



# DC Drive Training System

## Nvis 725AF



**Nvis 725AF DC Drive Training System** is used in electrical engineering laboratories for the purpose of conducting experiments in DC machines. This product provides fixed and variable DC output for continuous operation with an over current protection. Output voltage and current can be continuously monitored by front panel meters.

Nvis 725AF includes DC Shunt Motor of suitable mechanical loading arrangement to conduct various experiments such as running & reversing, no load test, load test, etc. It includes study of various faults simulated using toggle switches for trouble shooting of DC drive and circuit.

### Features

- Suitable to run in series and shunt mode of machine.
- Low cost thyristor based design.
- Separate section for fixed and variable supply.
- Over current and emergency protection.
- Machine with mechanical loading arrangement.
- Control board consist of high grade FRP material to provide utmost safety to the users.
- Machine with class “B” insulation.
- Brake-Drum/Pulley with heat suppression facility.
- Designed considering all safety standards.
- Diagrammatic representation for the ease of connections.
- Provided with digital tachometer.



### Scope of Learning

- Study of troubleshooting of DC drive using simulated switches.
- Study of self excited & separately excited DC shunt motor.
- Load characteristics of DC shunt motor.

### Technical Specifications

Input mains : 230V AC  $\pm 10\%$ , 50Hz

DC output voltage

Fixed : 220V  $\pm 10\%$ , 2A

Variable : 0-220V  $\pm 10\%$ , 12A

#### DC machine

Type : Shunt

Rating : 1 HP

Voltage rating : 220V  $\pm 10\%$

Speed : 1500 rpm  $\pm 7.5\%$

Insulation : Class 'B'

Loading arrangement : Mechanical

Brake Drum/Pulley : Aluminum cast

#### Digital Meters

Digital voltmeter : 300V

Digital ammeter : 20A

Single phase MCB : 16A

Emergency switch : 10A

Start and stop push button : 1 no each

Digital tachometer : 19,999 rpm