CBS Arc Safe®

Distance Is Safety®

A Group CBS Company

RSA-89A

For 9800 UNITROL Size 5





Distance is Safety®

WHAT STANDS BETWEEN YOU AND ARC-FLASH DANGER? WE DO.

More Products by CBS ArcSafe®

RRS-1 - Universal Remote Racking System (Rotary)

The CBS ArcSafe® 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® 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® 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® 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® 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® 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® 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

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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® 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 obstructions that may interfere with proper installation of the RSA.
- 2. Rotate the RSA actuator to match the position of the breaker handle prior to installation. The RSA actuator may be moved manually or electrically, see the Operation section on how to operate the RSO. Place the RSA on the breaker. Ensure that the locator on the RSA is flush against the curved surface of the breaker handle and the breaker handle is between the posts of the RSA actuator.



3. Adjust the RSA so that the bubble level on the top reads level as shown below.



4. Ensure that the magnet is fully seated against the breaker door and then turn the twist-lock handle of the magnet 180° to lock the RSA in place.

The RSA is now ready for operation.

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 the Installation section 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.
- 6. Press and hold CLOSE to turn the breaker ON.
- 7. Press and hold TRIP to turn the breaker OFF.



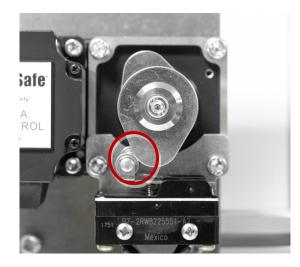
3 Adjustments

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 Motor Travel Range

The motor travel range may be adjusted by setting the automatic cutoff position of the Open and Close travel directions. The outer cam and limit switch (farthest from the motor) controls the cutoff of the Open operation, and the inner cam and limit switch (closest to the motor) controls the cutoff of the Close operation.

- 1. To adjust the Open travel distance, set the breaker to the Open position.
- 2. Loosen the set screws on the outer cam on the RSA.
- 3. Move the RSA actuator to match the Open position of the breaker handle.
- 4. Place the RSA on the breaker.
- 5. Rotate the outer cam clockwise until it engages the outer limit switch with a click as shown below.
- 6. Tighten the set screws when finished.



- 7. To adjust the Closed travel distance, set the breaker to the Closed position.
- 8. Loosen the set screws on the inner cam on the RSA.
- 9. Move the RSA actuator to match the Closed position of the breaker handle.
- 10. Place the RSA on the breaker.
- 11. Rotate the inner cam clockwise until it engages the inner limit switch with a click as shown below.
- 12. Tighten the set screws when finished.



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RSA-89A Installation and Operation

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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).