## REMOTE RACKING SYSTEM SPECIFICALLY DESIGNED FOR:



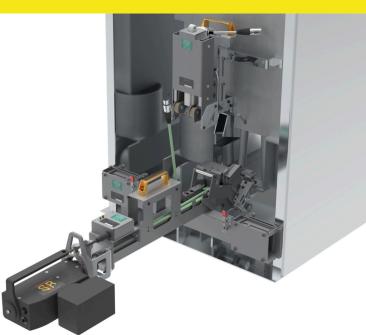
Because Distance is the Best Arc Flash Protection

CARIBBEAN

140

CARIBBEAN

BREAKER: MA250-B MANUFACTURER: Allis-Chalmers, Siemens VOLTAGE: 5kV CURRENT: 1200A, 2000A



LIGHTWEIGHT AND PORTABLE

- EASY-TO-USE HANDHELD CONTROLLER
- STANDARD 50' CABLE (WITH OPTIONAL EXTENSIONS) ASSURES SAFE DISTANCE FROM BREAKER DURING RACKING SEQUENCE
- ERROR RECOVERY & EMERGENCY STOP CAPABILITY
- SPANNER BAR ALLOWS FOR NO-MOD SETUP

### PARTS & ACCESSORIES

Spanner Bar, Smart Drive Bracket, Interlock Assembly, Motor Drive Unit, Handheld Controller, and 50' Communications Cable

All of our products are designed, built to spec, and shipped from our state-of-the-art facility in Tucson, Arizona. Each product is created and tested by our knowledgeable team of designers and engineers to fit each individual breaker, cubicle door, switchgear, or variant. When you choose Safe-T-Rack, you're getting the safest, most reliable product on the market.

#### OUR TEAM GOES TO WORK EVERY DAY To make sure your team Comes home safe.

#### REMOTE SOLUTIONS, LLC 2475 N. Jackrabbit Avenue · Tucson, AZ 85745 · (520) 628-4378 ·

FAX (520) 628-4568 · www.Safe-T-Rack.com





**SAFETY FIRST** 

MANUFACTURER: Allis-Chalmers, Siemens VOLTAGE: 5kV CURRENT: 1200A, 2000A

# PARTS LIST

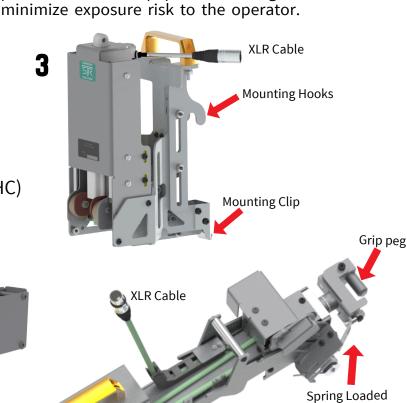
- 1. Spanner Bar
- 2. Smart Drive Bracket (SDB)
- 3. Interlock Manipulator

BREAKER: MA250-B

- 4. Motor Drive Unit (MDU)
- 5. Two (2) batteries with charger
- 6. One (1) SR-U Handheld Controller (HHC)

Drive Rings

- 7. 50' communication cable\*
- 8. Polymer Storage Case



Always observe safety precautions and use personal protective equipment (PPE) as required by local site

procedures. This equipment is designed to further



# **SETUP SEQUENCE**

#### SPANNER BAR, SMART DRIVE BRACKET (SDB), & INTERLOCK MANIPULATOR

- 1. Ensure that Spanner Bar, Smart Drive Bracket, Interlock Assembly, and Cubicle are all labeled with CARIBBEAN color code.
- 2. Place Spanner Bar across cubicle, extending until it fits snugly between cubicle walls. Secure in place using locking clamps.
- 3. Mount Smart Drive Bracket (SDB) onto cubicle so that grip peg on SDB engages with breaker hitch block. SDB will lock in place with spring-loaded latch.
- 4. Mount Interlock Manipulator onto breaker face by attaching Mounting Clip of assembly to breaker just above foot pedal. Once clip is secured, use springloaded Mounting Hooks to secure Interlock Manipulator in place using breaker handle.
- 5. Connect interlock assembly XLR cables to SDB XLR cables, ensuring that neither cable will be pinched or pulled during racking sequence.

