



**PERFORMANCE DATA SHEET
NEMA PREMIUM NR CAN NEMA 12 - 12**

Catalogue #: **JMQP-42**

HP	kW	Voltage	S.F. @ 60Hz	EFF.	P.F.	Frame	Design	L.R. Amps
20	14,92	230/460	1,25	93,0%	0,83	256JM	B	145

60 Hz							Code	F.L. RPM
208	230	416	460	480	575	600		
/	48,4	/	24,20	/	/		G	1760

50 Hz								
FLA			S.F. @ 50Hz		Efficiency	Power Factor	Code	F.L. RPM
190	380	415						
58,0	29		1,00		91,5%	0,850	F	1460

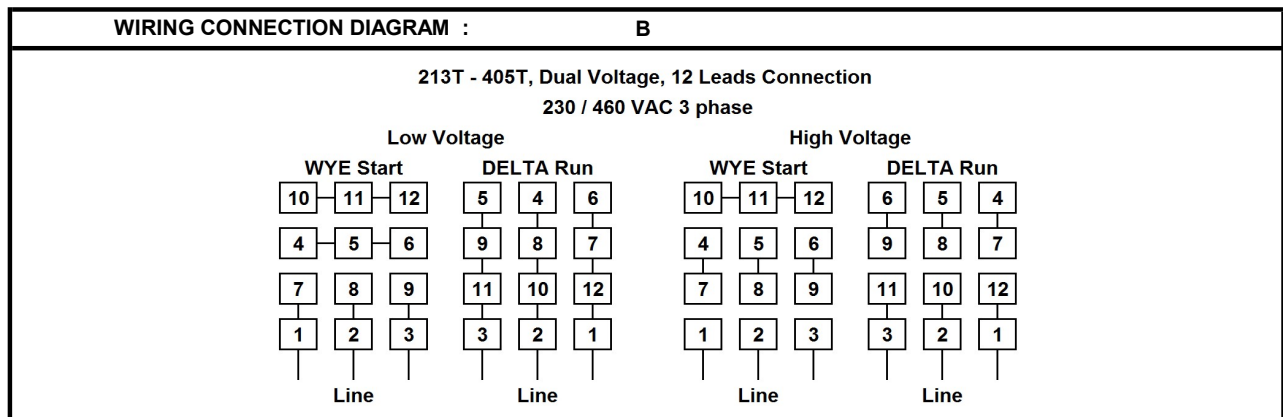
Wgt. Lbs	PH	Duty	Insul. Class	Amb.	Elevation	Temp. Rise° C
315	3	Cont.	F	40°C	1000M (3,300 Ft)	52

% Efficiency		% Power Factor		Torque		Winding Resist. Ω	Safe Cold Start (Secs)
Full Load:	93,0%	Full Load:	0,83	Full Load Ft/Lbs	59,7		
3/4 Load:	93,2%	3/4 Load:	0,78	Locked Rotor %	200		
1/2 Load:	92,9%	1/2 Load:	0,68	Break Down %	220	0,42	20

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
2,37	142	1045	Cast Iron	Cast Iron	Cast Iron	TEFC	IP55	12AWG

Ball Bearings		Grease	Mount Type	Orientation	Paint	Sound Pressure @ 3FT	Sound Power
DE	ODE						
6309	6309	Mobil PolyrexEm	Rigid	Horizontal	RAL6022	74	84

Inverter Duty, Motor meets MG1 parts 31.4.4.2	VFD SF	Constant Torque Range	Variable Torque Range	Constant HP RPM
	1,00	10:1	20:1	2700

