

# SINGLE PHASE INDUCTION MOTOR LAB

OMEGATYPE 20 107

OMEGA TYPE 20 107 Single Phase Induction Motor Lab Training Board provides one to study concepts of Single Phase Capacitor Short Induction Motor. Different terminals are provided for main winding, starting winding and capacitor so as to enable student to understand the significance of individual windings along with the role of capacitor in the motor in a simple manner. It contains phenomenon of excitation, running and reversing of the motor. One can calculate the equivalent circuit parameters and the power factor of the motor. With this unit one can also know the relation between speed and torque, know as load characteristics or speed-torque characteristic of the motor.

All connections and appearance of panel are designed in a simple manner. Students can make connections by themselves.

#### **OBJECT**

- 01 Study of Single Phase Induction Motor
- 02 Study of Running and Reversing of Single Phase Induction Motor
- 03 Study of the No-Load Test in a Single Phase Induction Motor
- 04 Study of the Blocked Rotor Test in a Single Phase Induction Motor
- 05 Study of Load Test of a Single Phase Induction Motor

### **FEATURES**

- 01 Machine with Mechanical Loading Arrangement. A SIGN OF QU
- 02 Provided with Digital Tachometer.
- 03 Machine with Class "B" Insulation.
- 04 Heavy Duty Base/Channel.
- 05 Brake Drum/Pulley with heat suppression facility.
- 06 Equipped with supply indication lamps
- 07 Designed by considering all the safety standards.
- 08 Diagrammatic representation for the ease of connections.
- 09 Exclusive and Compact Design.





## TECHNICAL SPECIFICATION The board consist of:

01 Single Phase Induction Motor

Type : Capacitor start

Rating : 1 HP

Voltage rating : 230 V ± 10%

Speed: 1440 RPM (No Load)

Insulation : Class 'B'
Loading Arrangement: Mechanical
Brake Drum/Pulley : Aluminum Casted

02 Digital Meters Used

AC Digital

Voltmeter : 0 - 500 V

AC Digital

Ammeter : 0 - 10 A

Digital Watt meter: 250V, Current 5Amp.

Total watt 1250W.

03 MCB : 10 A

04 Mains Supply : 230 V ±10%, 50 Hz

05 Dimensions (mm): W600xD350xH450Control panel

W335xD450xH560 (Motor)

06 Weight : 12KG Approximate(Control Pn.)

22KG Approximate (Motor)

#### LIST OF ACCESSORIES:

01 Shrouded 4 mm patch cord length 50/100cm.....28

02 Digital Tachometer: 20,000 RPM

### **OTHER APPARATUS REQUIRED:**

01 Single phase variac input 230V, output 0 - 270V, Current 6Amp and above.

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

### **OMEGA ELECTRONICS**

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