

- B. The switch breaking capacity shall be related to AC 23 utilization category or other approved equivalent standard for 400 Volts, 3 phase, 4 wire, 50Hz operation for use on specified fault level and for service and site climatic conditions as described in Clause 3.11.
- C. The changeover switch shall be periodically maintained to ensure proper operation and system reliability.

#### **1.3.14.5 Transfer Switch ATS/Bypass**

- A. Transfer switch where specified shall be provided in accordance with BS EN 60947-6.
- B. Transfer switch shall be Withdraw able type allowing easy removal of the switch for maintenance and without disconnecting the power cables.
- C. ATS functions shall be mechanically and electrically interlocked to ensure proper sequence of operation.
- D. Bypass switch contacts to close only during the bypass isolation operation. Bypass of the load to either normal or emergency power source with complete isolation of the ATS shall be possible regardless of the status of the ATS.
- E. The switch breaking capacity shall be related to AC 23 utilization category or other approved equivalent standard for 400 Volts 3 phase 4 wire 50 Hz operation for use on specified fault level and for service and site climatic conditions as described in Clause 3.11.
- F. The ATS Bypass Isolation switch shall be provided from a single manufacturer.
- G. A visual indication shall be provided to indicate ATS/Bypass position.
- H. The ATS shall incorporate adjustable 3 Phase under & over voltage and frequency sensing on normal and emergency source.
- I. Whenever there is a voltage dip of 80% or below in any phase of the normal source or frequency displacement of 2 Hz from the nominal for a maximum period of 10 seconds (field adjustable) a contact shall close to initiate starting of the engine generator.
- J. Upon emergency source reaching required power supply of 400 Volts 3 Phase 50 Hz +10% or -6%, the load shall be transferred to the emergency source after a programmable set time delay.