



Record Plus™ Molded Case Circuit Breaker Accessories

TDR Integral Handle Operator Door-Ring Interlock Kit

Congratulations and thank you for choosing the **Record Plus™** family of current-limiting circuit breakers. This TDR Integral Handle Operator Door Ring Interlock Catch Kit accessory is suitable for use with the FC100 circuit breaker series.

Record Plus™ circuit breakers are designed with a full line of integrated accessories. All units use the latest in integrated modular circuit breaker technology for flexibility in application and maximizing the product's utilization and capabilities.

All **Record Plus™** circuit breakers are listed by Underwriters Laboratories to the UL489 standard and the CSA Standard C22.2, No. 5. These circuit breakers are certified to IEC60947-2.

These accessories are also for use with our MAG-BREAK® instantaneous trip-only circuit breakers, which meet the same standards and are UL-recognized components for use in motor applications. They can also be used with our molded case switches, which are listed per Underwriters Laboratories to the UL489 standard.

Record Plus™ circuit breakers and their accessories are designed and manufactured to exceed our global customers' high standards for reliability and quality.



Warning: DANGER of Electrical shock or injury. Ensure ALL electrical power supplies are OFF before installing or removing any devices. The breaker, trip unit, or accessories **MUST ONLY** be installed and serviced by **QUALIFIED** personnel. See NEMA publication AB4.

Avertissement: Danger contre les risques d'électrocutions. S'assurer avant TOUTES manipulations du disjoncteur que les différentes sources d'alimentation sont en position OFF. Les disjoncteurs, unités de protection, ou accessoires doivent être installés par des personnes qualifiées et habilitées. Lire NEMA publication AB4.

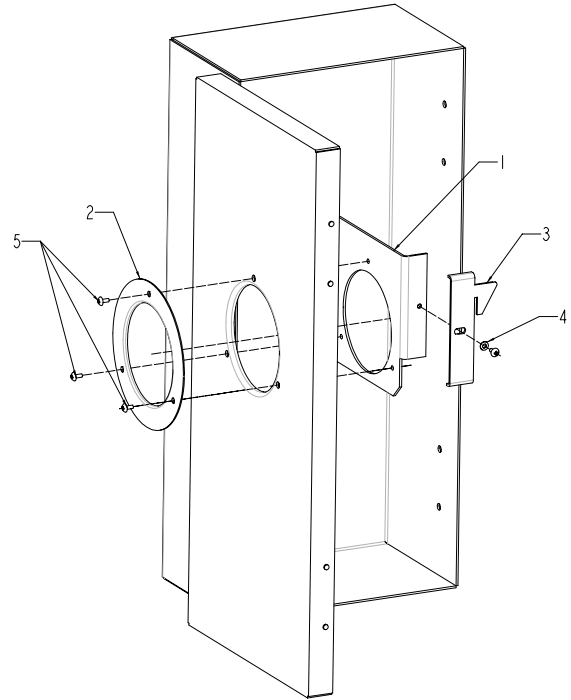


Figure 1. TDR integral handle operator kit.



CAUTION: This product is NOT suitable for use in equipment not specifically design to accept it. Contact the equipment manufacturer for possible equipment modifications.

ATTENTION: Cet appareil nedit pas etre employe dans un equipement non specialement adapte a cet effet. Contactez le constructeur concernant les possibles modifications a apporter a l'equipement.

Product Description

This accessory is for use with **Record Plus™** FC100 TDR integral handle operators catalog numbers FCNRC and FCNRD. The purpose of the catch kit is to prevent an enclosure door from being opened while a circuit breaker is ON. There is an interlock defeat screw located on the round indicator plate of the interlock mechanism.

The parts supplied with this kit are listed in Table 1. The parts are illustrated in numbers in brackets in the text and

the figures refer to the item numbers in Table 1.

Item	Description	Qty.
1	Interior ring	1
2	Exterior ring	1
3	Interlock catch	1
4	Lockwasher	1
5	#8-32 screws	4

Table 1. List of parts in the TDR integral handle operator catch kit.

Step 1 – Unpack and Inspect

Unpack the integral handle operator kit and inspect the parts for any shipping damage. Verify that all parts are supplied, as listed in **Error! Reference source not found.**

Step 2 – Mount protective device

Locate and mount the breaker within the enclosure per installation instructions DEH40463 for the FC100 circuit breaker. The distance from the vertical centerline of the protective device to the enclosure wall (with hinges) has a minimum distance A, illustrated in Figure 2. Distance A must be equal to or greater than one-half the length of the enclosure door from the hinged side to the latch side. Preferably, the hole should be located toward the latch side for interlock leverage.

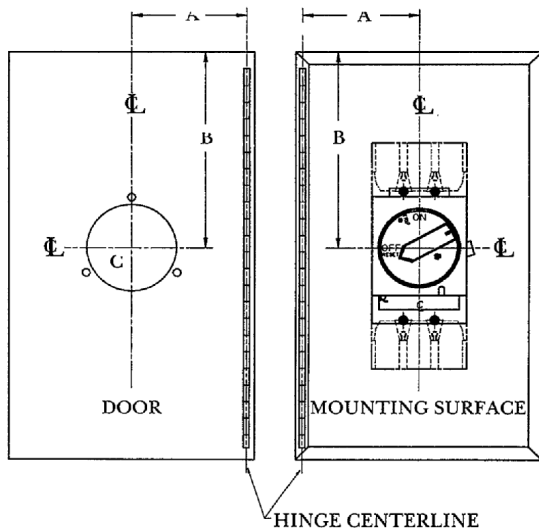


Figure 2. TDR integral handle operator catch kit.

