

PERFORMANCE DATA SHEET NEMA PREMIUM NR CAN NEMA 12 - 12

Catalogue #: MPP-86

HP	kW	Voltage	S.F. @ 60Hz	EFF.	P.F.	Frame	Design	L.R. Amps
150	111,90	575	1,15	95,0%	0,92	445TS	B	868

60 Hz								Code	F.L. RPM
FLA									
208	230	416	460	480	575	600		G	3580
/	/	/	/	/	128	/			

50 Hz								Code	F.L. RPM
FLA			S.F. @ 50Hz	Efficiency	Power Factor				
190	380	415				/	/	/	/
/	/	/							

Wgt. Lbs	PH	Duty	Insul. Class	Amb.	Elevation	Temp. Rise° C
1408	3	Cont.	F	40°C	1000M (3300 Ft)	< 80

% Efficiency		% Power Factor		Torque		Winding Resist. Ω	Safe Cold Start (Secs)
Full Load:	95,0%	Full Load:	0,92	Full Load Ft/Lbs	220,1		
3/4 Load:	94,5%	3/4 Load:	0,90	Locked Rotor %	130		
1/2 Load:	93,8%	1/2 Load:	0,86	Break Down %	245		

Rotor Inertia Wk2 Lb-Ft2	Max Load Inertia Wk2 Lb-Ft2	Shaft Material	Frame Material	DE Bracket Type	ODE Bracket Type	Enclosure	NEMA Rating	Lead Wire Size
21,36	170	Standard	Cast Iron	Standard	Standard	TEFC	IP55	4AWG

Ball Bearings		Grease	Mount Type	Orientation	Paint	Sound Pressure @ 3FT	Sound Power
DE	ODE						
6314	6314	Mobil PolyrexEm	Rigid	Horizontal	Green	92	104

Inverter Duty. Motor meets MG1 parts 31.4.4.2	Constant Torque Range	Variable Torque Range	Constant HP RPM
		10:1	20:1

