

A Group CBS Company



# Distance is Safety

WHAT STANDS BETWEEN YOU AND ARC-FLASH DANGER?

WE DO.

# **REMOTE RACKING & REMOTE SWITCHING**



CBSArcSafe.com (877) 4-SAFETY



# **Highlighted Products**

### See our remote switching and racking solutions for these common apparatus

#### AB Centerline 2100

Allen-Bradley motor control centers outfitted with the



Secure Connect feature can be remotely racked using our award-winning SecureConnect portable solution. Vintage gear is racked with the Remote Racking System (RRS-2-BE); switching operations are achieved through Remote Switch Kits (RSK-ABL1 or RSK-ABL2).





#### **Breaker Control Switch**

**Breaker Control Switch operations** are enabled by the Remote Switch Kit (RSK-CS series), which includes actuator, handheld controller, case, and more.





#### Magnum DS/SB

Eaton/Cutler-Hammer MDS/SB low-voltage circuit breakers can remotely charge/close/trip using the Remote Switch Actuator (RSA-48). The Remote Switching Kit (RSK-MDS30) handles close/trip applications. Racking can be done remotely with the RRS-3-MDS or with built-in video with the RRS-3-MDSR1.





#### **Load Break Switches**

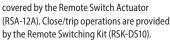
Many common load break switches can be remotely actuated using one of our popular Remote Switch Actuators, including the RSA-147, RSA-116, and RSA-116A.





#### DS/DS II

Cutler-Hammer/ Westinghouse/Square D DS-line air circuit breakers can be remotely racked using the portable Remote Racking System (RRS-3-DSR1 or RRS-3-DS). Full charge/ close/trip operations are







#### **Masterpact NW**

Merlin Gerin/Square D Masterpact NW ICCB can be remotely racked in/out while using the Remote Racking System (RRS-3-NW). Full charge/ close/trip operations are covered with the



Remote Switch Actuator (RSA-120), while the Remote Switching Kit (RSK-NW20) covers only close/trip operations.





#### **Molded Case Circuit Breakers**

Many common MCCBs, from 10 A to 3000 A, can be remotely actuated using one of our Remote Switch Actuators, including the RSA-113G, RSA-164K, and RSA-20F.







#### **Pringle Switch**

Pringle Switches with and without a push-button shunt trip can be remotely actuated using the Remote Switch Actuator (RSA-135 Series).





### RRS-1

Our Universal Remote Racking System (RRS-1) offers an industryleading number of solutions for rotary-style switchgear. This unit is designed for removing or inserting low- and medium-voltage drawout rotary circuit breakers while the operator remains outside the arc-flash boundary.







# CBS Arc Safe®

### A Group CBS Company

CBS ArcSafe products keep technicians outside of the arc-flash hazard boundary while performing potentially dangerous electrical tasks. With the largest selection of remote switching and racking solutions available, we are the industry leader in electrical remote operations. As a Group CBS Company, CBS ArcSafe provides you access to the industry's largest inventory of low- and medium-voltage switchgear. We have parts, on-site service, comprehensive repair, and "need-it-now" delivery capabilities.



#### We take pride in being available and capable of responding anytime, anywhere.

- Largest selection of remote switching and racking equipment for low- and medium-voltage circuit breakers, motor control centers, and other applications.
- On-site demonstrations, training, and in-depth site evaluations provided by our Product Specialists and Group CBS affiliates.
- Equipment Training: OEM training by CBS ArcSafe is included in the purchase of select equipment. For existing customers, we recommend OEM retraining every three years and/or as staff attrition occurs. 2021 NFPA 70E Article 110.6(3) states that retraining in safety-related work practices shall be performed at intervals not to exceed three years. In addition to training, you can visit our CBS ArcSafe YouTube channel for demonstration videos for a variety of devices.

# For after-hours or emergency support, contact us 24/7 via our emergency phone number: (877) 472-3389.

Assistance is also available from other Group CBS companies, which are listed on the back cover. We continue to develop new solutions for our customers on a daily basis. If you do not see what you need in our catalog, give us a call.

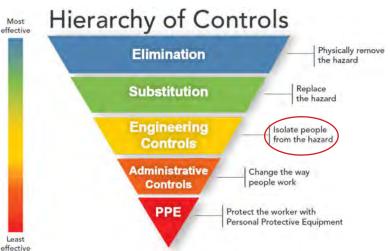
#### **CBS ArcSafe Facilities**

**All CBS ArcSafe equipment is manufactured in the United States** at our Denton, TX headquarters and Charleston, WV facility, ensuring the highest quality components and systems. Our capabilities include production at scale and custom solutions to meet specific customer design requirements.

Capabilities include product engineering, SolidWorks/CAD design, CNC milling, 3D printing, programming, and water jet and laser cutting.

