CANTONI MOTOR ®

J.R.PERREAULT & FILS LTÉE
moteurs & contrôles électriques industriels

TELEPHONE: 1-800-463-0400
www.jrperreault.com

CANTONI NEMA Premium®
JM/JP Close Coupled Pump Motors

Powerful Pump Action Performance for Fluid Handling Applications

1-60 HP 3PH TEFC 60 Hz NEMA AC Foot Mounted C-Face Motors

Features

- Inverter Duty Rated: 20:1VT
- Service Factor: up to 1.4
- Design: "B" or "A"
- Protection Degree: IP55
- Enclosure: TEFC Rigid Cast Iron Frame
- Warranty: 3-Years
- High locked rotor torque
- VPI applied for best electrical performance
- 230/460V 60Hz, usable at 208V 60Hz
- Double rated for 190/380V 50Hz
- Oversized double-shielded bearings
- Mechanically locked on shaft
- Motors 213JM/JP and larger suitable for Y/D starting at both 460V and 230V
- Class "F" insulation with rise below Class "B"
- Steel Fan Guard
- Designed for horizontal and vertical application
- F1 / F2 Convertible up to 286JM/JP frame
- CSA-US certified, DOE approved, CE and NEMA Premium marked

NEMA Premium
RoHS COMPLIANT
CE
C SP US
CSA E
ISO 9001
CC025B

Applications

Designed for continuous duty on close coupled pumps with NEMA JM/JP mounting dimensions which are ideal for fluid circulation and transfer applications ranging from treatment plants to swimming pools.

CANTONI JM & JP PREMIUM PUMP MOTORS

ARBRE BARRÉ MÉCANIQUEMENT
INVERTER DUTY 100:1
HAUT COUPLE DE DÉMARRAGE
CONÇU POUR OPÉRATION VERTICALE
EFFICACITÉ NEMA PREMIUM
ROULEMENTS SUR-DIMENSIONNÉS

MECHANICALLY LOCKED SHAFT
INVERTER DUTY 100:1
HIGH LOCKED ROTOR TORQUE
SUITABLE FOR VERTICAL OPERATION
NEMA PREMIUM EFFICIENCY
OVERSIZED BEARINGS

CANTONI MOTOR ®

J.R.PERREAULT & FILS LTÉE.
moteurs & contrôles électriques industriels

3 PHASES

TYPE	MODEL	VOLT CODE	HP	RPM	FRAME	ENCL	LISTE
JM-	143/1.0M2-	XXX	1	3600	143JM	TEFC	**712.00 $**
JM-	143/1.0M4-	XXX	1	1800	143JM	TEFC	**712.00 $**
JM-	143/1.5M2-	XXX	1.5	3600	143JM	TEFC	**769.00 $**
JM-	145A/1.5M4-	XXX	1.5	1800	145JM	TEFC	**769.00 $**
JM-	145A/2.0M2-	XXX	2	3600	145JM	TEFC	**836.00 $**
JM-	145B/2.0M4-	XXX	2	1800	145JM	TEFC	**839.00 $**
JM-	145B/3.0M2-	XXX	3	3600	145JM	TEFC	**896.00 $**
JM-	182/3.0M2-	XXX	3	3600	182JM	TEFC	**1 028.00 $**
JM-	182/3.0M4-	XXX	3	1800	182JM	TEFC	**1 032.00 $**
JM-	184A/5.0M2-	XXX	5	3600	184JM	TEFC	**1 299.00 $**
JM-	184/5.0M4-	XXX	5	1800	184JM	TEFC	**1 182.50 $**
JM-	184B/7.5M2	XXX	7.5	3600	184JM	TEFC	**1 325.00 $**
JM-	213/7.5M2	XXX	7.5	3600	213JM	TEFC	**1 705.00 $**
JM-	213/7.5M4	XXX	7.5	1800	213JM	TEFC	**1 633.00 $**
JM-	215A/10.0M2-	XXX	10	3600	215JM	TEFC	**1 980.00 $**
JM-	215/10.0M4-	XXX	10	1800	215JM	TEFC	**1 886.00 $**
JM-	215B/15.0M2-	XXX	15	3600	215JM	TEFC	**2 007.00 $**
JM-	254/15.0M2	XXX	15	3600	254JM	TEFC	**2 689.00 $**
JM-	254/15.0M4-	XXX	15	1800	254JM	TEFC	**2 497.00 $**
JM-	256A/20.0M2-	XXX	20	3600	256JM	TEFC	**3 245.00 $**
JM-	256/20.0M4-	XXX	20	1800	256JM	TEFC	**3 124.00 $**
JM-	256B/25.0M2-	XXX	25	3600	256JM	TEFC	**3 212.00 $**
JM-	284/25.0M2-	XXX	25	3600	284JM	TEFC	**3 998.00 $**
JM-	284/25.0M4-	XXX	25	1800	284JM	TEFC	**3 729.00 $**
JM-	286A/30.0M2-	XXX	30	3600	286JM	TEFC	**4 708.00 $**
JM-	286/30.0M4-	XXX	30	1800	286JM	TEFC	**4 301.00 $**
JM-	286B/40.0M2-	XXX	40	3600	286JM	TEFC	**6 270.00 $**
JM-	324/40.0M4-	XXX	40	1800	324JM	TEFC	**7 224.00 $**
JM-	324/50.0M2-	XXX	50	3600	324JM	TEFC	**8 225.00 $**
JM-	326/50.0M4-	XXX	50	1800	326JM	TEFC	**8 708.00 $**
JM-	326/60.0M2	XXX	60	3600	326JM	TEFC	**8 549.00 $**