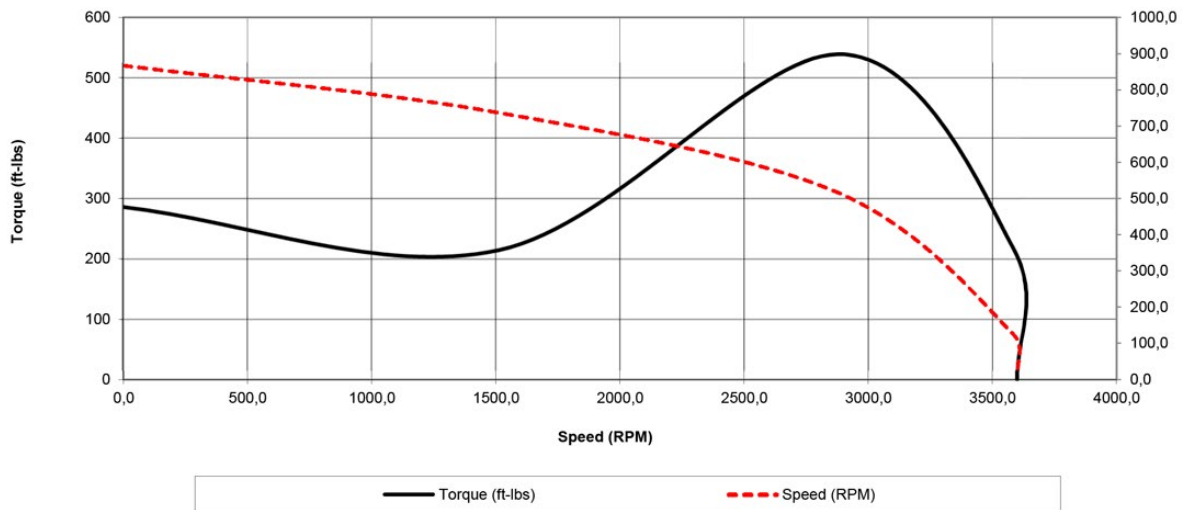


Date: 2020-02-27
 Customer: _____
 Contact: _____
 Submittee: J.C. Lavallée

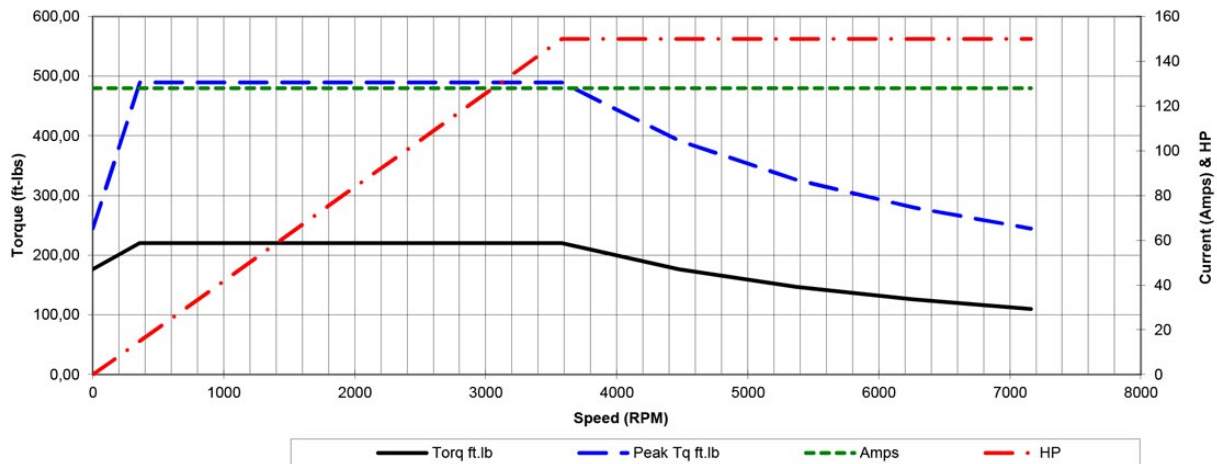
Catalogue #: MPP-86

NEMA PREMIUM NR CAN NEMA 12 - 12										
HP	VAC	RPM	Enclosure	Frame	Frequency	Design	Poles	LR Code Letter	Insulation Class	Temp. Rise °C
150	575	3580	TEFC	445TS	60	B	2	G	F	< 80
	0Hz	6Hz	15Hz	30Hz	45Hz	60Hz	75Hz	90Hz	105Hz	120Hz
Amps	128	128	128	128	128	128	128	128	128	128
RPM	0	358	895	1790	2685	3580	4475	5370	6265	7160
Torq ft.lb	176,04	220,06	220,06	220,06	220,06	220,06	176,04	146,70	125,75	110,03
