

480V Explosion Proof Disconnect Switch & Breaker C1D1&2 - C2D1&2 - 3-Pole - (2) 1-1/4" Cast Hubs Instruction Manual

Do not attempt operation until you are familiar with all warnings, precautions, and procedures outlined within this instruction sheet. Read carefully before operating. Retain these instructions for future reference.

WARNING!

- TO PREVENT RISK OF ELECTRICAL SHOCK DEACTIVATE/DISCONNECT POWER SUPPLY BEFORE INSTALLING.
- FOR SAFETY AND WARRANTY CONCERNS, THIS DEVICE SHOULD BE INSTALLED BY QUALIFIED TECHNICIANS IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND ANY STATE OR LOCAL REQUIREMENTS.
- VERIFY THAT THE SUPPLY VOLTAGE AGREES AS INDICATED ON NAMEPLATE. ALL LOCAL AND NATIONAL ELECTRICAL/BUILDING CODES MUST BE FOLLOWED DURING INSTALLATION. FOR CODE INTERPRETATION, CONSULT YOUR LOCAL AUTHORITY.

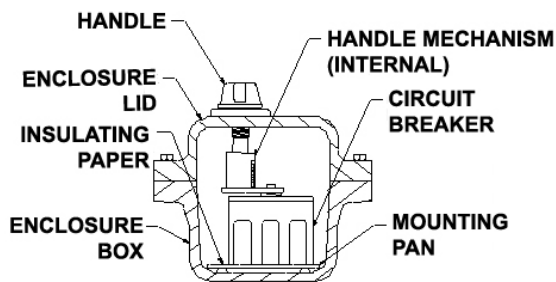
CAUTION:

Before installing, make sure you are compliant with area classifications, failure to do so may result in bodily injury, death and property damage. Do not attempt installation until you are familiar with the following procedures. All installation must comply with the applicable Electrical Code.

Make sure that the circuit is de-energized before starting installation or maintenance.

Verify that the installation is grounded. Failure to ground will create electrical shock hazards, which can cause serious injury and or death.

Technical information, advice and recommendations contained in these documents is based upon information that Killark believes to be reliable. All the information and advice contained in these documents is intended for use only by persons having been trained and possessing the requisite skill and know-how and to be used by such persons only at their own discretion and risk. The nature of these instructions is informative only and does not cover all of the details, variations or combinations in which this equipment may be used, its storage, delivery, installation, check out, safe operation and maintenance. Since conditions of use of the product are outside of the care, custody and control of Killark, the purchaser should determine the suitability of the product for his intended use, and assumes all risk and liability whatsoever in connection therewith.



**SECTIONED END VIEW OF ENCLOSURE
WITH CIRCUIT BREAKER AND HANDLE
MECHANISM INSTALLED**

To wire breaker, see accessory schematic diagram on side of circuit breaker.

THESE INSTRUCTIONS MAY NOT COVER ALL DETAILS OR VARIATIONS OF THIS PRODUCT FOR YOUR EQUIPMENT OR INSTALLATION REQUIREMENTS. SHOULD FURTHER INFORMATION NOT COVERED BY THESE INSTRUCTIONS BE REQUIRED, PLEASE CONTACT LARSON ELECTRONICS BY EMAIL AT SALES@LARSONELECTRONICS.COM OR BY PHONE AT 1-800-369-6671 FOR FURTHER ASSISTANCE.

PLEASE VISIT LARSONELECTRONICS.COM FOR **WARRANTY** AND **RETURN** INFORMATION.

Manual Operation

Manual operation of the circuit breaker is controlled by the circuit breaker handle and the PUSH-TO-TRIP button. The circuit breaker handle has three indicated positions, two of which are shown on the cover with raised lettering to indicate ON and OFF. On the sliding handle barrier, ON, OFF, and trip are also shown by a color-coded strip for each circuit breaker handle position: red for ON, white for tripped, and green for OFF. On the sliding handle barrier, ON/OFF is also shown with the international symbols I/O (See Fig. 4.)

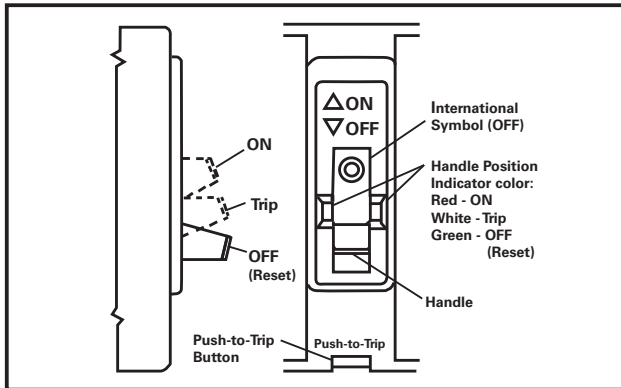


Figure 4. Circuit Breaker Manual Controls.

Circuit Breaker Reset

After tripping, the circuit breaker is reset by moving the circuit breaker handle to the extreme OFF position.

