

- E. The Motor Control Centre vendor shall strictly adhere to the wiring practices and works instructions as provided by the manufacturer.

1.3.16.7 Earth Leakage Relay

- A. Earth Leakage Protection Relay as shown on the drawings wherever in the specification shall be provided so as to measure the earth leakage current of the circuit it is connected.
- B. This protection system shall be comprises of two components:
 - a. Core Balanced Current Transformer (CBCT)
 - b. Earth Leakage Relay (ELR)
- C. The CBCT may be designed in ring or rectangular shape to suit mounting on conductors/cables or busbars as appropriate.
- D. The information from the CBCT shall be first registered in the amplifier circuit and continuously monitored thereby. Whenever the leakage exceeds the preset value this will operate a relay and through which trip the main circuit breaker of the circuit as per the designed logic.
- E. The ELR shall confirm to BS EN 60947-2.
- F. The ELR shall be adjustable type and suitable for mounting on compartment door.
- G. Residual operating current range: 0.03 to 2 A, Time delay: 0-1 S
- H. The ELR shall have the following main features as minimum:-
 - a. Immunity to nuisance tripping
 - b. Protection against direct and indirect contact
 - c. Continuous monitoring of the leakage current.
 - d. Capable of operating under all unbalanced phase conditions.
 - e. Alarm contact with fail safe operation
 - f. LED Status indications

1.3.16.8 Source Tests

- A. Provide type test certificate.
- B. All Motor Protection Relays shall be witness tested as integral units forming part of the "FBA" for a complete sequence of operation and as laid down in BS EN 60439.