Peak Tq ft.lb	244,81	489,62	489,62	489,62	489,62	489,62	391,70	326,42	279,79	244,81
HP	0	15,0	37,5	75,0	112,5	150,0	150,0	150,0	150,0	150,0
	Locked Rotor	Pull-Up	Breakdown	Rated Load	Idle	Duty	S. F.	Ambient	Elevation	dBA @ 1M
Speed (RPM)	0,0	1512	2880	3580	3600	Continuous	1,15	40°C	3300 ft	92
Current (Amps)	868,0	737,8	516,5	128,0	32,1	VFD Rating: Meets MG1 parts 31.4.4.2				
Torque (ft-lbs)	286,1	214,6	539,1	220,1	0,0	C.T.	10:1	V.T.	20:1	

Motor Speed Data



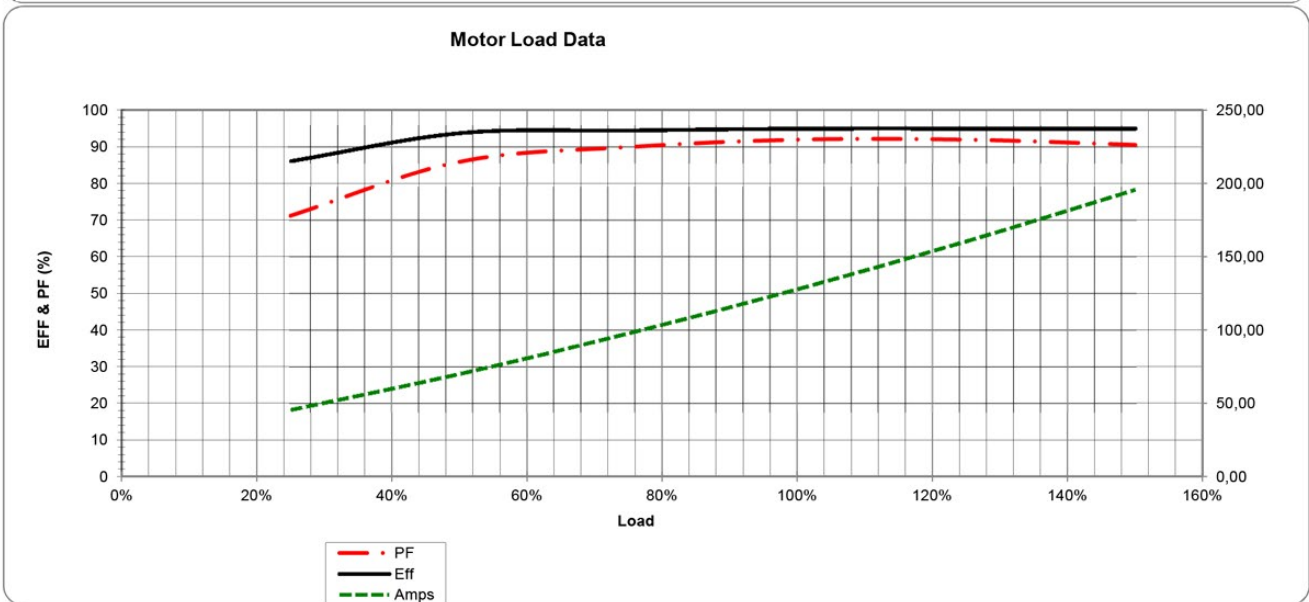
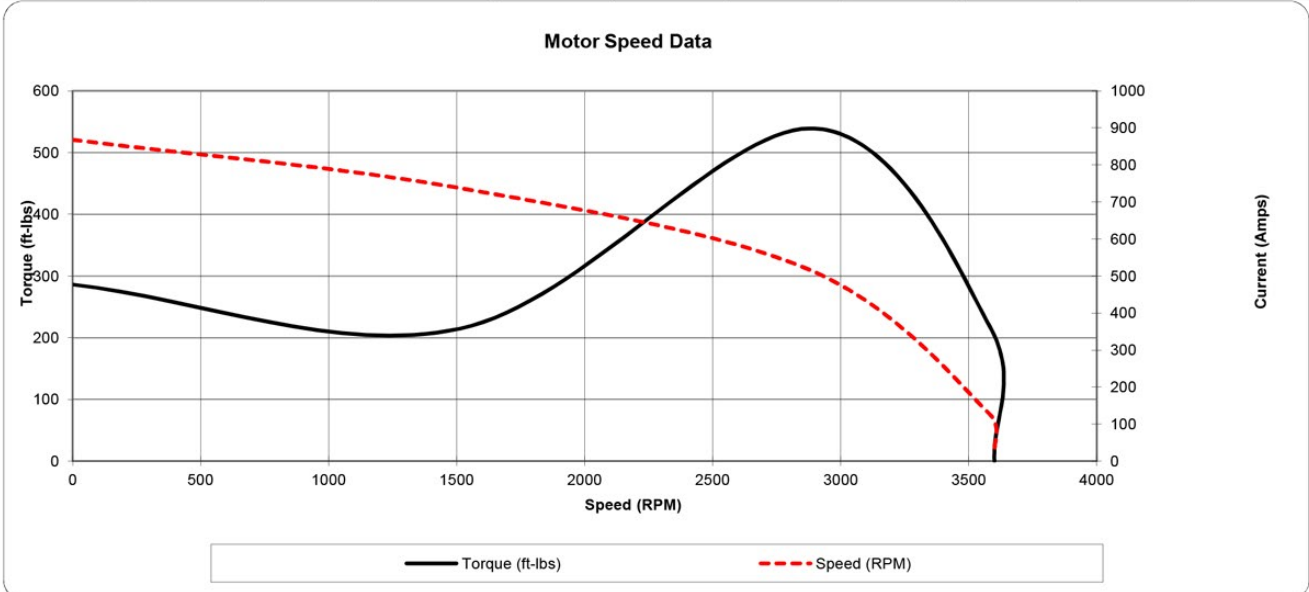
Motor Torque Capability vs RPM

