



SALIENT FEATURES :

- 01 Facilitates easy and safe wiring by students due to use of 4mm sturdy Shrouded banana patch cords & shrouded socket arrangements.
- 02 All machines are mounted on finely painted sturdy base frame with easy machine interchangeability. Use of gear coupling facilitates screwless coupling. interchangeability. Use of gear coupling facilitates screwless coupling.
- 03 With due emphasis on student safety machines operate upto 300W power levels and upto 1500 RPM, without compromising on didactic use. Able to draw all graphs.
- 04 Trunnion mounted DC Integrated machine is used as Dynamometer for loading other machines (Motors / generators both); unlike magnetic powder brake or eddy current brake which can load only coupled Motors and not generators, with facility to measure shaft power using electronic torque / speed Measurement

REPLUTION MOTOR TRAINER

Name of the Experiments :-

- Experiment-1 Study of speed torque characteristics of Repulsion motor.
- Experiment-2 Study of efficiency and input power factor measurement of single phase Repulsion motor.
- Experiment-3 Speed control and reversal of direction of rotation of repulsion motor.

Panels Provided

- | | |
|--|-------------|
| 01 Aluminum Machine trainer Rack..... | 20300 Qty.1 |
| 02 Multifunction Meter (Single Phase/Three Phase AC 50Hz)..... | 20302 Qty.1 |
| 03 DC voltmeter & Ammeter and Torque Measurement Meter..... | 20306 Qty.1 |
| 04 Variable DC Power Supply..... | 20307 Qty.1 |
| 05 Input Single Phase DOL Starter Panel AC DC Fix / Variable Supply..... | 20308 Qty.1 |
| 06 DC Load Resistor..... | 20310 Qty.1 |
| 07 Extension Board..... | 20315 Qty.1 |

Motors Provided

- | | |
|---|-------------|
| 1 Repulsion Motor (20507) with loading arrangement..... | 20513 Qty.1 |
|---|-------------|

Accessories Provided

- | | |
|--|----|
| 01 Hand held digital Tachometer..... | 01 |
| 02 Shrouded connecting leads 4mm 50 / 100cm assorted Red & Black | |


Continues- 1/2

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


OMEGA ELECTRONICS

**3 PHASE SQUIRREL CAGE
INDUCTION MOTOR TRAINER
OMEGA TYPE -20 610**


Technical Specification of Panels




ALUMINUM FRAME - MODULAR PANELS TYPE-20 300.
Electrical motor trainer rack made up aluminium profile size 40×40mm, foldable and light in weight 10 panel setup can be interchange conveniently to perform experiments. Dimension Length 1100×Height 1000×Depth 350mm.



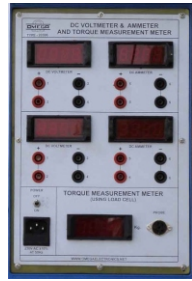
INPUT SINGLE PHASE DOL STARTER PANEL AC DC FIX / VARIABLE SUPPLY TYPE-20 308
 1 MCB 2 pole 10A with indicator
 2 Emergency Switch
 3 Push button switch for Stop/Start
 4 DOL 9A Contractor with 230V / 50 Hz / 11VA Coil .
 5 Shrouded socket 4Nos.
Variable AC Supply (0-200V)
 1 Shrouded socket 6Nos.
Fix/Variable DC Supply (0-200V)
 1 Shrouded socket 4Nos.



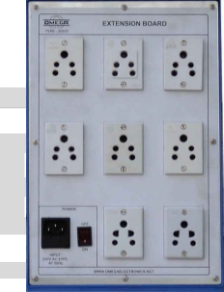
MULTIFUNCTION METER (Single Phase/ Three Phase AC 50Hz) TYPE-20 302
 1 Bidirectional Multifunction Meter
 2 3 Phase 4 wire, 440V, Current 5A
 3 LED display,
 4 Aux supply 230V, 45-65Hz, 5W
 5 To measure parameters ie Voltage Current., KVA, Frequency, Power factor, Active Power (W), Reactive Power (vary) etc.
 6 Shrouded socket 08Nos. etc.




DC LOAD RESISTOR TYPE-20 310
 1 750E/600E/300E/212E/162E/125E/112E/100E/400W /8 taps + OFF + separate 60E tap For DC series Gen.
 2 Load Resistance switch 3 POL 7 Way/10Amp.
 3 Cooling Fan size 4" 230V Operated
 4 Shrouded socket 6Nos.



DC VOLTMETER & AMMETER WITH TORQUE MEASUREMENT METER TYPE-20 306
 1 TWO DPM DC voltmeter (0-1000V)
 2 TWO DPM DC Ammeter (0-20A)
 3 Torque Measurement Meter
 4 Shrouded socket 16Nos.




EXTENSION BOARD TYPE-20 315.
 1 Operating Voltage 230VAC ± 10% at 50Hz
 2 ON OFF Switch with indicator
 3 Eight Nos. five pin 5 Amp Electrical Sockets



VARIABLE DC POWER SUPPLY TYPE-20 307
 1 Half bridge SCR based 0V-200V / 3 Amp cosine firing with linear characteristics, 3 Nos. Switch SPDT to On/Off with indication
 2 Three Nos. of these supplies required for DC Armature, DC motor field and AC generator field.
 3 Shrouded socket 8Nos.

Technical Specification of Motor



Repulsion Motor (20507) with loading arrangement - - - - 20513 Qty.1

Continues-2/2

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