



BLDC Motor Training System



** Shown image is just for illustration original may differ

Introduction

BLDC Motor Training System is an adaptable training system for the Electrical laboratories. It can be aptly employed for the underlying principles for the working of a BLDC motor. In case of a brushed DC motor, feedback is implemented using a mechanical commutator and brushes. With a in BLDC motor, it is achieved using multiple feedback sensors. The most commonly used sensors are hall sensors and optical encoders. The speed of BLDC motor can be control by using PWM method; direction change and braking system also apply through feedback sensor.

The product provides experiments like Speed control, Torque-Speed Characteristics, N-I Characteristics, Direction change and Braking system etc. Thus it also provides explicit understanding of the subject.

Product Features

- Digital microcontroller based measuring devices with high accuracy and resolution
- Built-in Instrumentation Power Supply
- Control board Consist of MS Material with power coating to avoid any rust
- Screen printed symbols, circuit diagrams, graphics or photos wherever requires.
- Designed using standard BS-10 terminal and patch cords for electrical safety
- Machine winding consist of copper for long term service
- Machine with Class "F" Insulation
- Machine with standard mechanical loading structure
- Machine with standard tabular spring balance with zero adjustment facility
- 1.5 mm x 3mm Heavy Duty Base/Channel with facility to concrete
- Brake-Drum/Pulley with heat suppression facility inside it
- Provided with non contact Digital speed measuring equipment
- Equipped with supply indicator lamp
- Earthing screw provided at the back side of the control board
- Product supplied with protection fuses, colored patch cords, single phase cords, learning manual having theory operating procedure with connecting diagram, FAQ, Glossary, etc

Technical Specifications

BLDC Motor	
Mains Supply	: Single Phase, 230VAC \pm 10%, 50Hz
Machine Type	: BLDC
Rating	: 200W
Voltage Rating	: 24VDV
Current	: 8A
Speed	: 2500 rpm \pm 10%
Loading arrangement	: Mechanical
Brake Drum/Pulley	: Aluminum Casted

Instrumentation power supply	: 24VDC, 10Amp
Digital Meters used	
AC Voltmeter	: 1 No.
AC Ammeter	: 1 No.
Digital Tachometer	
Range	: 19,999 rpm
Type	: Contact / Non-contact
Protection Devices	
MCB (DP)	: 1No
Glass Fuse	: 1No
Grounding Nut	: Available at the rear side of the panel

Experiments Can be performed:

- Study of running and reversing phenomenon of BLDC Motor
- Study of electrical braking of BLDC Motor
- Study of speed control of BLDC Motor using PWM technique
- Study of load characteristics of BLDC Motor

Supporting Accessories supplied with Product

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

****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.**