

### THREE PHASE LAB

OMEGA TYPE 20 001

OMEGA TYPE 20 001 Three Phase Lab is an ideal Training Board with build - in a highly safe 18V low voltage. Three Phase Power Supply. This Training board is very useful to know basic concepts of Three Phase circuit viz. Star Delta connections, its phase and line voltage and current etc. The training board is so simple that one can itself make connections of three phase circuits as all the experiments are performed at low voltage. The training systems is specifically designed keeping in view that L.C. Combination can be connected in series and also in parallel as well in three phase power supply configuration. It further provides in understanding the working of three phase transformer and its different configuration in star & delta connections

## **EXPERIMENT THAT CAN BE PERFORMED**

The Three Phase Rectifiers is again a versatile helpful in understanding the concept of three phase rectifier operation. This contains silicon diodes for the connections of Half wave and Full wave bridge rectifiers.

### **FEATURES**:

- 01 Designed considering all the safety standards
- 02 Handson Practice
- 03 Standalone operation
- 04 Test points are provided to measure line and phase parameters
- 05 Low cost training system
- 06 Extensive Manual

### **OBJECTS:**

- 01 Study of Three phase low voltage power supply
- 02 Study of Three phase power supply configurations
- 03 Study of Voltage and current in Passive load in three phase star configuration
- 04 Study of Voltage and current in Passive load in three phase Delta configuration
- 05 Study of Three phase circuits with balanced load
- 06 Study of Three phase circuits with unbalanced
- 07 Study of Three Phase Power in star & delta configuration
- 08 Study of three phase rectifiers using diodes.



## **SPECIFICATIONS** THE BOARD CONSISTS OF

- 01 Three phase input ON/OFF: MCB 4 pole
- 02 Digital AC Ammeter 0-200mA.
- 03 Digital AC Voltmeter 0-200Volt.
- 04 Digital Wattmeter 250Volt Current 0.5Amp total 125 Watt.
- 05 Resistors load : 1 K, 1K, 1K & 10 K
- 06 Capacitors load : 0.01uf, 0.01uF, 0.01uF &

0.022uf

07 Inductors load : 10 mH, 10mH, 10mH& 1.2 uH

# THREE PHASE LOW VOLTAGE POWER SUPPLY

Input : Three Phase Mains (230 V Phase

voltage, 415 Line voltage 50 Hz) ±10%

Outputs: 18 V Phase voltage, 28V Line voltage 50Hz ± 10%

## THREE PHASE SUPPLY CONFIGURATION

Input : 18 V each phase, 50 Hz ± 10%

Output :9V

## THREE PHASE RECTIFIERS

(BRIDGE / HALF WAVE RECTIFIER)

: 18 V each phase, 50 Hz ± 10% Input Output : 18V Rectified three phase.

OTHER:

Dimension(mm): L415 X H165 X D 315

:5.5Kg Weight LIST OF ACCESSORIES:

01 Patch Cord 50cm 4mm Red & Black: 16 Pcs.

OTHER APPARATUS REQUIRED:

01 Dual trace CRO OMEGATYPE CRO-20

We are committed to the continuous development of our products, and therefore reserve the right to amend specifications without prior notice.

## OMEGA ELECTRONICS