1.3.11.4 Fault Level (Short-Circuit Rating)

A. The LV Assemblies shall be designed and type tested to withstand a fault current of 50 KA for 1 second symmetrical. Additionally the LV assemblies shall be type tested for safe containment of an internal arcing fault, which will check the capability of the steel structure to withstand the forces associated with the arc, and ensure safety and integrity of the assembly for continuous use.

B. This is to establish that the enclosure of LV Assembly together with internal partitions and/or barriers withstands the pressure and temperature arising from internal arcing with short circuit current and thus provides protection for persons in front of or within the close proximity of the LV Assembly in the event of internal arcing.

C. The LV Assemblies shall be designed and equipped with properly sized circuit breaker and or fused disconnect switch as specified to provide selective short-circuit co-ordination so that faults are cleared without disturbing other circuits'

1.3.11.5 Service Conditions

A. The LV Assemblies shall be designed for indoor installation except where specified specifically for outdoor installation.

B. The LV Assemblies shall be designed to operate satisfactorily in an ambient air temperature of +50 degree C and RH exceeding 90%.

C. Unless otherwise specified temperature up to +70 degree C and RH up to 100% shall apply during transport, storage and installation. Equipment subjected to these extreme service conditions without being operated shall not suffer irreversible damage when operated under normal specified conditions.

D. The altitude of the site installation shall not exceed 2000 meters.

1.3.11.6 Environmental Conditions

A. The LV Assembly shall normally be located indoors in service conditions as specified above. However some parts of the LV assembly such as sensors field instruments and pilot devices may require installation in highly corrosive gaseous environments such as Hydrogen sulphide and methane may adversely affect the functions of the components and devices. In such application environments special measure shall be adopted to prevent corrosion and the subsequent rise in resistance leading to temporary or permanent interruption in control circuit.