

# Three Phase Synchronous Motor Lab Nvis 7013



**Nvis 7013 Three Phase Synchronous Motor Lab** is an adaptable Training System for the Electrical Laboratories. The product helps in getting fully acquainted with the basic concepts, functioning and operating principle of a Three Phase Synchronous Motor. The product includes experiment such as V and inverse V curve of synchronous motor. For engineering students it is important to know how the variation of field current can affect the power factor of the Synchronous Motor and hence improve the system's performance.

Separate terminals of windings brought out on a terminal box fitted on top of the motor so that one can connect them separately to the control panel and can perform experiment correspondingly. 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 easily understandable.

### **Features**

- Flexible Shaft Coupling Arrangement
- Control board consist of high grade FRP material to provide utmost safety to the users
- Equipped with supply indication lamps
- Provided with Digital Tachometer
- Machine with Class "B" Insulation
- Heavy Duty Base/Channel
- Designed by considering all the safety standards
- Diagrammatic representation for the ease of connections
- Exclusive and Attractive Design
- Online Product Tutorial



# **Scope of Learning**

- To study the V curve of Three Phase Synchronous Motor
- To study the Inverse V curve of the Three Phase Synchronous Motor

## **Technical Specifications**

Mains Supply

Three Phase, 415V±10%, 50Hz

#### Machines Specification (2 nos.)

Both the Machines are flexibly coupled and mounted on a M.S. channel base

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#### **Three Phase Synchronous Motor**

Туре	:	Salient Pole
Rating	:	3 HP
Voltage rating	:	415V±10%
Speed	:	1500 RPM
Insulation	:	Class 'B'
Excitation Voltage	:	120V±10%
DC Machine (Acts as Generator)		
Туре	:	Shunt
Rating	:	2 HP
Speed	:	1500 RPM ±5%
Insulation	:	Class 'B'
Digital Meters Used		
ACAmmeter	:	10A
DCAmmeter	:	10A
ACVoltmeter	:	450V
DC Voltmeter	:	300V
Wattmeter	:	1500W (2nos. )
MCB (TPN)	:	10A

### Optional

Three Phase Variac 10A, DC Power Supply "Nvis 725/Nvis 725A" Resistive Load "Nvis 7067"

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