

A reference ambient temperature of 40° C is normally assumed in the design of these motors to operate in one of the temperature classes T1, T2 & T3. Special designs are available for operation in higher ambient.

As on the date of publication of this brochure, KEC has got manufacturing and field experience of having supplied 200 KW flame proof motors (LV), increased safety and non-sparking motors upto 1350 KW (LV) and upto 2700 KW (HV,3.3/6.6 KV) to several major petrochemical, mining and others projects at home and abroad wherever motors have to operate in explosive atmospheres. It is one of the leading manufacturers of “Increased Safety Motors” now in India. Kirloskar motors are known for their high quality and reliability which have been achieved by combining sophisticated modern manufacturing techniques with computer aided optimum designs.

COMPLIANCE WITH STANDARDS

Flameproof Motors comply with the requirement of IS:2148, Increased Safety Motors with IS:6381 and Non Sparking Motors with IS 8289. Also, all the above three types of motors meet the requirements of other relevant Indian and International Standards wherever applicable.

However, it will not be out of place to mention the following features of motors in the relative specialities.

Flameproof Motors manufactured by KEC consist of rigid bodies to withstand explosions and also they have other standard KEC features.

Our increased safety motors comply with the requirements with respect to ‘te’ and surface temperatures in view of the expertise developed over the years in complying with the relevant specifications. Further the temperature rises of windings are kept 10° C less than that of standard motors with similar class of insulation.

KEC type ‘n’ motors are characterised by the special components that go into these motors to make them non-sparking and thus ensure their safe operation in semi-explosive surroundings.

SALIENT FEATURES OF THE FLAMEPROOF MOTOR

Flameproof Motors are designed to contain any explosion which may occur inside the enclosure and prevent its communication to the external surroundings.

Following are the salient features of this type of motor.

1. Robust & rigidly built with Cast Iron or fabricated construction.
2. Ingress of flammable gas or vapour if present in the atmosphere cannot enter into the enclosure.
3. The Enclosure is made sufficiently strong to withstand an internal explosion if in case an explosion occurs inside the enclosure. Enclosures are hydraulically tested for a pressure of 10 kg/cm² (150 PSI).