Technical Aspects :	
DESIGN	Our Designs, parts & Dimensions are as per I.S.I standards. Latest Innovations are incorporated. Changes are made with times and also as per Customer demands.
FRAME & ENCLOSURE	Our Steel made Frames ensure greater strength & standard type production. Ventilation is provided by strong fan. In case of excess heat due to low speeds, Blower Mounting arrangement are provided for necessary Cooling.
WINDINGS	The Shunt Coils are wound in such a way with Main Pole that, solid inter-pole & main-pole base would withstand any type of vibration. Coils made of copper conductors are insulated & then vaccum impregnated with high grade varnish ensuring resistance against acids, oil & moisture.
COMMUTATORS	Manufactured Cylindrically, with hard-drawn copper and V-Groove segments of high conductivity, insulated by a mica sheet in between. Complete commutator is baked for high temperature testing.
BRUSH BOX & BRUSHES	Brush Gear is made of strong, special design- but with simple construction- making it possible for shafts to rotate easily at low speeds with noise-free service. Provision for easy access to replace and adjust the brushes is provided. Brushes are of standard grades, ensuring sparkless commutation.
ARMATURE	Armatures are built of high quality Standard Steel Laminations, Securely insulated from each other and clamped together under high pressure ensuring low heating losses. Coils and wire-winding is strictly as per insulation class 'B'. Armature is tested for Dynamic Balancing. Resin Binding means full protection of Armature in all respects.
TESTING	Our all products are thoroughly & vigorously tested on special Heavy Duty Test Bench and Dynamometer. All continuously rated Motors & Generators are tested on Full Load for more than Five Hours (HEAT RUN TEST) for temperature rises and the same are not permitted to exceed values prescribed as per I.S. 4722. All windings are put to insulation test with lowest rate of 1.5 to 2 KV.

SYNCHRONOUS MOTOR CHARACTERISTICS (V-curves)

The steady-state characteristics of a synchronous motor represented by phasor diagrams are shown as function of the excitation voltage E: for low values of E, the motor is said to be under excited and the current I lags the terminal voltage V where as, for large values of E, the motor becomes over excited with the current now leading the voltage. Note that the locus of the current phasor is a vertical line meaning that I cos(φ) is constant; similarly the locus of E is a horizontal line satisfying the condition that E sin(δ) is constant; both constraints are the consequence of maintaining constant power P = I V cos(φ) = E V sin(δ) / X. The basic phasor equation is $\underline{V} = \underline{E} + jX\underline{I}$. The associated V-curve (I versus E) is also plotted.