FOR JP MOTORS, REPLACE JM BY JP

VOLT CODE:	
2X4=	230/460 VOLTS
575=	575 VOLTS

Performance Data

HP	RPM	Frame	Torque			FLA			LRA		Efficiency			Power Factor			NEMA Design	Code	SF	WK² lb ft²	lbs
			FLT lb-ft	LRT %	BDT %	460V	575V	208V	460V	575V	FL	75%	50%	FL	75%	50%					
1	1765	143J	3	300	320	1.4	1.1	3.1	12.9	10.3	85.5	84.5	81.3	78	70	57	B	M	1.4	0.09	53
1.5	3540	143J	2.2	350	410	2.1	1.7	4.6	20	16	84.5	83.2	79.8	78	69	57	B	M	1.4	0.07	56
	1750	145J	4.5	300	400	2	1.6	4.4	16.6	13.3	87	86.8	85	79	72	59	B	K	1.4	0.1	57
2	3525	145J	3	360	400	2.7	2.2	6.0	25.4	20.3	86	85.7	83.3	82	75	62	B	L	1.4	0.08	57
	1745	145J	6	260	340	2.6	2.1	5.8	19.2	15.4	86.5	87.1	85.8	83	77	64	B	J	1.4	0.13	59
3	3500	182J	4.5	310	320	4	3.2	8.8	32	25.6	86.5	86.4	84.4	82	76	65	B	K	1.4	0.12	76
	1775	182J	8.9	320	400	4.2	3.4	9.3	38	30.4	89.5	88.5	85.8	75	67	54	A	M	1.4	0.27	102
5	3535	184J	7.4	450	530	6.2	5.0	13.7	73	58.4	89	88.6	86.7	85	80	68	A	N	1.4	0.2	102
	1770	184J	14.8	300	380	6.7	5.4	14.8	61	48.8	89.5	89.2	87.6	78	71	58	A	L	1.3	0.34	108
7.5	3525	213J	11.2	290	315	8.5	6.8	18.8	76	60.8	90	90	88.7	92	89	81	A	K	1.3	0.45	159
	1765	213J	22.3	240	290	9.3	7.4	20.6	71	56.8	91.7	91.6	90.5	82	78	67	A	J	1.3	0.87	167
10	3535	215J	14.8	300	335	11.4	9.1	25.2	93	74.4	90.2	90.4	89.3	91	88	80	A	J	1.3	0.5	173
	1770	215J	29.6	230	280	12.5	10.0	27.6	87	69.6	91.7	91.7	90.4	82	77	66	A	H	1.3	0.99	185
15	3540	254J	22.3	240	250	17.6	14.1	38.9	112	90	91.7	91.8	90.5	87	85	77	B	G	1.3	1.15	258
	1775	254J	44.3	380	440	17.3	13.8	38.3	168	134.4	92.4	92	90.7	88	84	76	A	K	1.3	2.89	301
20	3540	256J	29.7	230	260	22.9	18.3	50.6	138	110	92	92.4	91.7	89	88	82	B	F	1.3	1.47	306
	1775	256J	59.1	380	450	22.9	18.3	50.6	230	184	93	92.7	91.4	88	84	76	A	L	1.2	3.57	390
25	3555	284J	36.9	260	300	29.5	23.6	65.2	205	164	92.4	92.4	91.3	86	82	74	A	H	1.2	1.72	348
	1780	284J	73.7	380	420	30.5	24.4	67.5	300	240	93.6	93.1	91.6	82	76	66	A	L	1.2	3.59	397
30	3540	286J	44.5	250	300	35.2	28.2	77.8	215	172	91.7	92	91.2	87	85	80	A	G	1.2	1.92	390
	1780	286J	88.4	370	390	37.5	30.0	82.9	350	280	93.6	93	91.3	80	73	61	A	L	1.2	3.84	441
40	3552	324J	59	145	200	44	35	97.3	290	232	93	93.6	93.3	92	91	88	B	G	1.2	4	608
	1780	324J	118	240	270	45	36	99.5	290	232	94.1	94.7	94.3	88	86	78	B	G	1.3	9.3	690
50	3552	326J	74	145	200	55	44	121.6	362	290	93	93.7	93.5	92	92	89	B	G	1.2	4.7	655
	1781	326J	148	250	270	56	45	123.8	362	290	94.5	95.1	94.9	88	85	78	B	G	1.3	11.6	769
60	3562	364J	88.5	125	200	65	52	143.8	435	348	93.6	94.1	93.8	92	91	87	B	G	1.2	6.5	860
	1786	364J	177	140	200	67	54	148.2	435	348	95	95.6	95.3	88	87	80	B	G	1.2	15.5	926