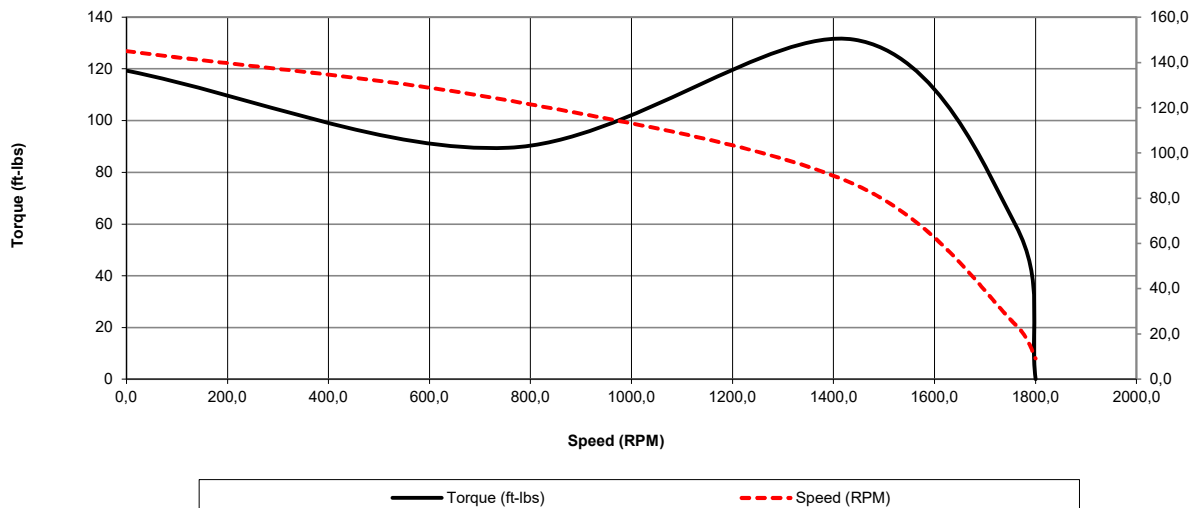


Date: 2023-12-13
 Customer: _____
 Contact: _____
 Submittee: J.C. Lavallée

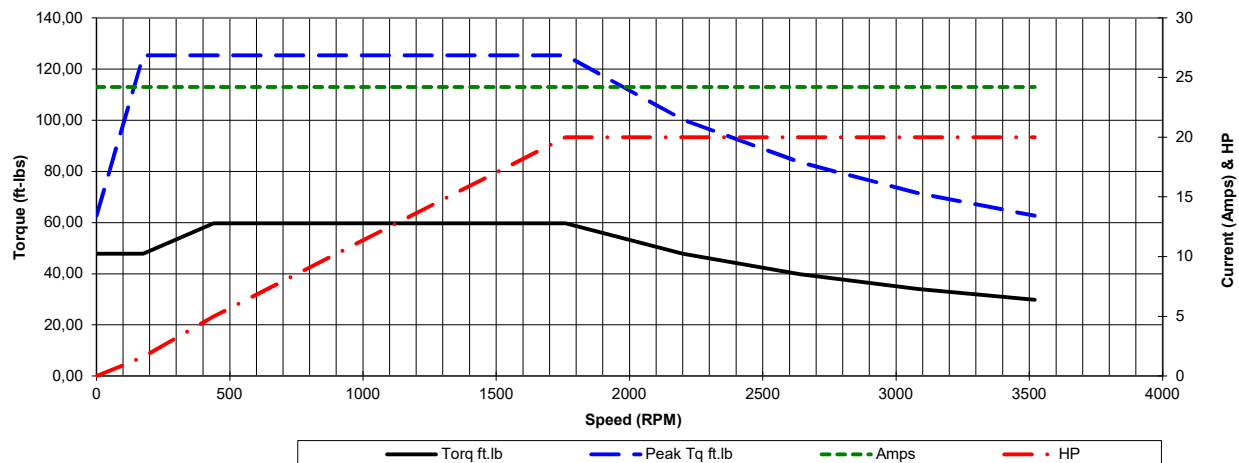
Catalogue #: JMQP-42

NEMA PREMIUM NR CAN NEMA 12 - 12										
HP	VAC	RPM	Enclosure	Frame	Frequency	Design	Poles	LR Code Letter	Insulation Class	Temp. Rise °C
20	460	1760	TEFC	256JM	60 Hz	B	4	G	F	52
	0Hz	6Hz	15Hz	30Hz	45Hz	60 Hz	75Hz	90Hz	105Hz	120Hz
Amps	24,2	24,2	24,2	24,2	24,2	24,2	24,2	24,2	24,2	24,2
RPM	0	176	440	880	1320	1760	2200	2640	3080	3520
Torq ft.lb	47,75	47,75	59,68	59,68	59,68	59,68	47,75	39,79	34,10	29,84
Peak Tq ft.lb	62,67	125,33	125,33	125,33	125,33	125,33	100,27	83,55	71,62	62,67
HP	0	1,6	5,0	10,0	15,0	20,0	20,0	20,0	20,0	20,0
	Locked Rotor	Pull-Up	Breakdown	Rated Load	Idle	Duty	S. F.	Ambient	Elevation	dBA @ 1M
Speed (RPM)	0,0	756	1440	1760	1800	Continuous	1,25	40°C	3,300 ft	74
Current (Amps)	145,0	123,3	86,3	24,2	9,2	VFD Rating: Meets MG1 parts 31.4.4.2				
Torque (ft.-lbs)	119,4	89,5	131,3	59,7	0,0	C.T.	10:1	V.T.	20:1	VFD SF 1.00

