



Industrial Electrical Protection Training System

Nvis 7059I



A relay is an automatic device which senses an abnormal condition of electrical circuit and closes its contacts. These contacts in turn close and complete the circuit breaker trip coil and make the circuit breaker disconnect the faulty portion of the electrical circuit from rest of the healthy circuit. Nvis 7059I Industrial electrical protection training system is provided to demonstrate the operating principle of over current relay, over voltage relay, under voltage relay and earth fault relay.

A contactor is an electrically-controlled switch used for switching an electrical power circuit. A contactor is typically controlled by a circuit which has a much lower power level than the switched circuit. In this product students can make the operational circuit of these contactor by using power supply and load (optional). It is provided with delay timer and relay.

A break in neutral conductor, within three phase or single phase system, can result into wide voltage variation between phase to phase and phase to neutral & cause heavy damages to the equipments connected to the system. Nvis 7059I is designed to demonstrate the neutral protection.

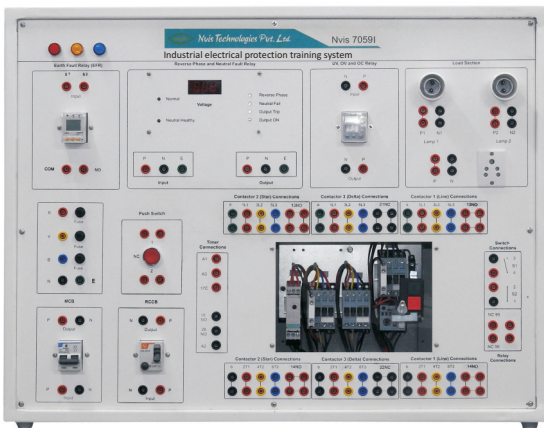
Feature

- Neutral failure protection.
- Over current protection.
- Over voltage protection.
- Under voltage protection.
- LED indications along with audio alarm.

Scope of learning

To study the operating principle of:

- Over voltage relay.
- Under voltage relay.
- Neutral failure protection.
- Over current relay.
- Earth fault relay.
- Contactor.
- Star- delta starter & timer.



Specification

- Under voltage, over voltage, neutral failure protection relay

| Characteristics | Specifications/Rating |
|-----------------|---|
| | 1 - Phase |
| Function | Detection & tripping for undervoltage / over voltage / neutral fail / reverse phase |
| Supply voltage | 230VAC 1 phase / +20%, -30% 3 wire (P N & E) |
| Frequency | 47 Hz to 53 Hz |
| Trip levels | Under volt-170V Over volt-270V |

Over current relay : 1-63 A(adjustable)
: Default- 40A

Earth fault relay : 1 no.

RCCB

Current : 25 Amp

Pole : 2

Earth leakage sensitivity : 30 mA

Push button : 3 nos.(ON, OFF, Reset)

Contactor : 3 nos.

Over load relay : 1no

Timer : 1 no.

Earth leakage sensitivity : 30 mA

Optional

- Single phase AC/DC load (Nvis 726).
- Three phase variac 10A.