REMOTE RACKING SYSTEM

SPECIFICALLY DESIGNED FOR:



Because Distance is the Best Arc Flash Protection

BREAKER: FSV Rir for FB/FC

MANUFACTURER: Siemens

VOLTAGE: 15kV

CURRENT: 1200A, 2000A



156





- 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
- MOUNTING HARDWARE INSTALLED ON CUBICLE FACE

PARTS & ACCESSORIES

Smart Drive Bracket,
Tool Adapter 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.











MISTY 156 OPERATION MANUAL

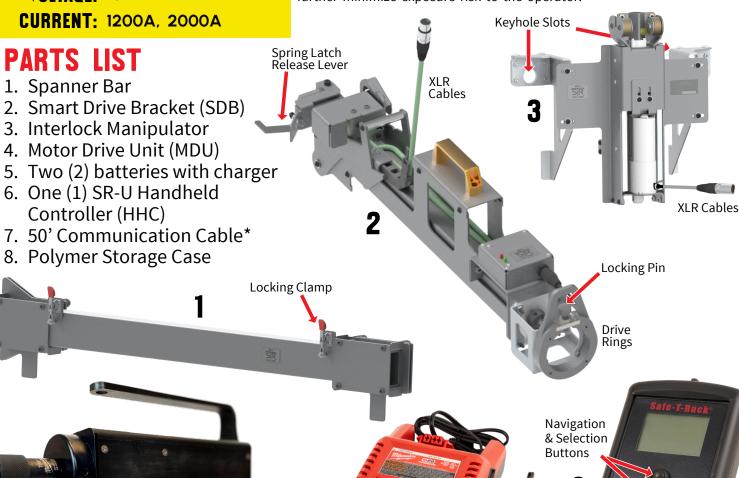
BREAKER: FSV Rir for FB/FC

MANUFACTURER: Siemens

VOLTAGE: 15kV

SAFETY FIRST

Always observe safety precautions and use personal protective equipment (PPE) as required by local site procedures. This equipment is designed to further minimize exposure risk to the operator.



CUBICLE KIT REQUIRED

This application requires an installed cubicle kit onto which the SDB is mounted. For questions or installation requests, contact Remote Solutions LLC.



WARNING

6

This product can expose you to chemicals including Di(2-ethylhexyl), phthalate (DEHP), which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

SETUP SEQUENCE

SPANNER BAR & INTERLOCK MANIPULATOR

- Assure that breaker is fitted with Cubicle Kit and that Spanner Bar, Smart Drive Bracket (SDB), Interlock Manipulator, and Cubicle are all labeled with MISTY color code.
- Extend Spanner Bar across cubicle at ground level until it fits snugly between cubicle walls. Secure in place using locking clamps.
- 3. Suspend Interlock Manipulator from breaker using keyhole slots of Interlock Manipulator and installed Shoulder Nuts (Cubicle Kit) on breaker.

SMART DRIVE BRACKET (SDB)

- 1. Engage Smart Drive Bracket (SDB) with hitch block of breaker. When placed correctly, spring assembly will snap into place to secure SDB.
- 2. Once connected, rest SDB on top of spanner bar.
- 3. Connect XLR cable on SDB with Interlock Assembly XLR cable, ensuring cord will not be pinched or pulled during racking process.

MOTOR DRIVE UNIT (MDU)

- 1. Attach fully charged battery to MDU.
- 2. Set the locking pin on SDB to an open position. Align and engage the MDU with ring dogs on drive rings.
- 3. Once aligned, release locking pin to hold MDU in place. Confirm that MDU is secured before proceeding.
- 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 PLACED ACROSS CUBICLE AND LOCKED IN PLACE WITH LOCKING CLAMPS



INTERLOCK MANIPULATOR SUSPENDED FROM CUBICLE KIT AND SMART DRIVE BRACKET SECURED IN PLACE - READY FOR XLR CABLE CONNECTION



MDU PROPERLY ENGAGED WITH DRIVE RINGS AND LOCKING PIN, READY FOR SDB AND HHC COMMUNICATION CORDS

*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). "Right" and "Left" will advance through menu screens. "Up" and "Down" will toggle selections on screen.

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 unit by pressing the E-Stop button. Remove battery from MDU.
- 2. Unplug power cord and HHC communication cord from SDB. Unplug XLR cable connecting Interlock Manipulator and SDB.
- 3. Stow 50' Communication Cable, HHC, MDU, and batteries in storage case.
- 4. Remove Interlock Manipulator from cubicle and store in protective case.
- 5. Use spring latch near hitch block to release and remove SDB from cubicle and store in provided polymer case.



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.

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 mid-process 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.



