Typical Specifications for Wound Rotor Motors

.....Hp, ...RPM, {25 / 60} Cycles,

{208 / 220 / 440 / 550} Volts, {2 / 3} Phase, Wound Rotor Induction

Motors For Driving.....
(Application)

Motor Shall Be Arranged for {Horizontal / Vertical} Mounting And Shall Be Provided With A.....
(Open, Splash-proof, etc.)

.....Type of Enclosure, *NEMA*

{Class A / Class B} Insulation and {Ball / Sleeve} Bearings.

Typical Specifications for Synchronous Motors

.....Hp, ...RPM, ... Per Cent P. F., ...

Volts, {2 / 3} Phase, {25 / 60} Cycles, Synchronous

Motors of the {Belted / Coupled / Engine} Type For Driving

..... Motor Shall be Arranged
(Application)

for {Horizontal / Vertical} Operation and Shall Be Provided

With A.....Type of Enclosure.
(Open, Splashproof, etc.)

Motor Shall be Capable of Developing A Starting Torque of ..... Per Cent Full Load Torque, A Pull-In Torque of ..... Per Cent Full Load Torque, And A Pull-Out Torque of ..... Per Cent Full Load Torque. The Motor Field Shall Be Excited From A

{Direct Connected Exciter / Belted Exciter / M-G Set Exciter / D-C Bus} Which {Shall / Shall Not} Be Included With The Motor.

in the circuit. These units are available for the small horsepower ratings and when equipped with a high slip rotor may be used for adjustable varying speeds through line voltage control. The motors are ideally suited for fan duty.

Speed-torque characteristics of single phase motors are shown in Fig. 10.

Typical specifications for single phase motors are shown on page 642.

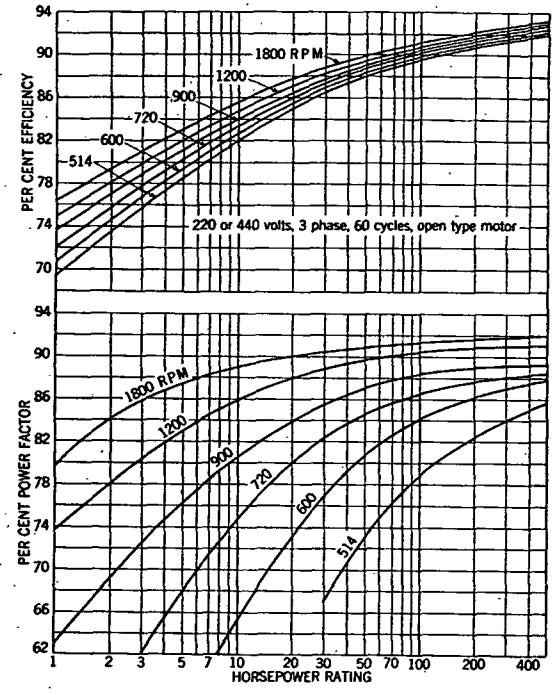

FIG. 8. EFFICIENCIES AND POWER FACTORS FOR SQUIRREL-CAGE INDUCTION MOTORS

CONTROL FOR ALTERNATING CURRENT MOTORS

Squirrel-Cage motors are usually linestarted where power company limitations permit. In small sizes up to 2 hp the motors are started by means of snap switches with an overload current element for motor protection. In larger ratings a linestarter is usually provided, either with an additional safety disconnect switch or with a switch built into the starter. Reduced voltage starting may be either of manual or push button controlled magnetic type. In specifying this type of starter consideration should be given to the fact that starting torque of squirrel-cage motors varies as the square of the applied voltage. For example, a motor developing 100 lb-ft starting torque on full voltage would produce only 25 lb-ft torque on starting on half rated voltage. Fig. 11 illustrates recommended control practice for squirrel-cage motors.