

Work scope

CLASS-III

PREVENTATIVE MAINTENANCE OF LOW VOLTAGE (LV) POWER CIRCUIT BREAKERS

RECEIVE AND INSPECT

1. The circuit breaker will be received along with the appropriate shipping and order documents.
2. Pertinent customer information and breaker nameplate information will be entered into our database, a unique breaker I.D. number (used to track the breaker) will be assigned.
3. An incoming inspection, that includes verification of “as found condition” including, insulation and contact resistance, will be performed and the results recorded.
4. The breaker trip device settings and trip bar force will be recorded.
5. The circuit breaker will be inspected for physical damage: parts that need replaced will be recorded. The customer will be advised of any additional charges.

Clean and Inspect

6. The operating mechanism will be cleaned, inspected and re-lubricated.
7. The primary finger clusters and main current carrying assemblies will be cleaned and inspected
8. The circuit breaker frame and other steel parts will be cleaned.
9. All electrical device coils will be cleaned..
10. Auxiliary contacts will be inspected and tested.
11. Arc chutes will be removed, cleaned and inspected for damage.
12. Insulating components such as pole pieces and phase barriers will be cleaned, inspected.

TESTING AND FINAL INSPECTION

13. The breaker will be ductored at 100Amps to test for proper contact resistance.
14. The breaker will be meggered at 1000V dc and resistance levels will be recorded.
15. The breaker will be Hi-pot tested at 2200V ac for proper insulation resistance.
16. The breaker will be high current tested to verify trip data vs. the manufacturer’s time current curves.
17. Electrically operated breakers will have each device tested for proper operation and pick-up.
18. The undervoltage device, when applicable, will be tested for minimum pick-up and drop-out voltages.
19. The auxiliary switch will be tested for proper sequencing of its contacts.
20. The bell alarm, if included, will be tested for proper reset.
21. The secondary disconnects, when applicable, will be adjusted.
22. If electrically operated, the breaker will be operated a minimum of 20 times.
 - 5 at minimum
 - 5 at maximum
 - 5 at nominal
 - 5 anti-pump
23. If manually operated, the breaker will be operated 10 times.
 - 5 open
 - 5 close
 - When shunt trip is used, a minimum of 5 openings using the shunt trip at the minimum control voltage specified for the coil
 - 5 trip free operations.
24. The operation of the racking mechanism and interlock will be checked.

25. Operation of visual indicators will be verified.
26. The trip bar force will be measured and recorded.
27. Quality control personnel will perform a final inspection.
28. Test and final inspection results will be documented and a copy will be attached to the breaker, along with a quality certificate prior to shipment.
29. The breaker test data will be entered into our E-ESS database.
30. The breaker will be packaged for shipment.

Freight included in and out

Warranty 30 days