Motor Speed Data



Motor Torque Capability vs RPM

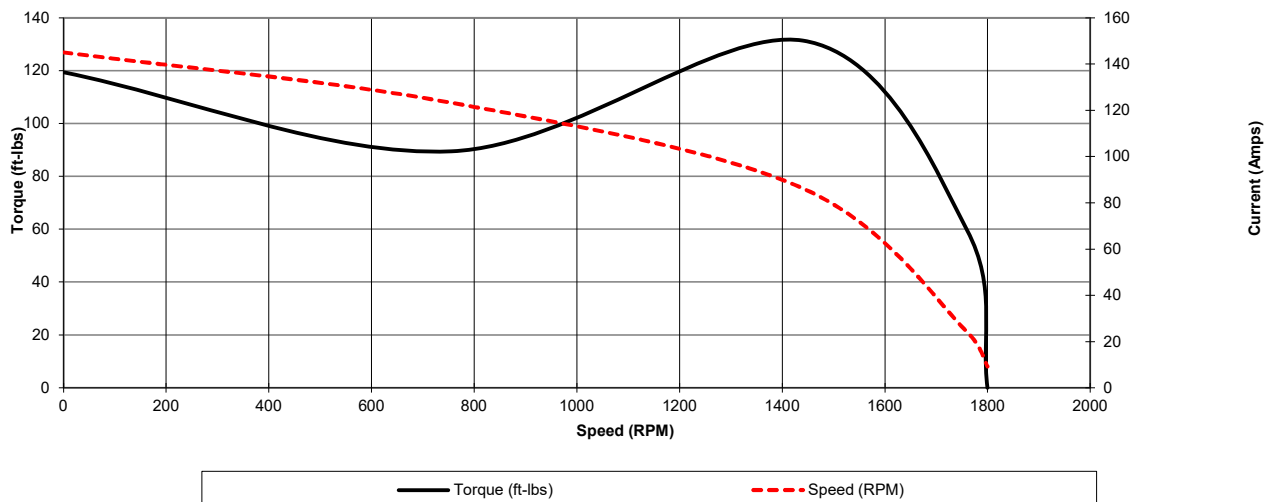


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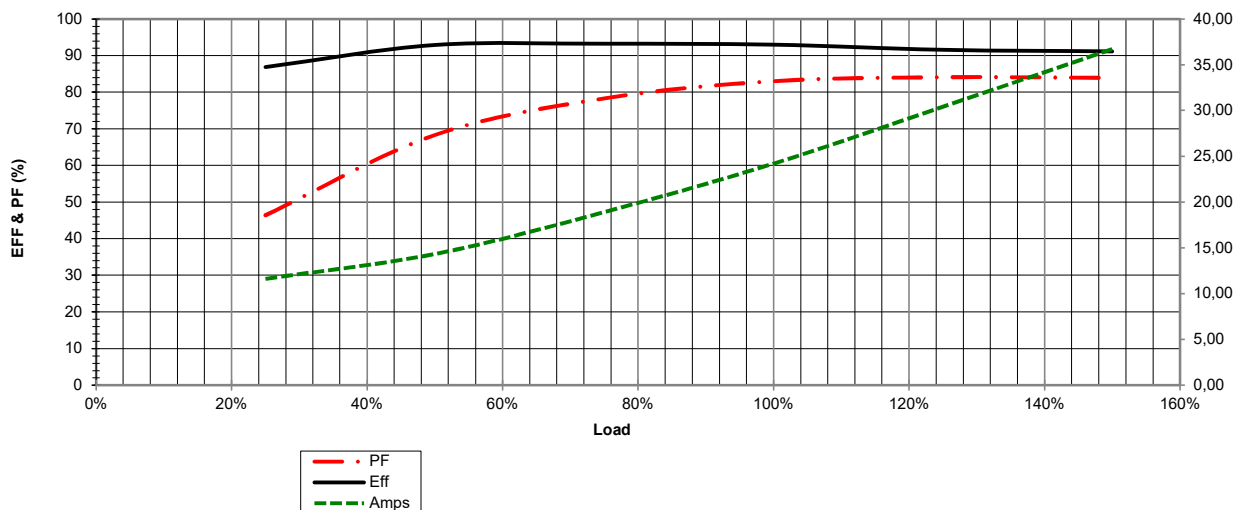
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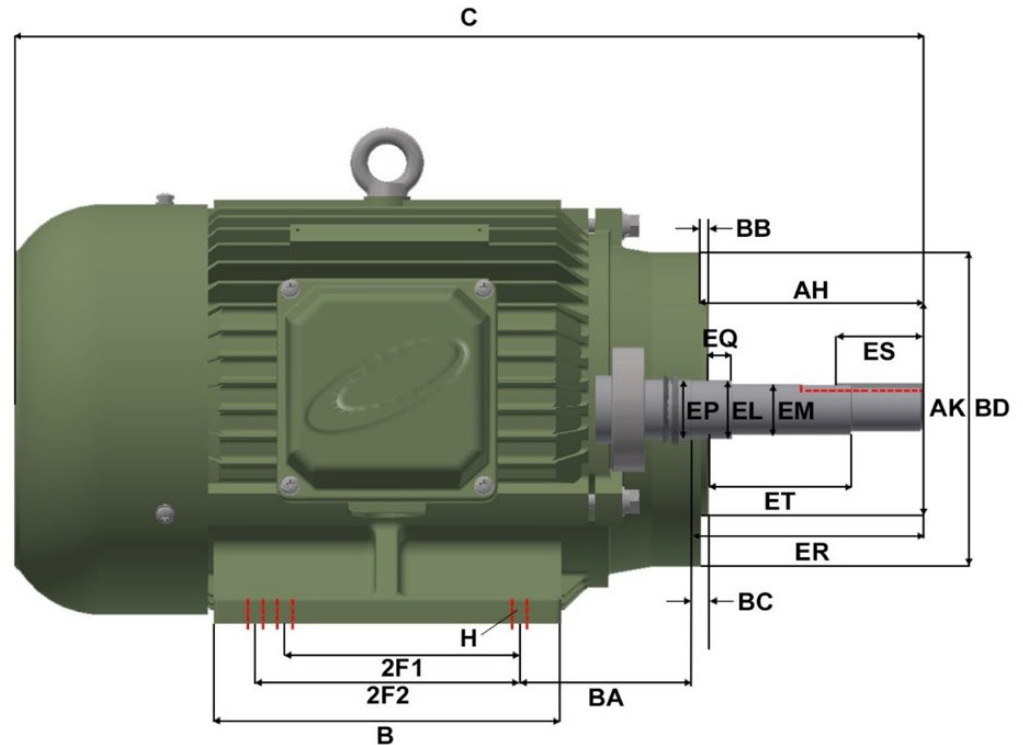
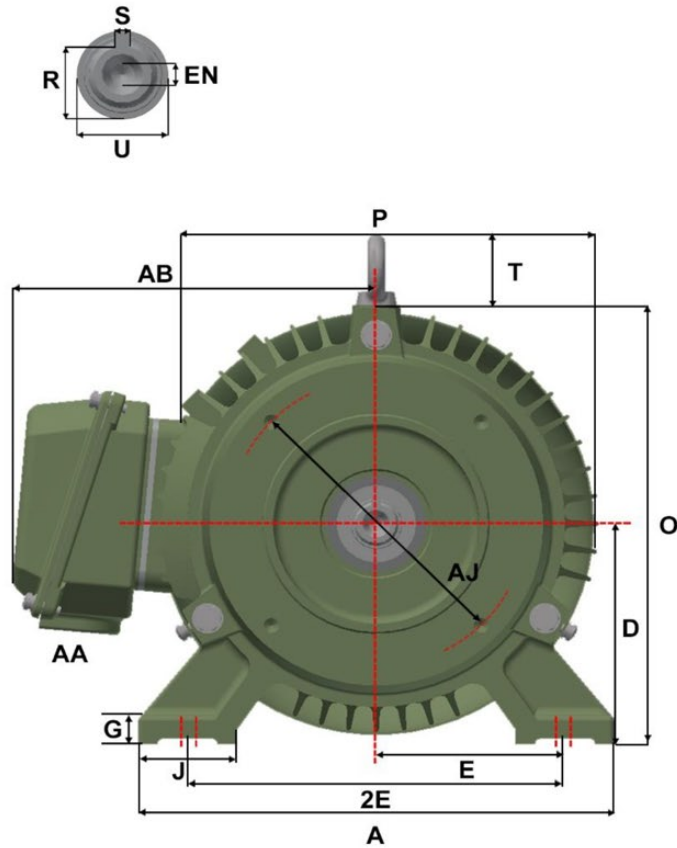
NEMA PREMIUM NR CAN NEMA 12 - 12										
HP	VAC	RPM	Enclosure	Frame	Frequency	Design	Poles	LR Code Letter	Insulation Class	Temp. Rise °C
20	460	1760	TEFC	256JM	60 Hz	B	4	G	F	52
Load %	0%	25%	50%	75%	100%	125%	150%			
Amps	9,20	11,62	14,33	18,90	24,20	30,41	36,71			
Torq ft/lbs	0	14,67	29,51	44,51	59,68	75,03	90,55			
RPM	0	1790	1780	1770	1760	1750	1740			
Eff	0	86,86	92,90	93,20	93,00	91,54	91,18			
PF	0	46,4	68,3	78,3	83	84,079	83,913			
	Locked Rotor	Pull-Up	Breakdown	Rated Load	Idle	Duty	S. F.	Ambient	Elevation	dBA @ 1M
Speed (RPM)	0	756	1440	1760	1800	Continuous	1,25	40°C	3,300 ft	74
Current (Amps)	145	123,3	86,3	24,2	9,196	VFD Rating: Meets MG1 parts 31.4.4.2				
Torque (ft-lbs)	119,36	89,52	131,30	59,68	0,0	C.T.	10:1	V.T.	20:1	VFD SF 1.00

