Amatrol's 85-MT2-C Alternators / Synchronous Motors Learning System adds to the 85-MT2 Electric Machines Learning System to teach alternators and synchronous motors commonly found in industrial applications. Alternators provide a mobile source of AC electrical power while synchronous motors reduce power costs by correcting the overall power factor in a plant. Students learn industry-relevant skills including how to operate, install, and analyze the performance alternators and synchronous motors.

The 85-MT2-C includes capacitive load, combination synchronous motor/alternator, and synchronizing lights/switch unit. The capacitive load unit combines with the 85-MT2 to provide operation under various types of loads. Student learning materials for both theory and lab and a teacher's guide are included.

**Learning Topics:**
- Installation
- Operation
- Performance Measurement
- Performance Analysis
- Alternators
- Synchronous Motors
- Power Factor Correction
- Synchronizing Alternators
- Field Excitation
- Reversing Synchronous Motors

**TECHNICAL DATA**

**Alternator/Synchronous Motor**
- Synchronous motor-alternator
- Nema 56 Frame
- 1/3 HP Rating
- Three phase, 208VAC, 1800rpm, 60Hz, 90V/0.4A DC Field.
- Connectors for 85-MT2 accessible machine windings, shaft coupling, escutcheon plate

**Synchronizing Switch/Lights Combination Unit**

**Capacitive Load Unit**
- Steel Enclosure
- 250 VAR Load Rating at 120-150 VAC
- Capacitor Selector Switch Set-selects individual or capacitor combinations
- Capacitor, 1 micro-Farad
- Capacitor, 2 micro-Farad
- Capacitor, 4 micro-Farad
- Capacitor, 8 micro-Farad
- Capacitors, 20 micro-Farad (2)

**B878 Student Learning Activity Packets**

**Required Items**
- 85-MT2 Electric Machines Learning System