

# Reclosers

## Microprocessor-Based Recloser Control Battery Charger Kit KME4-711 (240 Volt AC Input) Installation and Operation Instructions

Service Information

# S280-77-7



**Figure 1.**  
Microprocessor-based recloser control battery charger kit KME4-711 (240 volt AC input).

## PRODUCT INFORMATION

### Introduction

Service Information S280-77-7 provides operation instructions for the KME4-711 battery charger kit (240 VAC input). It is used to charge the batteries for the following recloser controls:

- Form 4C
- Form 5
- Form 6 (Pole Mount)
- FXB

**IMPORTANT:** The charger is not intended for use with a dead battery (below 2 VDC). Use a voltmeter to check battery voltage before attempting to charge it.

If the battery is below 19 VDC for more than two days, replace the battery. The expired battery should be disposed of in an environmentally responsible manner. Consult local regulations for proper battery disposal.

### Read This Manual First

Read and understand the contents of this manual and follow all locally approved procedures and safety practices before installing or operating this equipment.

### Additional Information

These instructions cannot cover all details or variations in the equipment, procedures, or process described, nor provide directions for meeting every possible contingency during installation, operation, or maintenance. For additional information, contact your Cooper Power Systems sales representative.

### Quality Standards

ISO 9001:2000 Certified Quality Management System

**TABLE 1**  
Kit KME4-711 Battery Charger Kit (240 Volt AC Input)

Item	Quantity	Description
1	1	Step-down Transformer
2	1	Battery Charger

### Acceptance and Initial Inspection

Each kit is in good condition at the factory and when accepted by the carrier for shipment.

Upon receipt, inspect the carton for signs of damage. Unpack the kit(s) and inspect it thoroughly for damage incurred during shipment. If damage is discovered, file a claim with the carrier immediately.

### Handling and Storage

Be careful during handling and storage of the kit to minimize the possibility of damage. If the kit is to be stored for any length of time prior to operation, provide a clean, dry storage area.

### Description

The battery charger can be wired into a 240 VAC power supply. The kit includes a battery charger and a step-down transformer.

For additional information on control battery installation and testing procedures, refer to the appropriate instructions:

- Service Information S280-77-1, Form 4C Control Instructions
- Service Information S280-78-1, Types FXA and FXB Control Instructions
- Service Information S280-79-1, Form 5 Control Instructions
- Service Information S280-79-10, Form 5, Form 5 UDP, Form 5 DC NOVA Control Instructions
- Service Information S280-79-12, Form 5 LS/UDP Control Instructions
- Service Information S280-42-3, Form 5/Triple-Single Control Instructions
- Service Information S280-70-3, Form 6 Pole Mount Control Instructions
- Service Information S280-70-7, Form 6/Triple-Single Pole Mount Control Instructions
- Service Information S280-90-6 Electronic Control Battery Testing, Charging, and Replacement Instructions



## SAFETY FOR LIFE



Cooper Power Systems products meet or exceed all applicable industry standards relating to product safety. We actively promote safe practices in the use and maintenance of our products through our service literature, instructional training programs, and the continuous efforts of all Cooper Power Systems employees involved in product design, manufacture, marketing, and service.

We strongly urge that you always follow all locally approved safety procedures and safety instructions when working around high voltage lines and equipment and support our “Safety For Life” mission.

## SAFETY INFORMATION

The instructions in this manual are not intended as a substitute for proper training or adequate experience in the safe operation of the equipment described. Only competent technicians who are familiar with this equipment should install, operate, and service it.

*A competent technician has these qualifications:*

- *Is thoroughly familiar with these instructions.*
- *Is trained in industry-accepted high- and low-voltage safe operating practices and procedures.*
- *Is trained and authorized to energize, de-energize, clear, and ground power distribution equipment.*
- *Is trained in the care and use of protective equipment such as flash clothing, safety glasses, face shield, hard hat, rubber gloves, hotstick, etc.*

Following is important safety information. For safe installation and operation of this equipment, be sure to read and understand all cautions and warnings.

### Hazard Statement Definitions

This manual may contain four types of hazard statements:

**⚠ DANGER:** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

**⚠ WARNING:** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

**⚠ CAUTION:** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

**CAUTION:** Indicates a potentially hazardous situation which, if not avoided, may result in equipment damage only.

### Safety Instructions

Following are general caution and warning statements that apply to this equipment. Additional statements, related to specific tasks and procedures, are located throughout the manual.

