



Designed & Manufactured By :

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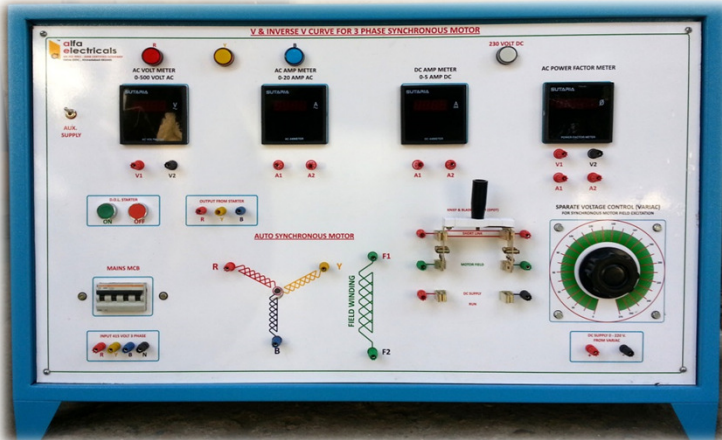


## Synchronous Machine Lab:

Synchronous motor is a doubly excited machine i.e two electrical inputs are provided to it. It's stator winding which consists of a 3 phase winding is provided with 3 phase supply and rotor is provided with DC supply. The 3 phase stator winding carrying 3 phase currents produces 3 phase rotating magnetic flux. The rotor carrying DC supply also produces a constant flux. The system includes a Synchronous Machine-(Cylindrical type Rotor with separately excited distributed field winding, with provision of Knife-Blade Switch to start the machine as an induction motor and the change over to synchronous speed by switching on DC supply) - coupled with DC Generator mounted on heavy duty 'C' Channel base Structure and anti-vibration pads. The Unique desing of Control Panel with demonstratative MMIC Diagram helps students to do connections and experiments themselves.

**Powder Coated Panel Structure, fabricated from high quality 16/18 SWG M S Sheet with in-built storage facility. Cost-Effective Table Top Panel, Customized & Tailor made design is also available as per specific requirement of the Customer.**

No-Load Test, Load Test Characteristics of Synchronous Motor. Measurement and calculate the positive sequence impedance, negative sequence impedance & zero sequence impedance of Synchronous Generator. Plot "V" and "Inverse V" Curve of Three Phase Synchronous Motor.



### Technical Specifications :

Motor : SPDP SAPEX Foot Mounted  
Type : Auto Synchronous with Damper Winding  
Ratings : 3 HP to 5 HP  
Base Voltage : Three Phase AC 415V  
Excitation : 0 - 180V DC Variable  
Speed : 1500 RPM(or as Specified)  
Insulation Class : B / F

DC Machine : SPDP Foot Mounted  
Type : Shunt/Series/Compound  
Ratings : 3 HP to 5 HP  
Base Voltage : 220V/380V/440V  
Speed : 1500 RPM(or as Specified)  
Insulation Class : B / F  
Choice for Digital or Analog Meters