

THREE PHASE SYNCHRONOUS GENERATOR LAB

OMEGA TYPE 20 108





OMEGA TYPE 20 108 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.

OBJECT

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

FEATURES

- 01 Electrical Loading Arrangement
- 02 Flexible Shaft Coupling Arrangement
- 03 Provided with Digital Tachometer
- 04 Machine with Class "B" Insulation
- 05 Heavy Duty Base/Channel
- 06 Equipped with supply indication lamps
- 07 Terminals provided to use the optional externally
- 08 Equipped with supply indication lamps
- 09 Designed by considering all the safety standards
- 10 Diagrammatic representation for the ease of connections
- 11 Exclusive and Compact Design

TECHNICAL SPECIFICATION

DC Power Supply Required

Input Mains : 230V AC, 50Hz

Fixed DC output : 200V Variable DC output : 0 - 200V 02 Machines Specification (2 Nos.)

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

03 DC Machine (acts as Prime Mover)

Type : Shunt Rating : 1HP Voltage Rating : 180/200V

Speed: 1500 RPM (no load)

Insulation : Class 'B'

04 Three Phase Synchronous Motor (acts as

Generator)

Type : Salient Pole
Rating : 500VA
Voltage rating : 415V ±10%

Speed: 1500 RPM (no load)

Insulation : Class 'B'
Excitation Voltage : 220V **05 Digital Meter 3½ Digit Used**

DC Voltmeter : 300V DC Ammeter : 10A DC Ammeter : 2A AC Voltmeter : 500V AC Ammeter : 10A

06 Dimensions

Cont Panel : L600xH450x D350mm 07 Dimensions MG Set : L900 x H 400 x D250mm 08 Weight Control Panel :12kg (approximate)

09 Weight MG Set : 106kg (approximate)

LIST OF ACCESSORIES:

OTHER APPARATUS REQUIRED

01 DC Powe Supply Omega TYPE 20201......01 02 Rheostat 220 Ohms, 2.8Amp......02

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

OMEGA ELECTRONICS

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