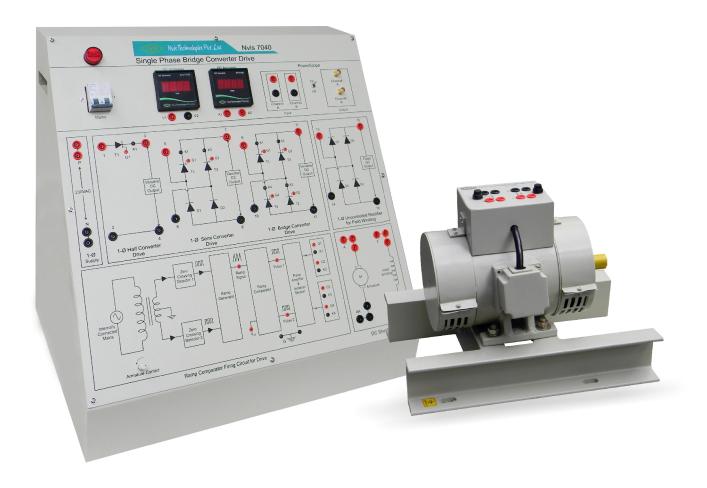


Single Phase Bridge Converter Drive Nvis 7040



Nvis 7040 Single Phase Bridge Converter Drive is an Elite Training System for Power Electronic Lab to demonstrate the operational functioning of Single Phase Bridge Converter. It includes experiment such as speed control of DC Motor by using full wave SCR configuration. It helps students to know how to generate firing pulses for single phase converter using ramp comparator scheme.

Nvis 7040 is equipped with SCR firing control circuit that deals with triggering, modulation and instrumentation which derives the operating characteristics and capabilities of Converter. It incorporates all the necessary test points in order to explain the gate circuit by analyzing gate waveforms at different blocks through inbuilt Power Scope. Separate terminals of armature and field winding are provided to operate the machine in either of the excitation mode.

Features

- Power Scope for isolation measurement
- Provided with DC Shunt Motor
- High quality meters
- Single Phase low voltage Supply for gate circuity
- Single Phase Firing Circuit provided with pulse isolation
- Test terminals provided to analyze the waveforms
- Designed by considering all the safety precautions
- Diagrammatic representation of circuits



Single Phase Bridge Converter Drive Nvis 7040

Scope of Learning

- Study of Ramp Comparator Firing Circuit for Drive
- Study of Single Phase Bridge Converter Drive

Technical Specifications

 $\textbf{Mains Supply} \hspace{1.5cm} : \hspace{.5cm} 230 \text{V} \pm 10\%, 50 \text{Hz}$

Motor Specification

Type : DC Shunt Motor

Rating : 0.5HP

RPM : 1500

Power Scope : Isolated 1500Vmax

SCR Rating : SCR TYN616, 600V/16A

Diode Rating : 6A10, 1000V/6A

Firing Angle Control : 30° to 180°

Digital Meter

DC Voltmeter : 300V

DC Ammeter : 5A

Single Phase MCB : 2A (SPN)

Dimensions (mm) : W 600 x D 450 x H 600 (panel)

W 180 x D 350 x H 310 (motor)

Weight

Panel : 18kg (approximate)

Motor : 23kg (approximate)