# CBS Arc Safe®

Distance Is Safety®

A Group CBS Company

RSA-14A

Siemens 81000
Medium Voltage Controller
Recessed Mounted





Distance is Safety®

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

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

#### 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

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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.

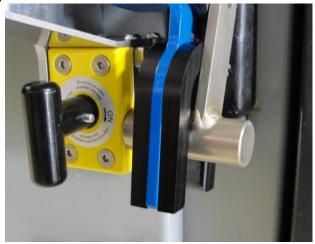
# **ATTENTION!**

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 any obstruction that may interfere with the proper installation of the RSA.



- 2. Position the motor arm of the RSA to match the contactor handle before installation. This adjustment may be done manually.
  - a. If the contactor handle is in the ON position, then the motor arm will need to be rotated to the fully "UP" position to install.
  - b. If the contactor handle is in the OFF position, then the motor arm will need to be rotated to the fully "DOWN" position to install.
- 3. Hold the RSA to the left of the contactor's handle. Next, carefully slide the forked arm of the RSA over the handle. Now, gently rotate the RSA down until the device sits flush against the panel.



4. Ensure that the upper and lower locators wrap around the base of the breaker handle, as shown below.





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

# 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. If not specified, leave AR turned OFF.
- 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 Locator Adjustment

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

1. Loosen the two bolts on each locator, as indicated below.



- 2. Attach the RSA as described in the Installation section.
- 3. Slide the locator so that it contacts the sides of the switch escutcheon, as described in the Installation section Instructions.
- 4. Re-tighten the bolts from Step 1.

# 3.2 Travel Limits

The RSA has travel stops on it to prevent over-travel and damage of the handle operator during operation.

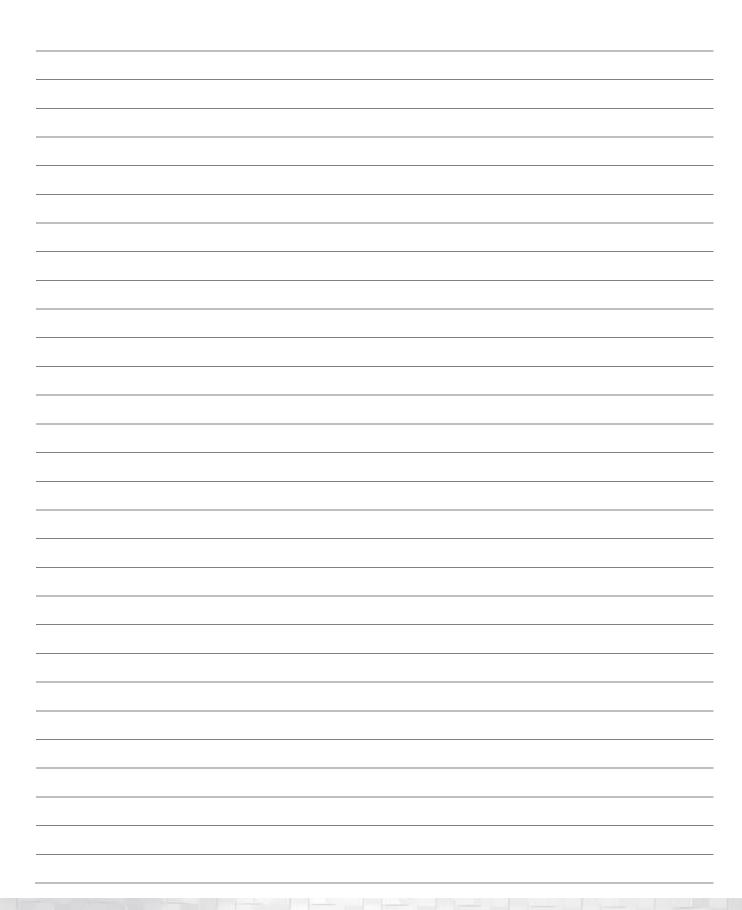
1. Loosen the bolt on each travel limit, indicated below.





- 2. Attach the RSA as described in the Installation section.
- 3. With the switch in the CLOSED position, slide the travel limit up to the RSA's actuator arm until it just makes contact, and re-tighten its bolt.
- 4. With the switch in the OPEN position, slide the travel limit up to the RSA's actuator arm until it just makes contact, and re-tighten its bolt.

# Notes



# CBS Arc Safe®

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RSA-14A 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).