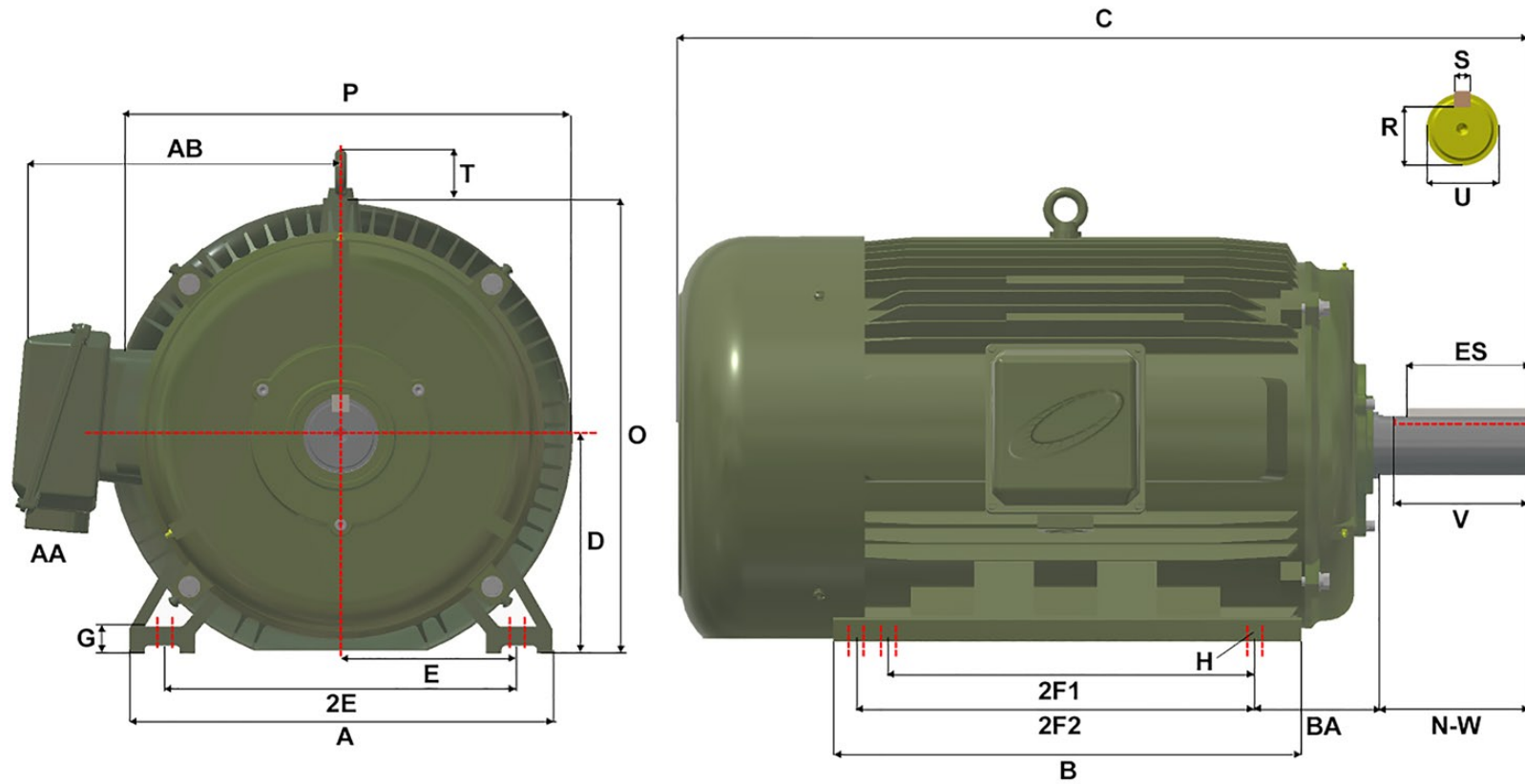


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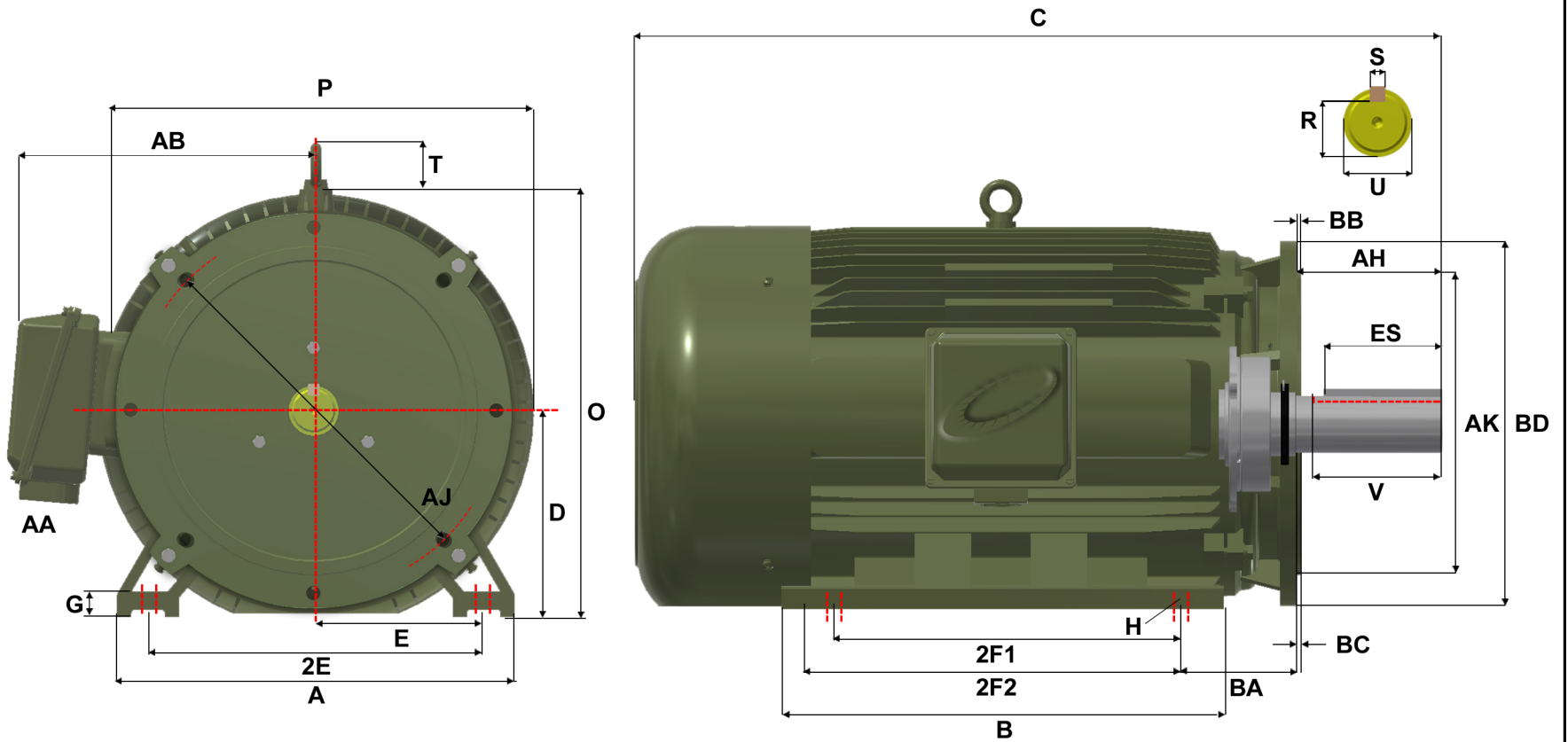
Catalogue #: MPP-86

