

CBS ArcSafe®

Distance Is Safety®

A Group CBS Company

Installation and Operation

RSA-29

For GE AK-1/2/3-25

Manually Operated, With Trip Button Below Handle



Distance is Safety®

WHAT STANDS
BETWEEN YOU AND
ARC-FLASH DANGER?

**WE
DO.**

2616 Sirius Road | Denton, TX 76208 | (877) 4-SAFETY | www.cbsarcsafe.com

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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

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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. Remove the manual charging handle from the breaker, if not already done.
3. Place the RSA on the face of the breaker as shown. The upper cross member of the RSA should rest on the upper edge of the breaker escutcheon with the sides of the RSA flush on the edges of the breaker.



- Next, check that the operating adapter on the RSA is fully seated on the protruding axle for the racking handle. The operating adapter on the RSA can be rotated by hand if necessary to achieve proper alignment.
- Ensure that the solenoid is correctly aligned over the breaker TRIP pushbutton as shown.



The RSA is 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-IIID are fully charged or that the unit is plugged into AC power.

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

1. Ensure that the RSA is properly installed. See the Installation Section for detailed instructions.
2. Connect the cables from the RSO-IIID to the RSA.
3. The three pin twist type cable will attach to the motor control box on the RSA.
4. Turn the power switch on the RSO-IIID to the ON position.
5. Ensure that the Auto-Retract (AR) function is turned off. For detailed instructions on the AR function see the RSO-IIID manual
6. Program the settings for the RSA into the RSO-IIID. These settings can be found on the placard on the RSA. For more information on programming the RSO-IIID please refer to the RSO-IIID Technical Manual.
7. Exit the arc flash boundary
8. Once the timers have been properly set, press and release the CHARGE/CLOSE button to actuate the motor on the RSA which will Charge and Close the breaker.
9. Press and release the TRIP button to trip the breaker.



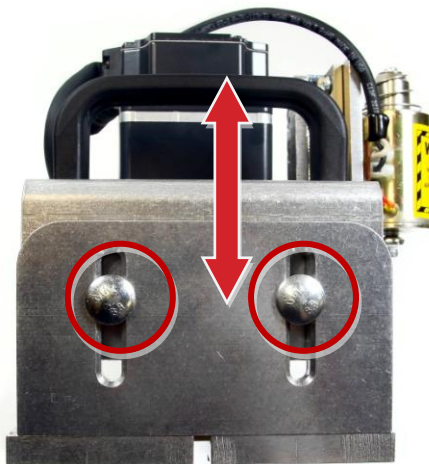
3 Adjustments

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 Depth Adjustment

The location of the top magnet on the RSA can be adjusted in order to avoid interference from items mounted to the breaker door.

1. Loosen the lock nuts on the two bolts in the top plate, as indicated below.

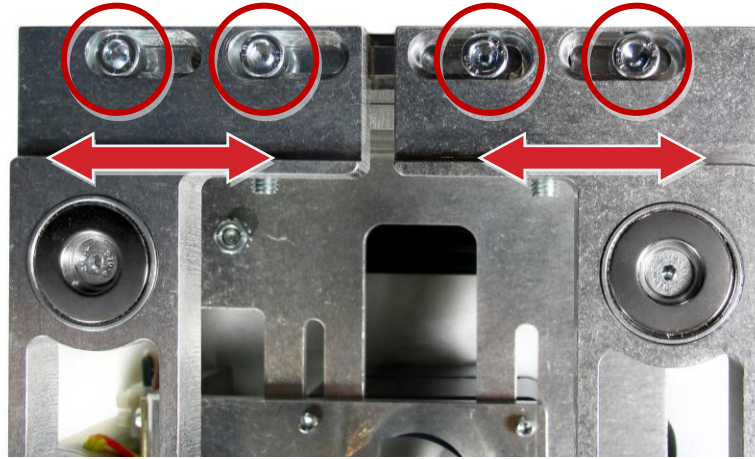


2. Install the RSA, as described in the Installation section of this manual.
3. Slide the RSA in or out as necessary to position it so it adequately avoids any obstructions and the operator engages sufficiently with the breaker charging mechanism.
4. Re-tighten the bolts.

3.2 Magnet Mount Adjustment

The spread for the magnet mounts can be adjusted to accommodate some obstructions around the breaker escutcheon.

1. Loosen the four screws holding the magnet mounts in place.



2. Install the RSA on the breaker as described in the Installation section. While installing, slide the magnet mounts as required to adequately avoid any obstructions, while ensuring that the charging adapter and solenoid remain properly engaged and aligned.
3. Carefully remove the RSA from the breaker and re-tighten the four bolts loosened earlier.

3.3 Motor Position Adjustment

The motor position can be adjusted to accommodate slight differences in mechanism positioning.

1. Loosen the four bolts on the motor mount, as indicated below.



2. Install the RSA as described in the Installation section.
3. Slide the motor mount up or down as required during installation to properly align the charging adapter and solenoid.
4. Re-tighten the bolts after repositioning has been successful.



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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).