



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

3 PHASE SQUIRREL CAGE INDUCTION MOTOR TRAINER

Name of the Experiments :-

- Experiment -1 Speed torque charACteristics of 3 phase squirrel cage induction motor.
 Experiment-2 Efficiency, % slip and input power factor measurement of 3 phase squirrel cage induction motor.
 Experiment -3 Speed control of squirrel cage induction motor by pole changing method.
 Experiment-4 'No Load Test' & 'Blocked Rotor Test' on 3 ph. squirrel cage induction motor.

Panels Provided

- | | |
|--|-------------|
| 01 Aluminum Machine trainer Rack..... | 20300 Qty.1 |
| 02 Input 3 phase DOL Starter panel..... | 20301 Qty.1 |
| 03 Multifunction Meter (Single Phase/Three Phase AC 50Hz)..... | 20302 Qty.1 |
| 04 FWD/REV, Star-Delta starter panel..... | 20303 Qty.1 |
| 05 Rotor Resistor Cum 3Phase Synchronous Motor Control..... | 20304 Qty.1 |
| 06 Input Single Phase DOL Starter Panel AC DC Fix / Variable Supply..... | 20308 Qty.1 |
| 07 Extension Board..... | 20315 Qty.1 |

Motors Provided

- 10 3 Phase Squirrel Cage Induction Motor (20508) with loading arrangement... 20512 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.

ROTOR RESISTOR CUM 3PHASE SYNCHRONOUS MOTOR CONTROL TYPE-20 304
1 Rotor resistors of 30E/5A with 3 taps of 15E, 21E, 30E each - 3 Nos.
2 Rotor resistor selector switch, 3 pole. 6 Way 10A/440V.
3 DC Rotor excitation with circuit breaker (3Amp)
4 Shrouded socket 8Nos.

INPUT 3 PHASE DOL STARTER PANEL TYPE-20 301
1 MCB 4 pole 4Amp.
2 DOL 9A Contactor with 415V / 50 Hz / 11VA COIL .
3 RYB Indicator
4 Emergency Switch
5 Shrouded socket 8Nos.
6 Push button switch for Stop/Start

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 Contactor 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.

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

FWD/REV AND STAR-DELTA STARTER PANEL TYPE-20 303
1 FWD/REV, 3 pole 3 way Switch with centre OFF, 10A/440V.
2 Star/Delta switch 3 pole, 3 way with centre OFF, 10A/440V.
3 Shrouded socket 12Nos.

Technical Specification of Motor

3 PHASE SQUIRREL CAGE INDUCTION MOTOR (20508) with loading arrangement...TYPE-20512

Continues-2/2

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