

TITLE

INDUCTION MOTORS, 150 HP AND BELOW

I. SCOPE

The functional requirements, features and general construction of TEFC electrical motors for use in wet locations, chemical environments, outdoors and in a service classified as Class I, Division 2 or Class II by the National Electric Code, and shall meet all applicable national standards.

II. RATING

Motors 150 HP and below shall be 460 volts, 3 phase, 60 hertz suitable for full voltage across the line starting, 1.0 service factor for continuous duty at maximum of 40°C ambient temperature, at an altitude not exceeding 3300 feet. In the event a motor can be supplied more economically which has a service factor greater than 1.0, it shall be applied at the 1.0 service factor rating.

III. CONSTRUCTION

Construction of the motor shall be corrosion resistant, cast iron frame, end brackets, fan housing and fan guard. Fan guard openings shall not be larger than $\frac{1}{2}$ " in size.

Fan shall be manufacturer's standard plastic type or of non sparking, corrosion resistant material.

End brackets shall be equipped with drain plugs at the low point, and have provisions for lubricating the bearings with the motor in service.

Bearings shall be manufacturer's standard single row double shielded ball type, grease lubricated, prepacked unless otherwise noted. Motor bearings for the Silica Pigments plant shall be same as above except must be of the sealed type. An external shaft bearing seal (slinger) shall be provided.

Terminal box shall be of corrosion resistant cast iron, diagonally split, rotatable in 90° steps, and equipped with a water tight gasket.

Hardware shall be of high strength corrosion resistant material.

Nameplate to be stainless steel with embossed lettering and secured with stainless steel pins.

Stator core shall be made of high grade electrical sheet steel and sealed from outside environment.

Stator winding shall be copper with Class B, non-hygroscopic, corrosion resistant insulation or Class F applied at 1.0 service factor.

Leads shall be stranded copper motor lead wire with 600 volt weatherproof insulation, permanently identified, with crimp-on type copper terminals. The lead opening in the motor frame shall have a waterproof seal. Only the 460 volt leads shall be brought out unless specified elsewhere.

Revised by 2-27-75
Date