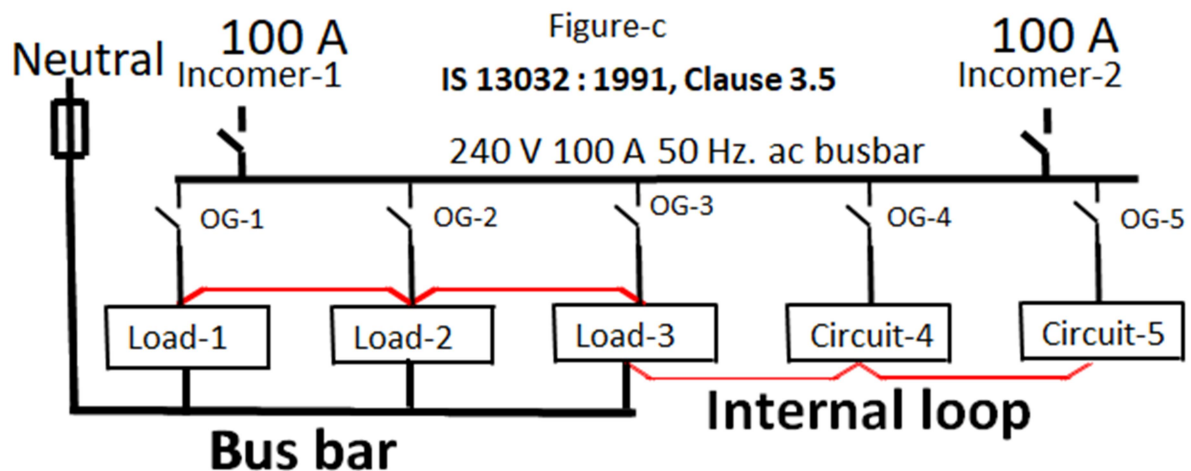
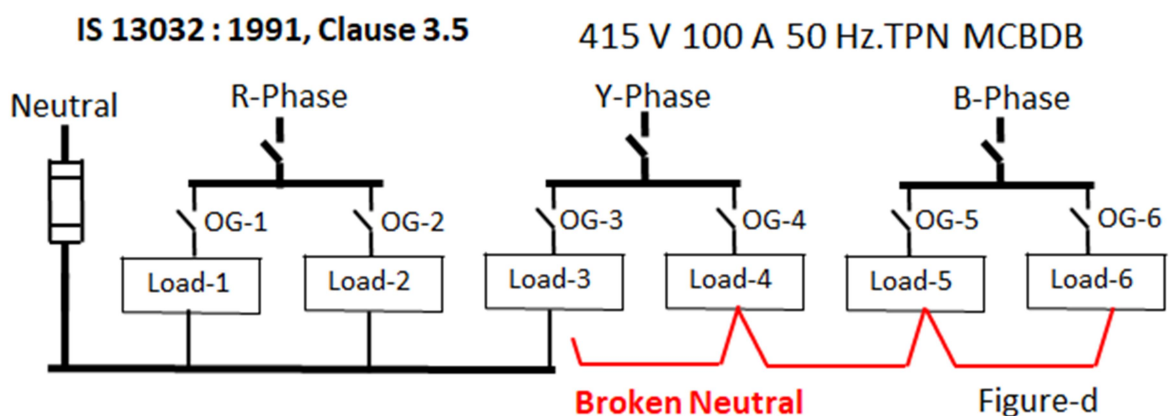


## V. IS 13032 : 1991 clause 3.5 Neutral of an MCB Board

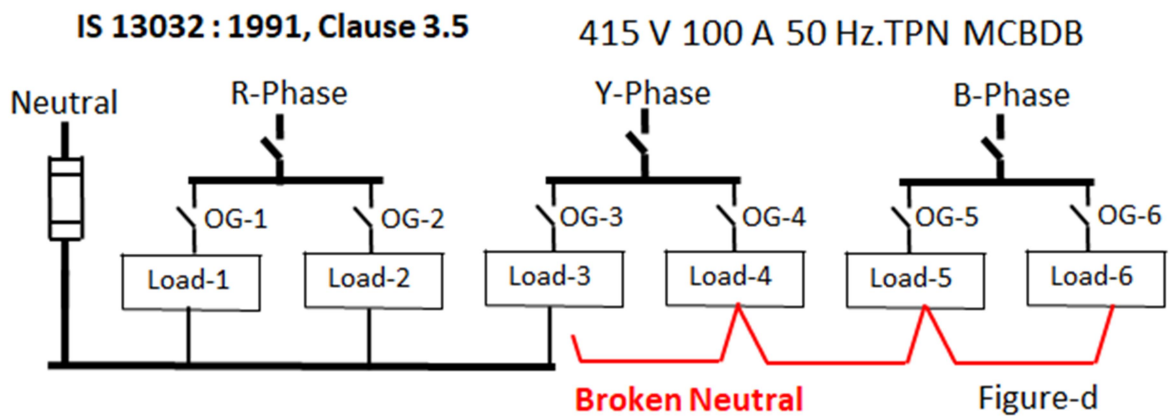
“A bus bar provided with terminals (and if required links) for connection to the neutral conductor of outgoing and incoming circuits of distribution system”.



1. More than one or all outgoing circuits could be looped with a single neutral at load circuit irrespective of the current rating of the loads from an SPN OR TPN MCBDB (refer to Figure-c). This may overheat that neutral wire towards an undesired event of electrical fire hazard.



2. More than one or all outgoing circuits could be looped with a single neutral at load circuit irrespective of the current rating of the loads in a TPN MCBDB (refer to Figure-d). A loose or disconnection of the looped neutral may back feed phase line through the neutral wire up to the disconnected end of the neutral wire with a rise in voltage through other switched phase line. Unknown back feeding may cause electric shock to working personnel.



3. More than one or all outgoing circuits could be looped with a single neutral at load circuit irrespective of the current rating of the loads (refer to Figure-d). In case of a TPN MCBDB, a loose or disconnection of the looped neutral may back feed phase line through the neutral wire up to the disconnected end of the neutral wire through other switched phase line. This will make a 240 V rated device working with 415 V in series with other switched phase load in such a way that one load with overcurrent and the other load with over voltage until a possible electric fire hazard in that premise.

## IS 13032 : 1991

### Recommended Changes

(To be deleted shown with line and to be added shown bolded)

#### 3.5 Neutral of an MCB Board

~~A bus bar~~ provided with terminals (and if required ~~links~~ **RCCB**) for connection to the neutral conductor of **each** outgoing and incoming circuits of distribution system.

#### IS 13032 : 1991 Clause 3.5 (after correction)

#### 3.5 Neutral of an MCB Board

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