NEMA PREMIUM NR CAN NEMA 12 - 12										
HP	VAC	RPM	Enclosure	Frame	Frequency	Design	Poles	LR Code Letter	Insulation Class	Temp. Rise °C
150	575	3580	TEFC	445TS	60	B	2	G	F	< 80
Load %	0%	25%	50%	75%	100%	125%	150%			
Amps	32,13	45,76	70,27	97,92	128,00	160,69	195,81			
Torq ft/lbs	0	54,78	109,72	164,81	220,06	275,45	331,01			
RPM	0	3595	3590	3585	3580	3575	3570			
Eff	0	86,22	93,80	94,50	95,00	95,00	95,00			
PF	0	71,2	86	90	92	92	90,6			
	Locked Rotor	Pull-Up	Breakdown	Rated Load	Idle	Duty	S. F.	Ambient	Elevation	dBA @ 1M
Speed (RPM)	0	1512	2880	3580	3600	Continuous	1,15	40°C	3300 ft	92
Current (Amps)	868	737,8	516,5	128	32,128	VFD Rating: Meets MG1 parts 31.4.4.2				
Torque (ft-lbs)	286,07	214,55	539,14	220,06	0,0	C.T.	10:1	V.T.	20:1	





Version: 2WTI		Revised: 08-10-2019		HP	RPM	FRAME	ENCLOSURE	MPP/MQP-86								
Customer is responsible in determining that Max Motion product will fit/perform suitably in the intended application								150	3600	445TS	TEFC					
A	B	C	D	E	2E	2F1	2F2	G	H	O	P	R				
21.70	26.40	40.60	11.00	9.00	18.00	14.50	16.50	1.35	6 X 0.81	23.00	23.40	2.021				
S	T	U	V	AA	AB	BA	ES	N-W								
0.625	3.00	2.375	4.50	3 NPT	19.90	7.50	3.03	4.75								



Version: 2WTI		Revised: 08-10-2019		HP	RPM	FRAME	ENCLOSURE	MPP/MQP-86D									
Customer is responsible in determining that MEP product will fit/perform suitably in the intended application								150	3600	445TSD	TEFC						
A	B	C	D	E	2E	2F1	2F2	G	H	O	P	R	S				
21.70	22.90	40.60	11.00	9.00	18.00	14.50	16.50	1.35	6 * 0.81	22.10	21.60	2.021	0.625				
T	U	V	AA	AB	AH	AJ	AK	BA	BB	BC	BD	ES					
3.00	2.38	4.50	3 NPT	19.00	4.75	20.00	18.00	7.50	0.25	0.00	22.00	3.03					

PREMIUM DESIGN B NEMA 12-12

CAST IRON CONSTRUCTION RIGID BASE

TEFC TOTALLY ENCLOSED FAN COOLED

MaxMotion

Applications:

General purpose use on conveyors, compressors, pumps, fans, blowers and other industrial and process machinery working in wet and dirty environments.

MaxMotion premium high efficiency motors offer even more return on your investment when used in high cycling and long running time applications.

Features:



Design - NEMA standard MG-1, Design B meets MG-1 Part 31

Agency listings and standard - NEMA, IEEE, CSA, CSAus, IEC, CE, NRCan

Service Factor - 1.25 SF 1HP to 50HP, 1.15 SF 60 HP to 300HP

Electrical Supply - At 60Hz: 575V and 230/460V dual rated and at 50Hz: 190/380, Frame 445T+ are only 460V or 575V

Windings - Highest quality Enamel coated Corona resistant inverter duty magnet wire. VPI with additional dip and bake.

Insulation - Non hygroscopic class F with class B temperature rise

Voltage and frequency variation - +/- 10% as based on two voltage points of the motor being either 230 / 460 or 333 / 575

Bearings - 143T to 215T are double sealed and grease filled, 254T to 449T are regreasable with brass grease nipples and retaining bearing caps. Frame 404T to 449T are with roller bearings.

Bearing lubricant - Frame 143T to 215T is lithium grease, -30 Deg C to 110 Deg C amb. Frame 254T+ are long life mobil Polyrex EM, -29 Deg C to 177 Deg C.

Enclosure Protection - Totally Enclosed Fan Cooled meeting IEC standard IP55. Factory Certified Division 2 Class I Groups A, B, C, D Class II Groups F, G. Meets Temp Code T2B.

Mounting - F1 Standard Assembly, Reversible to F2 Assembly

Conduit Box - Oversize cast iron, diagonally split. Can be rotated in 90 Deg steps. Lead separator gasket to seal conduit box from frame and gasketed cover. Grounding terminal inside conduit box and threaded conduit entry.

Inverter duty - Suitable for inverter application at 230V, 460V, 575V for speed ranges of 10:1 constant torque and 20:1 variable torque.

Nameplate - Corrosion resistant stainless steel showing all data connection diagrams and certifications

Drain plugs - Located at the lowest point of motor at both ends.

Warranty - 3 years



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TEFC TOTALLY ENCLOSED FAN COOLED



