RFCT Hotstick - Safety and Operation

The purpose of the RFCT Hotstick is to allow the user to remain safely away from dangerous voltages when installing the RFCT on the ground straps of cables. It is not intended to provide electrical isolation from energized conductors. Used properly, the hotstick reduces but does not eliminate the likelihood of accidental contact.

Safety Warnings

- This product must only be used by qualified personnel, skilled in the practice of and properly equipped for working in close proximity to the voltages involved. Under no circumstances may unqualified people operate this product.

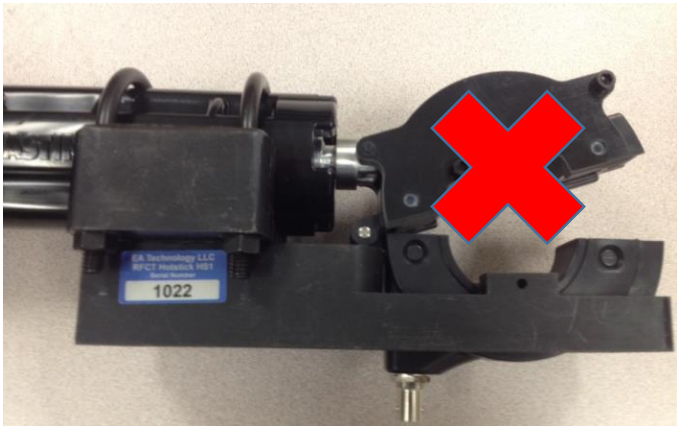
- This device must never be placed around or near the conductors, regardless whether they are bare or insulated.

- Due to the RFCT cable, the RFCT Hotstick does not provide total isolation from dangerous voltages.

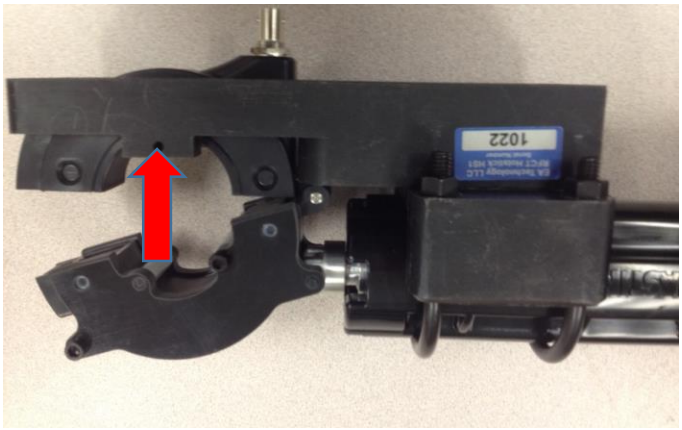
- Until the RFCT is connected to the ground strap, the user MUST maintain separation from the RFCT cable as it may become energized if the RFCT gets too close to an energized component.

- Once the RFCT is safely placed on the ground strap, the RFCT cable should remain at a safe voltage. It is up to the user to determine that this is a case due to the placement.

- In general there should be no physical load from the ground wire placed on the RFCT. The load should be applied to the edge of the hotstick. In the event that is not possible the hotsticks should never be hung so that there is a load on the hinged portion of the RFCT. Applying the hotstick this way will affect the test results and may damage the RFCT. If a load is to be applied, it should be on the fixed portion of the RFCT as shown in the second picture below.



Never allow hinged portion of the hotstick to take a load on the cable ground.



Correct positon for load from a ground wire.

- The RFCT Hotsticks MUST be handled with the same care and treatment as conventional hotsticks. Please see the Hastings website for additional information

- The RFCT Hotsticks MUST be subject to the same pre-use testing and maintenance as conventional hotsticks. Please see the Hastings website for additional information

- When using the RFCT Hotstick, wear appropriate PPE and do not place hands or body parts closer than the minimum safe distance to energized components. A full risk assessment and arc flash hazard

assessment must be done in accordance with NFPA70E to establish the minimum safe distance.

