



Percentage biased Differential Relay Testing System is a very significant product for Power System lab for electrical students. Under normal conditions, or for a fault outside of the protected zone, current  $i_1$  is equal to current  $i_2$ . Therefore the currents in the current transformers secondary are also equal, i.e.  $i_1=i_2$  and no current flows through the current relay. If a fault develops inside of the protected zone, currents  $i_1$  and  $i_2$  are no longer equal, therefore  $i_1$  and  $i_2$  are not equal and there is a current flowing through the current relay.

Nvis 8015 is designed in such a way that-students can explore about different sections of Differential Relay and can operate it to learn its functioning. It also includes built-in variable supply and fast response measuring instruments which makes the measurement system very precise.

### Technical specifications

- Differential relay consists of operating coil and restraining coil in relay.
- The differential relay is adjustable 15%, 30% and 45%.
- Panel size 2ft (height) x 4 ft (width) x 200mm (depth).
- MCB and fuse protection provided.
- BS-10 & BTI – 30 terminals for connections.
- 3 Phase auto transformer 8 Amps – 1no.
- 3 ph transformer 400/200 Volts Star/ Star – 3KVA.
- 10/5 Amp standard CT --- 3nos.
- 5/5 Amp standard CT --- 3nos.
- 30 VDC, 5Amp Power Supply for relay aux. – 1no.
- Metering: 2AAC-1no, 5AAC– 3nos, 10AAC-3nos, 500VAC-2nos.
- Load Bank, balanced load & unbalanced.
- 4 pole contactor 16 Amp with push to ON and push to OFF buttons.