

SYNCHRONOUS MOTOR/GENERATOR TRAINING SYSTEM

GENERAL DESCRIPTION

The db-tech, DB-SM-8 is synchronous motor Generator is an AC motor in which at steady state the rotation of the shaft is synchronized with the frequency of the supply current, the rotation period is exactly equal to an integral number of AC cycles. Synchronous motors contain multiphase AC electromagnets on the stator of the motor that create a magnetic field which rotates in time with the oscillations of the line current.



Specification

Experiment:

- Measuring of Structures and twisted wire resistances of Synchronizer.
- Starting Methods of Synchronous Motor.
- Testing of Phase & Load of Synchronous Motor.
- No-load and Short Testing of Synchronous Generator.
- Load Testing of Synchronous Generator.

Control Board:

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| 1. Power: 3ΦAC, 220V/380V, 50Hz, 1500RPM | 9. Power Lamp: 1 EA |
| 2. DC Voltage Meter: 2 EA | 10. Excitation Power: 1 Set |
| 3. DC Ampere Meter: 2 EA | 11. Speed Detector: 1 Set |
| 4. AC Voltage Meter: 1 EA | 12. Condenser Type Element: 3 EA |
| 5. AC Ampere Meter: 2 EA | 13. Digital Speed Meter: 1 EA |
| 6. Frequency Meter: 1 EA | 14. Electric Machine Assembly: 1 Set |
| 7. Synchronous Indicator: 1 EA | 15. Style: Steel, Portable Type |
| 8. MCCB: 4 EA | |

Electric Machine:

Synchronous Motor: 1 Set

1. Voltage : 3ΦAC
2. Excitation Voltage : DC 45V
3. Number of Pole : 4 Poles
4. Output : 360Watt(1/2HP)
5. Field : Revolving- Field Type
6. Style : Semi-enclosed Type

Synchronous Generator: 1 Set

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 2. Excitation Voltage : DC 45V
 3. Number of Pole : 4 Poles
 4. Output : 360Watt(1/2HP)
 5. Field : Revolving- Field Type
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