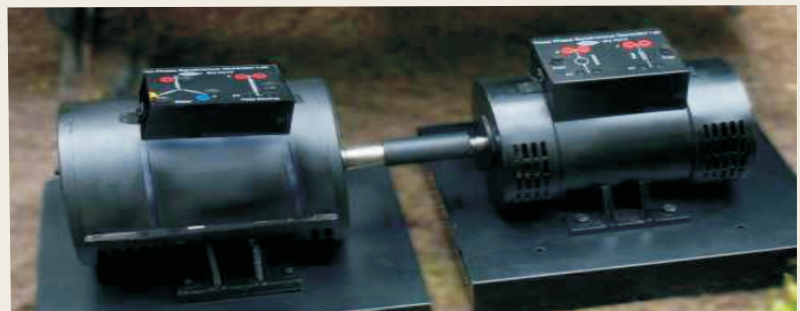


Three Phase Synchronous Generator Lab

Premier Three Phase Synchronous Generator Lab is an exclusive & important product designed to provide comprehensive learning about fundamental concepts and operating principles of Three Phase Synchronous Generator. Synchronous Generators are the primary source of electrical energy uses to convert mechanical power derived from (steam, gas, or hydraulic) turbine to ac electric power. The product provides hands-on experiments like Open Circuit Characteristic of Synchronous Generator and study of the relation between field current and armature voltage. The product is easy to use. All protection circuits are in built so there is very less chance of fault or danger to user. The varied scope of learning makes the subject understanding complete.



Technical Specifications

DC Input supply : Variable, 0-180/200 V
Fixed, 180 - 200V
(Please refer motor specs.)

Machines Specification (2 Nos.)

Both the Machines are Flexibly Coupled and Mounted on a M.S Channel Base

DC Machine acts as Prime Mover

Type : DC Shunt
Rating : 2 HP
RPM : 1500 (no load)
Insulation : Class 'B'

Three Phase Synchronous Motor acts as Generator

Type : Salient Pole Motor
Current type : AC
Rating : 3 HP
Excitation Voltage : 120 V
Voltage rating : 415V \pm 10%

Meters Used

Ammeter (MC type) : 2 Nos
Voltmeter (MC type) : 2 Nos

Dimensions (mm)

W 600 x D 450 x H 600 (panel)

Features

- ▶ Exclusive and rugged designed panel
- ▶ Mechanical Coupling Arrangement
- ▶ Designed by considering all the safety precautions
- ▶ High Quality meters used
- ▶ No external measuring instruments needed.
- ▶ Standard Safety Terminals used.



Scope of Learning

- To study Open Circuit Characteristics (OCC) of Three Phase Synchronous Generator
- To study Short Circuit Characteristics (SCC) of Three Phase Synchronous Generator