

# Induction Motor Series Generator Lab Nvis 7030



Nvis 7030 Induction Motor Series Generator Lab is a training system designed to provide comprehensive learning and functioning of a DC Series Generator. It can be used for performing various experiments like Operating Characteristics, Terminal Voltage v/s Armature current (V-I) Characteristics and Load Characteristics, etc. 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
- Control board consist of high grade FRP material to provide utmost safety to the users
- 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
- Product Tutorial (CD)



# Induction Motor Series Generator Lab

#### Nvis 7030

## Scope of Learning

- Study and verify No-Load Characteristics of DC Series Generator
- Study and verify Load Characteristics of DC Series 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 :  $1440 RPM \pm 5\%$ 

Insulation : Class 'B'

DC Machine (acts as generator)

Type : Series

Rating : 1HP (also available with 2 HP)

Speed :  $1500 RPM \pm 7.5\%$ 

Insulation : Class 'B'

Digital Meters used

DC Voltmeter : 300V

DC Ammeter : 5A

AC Voltmeter : 450V

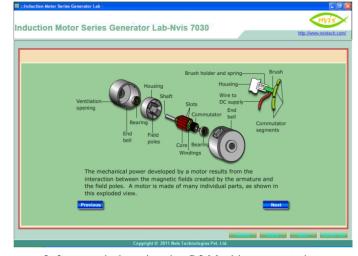
AC Ammeter : 5A

MCB (TPN) : 10A

Digital Tachometer : 20,000 RPM

**Optional Accessories** 

- Three Phase Variac, 10A
- 220 Ohms, 2.8A Rheostat
- Resistive Load "Nvis 726/ Nvis 7067" (for Machines rated upto 1HP/2H Prespectively)



Software window showing DC Machine cut-set view