

- F. The performance of routine tests so conducted at the manufacturer's works shall not relieve the supplier/manufacturer of LV Assembly of the obligation of repeating all tests at site upon completion of the installation.

#### **1.3.11.3 Form of Construction**

- A. LV Assemblies shall have internal separation by means of metallic or non-metallic partitions or barriers.
- B. Components within the compartment /cubicle shall be provided with the degree of protections to IP 2X as minimum whereas the degree of Protection to IP4X shall be provided to adjacent functional units preventing contact with live parts.
- C. Electrical continuity between the exposed conductive parts of LV Assembly and protective circuits of the installation shall be ensured to provide protection against indirect contact by using protective circuits.
- D. The protective circuits throughout the installation shall be so designed that makes it impossible to break the protective path with the removal of any component from the LV Assembly.
- E. All outgoing circuit's protective conductor shall have a separate terminal of adequate size duly identified in accordance with the Identification Section explained elsewhere in this specification document.
- F. LV Assemblies must be designed by giving highest importance to the accessibility specially when in service/fully powered, allowing easy viewing for inspection and operation, replacement of fuses and extension of additional functional units etc.
- G. The LV Assemblies shall be designed, manufactured and tested to IP54 in compliance with the requirements of IEC 60529 which ensures:
- Unintentional contact with hazardous live parts
  - Ingress of water or moisture
  - Ingress of solid foreign bodies and dusts.
- H. Equipment such as Variable Frequency Drives (VFD), UPS and others with large watt loss if specifically mentioned in the particular requirements to be included in the FBA that require forced ventilation by employing external fan and louvers as recommended by the manufacturer, the degree of protection (IP rating) shall be reduced to IP43 from IP54.