Special care is taken in the manufacture of Kirloskar Electric Increased Safety Motors. The components are constructed to posses adequate strength to guard against electrical and mechanical failures. The windings are well insulated, specially treated and firmly secured to avoid movement against forces developed due to heavy currents. Internal end connections of windings are made by silver solder. Further the windings and cage are so designed that limiting temperatures specified by the standards are not excceeded by them. Spacious terminal boxes and covers of fabricated steel or high grade cast iron with adequate strength are provided. These are designed to provide IP:55 protection.

Adequate clearances and creepage distances are maintained between live terminals and earth.

Terminal connections of windings are made with flexible cables and terminated with non rotatable type cable sockets and also non rotatable type cable sockets are provided for external cable connections.

MOTORS WITH TYPE OF PROTECTION 'n'

Kirloskar Electric Induction Motors with type of protection 'n' comply with the requirement of IS:8289 and BS. 5000 part 16. These motors are designed to operate in areas less hazardous than Zone 2. As such these motors are non-sparking and at no time, have any accessible surface whose temperatures are greater than the igniting temperature of the gaseous mixture to which they are subjected. These motors are economically advantageous as they are very much similar to Standard Motors except for some modifications in the mechanical design. Specialities in mechanical design include provisions of minimum stipulated clearances between the stationary and moving parts in various locations and minimum required creepage and clearances between the terminals and terminals to earth, as per the specifications laid down by the standards, a minimum clearance of not less than 0.1mm between the shaft and bearing cap is maintained in cases where rolling element bearings are used.

CERTIFICATION

Kirloskar Electric Flameproof increased safety (Type 'e') and motors with type of protection 'n' have been tested and approved by the Central Mining Research Station, Dhanbad.

Approval certificates are obtained from the following authorities which are apex bodies in INDIA and ISI certificate is also obtained.

1. Central Mining Research Station, Dhanabad (CMRS)
2. Director General of Mines Safety Dhanbad (DGMS)
3. Chief Controller of Explosives, Nagpur (CCE)
4. Directorate General Factory Advice Service and Labour Institutes Bombay (DGFAS & LI)

The Indian Electric Co.
Bharat Bhavan, 1360, Shukrawar Peth, Natu Baug, Pune 411 002 (India)
Phone : 4474303, 4475845, 4473038, 4471586
Fax : 020-4473037, 4470807 Mktg. Div.