

Motor bearings shall be of anti-friction type with self-contained lubricating system. The motor shall be equipped with a non-reverse ratchet and Kingsbury upper thrust bearing. The thrust bearing shall be capable of taking the thrust load of the pump during start-up, normal operation, minimum flow and run out condition and shall have rated thrust of not less than 150% of the sum of static and dynamic thrust load of the motor rotor, pump rotating elements and the hydraulics thrust imposed when the pump is operating with the discharge valve closed. The AFBMA L-10 rated minimum life of the bearings shall not be less than 4 years.

The motor shall be of high efficiency type, the guaranteed minimum efficiency and power factor shall not be less than 94% and 84% respectively, at the rated voltage, frequency and ambient condition carrying the full load. The thrust loss shall be included in the efficiency calculation.

The motor shall be equipped with thermistors in stator winding, one in each phase. Thermistor control modules with two output contacts for trip and alarm shall be provided for separate mounting in motor starter. A 120V space heater shall be provided in the motor.

The motor armature leads, space heater leads and thermistor leads shall be brought out to a proper terminal box of sufficient size for termination.

The motor shall have a complete test as defined by IEEE Std. 112, Method B. Report of test shall include data on form A2 applicable to the motor. Test data shall be submitted to the Engineer.

The motor shall be manufactured by Ideal Electric, General Electric, Louis-Allis, Siemens-Allis, U.S. Motors, Westinghouse, or approved equal.