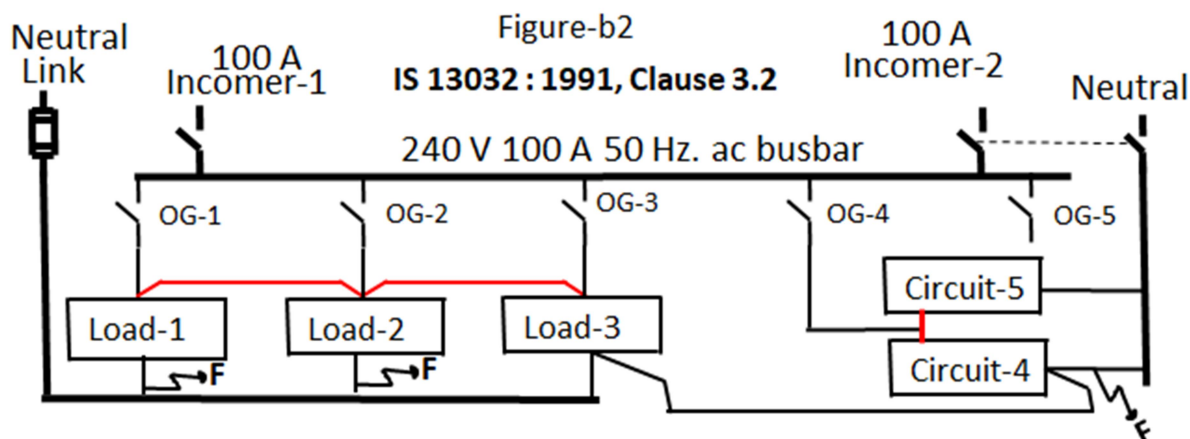


V. IS 13032 : 1991 clause 3.2 MCB Way NOTES-1

“The neutral may or may not form part of the MCB way”.



1. The neutral may or may not form part of the MCB way (refer Figure-b2). This feature will not allow detecting and isolating a load side neutral earth fault and remain in service with heat rise in that faulted wire or load until a possible fire hazard.
2. The neutral may or may not form part of the MCB way (refer Figure-b2). The entire load/circuit side neutral's earth fault (refer Figure-b2) will remain in service for long duration until the combined leakage current reaching the main incomer earth fault trip level or not an undesired fire hazard could happen in that premise.
3. The neutral may or may not form part of the MCB way (refer Figure-b2). A single load neutral to earth fault current only will flow while switching in that load. If a neutral faulted load switched off, the share of fault current from that load will be zero until switching on it again. Likewise single or multiple load side neutral earth fault current will be shared by each switched in loads. It is possible to see that a load without any leakage in phase and neutral switched in, the incomer ELCB trip and create black out at premise. Immediately the user will switch out the last switched load and reset the ELCB to maintain power in the premise. This will continuously feed leakage current under the trip level and a possible fire hazard could expect in that premise.

IS 13032 : 1991
Recommended Changes
(To be added shown bolded/underlined)

I. 3.1 Miniature Circuit- Breaker Board

An enclosure containing bus bars, miniature circuit-breaker (MCB) **and residual current circuit-breaker (RCCB)** for the purpose of protecting, controlling or connecting **each** outgoing circuit fed from one or more incoming circuits **through manual change over**. Miniature Circuit-Breaker Boards are also known as miniature Circuit-Breaker Distribution Boards (MCBDB) or MCB Boards.

II. 3.2 MCB Way

The part of the MCB board comprising a Miniature Circuit-Breaker **and residual current circuit-breaker (RCCB)** connected to **each** circuit.

III. 3.2 MCB Way NOTES-1

The neutral **must** form part of the MCB way.

IV. 3.5 Neutral of an MCB Board

Provided with terminals (and if required links) for connection to the neutral conductor of **each** outgoing and incoming circuit of distribution system.

V. 6.1 Preferred rated voltage

The preferred rated voltage **is 240 V for all out going and 240 V or 415 V for incoming.**

VI. 9.1.2 Routine Tests

Another routine test at place of installation is required for ensuring **MCB, RCCB and each circuit function test reports.**