SECTION 07000

ELECTRICAL

PART 1 - GENERAL

1.1 Description

A. Description of the Work

The work to be performed in accordance with this section includes the furnishing of all necessary equipment, materials, and labor to complete the installation of the specified electrical connections and electric motor installation.

B. Related Work Specified Elsewhere

Mechanical Equipment (Pumps).....Section 08000

PART 2 - MATERIALS

2.1 Motor Assembly

A. General

1. The electric motor shall be furnished by the pump supplier.

2. The motor shall be squirrel cage, induction type, three phase, sixty cycle, vertical hollow shaft with NEMA standard design and construction.

3. The motor shall be manufactured by General Electric or approved equal.

4. The motor shall be new and guaranteed for one full year from time of installation.

5. The motor shall meet as minimum requirements the published standards, rules, and requirements of NEMA and IEEE as applicable.

B. Requirements and Descriptions

Horsepower	=	125
Design	=	B
Speed	=	1775
Voltage	=	460
Phase	=	3
Frequency	=	60 Hz
Insulation	=	Class F
Temperature Rise	=	As Class B
Service Factor	=	1.15
Enclosure	=	WP-1
Construction	=	Vertical Hollowshaft
Bearings (Thrust)	=	Standard Thrust
Bearing Life (Thrust)	=	4800 #
Type of Coupling	=	Self Release
Winding Temperature Protection	=	Thermostats, one per with leads suitable for connection in series with control circuit

C. Windings

Motors 460V, 0 to 500 HP shall be random wound and insulated with Class "F" materials or better. The temperature rise shall not exceed the limits set forth by NEMA for class "B" insulation. The insulating varnish shall be applied by the Vacuum Pressurized Process.

D. Bearings

The thrust bearings shall be selected as to have a minimum life of one year when operated continuously at rated speed and load. Tandem stacked angular contact ball bearings. The motor shall be equipped with sight gauge to determine oil level in the bearing oil reservoir.

E. Nameplate

The nameplate shall have as a minimum the following information:

Horsepower	Model or ID Number	Code
Frame	Connection Diagrams	Numbers
Type	Full Load Current	Thrust Rating
Speed	Class of Insulation	Manufacturer's Name
Voltage	Temperature Rise	Special Features, If any
Design	Bearing Identification	Lubrication Instructions

PART 3 - EXECUTION

3.1 Preliminary Investigation of the Work

Verify that all preliminary work has been performed in accordance with these Specifications prior to performing any construction.

3.2 Submittals

A. Certificates of Compliance and Descriptions

3.3 Product Delivery, Storage, and Handling

Protect all equipment during unloading, storage, and placement against impact shocks and free falls. Replace damaged or defective materials.

3.4 Installation

CONTRACTOR shall remove existing motor from well head and replace with motor specified in these Specifications. All upgrades of existing electrical equipment to facilitate this replacement shall be the responsibility of the **CONTRACTOR**.

PART 4 - MEASUREMENT AND PAYMENT

4.1 Measurement

No measurement will be made.

4.2 Payment

A. Electrical Upgrades

No payment will be made for labor and materials to complete the electrical upgrades.

B. Motor Assembly

Payment for the motor assembly will be made at the contract lump sum price bid for the motor assembly and shall be considered full payment for providing the labor and materials to perform this work.

Payment will be made under Item number:

7000.1 - Motor Assembly, L.S.

END OF SECTION