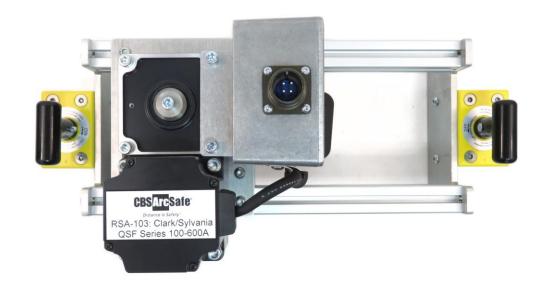


Distance Is Safety® A Group CBS Company

# **RSA-103**

#### For Sylvania/Zinsco QSF Series 100-600A





**Distance** is Safety<sup>®</sup>

WHAT STANDS BETWEEN YOU AND ARC-FLASH DANGER?

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#### 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

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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<sup>®</sup> for more information.

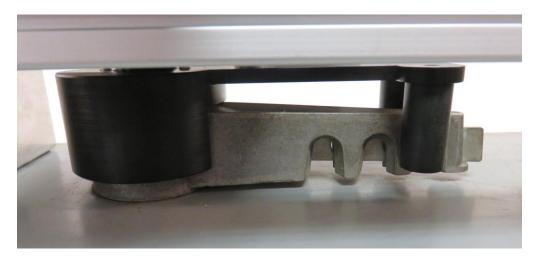
#### **ATTENTION!**

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 Switch to be operated is free from obstructions that may interfere with proper installation of the RSA



- 2. Place the RSA over the handle on the switch. Ensure that the switch actuator arm is fully seated in the handle actuator on the RSA, and that the cabinet locators (below left) and the handle locator (below right) are fully seated.
  - a. The handle adapter on the RSA can be manually rotated to match the switch position as needed.





3. Ensure that the operator is level, using the bubble level attached ot the top of the RSA.



4. Ensure the magnets are fully seated against the switch cover and then turn the handles of the twist-lock magnets 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. If not specified, leave AR turned OFF.
- 6. Press and hold CLOSE to turn ON the breaker.
- 7. Press and hold TRIP to turn OFF the breaker.





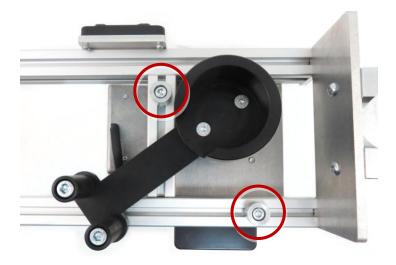
# **3 Adjustments**

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.

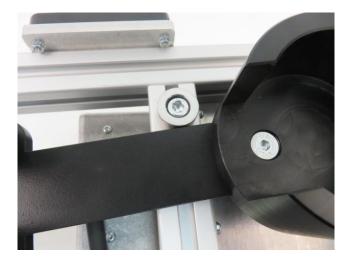
#### 3.1 Travel Adjustment

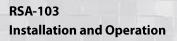
This RSA has travel stops on it to prevent over-travel and damage of the handle operator during operation.

- 1. Install the RSA as directed in the Installation section.
- 2. Loosen the two bolts on the travel stops.



3. To set the RSA to stop the handle at the ON position, tap the CLOSE button on the RSO to carefully jog the RSA until the Handle Operator has reached the ON position. Slide the stop so it sits flush against the handle, and re-tighten the bolt.







4. To set the RSA to stop the switch at the OFF position, tap the RSO TRIP button to carefully jog the RSA until the Handle Operator is at the OFF position. Slide the stop so it sits flush against the handle, and re-tighten the bolt.



#### 3.2 Operator Depth

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

1. Loosen the two bolts on each magnet plateas indicated below.



- 2. Attach the RSA as described in the Installation section.
- 3. Slide the operator in or out so the RSA is properly aligned and positioned on the switch.
- 4. Re-tighten the bolts from Step 1.



# Notes


7

RSA-103 Installation and Operation



RSA-103 Installation and Operation



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RSA-103 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).