DC Generators Learning System

85-MT2B





Learning Topics:

- DC Generator Function
- DC Generator Operation
- DC Series Generators
- DC Shunt Generators
- DC Compound Generators
- Wiring Configurations
- Performance Characteristics

Amatrol's DC Generators Learning System (85-MT2B) teaches industry-relevant DC generator skills including how to: operate, install, analyze performance, and select generators for various applications. A generator is a device that creates DC electricity and can be found in diesel locomotives, as well as aircraft and marine systems. The 85-MT2B requires the Electric Machines Learning System (85-MT2) and electricity (208 VAC/60 Hz/3 phase).

The 85-MT2B includes resistive load and inductive load units that connect to the DC generator supplied with the 85-MT2 System to provide operation under various types of loads. Learners will use these components to study topics such as DC series generators, DC shunt generators, and DC compound generators. Amatrol learning systems feature a perfect combination of theoretical knowledge and hands-on skill building to reinforce each in a learner's mind and strengthen comprehension for more advanced skills.



Technical Data

Complete technical specifications available upon request.

Resistive Load Unit Six (6) Parallel Branches of Resistance Toggle Switches (6) Total Resistance: 33 ohms – 3500 ohms Black Lead - 50 cm (2) Green Lead – 50 cm Inductive Load Unit Six (6) Parallel Branches of Resistance Toggle Switches (6) Black Lead -50 cm (2) Green Lead – 50 cm Interactive Multimedia Curriculum (MB876) Instructors Guide (CB876) Installation Guide (DB876) Student Reference Guide (H19706) Additional Requirements

Basic Electric Machines Learning System (85-MT2) Computer Requirements: http://www.amatrol. com/support/computer-requirements/ Utilities

Electricity (208 VAC/60 Hz/3 phase)

Use Real-World Components to Connect and Operate DC Generators

The 85-MT2B includes a resistive load unit with six parallel branches of resistance and a total resistance of 33 ohms – 3500 ohms, an inductive load unit with six parallel branches of resistance,

and a lead set. These components will be used to practice a variety of handson skills including determining the brush polarity of a DC generator using a digital multimeter; connecting and operating a DC series generator; connecting and operating a self-excited DC shunt generator; and connecting and operating a DC compound generator.



85-MT2B with required 85-MT2

Comprehensive Curriculum Covers the DC Generator Concepts and Performance Characteristics

This learning system includes world-class curriculum that begins with a basic introduction DC generator concepts and then explains the operation and performance of three types of DC



generators. Specifically learners will study objectives like: defining brush polarity and armature reaction; learning two wiring configurations for

DC shunt generators; and understanding the performance characteristics of a DC compound generator. This curriculum is presented in a highly-interactive multimedia format that will engage all learning styles. This multimedia features stunning 3D graphics and videos, audio voiceovers of all of the text, and interactive activities and quizzes.

Additional Electrical Machine Training

The 85-MT2B is just one option for electrical machine training from Amatrol. Other options to add onto the Basic Electrical Machines Learning System (85-MT2) include Alternators / Synchronous Motors Learning System (85-MT2C) and Wound Rotor Motor (85-MT2D). The 85-MT2C includes capacitive load, combination synchronous motor/ alternator, and synchronizing lights

/ switch unit to cover topics like alternator output voltage and frequency, three dark synchronization method, and reversing a synchronous motor. The 85-MT2D includes a wound rotor controller and motor to cover topics such as speed controllers, motor reversing, and performance analysis and measurement.



85-MT2C and 85-MT2D



Student Reference Guide

A sample copy of the Rotating Electrical Machines Student Reference Guide is included with this learning system. Sourced from the system's curriculum, the Student Reference Guide takes the entire series' technical content contained in the learning objectives and combines them into one perfectly-bound book. Student Reference Guides supplement this course by providing a condensed, inexpensive reference tool that learners will find invaluable once they finish their training making it the perfect course takeaway.



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