

ELECTRICAL MACHINE LAB TRAINER

GENERAL DESCRIPTION

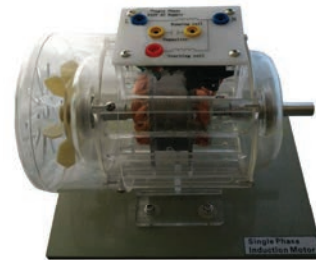
The DB-818EMT Electrical Machine Lab trainer is an ideal training system for electrical power & energy conversion lab. This trainer is equipped with various types of equipment, such as Power supply, Moto/Generator, Capacitor, Transformer, Rheostat. Using these machines and meters, students mainly do experiments on finding the machine characteristics and various parameter values.



Specification

1. Single Phase Induction Motor:

- With starting and operating capacitor
- Full Transparent 6mm Fiber Glass Body
- 4mm safety jack Connection facility
- Rated input Voltage: 220 VAC (±5%)
- Rated input Current: 0.10A (±5%)
- Rated Speed: Min 1400 rpm (±5%)
- Rated Power: 22W (±5%)
- Capacitor: 2μF



2. DC permanent magnet Machine:

- Full Transparent Fiber Glass Body
- 4mm safety jack Connection facility
- Rated Voltage: 220 V DC (±5%)
- Rated Current: 0.42A (±5%)
- Rated Speed: min.3200 rpm (±5%)
- Rated Power: 92.4 W (±5%)



3. DC Shunt wound Motor:

- Full Transparent Fiber Glass Body
- 4mm safety jack Connection facility
- Rated input Voltage: 220 V DC (±5%)
- Rated input Current: 0.7Amp (±5%)
- Shunt field Current: Max. 0.10Amp (±5%)
- Armature Current: 0.60 Amp (±5%)
- Rated Speed: Max. 7000 rpm (±5%)
- Rated Power: Max 154W (±5%)



4. DC Series wound Motor:

Full Transparent Fiber Glass Body
 4mm safety jack Connection facility
 Rated Voltage Max: 100 VDC ($\pm 5\%$)
 Rated Current Max: 0.41A ($\pm 5\%$)
 Rated Speed Max: 6600 rpm ($\pm 5\%$)
 Rated Power Max: 41W ($\pm 5\%$)

**5. DC Compound wound Motor:**

Full Transparent 6mm Fiber Glass Body
 4mm safety jack Connection facility
 Short Shunt:
 Rated Voltage Minimum: 220V DC ($\pm 5\%$)
 Rated Current Maximum: 0.125A ($\pm 5\%$)
 Armature Current Maximum: 0.055 ($\pm 5\%$)
 Shunt Current Maximum: 0.07 ($\pm 5\%$)
 Rated Speed Maximum: 1100 rpm ($\pm 5\%$)
 Rated Power Maximum: 15W ($\pm 5\%$)
 Long Shunt:
 Rated Input Voltage Maximum: 220V DC ($\pm 5\%$)
 Rated Input Current Maximum: 0.25A ($\pm 5\%$)
 Minimum Rated Speed: 2000 rpm ($\pm 5\%$)
 Minimum Rated Power: 30W ($\pm 5\%$)

**6. Universal Motor:**

Full Transparent 6mm Thickness Fiber Glass Body
 4mm safety jack Connection facility
 Rated Input Voltage Maximum: 120 V AC/DC ($\pm 5\%$)
 Rated Input Current Maximum: 1.0 A AC/DC ($\pm 5\%$)
 Rated Speed Maximum: 8400 rpm (AC) ($\pm 5\%$)
 Rated Speed Maximum: 10000 rpm (DC) ($\pm 5\%$)
 Rated Power Maximum: 120W ($\pm 5\%$)

**7. Three Phase Induction Motor:**

Full Transparent 6mm Fiber Glass Body
 4mm safety jack Connection facility
 Rated Input Voltage Minimum: 400 VAC ($\pm 5\%$) 3phase 3 wire
 Rated Input Current Maximum: 0.085A ($\pm 5\%$)
 Rated Speed Maximum: 1450 rpm ($\pm 5\%$)
 Rated Power Maximum: 65W ($\pm 5\%$)



8. Three Phase Rotor winding motor:

Full Transparent 6mm Thickness Fiber Glass Body
 4mm safety jack Connection facility
 Rated Input Voltage Maximum: 400 V AC ($\pm 5\%$)
 Rotor Excitation Voltage Maximum: 50-100V (3-Phase Line to Line)
 Rated Speed Maximum: 1500 rpm ($\pm 5\%$)

**9. Synchronous motor (Y-Connection):**

Full Transparent 6mm Thickness Fiber Glass Body
 4mm safety jack Connection facility
 Rated Input Voltage Maximum: 400 V AC ($\pm 5\%$)
 Rated Input Current Maximum: 0.20A ($\pm 5\%$)
 Rotor Field Excitation Voltage Maximum: 50 VDC ($\pm 5\%$)
 Rated Speed Maximum: 1500 rpm ($\pm 5\%$)
 Rated Power Maximum: 140W ($\pm 5\%$)

**10. Three Phase AC/DC Power Supply:**

Rated Input Voltage Maximum: 400 V AC ($\pm 5\%$) Three Phase 4-wire
 Rated Output Voltage Maximum: 400 V AC ($\pm 5\%$) Three Phase 4-wire
 Rated Output Voltage Maximum: 0- 400 V AC ($\pm 5\%$) ,Three Phase 4-wire
 Rated Output Current Maximum: 5 AC ($\pm 5\%$)
 Rated Output Voltage Maximum: 120 V DC ($\pm 5\%$) ,5Amp
 Rated Output Voltage Maximum: 0- 220 V DC ($\pm 5\%$) ,5Amp
 Short Circuit Protection Facility

► Accessories:

- 4mm safety Jack : 1set
- User Manual: 1 Nos
- Motor Rack : 1 Nos
- Mounted Socket for Power Supply Unit: 1 Set