Motor Speed Data



Motor Load Data





Version: 1WTI			Revised: 01-04-2020			HP	RPM	FRAME	ENCLOSURE	JMPP/JMQP-42			
Customer is responsible in determining that MEP product will fit/perform suitably in the intended application						20	1800	256JM	TEFC				
A	B	C	D	E	2E	2F1	2F2	G	H	J	O	P	R
10.00	12.20	26.50	6.25	5.00	10.00	8.25	10.00	0.70	0.53	2.75	13.20	12.80	1.112-1.097
S	T	U	AA	AB	AH	AJ	AK	BA	BB	BC	BD	EL	EM
0.252-0.250	2.20	1.2495-1.2490	1.25	10.30	5.25	7.25	8.500-8.497	4.75	0.312-0.250	0.25	10.00	1.750-1.748	1.375-1.3745
EN	EP	EQ	ER	ES	ET								
1/2-13	1.77	0.640-0.610	5.281-5.219	3.015-2.985	2.53								

PREMIUM DESIGN B NEMA 12-12

CLOSE COUPLED PUMP MOTORS JM STYLE | CAST IRON

CONSTRUCTION RIGID BASE TEFC TOTALLY ENCLOSED FAN COOLED

MaxMotion

Applications:

Close coupled pumps when the pump impeller is required to be mounted directly on the motor shaft in damp and dirty environments, and operating directly across the line or from a variable frequency inverter.

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

Electrical Supply - At 60Hz: 575V and 230/460V dual rated and at 50Hz: 190/380,

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% Voltage (-5% @208V & 416V, and +5% @480V) and +/- 5% frequency.

