

# 3 PHASE SQUIRREL CAGE INDUCTION MOTOR TRAINER

OMEGA TYPE -20 610





# **SALIENT FEATURES:**

- O1 Facilitates easy and safe wiring by students due to use of 4mm sturdy Shrouded banana patch cords &shrouded socket arrangements.
- O2 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.
- 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.
- O4 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.

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- 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
	Rotor Resistor Cum 3Phase Synchronous Motor Control	
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		
	Hand held digital Tachometer	.01
02	Shrouded connecting leads 4mm 50 / 100cm assorted Red & Black	

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

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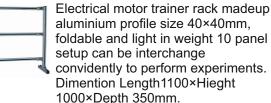


# 3 PHASE SQUIRREL CAGE INDUCTION MOTOR TRAINER

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# Technical Specification of Panels

# **ALUMINUM FRAME - MODULAR** PANELS TYPE-20 300.





# **ROTOR RESISTOR CUM 3PHASE** SYNCHRONOUS MOTOR CONTROL

**TYPE-20 304** 

- Rotor resistors of 30E/5A with 3 taps of 15E, 21E, 30E each - 3 Nos.
- Rotor resistor selector switch, 3 pole. 6 Way 10A/440V.
- DC Rotor excitation with circuit breaker (3Amp)
- Shrouded socket 8Nos.



# **INPUT 3 PHASE DOL STARTER PANEL**

### **TYPE-20 301**

- MCB 4 pole 4Amp.
- DOL 9A Contactor with 2 415V / 50 Hz / 11VA COIL .
- **RYB** Indicator
- **Emergency Switch**
- Shrouded socket 8Nos. 5
- 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
- DOL 9A Contractor with 230V / 50 Hz / 11VA Coil .
- Shrouded socket 4Nos

- 1 Shrouded socket files.
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  2 Shrouded socket files.
  3 Shrouded socket files.
  3 Shrouded socket files.



## **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
- Eight Nos. five pin 5 Amp **Electrical Sockets**



# FWD/REV AND STAR-DELTA STARTER PANEL **TYPE-20 303**

- FWD/REV, 3 pole 3 way Switch with centre OFF, 10A/ 440V.
- Star/Delta switch 3 pole, 3 way with centre OFF, 10A/ 44Ô\/
- 3 Shrouded socket 12Nos.

# Technical Specification of Motor



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

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