

**WARD LEONARD METHOD  
OF DC MACHINE  
OMEGA TYPE 20 112**



**OMEGA TYPE 20 112** Ward Leonard Method of DC Machine is an elite training system for Electrical Laboratories. The product helps you to get fully acquainted with the basic concepts and functioning of a DC machines.

The product demonstrates the Ward-Leonard Method of DC Machine through which user can not only operate but also control the speed of DC Machine in either direction without using DC supply.

Separate terminals of Armature and Field windings are brought out on a terminal box fitted on top of the Motor so that one can connect them separately to the panel and can perform experiment correspondingly.

Reverse connecting Switch is provided to control the speed of DC Motor in either direction. The trainer thus provides explicit understanding of the subject. All protection devices are in built so there is almost no chance of fault or danger to user.

**OBJECT**

- 01 To study the speed control of Separately Excited DC Shunt Motor in either direction by Ward Leonard Method.

**FEATURES**

- 01 Stand alone operation
- 02 Mechanical Coupling Arrangement
- 03 Exclusive and rugged designed panel
- 04 High quality meters
- 05 Standard BS-10 safety terminals
- 06 Designed by considering all the safety precautions
- 07 Diagrammatic representation for the ease of connections.

**TECHNICAL SPECIFICATION**

- 01 Mains Supply : Three Phase 415 V,  $\pm 10\%$ , 50 Hz
- 02 Machines Specification (2 Nos.)  
Both the Machines are flexibly coupled and mounted on a M.S. channel base acts as a Motor Generator set. AC Three Phase Squirrel Cage Induction Motor acts as a

- 03 PRIME MOVER  
Rating : 1 HP  
Voltage Rating : 415 V  
RPM : 1440 (No Load)  
Insulation : Class 'B'
- 04 DC MACHINES (ACTS AS A GENERATOR)  
Type : DC Shunt  
Rating : 0.6KW  
Voltage Rating : 220 V  
RPM : 1500 (No Load)  
Insulation : Class 'B'  
(Please refer specification on the motor)
- 05 EXTRA D.C. SHUNT MOTOR 200V for which the speed can be Controlled using Motor Generator set.  
Rating : 1/2 HP  
Voltage Rating : 200 V  
RPM : 1500 (No Load)  
Insulation : Class 'B'
- 06 DIGITAL METER 3½ DIGIT USED  
DC Voltmeter : 300V.  
DC Ammeter : 2Amp.  
AC Voltmeter : 500V.  
MCB : 4 Pole 10Amp.
- 07 Dimensions Panel : L600 x H450 x D350 mm
- 08 Weight panel : 19.50 Kg.
- 09 Weight Motor : 60 Kg.

**LIST OF ACCESSORIES:**

- 01 Shoured Patch Cord 4mm Length 50/100cm Red.. 17
- 02 Shoured Patch Cord 4mm Length 50/100cm Blck 17
- 03 Digital Techometer..... 01

**OTHER APPARATUS REQUIRED:**

- 01 Three phase variac Input 0-415 V  
Output 0-470 V current 10 Amp..... 01
- 02 Rheostat 220 Ohms, 2.8Amp ..... 01

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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