### MOTOR DRIVE UNIT (MDU)

- 1. Set the locking pin on SDB to an open position and insert MDU into the drive rings on SDB.
- 2. Align and engage the MDU with ring dogs on drive rings. Once aligned, release locking pin to hold MDU in place.
- 3. Attach fully charged battery to MDU.
- 4. Connect SDB communication cable to port in MDU. Note: Red line on communication cables indicates correct alignment with port.

#### HANDHELD CONTROLLER (HHC)

- 1. Connect 50' Communication Cable to second port in MDU.
- 2. Connect other end of 50' Communication Cable to Handheld Controller (HHC)\*.
- 3. Move a safe distance away from the breaker.



SPANNER BAR POSITIONED ON CUBICLE USING LOCKING CLAMPS



SDB SHOWING GRIP PEG ENGAGED WITH CUBICLE HITCH BLOCK AND SPRING-LOADED LATCH SECURED



INTERLOCK MANIPULATOR MOUNTED ONTO CUBICLE USING MOUNTING CLIP AND MOUNTING HOOKS



SPANNER BAR, SDB, AND INTERLOCK Maniuplator Secured and Ready For XLR Cords, Mdu Cord, and hhc communication Cord

\*Note: Multiple cables can be used to increase safe distance from breaker. Additional cables sold separately. Contact Remote Solutions LLC for more information.

# POWER ON

- 1. Twist the E-Stop switch on HHC to activate the system.
- 2. Several screens will flash as unit powers up. Once HHC has powered up, verify correct application screen is displayed.

## SYSTEM OPERATION

1. Follow the on-screen prompts to complete racking procedure. Navigate selections using perimeter buttons on HHC (backlit in green). "Up" and "Down" will toggle through options on screen. "Right" and "Left" will confirm selections.

### BATTERY REQUIREMENT

Note: System will ask to verify battery level. Check battery level is at 4 bars before attempting to rack. If racking multiple breakers, please verify battery level between each racking attempt.

- 2. Navigating HHC in this manner, select current location and desired destination of breaker. When selection is highlighted, click center button (backlit in red) to confirm selection. This will initiate the racking process.
- 3. System will perform action as selected, displaying progress on screen.
- 4. Upon successful operation, HHC will display a completed racking screen.

## **POWER DOWN & STORAGE**

- 1. Power down the HHC by pressing the E-Stop button. Remove battery from MDU.
- 2. Unplug HHC communication cord from SDB and remove cord from MDU.
- 3. Stow 50' Communication Cable, HHC, MDU, and batteries in storage case.
- 4. Remove Interlock Manipulator from cubicle by releasing spring mechanism near mounting hooks. Store in provided case.
- 5. Using Spring Loaded Latch Release, decouple and remove SDB from breaker and store in provided polymer case.
- 6. Release locking clamps to remove and store Spanner Bar.

### CARE & MAINTENANCE

To ensure longevity of the Portable Kit and SDB, store the tools in the provided polymer case in a dry, temperate environment. The tools are weather resistant but should be used with care in rain and snow.



Remote Solutions reserves the right to change or update product or documentation without prior notice.

# **ERROR RECOVERY**

If a problem occurs, programmed recoveries will happen automatically and the system will attempt to recover the breaker to a known position.

When racking in/out, if an obstruction or mechanism failure occurs, the system will attempt to recover the breaker to a safe position. Actions will be displayed on HHC with an asterisk (\*) in front of them. When the system has completed recovery operations, HHC will display current expected location of the breaker. Note the expected location and approach the breaker with caution. Determine cause of the failure and remedy the situation prior to attempting additional remote racking.

NOTE: Attempting to stop or shutting down the system midprocess once it has started is not recommended, as this will leave the breaker in an unknown position. The Remote Racking System will only operate from known positions.

## **EMERGENCY STOP**

The red E-Stop button on the HHC serves as both the power and Emergency Stop button. If an E-stop is initiated, the system will shut down. Operator must then manually recover the breaker to a known position. Follow all safety procedures and wear appropriate PPE when recovering a breaker manually.

> For any questions, concerns, information, or missing/ replacement parts, contact Remote Solutions below or follow the QR link to our website.



SAFE-T-RACK by Remote Solutions LLC

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