Note: In the event of a thermal trip, the circuit breaker cannot be reset until the thermal element cools.

PUSH-TO-TRIP Button

The PUSH-TO-TRIP button checks the tripping function and is used to periodically exercise the operating mechanism.

Inspection and Field Testing

Series C molded case circuit breakers are designed to provide years of almost maintenance-free operation. The following procedure describes how to inspect and test a circuit breaker in service.

Inspection

Circuit breakers in service should be inspected periodically. The inspection should include the following checks 4-1 thru 4-7.

⚠ WARNING

BEFORE INSPECTING THE CIRCUIT BREAKER IN AN ELECTRICAL SYSTEM, MAKE SURE THE CIRCUIT BREAKER IS SWITCHED TO THE OFF POSITION AND THERE IS NO VOLTAGE PRESENT WHERE WORK IS TO BE PERFORMED. SPECIAL ATTENTION SHOULD BE PAID TO REVERSE FEED APPLICATIONS TO ENSURE NO VOLTAGE IS PRESENT. THE VOLTAGES IN ENERGIZED EQUIPMENT CAN CAUSE INJURY OR DEATH.

⚠ CAUTION

MAKE SURE THAT CLEANING AGENTS OR SOLVENTS USED TO CLEAN THE CIRCUIT BREAKER ARE SUITABLE FOR THE JOB. SOME COMMERCIAL CLEANING AGENTS WILL DAMAGE THE NAME PLATES OR MOLDED PARTS.

1. Remove dust, dirt, soot, grease, or moisture from the surface of the circuit breaker using a lint-free dry cloth, brush, or vacuum cleaner. Do not blow debris into circuit breaker. If contamination is found, look for the source and eliminate the problem.
2. Switch circuit breaker to ON and OFF several times to be sure that the mechanical linkages are free and do not bind. If mechanical linkages are not free, replace circuit breaker.
3. Press the PUSH-TO-TRIP button to mechanically trip the circuit breaker. Trip, reset, and switch circuit breaker ON several times. If mechanism does not reset each time the circuit breaker is tripped, replace the circuit.
4. Check base, cover, and operating handle for cracks, chipping, and discoloration. Circuit breakers should be replaced if cracks or severe discoloration is found.
5. Check terminals and connectors for looseness or signs of overheating. Overheating will show as discoloration, melting, or blistering of conductor insulation, or as pitting or melting of conductor surfaces due to arcing. If there is no evidence of overheating or looseness, do not disturb or tighten the connections. If there is evidence of overheating, terminations should be cleaned or replaced. Before re-energizing the circuit breaker, all terminations and cable should be refurbished to the condition when originally installed.
6. Check circuit breaker mounting hardware. Tighten if necessary.
7. Check area where circuit breaker is installed for any safety hazards, including personal safety and fire hazards. Exposure to certain types of chemicals can cause deterioration of electrical connections.

Field Testing

Any field testing should be done in accordance with applicable NEMA Standards.

NOTES:

- (1) EXTERIOR FINISH-
 a) UNFINISHED (NATURAL CAST ALUMINUM, MAY OR MAY NOT BE SAND OR SHOT BLASTED)
 b) ALUMINUM LACQUER FINISH c) SPECIAL CORROSION RESISTANT COATINGS, 18,
 GREY COLORED EPOXY, ETC.
- (2) THESE ENCLOSURES ARE DESIGNED TO BE INSTALLED PER REQUIREMENTS OF ARTICLE 300
 OF THE NEC CODE - SEALS SUCH AS EY OR EYS MUST BE USED WITHIN 18" OF
 THE ENCLOSURE ON ALL CONDUITS ENTERING OR LEAVING THE ENCLOSURE.
- (3) IF THE ENCLOSURE IS INSTALLED & ONLY ONE HUB IS USED, PLUG THE OTHER WITH
 TYPE CUP-3 (CLOSE-UP-PLUG)
- (4) IF A SMALLER ENTRY IS REQUIRED, USE TYPE R' REDUCERS
- (5) CARE MUST BE TAKEN NOT TO SCRATCH OR MAR THE GROUND SURFACE BECAUSE
 IT IS A FLAME PATH. THE SURFACE (JOINT) MUST BE FREE OF ALL FOREIGN MATTER
 (IT MAY HAVE A FILM OF LUBG OR PETROLEUM JELLY LUBRICANT) WHEN BOLTED
 UP (200-300 IN - TORQUE) SO THAT A 0.0015" THICK FEELER GAUGE WILL
 NOT ENTER THE JOINT AT ANY POINT, MORE THAN 1/8".
- (6) CAUTION: DISCONNECT THIS DEVICE FROM THE SUPPLYING CIRCUIT, BEFORE
 ENTERING. KEEP THE ASSEMBLY TIGHT WHILE CIRCUITS ARE ALIVE.
- (7) CIRCUIT BREAKERS MUST BE UL LISTED, ©

