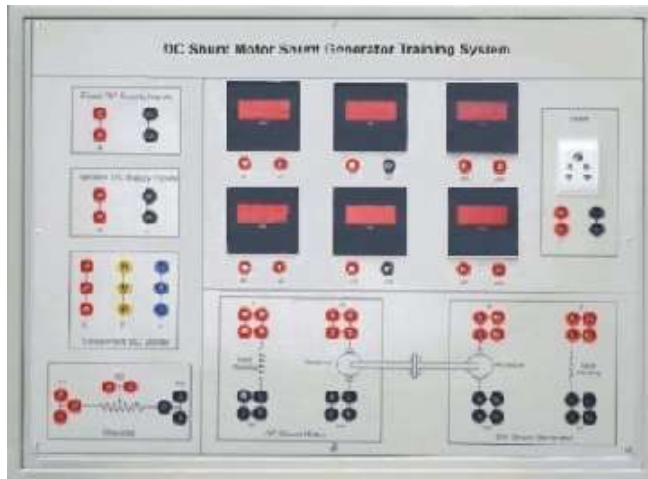




DC Shunt Motor Shunt Generator Training System



** Shown image is just for illustration original may differ

Introduction

DC Shunt Motor Shunt Generator Training System is a significant training system for Electrical Machine Laboratories to demonstrate the operational working and characteristic of DC Generators 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.

It includes various experiments to be conducted such as operational working behavior of DC Shunt Generator, Open Circuit Characteristic, and Load Characteristic etc. Diagrammatic representations are provided on the control panel so that students can make connections by their own

Product Features

- Machine with standard electrical loading arrangement through flexible love-joy coupler
- Machine winding consist of copper for long term service
- Machine Conforms to all leading industrial standards with Class "B/F" Insulation
- Heavy Duty Base/Channel with facility to concrete machine using suitable heavy nuts and bolts
- Provided with contact type Digital speed measuring equipment
- Inbuilt DC Drive of suitable rating with overload protection
- Control panel with digital microcontroller based measuring devices with high accuracy and resolution
- Front board consist of MS Material with power coating / epoxy paint to avoid any rust
- Provided with suitable protection such as fuses, MCB, etc wherever requires
- Specially designed BS10 Terminals and patch cords for electrical safety
- Lamp indication for single phase supply
- Earthing screw provided at the back side of the control set-up
- Screen printed diagrammatic representation for the ease of connections.
- Product should be provided with protection fuses, colored patch cords, single phase cords, learning manual having theory operating procedure with connecting diagram, FAQ, Glossary, etc

Technical Specifications

Operation Voltage of Control Panel : 220VAC \pm 10%, 50Hz

Machine Specifications

Both the machines are flexibly coupled and mounted on a "C" Channel base

DC Machine (Act as prime mover)

Type : Shunt
Voltage Rating : 220VDC \pm 10%
Speed : 1500 rpm \pm 10% at load
Insulation : Class 'F'
Winding : Copper

Duty	: Continuous
Enclosure	: SPDP
Mounting	: Horizontal foot mounted
Shaft Extension	: Single Sided
Loading arrangement	: Electrical
DC Machine (Act as generator)	
Type	: Shunt
Rating	: ½ HP to 3HP
Generated Voltage Rating	: 220VDC ± 10% at load
Speed	: 1500 rpm ± 10%
Insulation	: Class 'F'
Winding	: Copper
Duty	: Continuous
Enclosure	: SPDP
Terminals box	: Powder coated/epoxy paint with terminals and fuses brought out at the top
Machine Base	: MS "C" Channel with suitable interconnection
Digital Meters used	
DC Voltmeter	: 300V (2nos)
DC Ammeter	: 20A (3nos)
DC Power Supply	
Output Fixed voltage	: 200VDC ± 10%
Output Variable voltage	: 0 - 240VDC ± 10%
Current Rating	: Based on Power Rating of Machine
Protection	: Overload Protection
Digital Tachometer	
Range	: 19,999 rpm
Type	: Contact / Non-contact
Protection Devices	
MCB (DP)	: 1No
Glass Fuse	: 3Nos
Grounding Nut	: Available at the rear side of the panel

Experiments Can be performed:

- Study of Separately Excited DC Shunt Generator
- Study of Self Excited DC Shunt Generator
- Study of No Load Characteristics of Self Excited DC Shunt Generator
- Study of (Internal and External) Load Characteristics of Self Excited DC Shunt Generator

Supporting Accessories supplied with Product

- Patch Cords of different color scheme
- Single Phase Mains Cord
- Extra Glass Fuses
- Operating Manual (softcopy)
- Digital Tachometer

Optional Accessories

- Rheostat, 2.8A, 220Ohms
- Resistive Load (based on machine rating)

****Please feel free to share your queries or requirements by filling your details in ask query section or request a Quote section on the website, we will be happy to cater your requirement.**