HP	FL RPM	VOLTS	FRAME	CAT NO.	NOM EFF.	F.L. AMPS	CODE	WT (Lbs)	DE BRG	ODE BRG	"C" Dimension (Inch)
1	3515	230/460	143T	MQP-1	77	3.5/1.75	M	41	6205	6205	12,6
	3515	575	143T	MPP-1	77	1.4	M	41	6205	6205	12,6
	1745	230/460	143T	MQP-2	85,5	3/1.5	M	47	6205	6205	13,6
	1745	575	145T	MPP-2	85,5	1.2	M	47	6205	6205	13,6
	1160	230/460	145T	MQP-3	82,5	3.6/1.8	M	52	6205	6205	14,6
	1160	575	145T	MPP-3	82,5	1.44	M	52	6205	6205	14,6
	865	230/460	182T	MQP-4	75,5	3.8/1.9	M	64	6306	6306	16,1
	865	575	182T	MPP-4	75,5	1.55	M	64	6306	6306	16,1
	1 1/2	3520	230/460	143T	MQP-6	84,1	4/2.2	M	46	6205	6205
3520		575	143T	MPP-6	84,1	1.76	M	46	6205	6205	13,6
1750		230/460	145T	MQP-7	86,5	4.4/2.2	M	55	6025	6025	14,6
1750		575	145T	MPP-7	86,5	1.8	M	55	6025	6025	14,6
1175		230/460	182T	MQP-8	87,5	4.8/2.4	M	95	6306	6306	16,1
1175		575	182T	MPP-8	87,5	1.9	M	95	6306	6306	16,1
865		230/460	184T	MQP-9	78,5	5.4/2.7	M	64	6306	6306	17,1
865		575	184T	MPP-9	78,5	2.16	M	64	6306	6306	17,1
2		3510	230/460	145T	MQP-11	85,5	5.3/2.65	L	52	6205	6205
	3510	575	145T	MPP-11	85,5	2.05	L	52	6205	6205	14,6
	1745	230/460	145T	MQP-12	86,5	6.2/3.1	L	56	6205	6205	14,6
	1745	575	145T	MPP-12	86,5	2.4	L	56	6205	6205	14,6
	1180	230/460	184T	MQP-13	88,5	5.9/2.95	L	103	6306	6306	17,1
	1180	575	184T	MPP-13	88,5	2.4	L	103	6306	6306	17,1
	860	230/460	213T	MQP-14	84	6.8/3.4	L	150	6308	6308	18,9
	860	575	213T	MPP-14	84	2.65	L	150	6308	6308	18,9
	3	3485	230/460	145T	MQP-16S	86,5	7.4/3.7	K	90	6205	6205
3485		575	145T	MPP-16S	86,5	3	K	90	6308	6308	14,6
3520		230/460	182T	MQP-16	86,5	7.4/3.7	K	97	6306	6306	16,1
3520		575	182T	MPP-16	86,5	3	K	97	6306	6306	16,1
1760		230/460	182T	MQP-17	89,5	7.6/4	K	97	6306	6306	16,1
1760		575	182T	MPP-17	89,5	3.2	K	97	6306	6306	16,1
1185		230/460	213T	MQP-18	89,5	8.4/4.2	K	136	6308	6308	18,9
1185		575	213T	MPP-18	89,5	3.4	K	136	6308	6308	18,9
860		230/460	215T	MQP-19	85,5	9.2/4.6	K	167	6308	6308	20,4
860	575	215T	MPP-19	85,5	3.68	K	167	6308	6308	20,4	
5	3515	230/460	184T	MQP-21	88,5	11.6/5.8	J	110	6306	6306	17,1
	3515	575	184T	MPP-21	88,5	4.6	J	110	6306	6306	17,1
	1755	230/460	184T	MQP-22	89,5	13.6/6	J	112	6306	6306	17,1
	1755	575	184T	MPP-22	89,5	5.4	J	112	6306	6306	17,1
	1180	230/460	215T	MQP-23	89,5	14.2/7.1	J	162	6308	6308	20,4
	1180	575	215T	MPP-23	89,5	5.68	J	162	6308	6308	20,4
	870	230/460	254T	MQP-24	86,5	16/8	J	286	6309	6309	23,2
	870	575	254T	MPP-24	86,5	6.5	J	286	6309	6309	23,2
	7.5	3505	230/460	184T	MQP-26S	86,5	17.6/8.8	H	134	6306	6306
3505		575	184T	MPP-26S	89,5	7	H	134	6306	6306	17,1
3530		230/460	213T	MQP-26	89,5	17.6/8.8	H	150	6308	6308	18,9
3530		575	213T	MPP-26	89,5	7	H	150	6308	6308	18,9
1770		230/460	213T	MQP-27	91,7	18.4/9.2	H	150	6308	6308	18,9
1770		575	213T	MPP-27	91,7	7.4	H	150	6308	6308	18,9
1185		230/460	254T	MQP-28	91	20.8/10.4	H	272	6309	6309	23,2
1185		575	254T	MPP-28	91	7.8	H	272	6309	6309	23,2
870		2230/460	256T	MQP-29	86,5	24/11.5	H	315	6309	6309	25
870	575	256T	MPP-29	86,5	9.6	H	315	6309	6309	25	
10	3525	230/460	215T	MQP-31	90,2	22.8/11.4	H	167	6308	6308	20,4
	3525	575	215T	MPP-31	90,2	9.1	H	167	6308	6308	20,4
	1770	230/460	215T	MQP-32	91,7	24/12	H	167	6308	6308	20,4
	1770	575	215T	MPP-32	91,7	9.6	H	167	6308	6308	20,4
	1180	230/460	256T	MQP-33	91	25.6/12.8	H	293	6309	6309	25
	1180	575	256T	MPP-33	91	10.2	H	293	6309	6309	25
	885	230/460	284T	MQP-34	89,5	31/15.5	H	392	6311	6311	26,6
	885	575	284T	MPP-34	89,5	12.5	H	392	6311	6311	26,6



