three Phase supply indicators.
13. The unit is operative on 3Phase 415VAC at 50Hz
14. Good Quality, reliable safety Shrouded sockets are provided at appropriate places on panel for connections/ observation of waveforms.
15. Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.
16. Weight : 8.00 Kg. (Approx.)
17. Dimension : W 415 x H 165 x D 315.

List of Accessories:

1. Patch cord 4mm length 50cm Red. 10
2. Patch cord 4mm length 50cm Black. 10

Other Apparatus Required:

1. Dual trace CRO 20MHz

Note: Specifications are subject to change.