#### **NFPA 70E compliance**











# Remote Switch Actuators (RSA)

CBS ArcSafe® Remote Switch Actuators (RSAs) are designed to remotely charge, close, and/or trip various styles and types of electrical equipment. An RSA can be custom built for any electrical device. RSAs are quickly attached by strong magnets, eliminating the need for modifications to your switchgear. This results in safe and efficient operations. Magnets also allow workers to easily move the RSA from one application to another.



RSA-48 Eaton, Cutler-Hammer Magnum DS, SB (Door Closed, 800-4000 A)





RSA-116

#### **OPTIONAL FEATURES**

- Radio remote with up to 300-foot range
- Wireless video camera system with LCD monitor
- Rugged protective case assembly

#### **BENEFITS**

- Lightweight, portable construction
- Mechanical and/or electrical safety protection
- Adjustable to fit unique electrical equipment configurations
- Fast and easy to set up
- Reduces need for a full-body arc-flash suit
- Adds safety and helps comply with NFPA 70E
- No modifications required

# Remote Switch Kits (RSK)



Chicken Switch® Remote Switch Kits (RSK) are portable devices designed to remotely operate circuit breakers, control switches, and motor control centers. RSKs are ideal in environments where weight and portability are a consideration. With no need to purchase a separate power source, the price point and packaging are appealing.

 Complete kit includes actuator, handheld controller, batteries, control cable, instruction manual, and carrying case \*RSK only





#### RSK-CS01

Electroswitch Series 24, 24P, General Electric SB, SBM, SB-1, SB-9, SB-10, Westinghouse Type W, Shallco Series 26



ABB, BBC, ITE K-Line (2000 A & below, Electrically Operated)



RSK-GEPB1L PowerBreak (with Close button on left side of charging handle)











\*Wireless control available on most models.

#### All CBS ArcSafe products are compatible with all switchgear manufacturers, including:

- ABE
  - **Allis-Chalmers**
- Alstom
- ВВС
- **■** Cutler-Hammer

- l Eato
- Federal Pacific Electric
- Federal Pioneer
- General Electric
- Hyundai
- ITE

- McGraw-Edison
- Merlin Gerin
- Mitsubishi
- Powell
- Reyrolle

- Siemens
- Siemens-Allis
- Square D
- Toshiba
- Westinghouse

# RRS-1

# **Remote Racking System**

For Rotary Circuit Breakers



By permitting the automatic racking of the circuit breaker from a remote location, the CBS ArcSafe® remote racking system replaces the manual racking operation and removes the operating personnel from manual contact with the circuit breaker. The unique design of the CBS ArcSafe remote racking system, with its specially manufactured drive shafts and tooling, enables the system to operate with all types of circuit breakers produced by the major switchgear manufacturers. The CBS ArcSafe remote racking system can operate with draw-out types of air, SF6, oil, and vacuum circuit breakers that have either a horizontal or vertical racking operation.

#### **BENEFITS**

- Remote operation places operator outside the arc-flash protection boundary
- Compatible with low- and medium-voltage circuit breakers produced by all major switchgear manufacturers
- Use with horizontal and vertical types of air, SF6, oil, and vacuum circuit breakers
- Height and angle of the drive is easily adjusted
- Quick-release drive shafts and couplings simplify setup
- Redundant over-racking protection provided
- Seamless transfer of AC/DC power
- Hand-truck design provides easy mobility

#### **SPECIFICATIONS**

WEIGHT ... 200 lbs

BATTERY LIFE . . . > 50 Operations\*

SYSTEM VOLTAGE . . . 24V DC

**INPUT VOLTAGE . . .** 120±10% VAC, 47-63 Hz<sup>†</sup>

MAXIMUM AC CURRENT... 12.2 A

DRIVE MOTOR POWER... 250 W

**DRIVE ASSEMBLY SPEED** .. 80 RPM

CHARGE TIME . . . Approx. 6 hours

**DIMENSIONS...** 74" H x 26" W x 38.1" D

**OPERATING DISTANCE...** 35 feet<sup>‡</sup>

\*Number of operations is dependent on the nature of the operation †May be custom ordered to match different local power standards †Standard configuration, contact CBS ArcSafe® for other options

US PATENT NO. 8 151 452B2

# **Optional Equipment**

# **Remote Racking Systems**

For Extraction-Style and Rotary-Type Circuit Breakers

#### **CCM Radio Remote**

The Current Control
Module (CCM) radio
remote option allows
users to operate the
RRS and monitor the
racking status wirelessly from
up to 300 feet away. Ideal for
users with extended distance
requirements or those who wish
to monitor the status of the
racking operation remotely.

#### **LED Light**

The LED light accessory adds a forward-facing, high-intensity light source with pan and tilt capability to the front of the RRS. Ideal for personnel setting up the RRS or installing RRS tooling in low-light environments.

