

Single and Three Phase Electrical Measurement Training System

Nvis 7053



Nvis 7053 Single and Three Phase Electrical Measurement Training System is a versatile solution for electrical laboratories. It enables the study and measurement of basic electrical parameters such as single and three phase voltages, single and three phase currents, frequency, active power, reactive power, apparent power, power factor and energy.

Nvis 7053 provides Resistive (R), Inductive (L) and Capacitive (C) loads to understand their effect in power systems. Users can observe and learn about parameters such as active power, reactive power, apparent power, and power factor at different combinations of resistive, inductive, and capacitive loads. It provides a platform to easily understand the concepts behind current transformers (CT) & potential transformers (PT) and their applications in power systems. The varied scope of learning makes the subject easy to grasp.

Features

- Built in Direct on Line (DOL) starter
- Equipped with supply indication lamps
- Built in CT & PT to understand working and applications
- Equipped with single and three phase multifunction meters
- Provides with suitable values of Resistive, Inductive and Capacitive Load.
- Stand alone operation
- BS10 safety terminals provided
- Diagrammatic representation for easy connections

Scope of Learning

- Measurement of single phase voltage, current, frequency, active power, reactive power, apparent power and power factor at various configurations of RLC loads.
- Measurement of three phase voltage, three phase current, frequency, active power, reactive power, apparent power and power factor at various configurations of RLC loads.
- Measurement of high value of AC current by a low range AC ammeter and current transformer
- Measurement of power using CT and PT.

Technical Specifications

Single Phase : $230 \text{V} \text{AC} \pm 10\%$, 50 HzThree Phase : $415 \text{V} \text{AC} \pm 10\%$, 50 Hz

DOL Starter

Contactor : 9A AC, 230V AC, 50 Hz, 11VA Coil.

Bi-metallic thermal O/L relay : 1 A AC - 2.5 A AC

Digital Meters

Single Phase measurement : Voltage, current, frequency, active

power, reactive power, apparent

power and power factor.

Three Phase measurement : Line voltage & current, phase voltage

& current, frequency active power, reactive power, apparent power,

power factor and energy.

Potential Transformer(2 nos.)

Primary : 230V AC Secondary : 24V AC

Current Transformer(2 nos.)

Primary : 5A AC Secondary : 1A AC

Electrical Loads (Compatible with single and three phase supply) - optional

Resistive Load : 2.5A AC/phase Inductive Load : 1.5A AC/phase Capacitive Load : 2.5A AC/phase MCB (TPN) : 415 V AC, 2A AC