Bearings - 143JM to 215JM are double sealed with grease, 254JM to 326JM are regreasable with brass grease nipples and retaining bearing caps.

Bearing lubricant - Frame 143JM to 215JM is lithium grease, -30 Deg C to 110 Deg C ambient and Frame 254JM+ are long life mobile Polyrex EM, -29 Deg C to 177 Deg C.

Enclosure Protection - Totally Enclosed Fan Cooled meeting IEC standard IP55. CSA 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

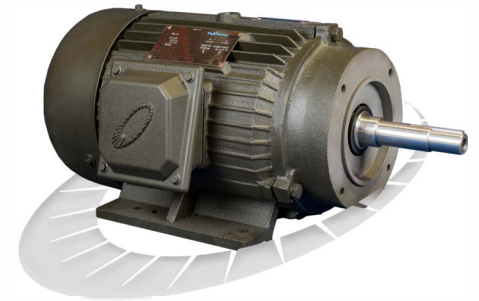
Conduit Box - Oversize cast iron, diagonally split. Can be rotated in 90 Deg steps. Lead separator gasket to seal conduit box from frame and gasketed cover. Grounding terminal inside conduit box and threaded conduit entry.

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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HP	FL RPM	VOLTS	FRAME	CAT NO.	CONSTRUCTION	NOM EFF.	F.L. AMPS	CODE	WT (Lbs)	DE BRG	ODE BRG	"C" Dimension (Inch)
1	1745	230/460	143JM	JMQP-2	CAST IRON	85.5	3/1.5	M	47	6206	6205	16.23
	1745	575	143JM	JMPP-2	CAST IRON	85.5	1.2	M	47	6206	6205	16.23
	1160	230/460	145JM	JMQP-3	CAST IRON	82.5	3.7/1.85	M	52	6205	6205	17.23
	1160	575	145JM	JMPP-3	CAST IRON	82.5	1.45	M	52	6205	6205	17.23
1 1/2	1750	230/460	145JM	JMQP-7	CAST IRON	86.5	4.6/2.3	M	55	6206	6205	17.23
	1750	575	145JM	JMPP-7	CAST IRON	86.5	1.9	M	55	6206	6205	17.23
	1175	230/460	182JM	JMQP-8	CAST IRON	87.5	4.8/2.4	M	95	6306	6306	18.48
	1175	575	182JM	JMPP-8	CAST IRON	87.5	1.9	M	95	6306	6306	18.48
2	3510	230/460	145JM	JMQP-11	CAST IRON	85.5	5.3/2.65	L	52	6206	6205	17.23
	3510	575	145JM	JMPP-11	CAST IRON	85.5	2.05	L	52	6206	6205	17.23
	1745	230/460	145JM	JMQP-12	CAST IRON	86.5	6/3	L	56	6206	6205	17.23
	1745	575	145JM	JMPP-12	CAST IRON	96.5	2.4	L	56	6206	6205	17.23
	1180	230/460	184JM	JMQP-13	CAST IRON	88.5	6/3	L	103	6306	6306	19.48
	1180	575	184JM	JMPP-13	CAST IRON	88.5	2.4	L	103	6306	6306	19.48
3	3470	230/460	145JM	JMQP-16S	CAST IRON	86.5	8/4	K	90	6308	6306	17.23
	3470	575	145JM	JMPP-16S	CAST IRON	86.5	3.2	K	90	6308	6306	17.23
	3520	230/460	182JM	JMQP-16	CAST IRON	86.5	7.6/3.8	K	95	6308	6306	18.48
	3520	575	182JM	JMPP-16	CAST IRON	86.5	3	K	95	6308	6306	18.48
	1760	230/460	182JM	JMQP-17	CAST IRON	89.5	7.6/3.8	K	97	6208	6306	18.48
	1760	575	182JM	JMPP-17	CAST IRON	89.5	3	K	97	6208	6306	18.48
