

Distance Is Safety® A Group CBS Company

# RSA-41A

Allen Bradley Centerline 2100 MCC Size 5 Bucket, Plastic Handle (Black Or Gray)





## **Distance** *is* **Safety**<sup>®</sup>

WHAT STANDS BETWEEN YOU AND ARC-FLASH DANGER?



2616 Sirius Road | Denton, TX 76208 | (877) 4-SAFETY | www.cbsarcsafe.com *Rev. 5/22/2015* 

## More Products by CBS ArcSafe<sup>®</sup>

#### RRS-1 – Universal Remote Racking System (Rotary)

The CBS ArcSafe<sup>®</sup> RRS-1 is a universal remote racking system capable of remotely installing and removing rotary style draw out circuit breakers without requiring any modification to the existing switchgear. Operation of the simple to use RRS-1 is quite intuitive and requires only minimal setup. When used properly, the RRS-1 allows technicians to remain outside of the arc flash boundary during the potentially dangerous racking operation.

#### RRS-2 – Universal Remote Racking System (Non-Rotary)

The CBS ArcSafe<sup>®</sup> RRS-2 is a universal remote racking system capable of remotely installing and removing non-rotary style draw out circuit breakers without requiring any modification to the existing switchgear. Operation of the simple to use RRS-2 is quite intuitive and requires only minimal setup. When used properly, the RRS-2 allows technicians to remain outside of the arc flash boundary during the potentially hazardous racking operation.

#### RRS-3 - Application Specific Remote Racking System (Rotary And Non-Rotary)

The CBS ArcSafe<sup>®</sup> RRS-3 product line is made up of various application specific remote breaker racking devices. Each standalone system allows service personnel to remotely install and remove a particular type of circuit breaker safely while stationed safely outside of the arc flash boundary during the potentially dangerous operation. The lightweight and compact design of the RRS-3 systems makes them ideal for hard to access areas where space is at a premium.

#### RRS-4 - PLC Based Universal Remote Racking System (Rotary)

The CBS ArcSafe<sup>®</sup> RRS-4 universal remote racking system is an updated PLC based version of the best selling RRS-1. The dual mode, source programmable, PLC based control system offers two different operating modes to choose from based on user preference or the application. The RRS-4 is capable of remotely installing and removing rotary style draw out circuit breakers without requiring any modification to the existing switchgear, allowing users to remain outside of the arc flash boundary during the potentially hazardous racking operation.

#### RSA – Remote Switch Actuator

The CBS ArcSafe<sup>®</sup> Remote Switch Actuator (RSA) product line is made up of various application specific remote operating devices. These products allow service personnel to remotely perform all aspects of an operation for a particular type of electrical equipment from outside the arc flash boundary – reducing or eliminating the possibility of serious injury or death resulting from an arc flash.

#### RSO - Remote Switch Operator

During a remote operation, the CBS ArcSafe<sup>®</sup> RSO functions as both the power supply and user interface for the device being remotely operated by the user. When paired with an applicable CBS ArcSafe<sup>®</sup> device, this portable standalone system allows service personnel to remotely perform a racking or switching procedure from outside the arc flash boundary – reducing or eliminating the possibility of injury or death resulting from an arc flash

Published and distributed by: CBS ArcSafe® 2616 Sirius Road Denton, Texas 76208

A division of: GroupCBS, Inc.® P.O. Box 1557 Gainesville, Texas 76241

Copyright CBS ArcSafe® 2013

Printed in the United States of America Reproduction, adaptation, or translation without prior written permission is prohibited except as is allowed by law.

## **1** Installation

## DANGER!

Before servicing any breaker, make sure that it matches the breaker discussed. If the breaker does not match the breaker described above, please call CBS ArcSafe<sup>®</sup> for more information.

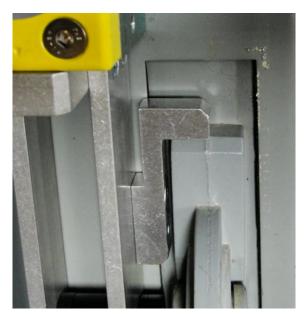
## **ATTENTION!**

The location of certain items such as mimic bus, stickers, and/or placards may interfere with the proper installation of the RSA. Please remove or reposition these items before installing the RSA.