- Extreme care MUST be used and all local and corporate safety practices MUST be followed when using this product. If in doubt, don't do it!

- We do not offer or supply a working "rating". Hastings, as a manufacturer of Hot Line Tools is required to test all fiber glass tools per OSHA/ASTM F711. In essence this rule states that all newly manufactured Hot Sticks must be able to withstand 100KV (100,000 Volts) for 5 minutes.

Safety Clearance Distances and NFPA 70E

This product is intended to allow the placement of RFCT onto ground straps without ever violating the minimum distances required by NFPA 70E. As the RFCT has a conductive connection from it to the CDC and from the CDC to a laptop, certain precautions must be taken.

- Ideally, the conductive parts at the end of the RFCT and attached cable should never violate the NFPA minimum clearances, including allowance for inadvertent movement.

- In the event that this is not possible, the user must consider the conductive parts at the end of the hotstick and attached cabling / devices to be at live potential and maintain clearances to that equipment until the RFCT is in place and all conductive parts are outside the NFPA minimum distance.

- Only once the RFCT is in place, no longer moving, and the RFCT and all attached cabling / devices are outside the NFPA minimum clearance distance can the attached devices such as the laptop be considered safe.

- In the event that the physical configuration of the conductors do not allow for all parts of the RFCT / cables / CDC / Laptop to be outside the NFPA 70E minimum clearance distance, the hotstick RFCT MUST NOT be used. Serious Injury or Death may result. These conditions may be acceptable with a Fiber Isolated CDC is used with the appropriate consideration.

Hotstick RFCT Safety Warning label

Warning!

THIS HOTSTICK DOES NOT PROVIDE HV ISOLATION! THE RFCT CABLE IS NOT ISOLATED FROM THE RFCT!

MAINTAIN SPACING FROM THE RFCT CABLE AND ITEMS CONNECTED TO IT UNTIL AFTER THE RFCT IS SAFELY CONNECTED TO THE GROUND STRAP!

The hotsticks are designed to keep the user out of the hazardous area while applying the RFCT. Only once the RFCT hotsticks are safely installed on good ground straps is it safe to touch the CDC and laptop.

RFCT hotsticks are for use at ground potential only and provide no insulation against high voltage! Only persons legally qualified to work on energized equipment are permitted to install RFCT's. Local and corporate safety practices must be followed.

Read the user's manual for additional safety precautions.

Operation

1. Perform a risk assessment and arc flash assessment to determine the minimum safe distance prior to approaching the high voltage components

2. Prior to installing the RFCT Hotstick on the ground strap, make all CDC and laptop connections. Place CDC in a location that will allow the RFCT cables to safety reach the switchgear without stretching. Do not allow anyone near the CDC or laptop when installing or removing the RFCT Hotstick.

3. Holding the RFCT Hotstick safely, press the release lever and move the slide toward you to open the jaws of the RFCT.

4. Prior to installing the RFCT in the switchgear, practice closing the jaw to understand the proper amount of force required to reach the correct step on the ramp. When properly closed, the jaws can be opened slightly under spring pressure. They must be closed but should not be forced closed so that there is no spring travel left to open them.

5. While maintaining safe separation distance from the cables, CDC, and laptop carefully position the RFCT around the ground strap and close the jaw by moving the slide forward.

6. Position the RFCT as close as possible to the ground bar end of the ground strap. NEVER should the RFCT be near the cable termination end of the ground strap.

7. Position the tail end of the hotstick so it can rest safely without putting undo stress on the ground connection. Also, avoid positioning the tail end of the hotstick near any dangerous voltages.

8. Inspect the positioning again, prior to using the CDC and laptop to ensure the RFCT is closed tightly around the ground strap and that no portion of the hotstick or RFCT cable is within minimum spacing to dangerous voltages.

9. When removing the RFCT Hotstick, use extreme care to ensure it does not come too close to dangerous voltages.

10. Do not allow anyone to be near the CDC or laptop when removing or installing the RFCT Hotsticks.