



Induction Motor Shunt Generator Lab

Nvis 7028



Nvis 7028 Induction Motor Shunt Generator Lab is a significant training system for Electrical Machine Laboratories to demonstrate the operational working and characteristic of DC Shunt Generator under different loading conditions. DC Shunt Generator is a type of Generator whose field winding and armature winding are connected in parallel and acquire properties to behave as almost constant speed DC Machine.

Nvis 7028 includes various experiments to be conducted such as operational working behavior of DC Shunt Generator, Open Circuit Characteristic, Load Characteristic etc. Diagrammatic representations are provided on the control panel so that students can make connections by their own. Nvis 7028 includes digital panel meters to obtain precise results. Separate terminals are provided to connect the optional accessories externally to the control panel with ease.

Features

- Flexible Shaft Coupling Arrangement
- Electrical Loading Arrangement
- Rust free powder coated control panel
- Control board consist of high grade FRP material to provide utmost safety to the users
- Provided with Digital Tachometer for RPM measurement
- Good quality digital panel meters
- Heavy duty base/channels
- Machines with class "B" insulation
- Designed by considering all the safety measures
- Specially designed patch cords for safety purpose
- Diagrammatic representation for the ease of connections
- Online Product Tutorial (CD)



Scope of Learning

- Study and measurement of Open Circuit Characteristic of DC Shunt Generator
- Study and measurement of Load Characteristic of DC Shunt Generator

Technical Specifications

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

Machines Specifications

Both the Machines are flexibly coupled and mounted on a single "C" channel base

Three Phase Induction Motor (acts as prime mover)

Type	: Squirrel Cage
Power Rating	: 2 HP
Voltage Rating	: 415V \pm 10%
Speed	: 1440 rpm \pm 5%
Insulation Class	: 'B'

DC Machine (acts as Generator)

Type	: DC Shunt
Power Rating	: 1HP (also available with 2HP)
Rated Current	: 4.1A
Speed	: 1500 rpm \pm 7.5%
Insulation Class	: 'B'

Digital Meters used

DC Voltmeter	: 300V
DC Ammeter	: 5A (2 nos)
AC Voltmeter	: 450V
AC Ammeter	: 5A

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/2HP respectively)