TYPICAL CHARACTERISTICS AND APPLICATIONS OF FIXED FREQUENCY SMALL AND MEDIUM AC SQUIRREL-CAGE INDUCTION MOTORS

Polyphase Characteristics	Locked Rotor Torque (Percent of Rated Load Torque)	Pull-Up Torque (Percent of Rated Load Torque)	Break Down Torque (Percent of Rated Load Torque)	Locked Rotor Current (Percent of Rated Load Current)	Slip	Typical Applications	Relative Efficiency
Design A Normal locked rotor torque and high locked rotor current.	70 - 275	65 - 190	175-300	Not Defined	0.5 - 5%	Fans, blowers, centrifugal pumps and compressors, motor-generator sets, etc. where starting torque requirements are relatively low	Medium or high
Design B Normal locked rotor torque and normal locked rotor current.	70 - 275	65 - 190	175-300	600 - 700	0.5 - 5%	Fans, blowers, centrifugal pumps and compressors, motor-generator sets, etc. where starting torque requirements are relatively low	Medium or high
Design C High locked rotor torque and normal locked rotor current.	200 - 285	140 - 195	190 - 225	600 - 700	1 - 5%	Conveyors, crushers, stirring motors, agitators, reciprocating pumps and compressors, etc., where starting under load is required	Medium
Design D High locked rotor torque and normal locked rotor current.	275	N/A	275	600 - 700	5 - 8%	High peak loads with or without flywheels such as punch presses, shears, elevators, winches, hoists, oil-well pumping and wire drawing motors	Low
Design E Normal locked rotor torque and low slip. High locked rotor current.	75 - 190	60-140	160-200	800 - 1000	0.5 - 3%	Fans, blowers, centrifugal pumps and compressors, motor-generator sets, etc. where starting torque requirements are relatively low	High