PREMIUM DESIGN B NEMA 12-12

CAST IRON CONSTRUCTION RIGID BASE

TEFC TOTALLY ENCLOSED FAN COOLED



HP	FL RPM	VOLTS	FRAME	CAT NO.	NOM EFF.	F.L. AMPS	CODE	WT (Lbs)	DE BRG	ODE BRG	"C" Dimension (Inch)
15	3545	230/460	215T	MQP-36S	91	34.4/17.2	G	162	6309	6308	20,4
	3545	575	215T	MPP-36S	91	13.8	G	162	6309	6308	20,4
	3545	230/460	254T	MQP-36	91	34.4/17.2	G	286	6309	6309	23,2
	3545	575	254T	MPP-36	91	13.8	G	286	6309	6309	23,2
	1770	230/460	254T	MQP-37	92,4	36.4/18.2	G	297	6309	6309	23,2
	1770	575	254T	MPP-37	92,4	14.6	G	297	6309	6309	23,2
	1180	230/460	284T	MQP-38	91,7	38/19	G	363	6311	6311	26,6
	1180	575	284T	MPP-38	91,7	15.2	G	363	6311	6311	26,6
	885	230/460	286T	MQP-39	89,5	46/23	G	394	6311	6311	28,1
	885	575	286T	MPP-39	89,5	18.5	G	394	6311	6311	28,1
20	3540	230/460	256T	MQP-41	91	46/23	G	315	6309	6309	25
	3540	575	256T	MPP-41	91	18.4	G	315	6309	6309	25
	1760	230/460	256T	MQP-42	93	48.4/24.2	G	315	6309	6309	25
	1760	575	256T	MPP-42	93	19.1	G	315	6309	6309	25
	1185	230/460	284T	MQP-43	91,7	50/25	G	394	6311	6311	28,1
	1185	575	284T	MPP-43	91,7	20	G	394	6311	6311	28,1
	880	230/460	324T	MQP-44	90,2	58/28	G	444	6312	6312	29,8
	880	575	324T	MPP-44	90,2	22.5	G	444	6312	6312	29,8
25	3540	230/460	284TS	MQP-46	91,7	57/28.5	G	385	6311	6311	25,2
	3540	575	284TS	MPP-46	91,7	22.4	G	385	6311	6311	25,2
	1775	230/460	284T	MQP-47	93,6	60/30	G	392	6311	6311	26,6
	1775	575	284T	MPP-47	93,6	24	G	392	6311	6311	26,6
	1185	230/460	324T	MQP-48	93	61/30.5	G	508	6312	6312	29,8
	1185	575	324T	MPP-48	93	24.4	G	508	6312	6312	29,8
	880	230/460	326T	MQP-49	90,2	76/38	G	469	6312	6312	31,3
	880	575	326T	MPP-49	90,2	30.5	G	469	6312	6312	31,3
30	3530	230/460	286TS	MQP-51	91,7	69/34.5	G	409	6311	6311	26,7
	3530	575	286TS	MPP-51	91,7	27.6	G	409	6311	6311	26,7
	1775	230/460	286T	MQP-52	93,6	70.6/35.3	G	418	6311	6311	28,1
	1775	575	286T	MPP-52	93,6	28.2	G	418	6311	6311	28,1
	1185	230/460	326T	MQP-53	93	71.8/35.9	G	537	6312	6312	31,3
	1185	575	326T	MPP-53	93	28.7	G	537	6312	6312	31,3
	885	230/460	364T	MQP-54	91,7	88/44	G	607	6313	6313	32,5
	885	575	364T	MPP-54	91,7	35	G	607	6313	6313	32,5
40	3545	230/460	324TS	MQP-56	92,4	91/45.5	G	510	6312	6312	28,3
	3545	575	324TS	MPP-56	92,4	36.4	G	510	6312	6312	28,3
	1780	230/460	324T	MQP-57	94,1	93.2/46.6	G	519	6312	6312	29,8
	1780	575	324T	MPP-57	94,1	37.3	G	519	6312	6312	29,8
	1188	230/460	364T	MQP-58	94,1	100/50	G	697	6313	6313	32,5
	1188	575	364T	MPP-58	94,1	40	G	697	6313	6313	32,5
	885	230/460	365T	MQP-59	91,7	112/56	G	902	6313	6313	33,5
	885	575	365T	MPP-59	91,7	36	G	902	6313	6313	33,5
50	3545	230/460	324TS	MQP-61	93	116.2/58.1	G	548	6312	6312	29,8
	3545	575	324TS	MPP-61	93	46.4	G	548	6312	6312	29,8
	1780	230/460	326T	MQP-62	93	116.2/58.1	G	594	6312	6312	31,3
	1780	575	326T	MPP-62	94,5	46.6	G	594	6312	6312	31,3
	1187	230/460	364T	MQP-63	94,1	126/63	G	752	6313	6313	33,5
	1187	575	364T	MPP-63	94,1	50	G	752	6313	6313	33,5
	885	230/460	404T	MQP-64	92,4	133/66.5	G	902	NU318	6314	33,5
	885	575	404T	MPP-64	92,4	53.2	G	902	NU318	6314	33,5
60	3565	230/460	364TS	MQP-66	93,6	132/66	G	704	6313	6313	31,4
	3565	575	364TS	MPP-66	93,6	52.8	G	704	6313	6313	31,4
	1780	230/460	364T	MQP-67	95	139/69.5	G	766	6313	6313	32,5
	1780	575	364T	MPP-67	95	55.6	G	766	6313	6313	32,5
	1190	230/460	404T	MQP-68	94,5	140/70	G	1000	NU318	6314	38
	1190	575	404T	MPP-68	94,5	56	G	1000	NU318	6314	38
	885	230/460	405T	MQP-69	92,4	160/80	G	1010	NU318	6314	38
	885	575	405T	MPP-69	92,4	64	G	1010	NU318	6314	38



