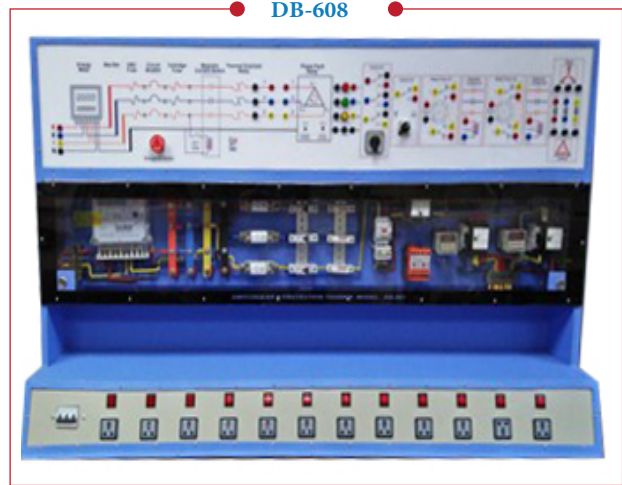


# SWITCHGEAR AND PROTECTION TRAINER

## GENERAL DESCRIPTION

The db-tech, DB-608 is an idea module for students to exercises the function of relays and protection of electrical machines. The module is designed in such a way that the student can be familiar with different types of relays and their applications in real life situation. The students can also perform practical exercise of protection system by attaching the modules with different machines.



## Specification

### Three Phase AC/DC Power Supply:

- Rated Input Voltage: 400 V AC ( $\pm 5\%$ ) Three Phase 4-wire
- Rated Output Voltage: 400 V AC ( $\pm 5\%$ ) Three Phase 4-wire
- Rated Output Voltage: 0~ 400 V AC ( $\pm 5\%$ ), Three Phase 4-wire
- Rated Output Current: 5 AC ( $\pm 5\%$ )
- Rated Output Voltage: 120 V DC ( $\pm 5\%$ ), 5Amp
- Rated Output Voltage: 0~ 220 V DC ( $\pm 5\%$ ), 5Amp
- Short Circuit Protection Facility
- 4mm safety jack Connection facility
- Air Cooling system facility

### Control Board:

- Reversible Relay: 1EA
- Three Phase Energy Meter: 1 EA
- BAS Bar :4EA
- Circuit Breaker :3EA (10Amp)
- Cartridge Fuse:3EA (10Amp)
- HRC Fuse: 3EA (15Amp)
- Thermal Overload Relay: 1 EA
- Phase fault Relay: 1EA
- Digital Timer: 2EA
- Magnetic Contractor: 3EA
- Selector Switch:2 EA
- Rated Input Voltage: 400 V AC ( $\pm 5\%$ ), 50Hz Three Phase 4-wire

### Scope of Learning:

- Show skill in connecting cutout, MCB/MCCB in a circuit.
- Test the rating of circuit breaker(6A, 10A)
- Demonstrate polyphase system and phase sequence.
- Show skill in connecting Phase Fault Relay
- Show skill in phase missing test
- Show skill in Over-voltage test
- Show skill in Under voltage test
- Show skill in phase sequence test
- Perform star-delta conversion in power system.
- Study the different parts of a energy meter.
- Study the different parts of a Busbar, Thermal over load relay, Magnetic contact, Timer etc.
- Measure the energy of a three phase circuit by three phase energy meter.
- Perform the identification of the parts of a three phase induction motor.
- Start a 3-phase induction motor by star-delta starter using magnetic contact switch.
- Start a 3-phase induction motor by Auto star-delta starter using Timer & magnetic contact switch.
- Categorize different types of fuses and measure the current carrying capacity of HRC fuse.

**Accessories:** 1 Training Manual, 1 Experimental Table 4mm Safety banana socket  
 Size (L x W x H)= (60 inch x 36 inch x 12 inch)  
 Weight: 100Kg (Approx.)  
 Power Requirements: 220~240V AC, 50Hz  
 Built-in short circuit protection system.