

# 3 PHASE INDUCTION MOTOR SPEED CONTROL USING CASCADE METHOD (XPO - CSD)



3 Ph. AC to 3 Ph. AC M/C coupled set



## Salient Features:

- ◆ Easy and safe wiring by students due to 4mm sturdy shrouded banana patch cords and shrouded socket arrangement for high voltage circuits.
- ◆ Aluminum profile flat demo panel system (table top), carrying various high voltage components housed in plastic enclosures (panel) to minimize shock possibility.
- ◆ Facilitates easy learning about slip power recovery by cascading two torque motors.
- ◆ Each panel has ABS molded plastic sturdy enclosure, and colorful screw less overlays showing circuit diagram & its connection tag numbers for easy understanding and connections.
- ◆ Set of Instructor Guide & Student Workbook.
- ◆ CNC manufactured chasis mounted coupled motor set 3 Ph. AC.

## TECHNICAL SPECIFICATIONS

- ◆ **Input 3 phase DOL Starter panel (EMT1)**  
(10 Shrouded Banana)
  - 4 pole MCB of 415 V/4A.
  - DOL 9A Contactor with 230V / 50 Hz / 11VA COIL.
  - Bimetallic thermal O/L relay with range 1.4A - 2.3A.
- ◆ **3 Phase power cum Energy meter panel (EMT 34)**  
(8 shrouded Banana)
  - Multifunction Meter
  - 3 Phase 3/4 wire, 415V CT Input 5A
  - LCD/LED display, Aux supply 230V, 45-65 Hz, 5W
  - V.I., Hz, Pf, KVA, KW, KWH
  - Modbus RTU RS 485 (optional)
- ◆ **FWD/REV Panel (EMT 4A)**  
(12 Shrouded Banana)
  - FWD/REV, 3 pole 3 way switch with centre OFF, 6A/440V.
- ◆ **3 Phase wound Rotor & Sync. Motor panel (EMT 5A/B)**  
**[8 Shrouded Banana]**
  - 1] Rotor resistors of 30E/5A with 3 taps of 0E, 15E, 21E, 30E (each 3 nos.)
  - 2] Rotor resistor selector switch, 3 pole 6 Way 6A/440 V.
  - 3] DC Rotor excitation over current Circuit Breaker (3Amp)
- ◆ **Table Top Machine Set:**  
3 phase AC integrated machine 300W chasis mounted coupled with 3 phase AC integrated machine 300W chasis mounted
- ◆ **List of Experiment :**  
Speed control of 3 phgase induction motor using cascade method
- ◆ **Accessories :**  
Handheld tachometer
- ◆ **Aluminium Rack :**  
5 x 1 matrix used as flat demo panel system to house panels needed for the trainer ordered.
- ◆ **Mechanical Dimension(mm):**  
960 (L) x 300 (W) x 545 (H)mm
- ◆ **Net Weight :** 33 kg, Each motor = 40Kg.