Order Code - 46592
Three Phase Synchronous Generator Lab

46592 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. These are used 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 very 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's understanding complete.

Features

- Electrical Loading Arrangement
- Flexible Shaft Coupling Arrangement
- Provided with Digital Tachometer
- Machine with Class "B" Insulation
- Heavy Duty Base/Channel
- Equipped with supply indication lamps
- Terminals provided to use the optional externally
- Equipped with supply indication lamps
- Designed by considering all the safety standards
- Diagrammatic representation for the ease of connections
- Exclusive and Compact Design
- Learning material CD
- 2 Year Warranty

Scope of Learning

- To study the Open Circuit Characteristics (OCC) of Three Phase Synchronous Generator
- To study the short circuit characteristics (SCC) of three Phase Synchronous Generator

Technical Specifications

DC Power Supply
Input Mains : 230V AC, 50Hz
Fixed DC output : 200V
Variable DC output : 0 - 200V
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 : Shunt
Rating : 2HP
Voltage Rating : 200V
Speed : 1500 RPM (no load)
Insulation : Class 'B'
Three Phase Synchronous Motor (acts as Generator)
Type : Salient Pole
Rating : 3HP
Voltage rating : 415V ±10%
Speed : 1500 RPM (no load)
Insulation : Class 'B'
Excitation Voltage : 120V
Analog Meters Used
DC Voltmeter (MC) : 300V
DC Ammeter (MC) : 10A, 1A
AC Ammeter (MI) : 10A
AC Voltmeter (MI) : 500V (2 Nos.)
Dimensions (mm) : W 600 x D 450 x H 600 (Control Panel)
W 250 x D 900 x H 400 (MG set)
Weight :17.5kg (approximate) (Control Panel)
106kg (approximate)(MG Set)

Optional
DC Power Supply
Rheostat 2.8A, 220Ω

Note: Specifications are subject to change.

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