

Motors - Performance & Specification Comparisons

Characteristic	microMAX™	Black Max®	Blue Max®	Blue Chip XRI®
Electrical Characteristics				
Horsepower range	1/4 - 10	1/4 - 30	40 - 100	15 - 100
Base speed (# Poles)	1800 (4)	1800 (4) and 1200 (6)	1800 (4)	1800 (4)
Standard Voltage	230/460 (1/4 HP is 230 V only)	230/460 and 575	230/460	230/460 and 575
Insulation Class	H	F	H	F
Insulation System	CR ²⁰⁰ magnet wire	MAX GUARD®	MAX GUARD®	n/a
Service Factor (inverter power)	1.0	1.0	1.0	1.15
Phase/Base Frequency	3/60	3/60	3/60	3/60
Design Code (NEMA)	A and B for 1/4 - 2 HP	A	A	B
Duty Cycle	Continuous	Continuous	Continuous	Continuous
Thermal protection	None	Class F thermostats	Class F thermostats	None
Mechanical Characteristics				
Frame size (mounting)	56C - 215TC	56C - 286TC	324T(C) - 405T(C)	254T - 405T
Normal NEMA frame size	Yes	Yes	Yes	Yes
Enclosure	TENV and TEFC	TENV	TEFC and TEBC	TEFC
Frame material	Rolled Steel	Rolled Steel, Aluminum & Cast Iron	Cast Iron	Cast Iron
End bracket material	Aluminum	Aluminum, Cast Iron	Cast Iron	Cast Iron
Conduit box material	Steel	Steel	Cast Iron	Cast Iron
Fan guard material	Polypropylene	None (all ratings TENV)	Cast Iron	Cast Iron
Fan material	Polypropylene	None (all ratings TENV)	Polypropylene	Polypropylene
Lead termination	Conduit box (1/4 HP - terminal block)	Conduit box	Conduit box	Conduit box
Standard mounting	C-Face with Rigid Base and C-Face Round Body	C-Face with Rigid Base	C-Face with Rigid Base	Rigid Base
Drive end shaft slinger	No	No	Yes	Yes
Paint	Black powder-coat	Black enamel	Blue enamel	epoxy paint
Bearings	Ball (C3 fit)	Ball (C3 fit)	Ball (C3 fit)	Ball (C3 fit)
Grease	Exxon POLYREX EM	Exxon POLYREX EM	Exxon POLYREX EM	Exxon POLYREX EM
Standard conduit box assembly position	F3	F1, reversible to F2	F1, reversible to F2	F1
Performance Characteristics				
Constant Torque speed range	20:1 (TEFC), 1000:1 (TENV)	1000:1 (TENV)	2000:1 (all enclosures)	20:1
Constant Horsepower speed range	2:1 (90-120 Hz intermittent)	2:1 (90-120 Hz intermittent)	2:1	2:1
Temperature rise	B	F	F (TEFC) and B (TEBC)	B
Encoder provisions	No	Yes	Yes	No
Other Characteristics				
Agency listings	UL Recognized, CSA Certified	UL Recognized, CSA Certified	UL Recognized, CSA Certified	UL Recognized, CSA Certified
Warranty*	3 years	3 years	3 years	3 years

*See Terms and Conditions for motor warranty explanation.