



Regenerative Charging and Braking Training System Nvis 438R



Energy saving and extended mileage are very important for battery-operated electric vehicles (BEV). Regenerative braking performances are the key for saving energy in BEV's. Nvis 438R training system introduces Permanent Magnet DC (PMDC) motor based regenerative braking to improve energy efficiency in BEV. The kinetic energy of the motor is returned to the battery system in regenerative charging.

Nvis 438R is an ideal platform to enhance vocational training, skills & development. This product clarifies the fundamentals of functioning of regenerative braking and also explains the regenerative charging technique used in Electric Vehicles.

Features

- Provided with built in DC power supply.
- Provided with digital tachometer for speed measurement.
- Control box consists of high grade FRP material.
- Provided with high quality meters.
- Diagrammatic representation for the ease of connections.
- Designed considering all safety standards.

Technical Specifications

Mains Supply : Single Phase, 230V±10%, 50Hz.

Machine Type : PMDC

Rating : 100W watt approx.

Voltage : 24V

Current : 5 A (approx.)

Speed : $2800 \text{ RPM} \pm 10\%$

Power Supply : 24V, 10A

Digital Meters used

DC Voltmeter : 300V
DC Ammeter : 10A

Digital Tachometer : 19,999 RPM

Scope of Learning

- To understand the regenerative braking of PMDC motor.
- To understand the charging of battery by regenerative braking.
- Study and perform no load test of PMDC motor.