

# Induction Motor Compound Generator Lab Nvis 7027



**Nvis 7027 Induction Motor Compound Generator Lab** is an adaptive training system for Electrical laboratories. It is designed to demonstrate the fundamental concepts of DC Compound Generator on different loading conditions. The diagrammatic representation is provided on the control panel so that students can make connections themselves. All protection circuits are inbuilt, so there is very less chance of fault or danger.

## **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
- Designed by considering all the safety standards
- Diagrammatic representation for the ease of connections
- Exclusive and Compact Design
- Online Product Tutorial

# Scope of Learning

### Study and verify the:

- Load Characteristics of Long Shunt Cumulatively Compound Generator
- Load Characteristics of Short Shunt Cumulatively Compound Generator
- Load Characteristics of Long Shunt Differentially Compound Generator
- Load Characteristics of Short Shunt Differentially Compound Generator

# **Technical Specifications**

Mains Supply : Three Phase, 415V±10%, 50Hz

## **Machine Specifications**

Both the Machines are flexibly coupled and mounted on a 'C' Channel base

# Three Phase Induction Motor (acts as prime mover)

Type : Squirrel Cage

Rating : 2 HP

Voltage Rating : 415V AC ±10% Speed : 1440 RPM ±5% Insulation : Class 'B'

#### DC Machine (acts as generator)

Type : Compound

Rating : 1HP (also available with 2 HP)

Speed :  $1500 RPM \pm 7.5\%$ 

Insulation : Class 'B'

### **Digital Meters used**

DC Voltmeter : 300V (2 nos.)
DC Ammeter : 5A (2 nos.)
AC Voltmeter : 450V
AC Ammeter : 5A
MCB (TPN) : 10A

Digital Tachometer : 20,000 RPM

#### **Optional**

- Three Phase Variac 10A
- Resistive Load "Nvis 726/Nvis 7067" (for machines rated upto 1HP/2HP respectively)