

4. The enclosure is so constructed that the flame (which may occur due to the explosion) passing from inside to the outside is cooled to such an extent that the external hazardous atmosphere is not ignited.
5. This type of construction does not preclude the usage of slip-ring associated with brushes.
6. Surface temperatures of these enclosures attained in the operations will not be sufficient to ignite gases or vapours in the atmosphere in which these are installed.
7. A unibake component painting system at controlled atmosphere ensures quality finish, scratch resistance and durability.
8. Specially designed top terminal box.

KEC Flame Proof Motors comply with the requirements specified in the following standards.

1. Flameproof Construction to IS:2148
2. Mounting dimensions & rating to IS: 1231
3. Performance to -IS : 325 & IS : 3682

APPLICATIONS:

Flameproof motors find extensive application in coal mines; refineries and petrochemical industries in Zone 1 hazardous areas, and in the presence of Group I, Group IIA, & Group IIB gases.

SALIENT FEATURES OF TYPE 'e' MOTORS

Increased safety motors are intended for operation in Zone-2 hazardous areas.

The concept here is different from that for Flame Proof Motors. These motors are basically an improved version of standard totally enclosed fan cooled motors, wherein extra protection is inbuilt by way of superior quality materials and special manufacturing methods. Increased Safety Motors are required to be so designed and constructed that arcs and sparks are totally prevented. Hence slipring motors cannot normally be offered with this enclosure. However, if certain applications specifically call for slipring motors, then Type 'e' motors with the slipring and brush gear part of the motor housed in a 'Flameproof' enclosure can be offered. Further, these motors are manufactured for use in hazardous areas of flammable gases and vapours categorized on temperature class based on Ignition temperature group (described earlier). One characteristic feature of increased safety motor is that temperature at any part of the motor is limited to the temperature class for which it is designed. For example if the motor is designed for T3 temperature class, the temperature at any part of the motor will not exceed 200⁰ C at any time.