### **Wireless/Wired Video System**

The wireless/wired video system allows users to monitor the remote racking operation from up to 300 feet away using an RRS-mounted camera and



stand-alone monitor. Ideal for users who will be visually separated from the RRS during the remote operation.



Wireless Video Operation

#### **Power Slide**

The power slide system utilizes a motor to raise and lower the drive assembly instead of the standard handle. Ideal for applications



requiring users to quickly and easily switch between racking heights for different breakers.

### High Lift

The high lift option is required to remotely rack any equipment with a racking mechanism more than 66 inches off the ground. Ideal for users who wish to rack breakers with extremely high racking mechanisms that would otherwise cause issues during manual operation.



### Low-Speed/Jog

The low-speed/jog option consists of a high-torque/ low-speed gearbox, as well as manual jog control for the RRS operation. Ideal for applications requiring added torque output and/or more precise control.



RRS Accessories



# **RRS-2**

# **Remote Racking System**

For Extraction-Style Circuit Breakers



The CBS ArcSafe RRS-2 is a portable and highly configurable remote racking system built to rack all circuit breakers with non-rotary racking mechanisms while keeping the operator outside of the arc-flash boundary. The operator is able to manipulate the breaker-specific tooling, available for numerous makes and models of switchgear, via either a wired or wireless pendant station from up to 300 feet away. Prior to ordering, CBS ArcSafe recommends an on-site evaluation be performed by a company representative in order to ensure the proper equipment may be provided for each customer based on their particular switchgear and specific requests.

#### **SPECIFICATIONS**

**WEIGHT** . . . . 160 lbs

BATTERY LIFE . . . . > 50 Operations\*

SYSTEM VOLTAGE . . . . 24V DC

**INPUT VOLTAGE** . . . . 120±10% VAC, 47-63 Hz<sup>†</sup>

MAXIMUM AC CURRENT ..... 12.2 A

EXT. ACTUATOR FORCE ..... 600 lbs

EXT. ACTUATOR SPEED ..... 1.0"/second

CHARGE TIME ..... Approx. 6 hours

**DIMENSIONS** . . . . 60" H x 26" W x 36" D

**OPERATING DISTANCE....** 35 feet<sup>‡</sup>





\*Number of operations is dependent on the nature of the operation; 'May be custom ordered to match different local power standards; 'Standard configuration, contact CBS ArcSafe® for other options

# **RRS-2BE**

# **Remote Racking System**

For Motor Control Center Buckets Only



The RRS-2 BE is designed specifically for motor control center (MCC) bucket removal applications where users normally would be required to perform the install or remove operation manually — exposing them to the potential hazards of an arc flash and its lethal consequences. Designed to be extremely versatile, the RRS-2 BE is suited for use in all environments — from grueling applications in a power-generation facility to clean rooms at a high-tech manufacturing plant.









#### BENEFITS

Setup and operation of the RRS-2 BE are very similar to that of the standard RRS-2, allowing users who are familiar with RRS-2 operation to transition between the two easily with no additional training required. RRS-2 BE benefits include:

- Large linear actuator has been replaced with a compact, adjustable travel linear actuator more suited to the forces required for MCC buckets instead of large breakers
- Steel frame of the RRS-2 has been modified to accept the specialized tooling required for MCC bucket install and remove operations
- Dual channel-enabled operation allows users to carefully control the MCC bucket install and remove operations
- Two-station high-reach vertical adjustment is capable of reaching MCC buckets up to 80" high. The
  included wireless remote control allows users to operate the unit from up to 300 feet away

#### **SPECIFICATIONS**

**WEIGHT** ... 105 lbs

**BATTERY LIFE** ... > 50 Operations\*

SYSTEM VOLTAGE ... 24V DC

**INPUT VOLTAGE** ... 120±10% VAC, 47-63 Hz<sup>†</sup>

CHARGE TIME ... Approx. 4 hours

DIMENSIONS ... 74" H x 25" W x 32" D

OPERATING DISTANCE... 300 feet<sup>‡</sup>

\*Number of operations is dependent on the nature of the operation
'May be custom ordered to match different local power standards
'Radio remote control standard on RRS-2 BE

# **RRS-3** Single-Use Portable Remote Racking Systems

CBS ArcSafe Single-Use Remote Racking Systems (RRS-3) are designed to remotely rack a single style of circuit breaker utilizing a portable, stand-alone device. The RRS-3 units are most commonly assisted by strong magnets, meaning that no modifications are required to the switchgear. This also allows operators to easily move the RRS-3 from one breaker to another.

The RRS-3 system is an inexpensive single-application remote racking system that allows the operator to install and remove a breaker while standing 25 to 75 feet away with a hand-control unit. Each CBS ArcSafe RRS-3 is custom built to your electrical equipment so that it can safely operate your switchgear.