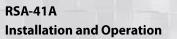
- 1. Ensure that the breaker is free from any obstruction that may interfere with the proper installation of the RSA.
- 2. Position the actuator of the RSA-41 to match the breaker handle before installation.
  - a. If the bucket is ON then the actuator will need to be fully extended. See Operation section to adjust actuator position.
  - b. If the bucket is OFF then the actuator will need to be fully retracted. See Operation section to adjust actuator position.
- 3. Place the RSA-41 on the face of the cabinet and position the handle adaptor around the breaker handle as shown in the image to the right.
- 4. Ensure that the upper and lower locators wrap around the base of the breaker handle, as shown below.



**CBS**ATCSafe<sup>®</sup>







5. Secure the RSA to the breaker by turning the handle of the magnet 180 degrees clockwise. The RSA is ready for remote operations.



RSA-41A Installation and Operation



2

## 2 Operation

## **ATTENTION!**

Please ensure that all cables are clear of moving parts. Failure to do so may result in damage to cables and/or actuator.

## **ATTENTION!**

Please ensure that the batteries to the RSO-I AR are fully charged or that the unit is plugged into AC power.

For detailed instructions on the operation of the RSO-I AR please see the RSO-I AR Manual.

- 1. Ensure that the RSA is properly installed. See Section 3 for detailed instructions.
- 2. Plug the RSO-I AR into the motor control box.
- 3. Exit the arc flash boundary
- 4. Turn the power switch on the RSO-I AR to the ON position.
- 5. Ensure that the Auto Retract (AR) function is set according to the placard on the RSA. Default is OFF.
- 6. If the switch is ON and needs to be turned OFF then push and hold the TRIP button on the RSO-I until the breaker is tripped.
- 7. If the switch is OFF and needs to be turned ON then push and hold the CLOSE button on the RSO-I until the breaker is closed.





## **3 Adjustments**

The RSA comes adjusted from the factory to fit most common configurations, and should not need to be adjusted in most cases. However, if adjustments do need to be performed, it is recommended that they be done on de-energized and isolated equipment to prevent possible damage or injury.

## 3.1 Locator Adjustment

The locator on the RSA can be adjusted to accommodate some differences in the depth of the switch.

1. Loosen the two bolts on the lower locator tab as shown below.



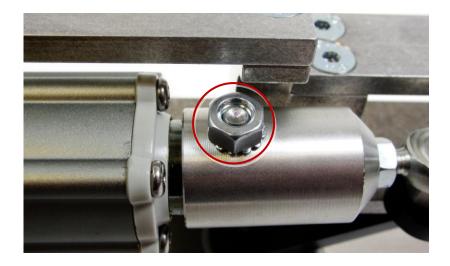
- 2. Attach the RSA as described in the Installation section.
- 3. Slide the locator to the required position so the RSA fits properly on the breaker.
- 4. Re-tighten the bolts from Step 1.



## 3.2 Travel Limit

The travel limit on this RSA can be adjusted to accommodate slight differences in equipment construction.

1. Remove the bolt holding the screw eyelet on the linear actuator, as shown.



2. Loosen the retaining nut on the threaded eyelet, as shown.



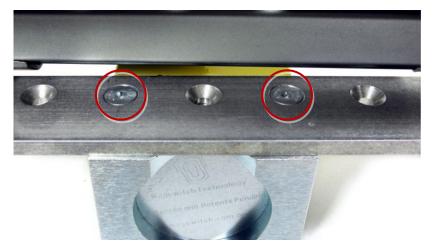
3. Install the RSA as described in the Installation section of this manual.



## 3.3 Magnet Adjustment

The positions of the lower magnet can be adjusted to accommodate various items on a given cabinet that may interfere with the proper installation of the RSA.

1. First, remove the first two screws on the back of the magnet.



2. Move the magnet to any of the hole pairs, on either side of the RSA that will adequately avoid any obstructions on the breaker or cabinet. Ensure that both screws can be re-inserted into the magnet in the new position.



3. Re-insert and re-tighten both screws.



### RSA-41A Installation and Operation



7

## Notes


RSA-41A Installation and Operation



9

# **CBS**ATC**Safe**®

Distance Is Safety®

A Group CBS Company

RSA-41A Installation and Operation

2616 Sirius Road Denton, TX 76208 Tel: 877-4-SAFETY Fax: 940-382-9435 Website: www.CBSArcSafe.com Email: info@CBSArcSafe.com

#### **DANGER!**

Ensure that personnel using this equipment are adequately trained in the operation of the switchgear they are planning to work with; that they are correctly stationed outside the arc flash boundary; and that they comply with all applicable Federal, State, Local, and In-house safety regulations and procedures. Attention should be given to distance, angle, and personal protective equipment (PPE).