	1185	230/460	213JM	JMQP-18	CAST IRON	89.5	8.4/4.2	K	136	6308	6308	20.78
	1185	575	213JM	JMPP-18	CAST IRON	89.5	3.4	K	136	6308	6308	20.78
5	3515	230/460	184JM	JMQP-21	CAST IRON	88.5	11.6/5.8	J	110	6208	6306	19.48
	3515	575	184JM	JMPP-21	CAST IRON	88.5	4.6	J	110	6208	6306	19.48
	1755	230/460	184JM	JMQP-22	CAST IRON	89.5	13.6/6.8	J	112	6208	6306	19.48
	1755	575	184JM	JMPP-22	CAST IRON	89.5	5.4	J	112	6208	6306	19.48
	1180	230/460	215JM	JMQP-23	CAST IRON	89.5	14.2/7.1	J	162	6308	6308	22.28
	1180	575	215JM	JMPP-23	CAST IRON	89.5	5.68	J	162	6308	6308	22.28
7.5	3505	230/460	184JM	JMQP-26S	CAST IRON	89.5	17.6/8.8	H	134	6208	6306	19.48
	3505	575	184JM	JMPP-26S	CAST IRON	89.5	7	H	134	6208	6306	19.48
	3530	230/460	213JM	JMQP-26	CAST IRON	89.5	17.6/8.5	H	145	6309	6308	20.78
	3530	575	213JM	JMPP-26	CAST IRON	89.5	7	H	145	6309	6308	20.78
	1770	230/460	213JM	JMQP-27	CAST IRON	91.7	18.4/9.2	H	150	6309	6308	20.78
	1770	575	213JM	JMPP-27	CAST IRON	91.7	7.4	H	150	6309	6308	20.78
	1185	230/460	254JM	JMQP-28	CAST IRON	91	19.6/9.5	H	272	6309	6309	24.7
	1185	575	254JM	JMPP-28	CAST IRON	91	7.8	H	272	6309	6309	24.7
10	3525	230/460	215JM	JMQP-31	CAST IRON	90.2	22.8/11.4	H	167	6309	6308	22.28
	3525	575	215JM	JMPP-31	CAST IRON	90.2	9.1	H	167	6309	6308	22.28
	1770	230/460	215JM	JMQP-32	CAST IRON	91.7	24/12	H	167	6309	6308	22.28
	1770	575	215JM	JMPP-32	CAST IRON	91.7	9.6	H	167	6309	6308	22.28
	1180	230/460	256JM	JMQP-33	CAST IRON	91	25.6/12.8	H	293	6309	6309	26.5
	1180	575	256JM	JMPP-33	CAST IRON	91	10.2	H	293	6309	6309	26.5
15	3510	230/460	215JM	JMQP-36S	CAST IRON	91	34.4/17.2	G	162	6309	6309	22.28
	3510	575	215JM	JMPP-36S	CAST IRON	91	13.8	G	162	6308	6308	22.28
	3545	230/460	254JM	JMQP-36	CAST IRON	91	34.4/17.2	G	286	6309	6309	24.7
	3545	575	254JM	JMPP-36	CAST IRON	91	13.8	G	286	6309	6309	24.7
	1770	230/460	254JM	JMQP-37	CAST IRON	92.4	36.4/18.2	G	297	6309	6309	24.7
	1770	575	254JM	JMPP-37	CAST IRON	92.4	14.6	G	297	6309	6309	24.7
	1180	230/460	284JM	JMQP-38	CAST IRON	91.7	38/19	G	363	6311	6311	27.47
	1180	575	284JM	JMPP-38	CAST IRON	91.7	15.2	G	363	6311	6311	27.47
20	3540	230/460	256JM	JMQP-41	CAST IRON	91	46/23	G	315	6309	6309	26.5
	3540	575	256JM	JMPP-41	CAST IRON	91	18.4	G	315	6309	6309	26.5
	1760	230/460	256JM	JMQP-42	CAST IRON	93	48.4/24.2	G	315	6309	6309	26.5
	1760	575	256JM	JMPP-42	CAST IRON	93	19.1	G	315	6309	6309	26.5



