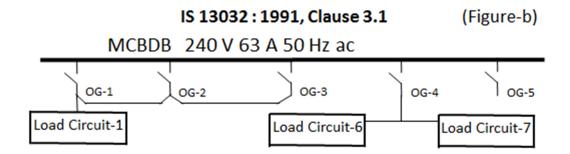
II. IS 13032: 1991 clause 3.1 Miniature Circuit- Breaker Board specification lines 1-4 read as below: (see bolded/underlined part)

"An enclosure containing bus bars and miniature circuit-breaker for the purpose of protecting, controlling or **connecting more than one outgoing circuit** fed from one or more incoming circuits".



- More than one Out Going Circuit could be connected to one MCB (refer to Figure-b, OG-4). This will lead to the over loading of that MCB of the MCBDB and may increase the heat rise inside the MCBDB towards electrical fire hazards.
- 2. More than one MCB could be inter linked inside the MCBDB for a single load (refer to Figure-b, Load Circuit-1). This will increase the fault level KVA/MVA rating of the single load and progressively will increase the heating effect towards electrical fire hazard during faults in the load or load circuit.
- 3. More than one MCB could be inter linked inside the MCBDB for a single load (refer to Figure-b, Load Circuit-1). During a fault in the load or load circuit all MCBs involved in the interconnection must trip for the isolation of fault. If combined capacity of MCBs involved is more than the fault current level, tripping never will happen and a possible fire could be expected in that electrical utility consumer premise.

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Recommended Changes

(To be added shown bolded/underlined)

I. 3.1 Miniature Circuit- Breaker Board

An enclosure containing bus bars, miniature circuit-breaker (MCB) <u>and</u> <u>residual current circuit-breaker (RCCB)</u> for the purpose of protecting, controlling or connecting <u>each</u> outgoing circuit fed from one or more incoming circuits <u>through manual change over</u>. 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 <u>and</u> 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.