PREMIUM DESIGN B NEMA 12-12

CAST IRON CONSTRUCTION RIGID BASE

TEFC TOTALLY ENCLOSED FAN COOLED



HP	FL RPM	VOLTS	FRAME	CAT NO.	NOM EFF.	F.L. AMPS	CODE	WT (Lbs)	DE BRG	ODE BRG	"C" Dimension (Inch)
75	3565	230/460	365TS	MQP-71	93,6	166/83	G	766	6313	6313	31,4
	3565	575	365TS	MPP-71	93,6	66.5	G	766	6313	6313	31,4
	1780	230/460	365T	MQP-72	95,4	174/87	G	783	6313	6313	33,5
	1780	575	365T	MPP-72	95,4	70	G	783	6313	6313	33,5
	1190	230/460	405T	MQP-73	94,5	178/89	G	1120	NU318	6314	38
	1190	575	405T	MPP-73	94,5	70	G	1120	NU318	6314	38
	890	460	444T	MQP-74	93,6	194/97	G	1353	NU319	6318	44,3
	890	575	444T	MPP-74	93,6	77.6	G	1353	NU319	6318	44,3
100	3570	230/460	405TS	MQP-76	94,1	220/110	G	1040	6314	6314	35
	3570	575	405TS	MPP-76	94,1	89	G	1040	6314	6314	35
	1790	230/460	405T	MQP-77	95,4	224/112	G	1058	NU318	6314	38
	1790	575	405T	MPP-77	95,4	89.6	G	1058	NU318	6314	38
	1185	460	444T	MQP-78	95	122	G	1320	NU319	6318	44,3
	1185	575	444T	MPP-78	95	96	G	1320	NU319	6318	44,3
	890	460	445T	MQP-79	93,6	252/126	G	1373	NU319	6318	44,3
	890	575	445T	MPP-79	93,6	100.8	G	1373	NU319	6318	44,3
125	3580	460	444TS	MQP-81	95	140	G	1247	6314	6314	40,6
	3580	575	444TS	MPP-81	95	111	G	1247	6314	6314	40,6
	1785	460	444T	MQP-82	95,4	145	G	1342	NU319	6318	44,3
	1785	575	444T	MPP-82	95,4	115	G	1342	NU319	6318	44,3
	1185	460	445T	MQP-83	95	147	G	1400	NU319	6318	44,3
	1185	575	445T	MPP-83	95	117.6	G	1400	NU319	6318	44,3
	890	460	447T	MQP-84	94,1	158	G	1680	NU319	6318	47,8
	890	575	447T	MPP-84	94,1	126.4	G	1680	NU319	6318	47,8
150	3580	460	445TS	MQP-86	95	166	G	1408	6314	6314	40,6
	3580	575	445TS	MPP-86	95	133	G	1408	6314	6314	40,6
	1790	460	445T	MQP-87	95,8	171	G	1672	NU319	6318	47,8
	1790	575	445T	MPP-87	95,8	137	G	1672	NU319	6318	47,8
	1188	460	447T	MQP-88	95,8	173	G	1800	NU319	6318	47,8
	1188	575	447T	MPP-88	95,8	138	G	1800	NU319	6318	47,8
	890	460	449T	MQP-89	94,1	186	G	1800	NU319	6318	52,8
	890	575	449T	MPP-89	94,1	148.8	G	1800	NU319	6318	52,8
200	3580	460	447TS	MQP-96	95,4	222	G	2185	6314	6314	44,1
	3580	575	447TS	MPP-96	95,4	170	G	2185	6314	6314	44,1
	1790	460	447T	MQP-97	96,2	220	G	2260	NU319	6318	47,8
	1790	575	447T	MPP-97	96,2	176	G	2260	NU319	6318	47,8
	1188	460	449T	MQP-98	95,8	220	G	3100	NU319	6318	52,8
	1188	575	449T	MPP-98	95,8	184	G	3100	NU319	6318	52,8
250	3580	460	449TS	MQP-101	95,8	266	G	2700	6314	6314	49,1
	3580	575	449TS	MPP-101	95,8	212.6	G	2700	6314	6314	49,1
	1790	460	449T	MQP-102	96,2	275	G	3100	NU319	6318	52,8
	1790	575	449T	MPP-102	96,2	220	G	3100	NU319	6318	52,8
300	3580	460	449TS	MQP-106	95,8	320	G	2900	6314	6314	49,1
	3580	575	449TS	MPP-106	95,8	256	G	2900	6314	6314	49,1
	1790	460	449T	MQP-107	96,2	330	G	3220	NU319	6318	52,8
	1790	575	449T	MPP-107	96,2	264	G	3220	NU319	6318	52,8

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