Step 3 – Secure integral handle operator to protective device

Mount integral handle mechanism to circuit breaker after the breaker is secured to the enclosure according to installation instructions DEH40914 for the FCNRC or FCNRD TDR handle operator.

Step 4 – Secure door ring interlock catch kit

Each kit consists of an exterior ring, interior ring, interlock catch, and mounting hardware. The kit is designed to assure proper door ring alignment and interlocking. The interlock catch for the protective device must be secured to the interior ring with one of the #8-32 screws furnished.

A. Locate the center of a circle for the integral handle indication ring on the enclosure door, referring to Figure 2 and the following steps.

1. Obtain distances A and B.
 - a. The horizontal distance from the centerline of the indication ring centerline of the enclosure.
 - b. The vertical distance from the centerline of the indication ring to the top of the enclosure.
2. Assuming the mounting surface of the enclosure and the closed door to be parallel, transcribe dimensions A and B to the enclosure door per figure 2.
 - a. Using point C as your center, scribe a circle, diameter is 3.437" (87.3mm).
 - b. Cut out the circle in the enclosure door.
 - c. Drill three 0.406" (10.3mm) diameter holes in the enclosure door about a 3.812" (96.82mm) diameter per Figure 3.

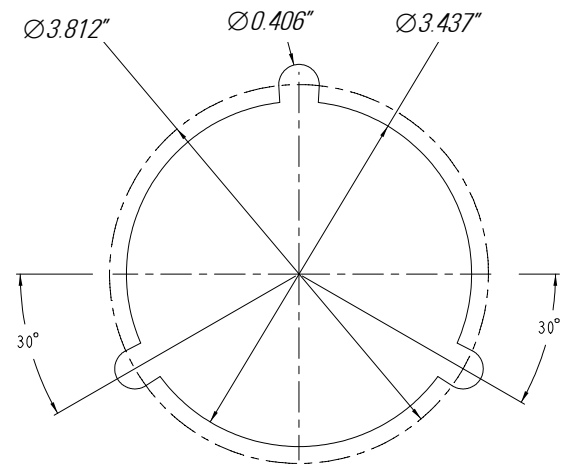


Figure 3. Hole cutout and drill pattern.

- d. Loosely secure each ring to the door with pan head screws per Figure 4.

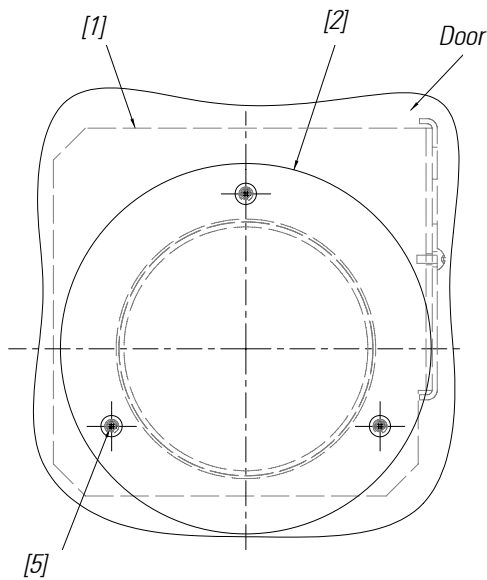


Figure 4. Secure door rings with pan head screws.

e. Adjust for proper alignment of indication plate and hole in the door.

- 1) Adjust catch height per Figure 5.
- 2) Turn integral handle to OFF position.
- 3) Close enclosure door.
- 4) Adjust external ring on the door so it is concentric with handle ring.
- 5) Small notch at right hand side of exterior ring must be immediately adjacent to the hole horizontal centerline.
- 6) Tighten pan head screws [5].

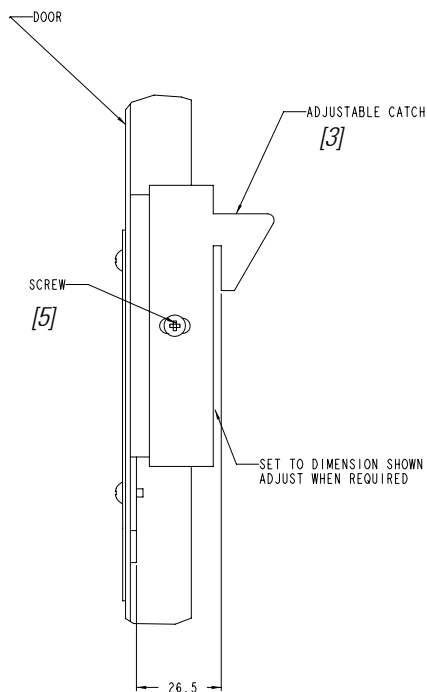


Figure 5. TDR integral handle operator catch kit.

B. Adjust sliding interlock catch for circuit breaker per Figure 5 and tighten with furnished screw.

C. Check operation of interlocking features.

1. Close enclosure door. Turn handle to ON. Door should not be able to open with handle in ON position. To open door, turn defeater screw (see figure 1) located in indicator plate counterclockwise, or turn handle to OFF position.

2. Open enclosure door. Open door should prevent turning disconnect ON without first defeating interlock. The interlock arm must be pushed toward the mounting surface and held while turning the handle to ON.

D. Install optional gasket (SEFRGSK) to the interior door ring [1], facing the pan of the integral handle. Consult the GE BuyLog© for gasket kit ordering details.

These instructions do not cover all details or variations in equipment nor do they provide for every possible contingency that may be met in connection with installation, operation, or maintenance. Should further information be desired or should particular problems arise that are not covered sufficiently for the purchaser's purposes, the matter should be referred to the GE Company. The circuit breaker is a sealed unit that contains no user-serviceable parts. Tampering with the seal will void the warranty.



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