ELECTRICAL MACHINE LAB



.....a total solution for Educational Lab Trainers

KPR-06

DISTANCE PROTECTION RELAY TRAINER



Features:

- Relay testing kit typically consisting of RL Transmission Line, trip relay logic
- RL Transmission Line (125Kms & 250kms)
- Light weight aluminum flat panel
- Easy and safe wiring using of 4mm Shrouded banana patch cords
- Easy overlays showing circuits diagrams, connection for understanding.
- User manual with set of 4mm banana patch chords

Specifications:

- Transmission line Panel
 - Simulated model for short transmission line using Resistance R (10 ohm/600W)
 - Six numbers of Inductance L(0.15H/5A)
 - Six numbers of Capacitance C (2.2uF/630V)
 - Simulated model for length 125kms & 250kms transmission line.
 - Two numbers of Fan provided for Air cooling.
- Distance Relay Panel
 - Relay connection are brought out on front panel
 - 2 NO Trip contacts, 1 NC Trip contacts, 1 NO Auto reclose contact.
 - Auxiliary Supply of 230VAC.
- Protection relay type (Numerical)
 - Numerical type distance protection relay, current rating 1A/5A for protection of transmission line
 - RS232 port for PC communication, relay setting with software on CD
 - RS232 to USB converter for USB interface
- Transformer Panel
 - 415/110VAC, 50VA, Star/Star Step Down Transformer Panel

- Transformer primary and secondary are brought SBS5 connector on Front panel.
- CT panel
 - Six numbers of 5/5 Amp. CT.
 - Primary side of CTs are brought on 3 x 2 x 2 SBS-5 connectors.
 - Secondary side of CTs are Star connected in group of 3 & brought out on 4 x 2 SBS5 connectors
- FWD-OFF-REV Switch Panel
 - 6A/440V FWD/REV 3 pole 3 way switch with center OFF
- Input 3 phase DOL Starter panel
 - 4 pole MCB of 415 V/2A.
 - DOL 9A Contactor with 230V / 50 Hz/ 11VA.
 - Bimetallic thermal O/L relay with range 1.4A 2.3A
 - R-Y-B Input display Indicators.
 - Separate NO contact brought out for auto recloser & NC for trip.
- 1 phase AC Input supply panel
 - Two numbers of 1ph. MCBs of 4A/1.6A
 - Resistive & Inductive Load.
- Two numbers of 3 Phase Bidirectional Power cum Energy meter panel
 - 3 phase 3/4 wire, 415VAC, CT Input 5A
 - LCD/LED display, Aux. supply 230V, 45-65Hz,5W,
 - V, I, Hz, Pf, KVA, KW, KWH.
 - Modbus RTU RS 485 (optional)
- Resistive Load panel
 - 3 numbers of 600W resistors with switch selectable
 - Switch of 7 way at 100, 112, 125, 150, 175, 200 & 225 Ohm selection.
 - Two numbers of Fan provided for Air cooling

Experiments Covered

- To perform experiment for distance protection of transmission line LG, LL, LLG, LLL, LLLG.
- To perform experiment for auto recloses function of the relay for transient type faults.

Note: Specifications can be altered without notice in our constant efforts for improvement.