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HP	FL RPM	VOLTS	FRAME	CAT NO.	CONSTRUCTION	NOM EFF.	F.L. AMPS	CODE	WT (Lbs)	DE BRG	ODE BRG	"C" Dimension (Inch)
25	3540	230/460	256JM	JMQP-46S	CAST IRON	91.7	55/27.5	G	365	6309	6309	26.5
	3540	575	256JM	JMPP-46S	CAST IRON	91.7	22	G	365	6309	6309	26.5
	3540	230/460	284JM	JMQP-46	CAST IRON	91.7	57/28.5	G	385	6311	6311	27.47
	3540	575	284JM	JMPP-46	CAST IRON	91.7	22.8	G	385	6311	6311	27.47
	1775	230/460	284JM	JMQP-47	CAST IRON	93.6	60/30	G	392	6311	6311	27.47
	1775	575	284JM	JMPP-47	CAST IRON	93.6	24	G	392	6311	6311	27.47
30	3530	230/460	286JM	JMQP-51	CAST IRON	91.7	69/34.5	G	409	6311	6311	28.97
	3530	575	286JM	JMPP-51	CAST IRON	91.7	18.4	G	409	6311	6311	28.97
	1775	230/460	286JM	JMQP-52	CAST IRON	93.6	70.6/35.3	G	418	6311	6311	28.97
	1775	575	286JM	JMPP-52	CAST IRON	93.6	28.2	G	418	6311	6311	28.97
40	3545	230/460	286JM	JMQP-56S	CAST IRON	92.4	90/45	G	435	6311	6311	28.97
	3545	575	286JM	JMPP-56S	CAST IRON	92.4	36	G	435	6311	6311	28.97
	3545	230/460	324JM	JMQP-56	CAST IRON	92.4	91/45.5	G	486	6312	6312	30.05
	3545	575	324JM	JMPP-56	CAST IRON	92.4	36.4	G	486	6312	6312	30.05
	1780	230/460	324JM	JMQP-57	CAST IRON	94.1	93.2/46.6	G	519	6312	6312	30.05
	1780	575	324JM	JMPP-57	CAST IRON	94.1	37.3	G	519	6312	6312	30.05
50	3545	230/460	326JM	JMQP-61	CAST IRON	93	116.2/58.1	G	548	6312	6312	31.55
	3545	575	326JM	JMPP-61	CAST IRON	93	46.4	G	548	6312	6312	31.55

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HP	FL RPM	VOLTS	FRAME	CAT NO.	CONSTRUCTION	NOM EFF.	F.L. AMPS	CODE	WT (Lbs)	DE BRG	ODE BRG	"C" Dimension (Inch)
2	1745	230/460	145JP	JPQP-12	CAST IRON	86.5	6/3	L	56	6206	6205	20.30
	1745	575	145JP	JPPP-12	CAST IRON	86.5	2.4	L	56	6206	6205	20.30
3	1760	230/460	182JP	JPQP-17	CAST IRON	89.5	7.6/3.8	H	97	6208	6306	21.55
	1760	575	182JP	JPPP-17	CAST IRON	89.5	3	H	97	6208	6306	21.55
5	1755	230/460	184JP	JPQP-22	CAST IRON	89.5	13.6/6.8	H	112	6208	6306	22.55
	1755	575	184JP	JPPP-22	CAST IRON	89.5	5.4	H	112	6208	6306	22.55
7.5	1770	230/460	213JP	JPQP-27	CAST IRON	91.7	18.4/9.2	H	150	6309	6308	24.65
	1770	575	213JP	JPPP-27	CAST IRON	91.7	7.4	H	150	6309	6308	24.65
10	3525	230/460	215JP	JPQP-31	CAST IRON	90.2	22.8/11.4	H	167	6309	6308	26.15
	3525	575	215JP	JPPP-31	CAST IRON	90.2	9.1	H	167	6309	6308	26.15
	1770	230/460	215JP	JPQP-32	CAST IRON	91.7	24/12	F	167	6309	6308	26.15
	1770	575	215JP	JPPP-32	CAST IRON	91.7	9.6	F	167	6309	6308	26.15
15	3510	230/460	215JP	JPQP-36S	CAST IRON	91	34.4/17.2	G	162	6309	6308	26.15
	3510	575	215JP	JPPP-36S	CAST IRON	91	13.8	G	162	6309	6308	26.15
	3545	230/460	254JP	JPQP-36	CAST IRON	91	34.4/17.2	G	286	6309	6309	27.58
	3545	575	254JP	JPPP-36	CAST IRON	91	13.8	G	286	6309	6309	27.58