#### **RRS-3 MBII**

#### **RRS-3 MDS**

#### **RRS-3 VB**







**RRS-3 VCPR** 







## BENEFITS

- Lightweight, portable construction
- Mechanical and electrical safety protection
- Mechanical clutch over-racking protection
- Adjustable to fit unique equipment configurations
- Fast and easy to set up
- Reduced need for a full-body arc-flash suit
- Adds safety and helps comply with NFPA 70E
- No modifications required



# **Remote Switch Operators (RSO)**



#### RSO-IIID-M18

- 1. Operating pushbuttons, such as circuit breaker trip and close buttons
- 2. Operating charging handles requiring single or multiple cycles
- Engaging or disengaging mechanical interlocks, such as circuit breaker interlock foot-pedals

### UPDATED DESIGN





#### RSO-IAR-M18

- 1. Operating pushbuttons, such as circuit breaker trip and close buttons
- Operating levers, such as those found on motor control center buckets
- 3. Operating handles requiring single strokes
- 4. Operating rotary and pistol-grip switches, such as breaker control switches



### RSO-IV-M18

- 1. Works with RRS-3 Single-Use Remote Racking Systems
- 2. Installing and removing any switchgear utilizing a rotary racking mechanism
- 3. Installing and removing any switchgear utilizing a non-rotary racking mechanism
- Engaging or disengaging mechanical or electrical interlocks, such as circuit breaker interlock foot-pedals or buttons
- 5. NEW Blue Indicator beacon alerts user when input settings have been reached





LEARN MORE ABOUT OUR
REMOTE SWITCH OPERATORS
FROM A LIVE BROADCAST
ON OUR YOUTUBE CHANNEL



### **GROUP CBS AFFILIATES**

#### **Group CBS**

GroupCBS.com

Addison, TX - Ph: 972-250-2500

# Advanced Electrical & Motor Controls

AEAMC.com

**HEADQUARTERS:** Irving, TX — Ph: 972-253-7783

### **Arkansas Electrical Outlet**

Aeoglobal.com

Forrest City, AR - Ph: 870-633-4997

CBSArcSafe.com

Denton, TX — Ph: 940-382-4411

Charleston, WV - Ph: 304-965-9220

CBSNuclear.com

Matthews, NC - Ph: 704-882-1875

### **Carolina Precision Switchgear**

CPSwitchgear.com

Concord, NC - Ph: 704-596-4242

### Circuit Breaker Analyzer

CBAnalyzer.com

Addison, TX - Ph: 972-290-0074

### Circuit Breaker Sales & Repair

CBSalesAndRepair.com

HEADQUARTERS: La Porte, TX — Ph: 281-479-4555

#### REGIONAL SERVICE SHOP:

Gonzales, LA - Ph: 225-673-2278

## Circuit Breaker Sales

CircuitBreaker.com

HEADQUARTERS: Gainesville, TX — Ph: 940-665-4444

#### REGIONAL SERVICE SHOPS:

Chicago Service Shop

Crown Point, IN - Ph: 219-213-2095

**Denver Service Shop** 

Denver, CO - Ph: 720-981-4580

**Detroit Service Shop** 

Livonia, MI - Ph: 734-357-8005

**Lakeland Service Shop** 

Lakeland, FL - Ph: 863-646-5099

**Houston Service Shop** 

La Porte, TX - Ph: 281-479-4555

Phoenix Service Shop

Phoenix. AZ - Ph: 888-395-2021

Salt Lake Service Shop

Salt Lake City, UT - Ph: 888-395-2021

Seattle Service Shop

Seattle, WA - Ph: 888-395-2021

Vancouver Service Shop

Vancouver, WA - Ph: 888-395-2021

### Circuit Breaker Sales NE

CircuitBreakerSalesNE.com

**HEADQUARTERS:** Seymour, CT — Ph: 203-888-7500 Johnstown, PA — Ph: 203-888-7500 Boston, MA - Ph: 781-438-7770

### Group CBS UK/Europe

GroupCBSEurope.co.uk

Milton Keynes, Buckinghamshire, - Ph: +44 0 7770 500 577

#### Solid State Exchange & Repa

SolidStateRepair.com

Denton, TX - Ph: 877-TRIP-FIX

### **Vacuum Interrupters**

VacuumInterruptersInc.com

Farmers Branch, TX - Ph: 214-442-5877

### **CBS Field Services**

CBSFieldServices.com

HEADQUARTERS: Phoenix, AZ - Ph: 888-395-2021

#### REGIONAL SERVICE CENTERS:

**CBS Field Services Detroit** 

Detroit, MI - Ph: 810-720-2280

**CBS Field Services Lakeland** 

Lakeland, FL - Ph: 800-232-5809

**CBS Field Services Nashville** 

Nashville, TN - Ph: 615-669-4348

CBS Field Services Salt Lake City

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