#### ⚠ DANGER:

Hazardous voltage. Contact with hazardous voltage will cause death or severe personal injury. Follow all locally approved safety procedures when working around high- and low-voltage lines and equipment.

G103.3

#### ⚠ WARNING:

Before installing, operating, maintaining, or testing this equipment, carefully read and understand the contents of this manual. Improper operation, handling, or maintenance can result in death, severe personal injury, and equipment damage.

G101.0

#### ⚠ WARNING:

This equipment is not intended to protect human life. Follow all locally approved procedures and safety practices when installing or operating this equipment. Failure to comply may result in death, severe personal injury, and equipment damage.

G102.1

#### ⚠ WARNING:

Power distribution and transmission equipment must be properly selected for the intended application. It must be installed and serviced by competent personnel who have been trained and understand proper safety procedures. These instructions are written for such personnel and are not a substitute for adequate training and experience in safety procedures. Failure to properly select, install, or maintain power distribution and transmission equipment can result in death, severe personal injury, and equipment damage.

G122.3

## Installation and Operation

**CAUTION:** Recloser misoperation. The control must be removed from service before disconnecting the control battery. Disconnecting the control battery from an in-service control may cause recloser misoperation (unintentional operation). Failure to comply can result in equipment damage and personal injury. T213.4

**CAUTION:** Recloser misoperation. The control must be removed from service prior to performing any maintenance, testing, or programming changes. Failure to comply can result in misoperation (unintentional operation) of the recloser. T216.2

**Note:** Do not attempt to charge a battery with a measured voltage of below 2 VDC. The charger will not operate if it does not detect a battery above 2 VDC.

1. Remove the control from service. Refer to the appropriate *Service Information* instructions (listed in **Description** section of this manual).
2. Carefully transport the control to a suitable service facility.

**Note:** The entire disassembly, reassembly, and testing process should be conducted in a clean environment, such as a repair shop.

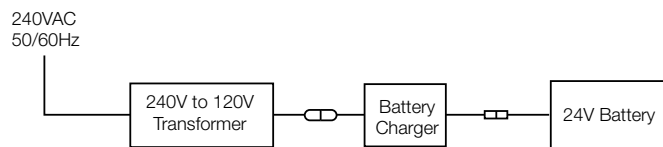
**IMPORTANT:** Make sure the power is turned off and the battery is disconnected.

3. Configure the connectors on the battery charger to match the configuration on the battery. This can be accomplished by sliding the plastic red/black connectors together until they snap closed side-by-side (Figure 2).

**Note:** Mate black connectors with black and red connectors with red (refer to Figures 2 and 3).



**Figure 2.**  
End view of battery connector – 24 Volt battery configuration.



**Figure 3.**  
Battery charger connections.

4. Connect the battery to the battery charger (refer to Figure 3) as applicable:

- If the control uses a single 24 V battery, the charger connects directly to the battery.
- If the control uses two 12 V batteries, adapter KME5-325-1 is required to connect the two batteries to the charger.

**IMPORTANT:** Use adapter KME5-325-1 battery assembly to connect the two 12 volt batteries to the KA43ME7001 charger. Never connect a single 12 volt battery to the KA43ME7001 charger.

5. Plug the battery charger into the step-down transformer (Figure 3).
6. Plug the step-down transformer into a 240Vac power source (Figure 3).


A green LED will illuminate when a full charge has been reached. Refer to *Service Instructions S280-79-14 Form 4C, Form 5, Form 6, and FXB Controls Portable Lead Acid Battery Charger KA43ME7001 Operating Instructions* for additional information regarding LED operation.

**Note:** This process can take up to 24 hours.



**Figure 4.**  
Charger yellow LED illuminates while battery is charging.

## Testing

 **CAUTION:** Equipment misoperation. Do not connect this control to an energized recloser until all control settings have been properly programmed and verified. Refer to the programming information for this control. Failure to comply can result in control and recloser misoperation, equipment damage, and personal injury.

G110.3

Refer to appropriate *Service Information* instructions (listed in **Description** section of this manual) for procedures to install and test the charged battery.