INCREASED HP MOTORS

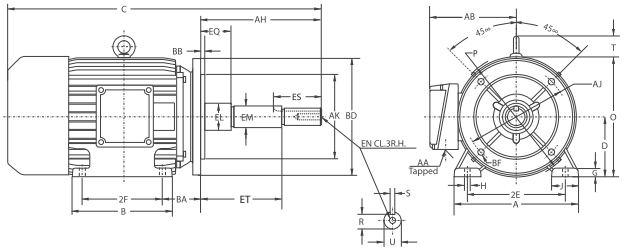
Performance Data

HP	RPM	Frame	Torque			FLA		LRA		Efficiency			Power Factor			NEMA Design	Code	SF	WK² lb ft²	lbs
			FLT lb-ft	LRT %	BDT %	230V	460V	230V	460V	FL	75%	50%	FL	75%	50%					
1.5	1745	143J	4.5	200	210	3.8	1.9	25	12.5	84	83	79.8	86	78	65	B	H	1	0.1	57
2	3495	143J	3.0	270	310	5.4	2.7	40.6	20.3	84	83.2	79.8	84	75	63	B	K	1	0.08	57
	1745	145J	6.0	220	300	5	2.5	33	16.5	84	84.3	82.8	88	81	69	B	H	1	0.13	59
3	3470	145J	4.6	240	270	7.4	3.7	51	25.5	85.5	85.7	83.3	89	82	70	B	H	1	0.12	76
5	1750	182J	15.0	190	240	12.8	6.4	76.8	38.4	87.5	86.5	83.8	84	76	63	B	G	1	0.34	108
7.5	3490	184J	11.3	300	350	17.8	8.9	146	73	88.5	88.6	86.7	89	84	72	B	J	1	0.45	159
10	3490	213J	15.0	220	240	22.4	11.2	152.4	76.2	89.5	90	88.7	93	90	82	B	G	1	0.5	173
	1750	213J	30.0	170	190	23.8	11.9	142.8	71.4	89.5	89.4	88.3	88	84	73	B	G	1	0.99	185
15	3500	215J	22.5	200	220	32.8	16.4	187	93.5	90.2	90.4	89.3	95	92	84	B	E	1	1.15	258
20	3500	254J	30.0	180	190	47.2	23.6	221.8	110.9	90.2	90.3	89	88	86	78	B	D	1	1.47	306
	1760	254J	59.6	280	330	44.8	22.4	336	168	91	90.6	89.3	92	88	80	B	H	1	3.57	390
25	3500	256J	37.5	180	210	57.2	28.6	274.6	137.3	91	91.7	91	90	89	83	B	D	1	1.72	348
	1755	256J	74.7	300	360	55.6	27.8	461.4	230.7	92.4	92.7	92.4	91	77	69	B	J	1	3.59	397
30	3505	284J	44.9	210	250	68.8	34.4	598.6	299.3	91.7	91.7	90.6	89	85	77	B	J	1	1.92	390

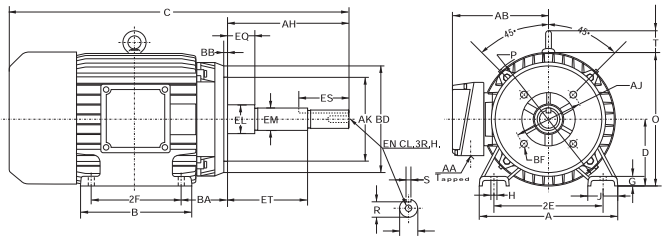
575 VOLTS AMPS = 460 V. X 0.80
ALSO AVAILABLE IN 40, 50, 60 AND 75 HP

Mounting Dimensions

143JM/JP - 184JM/JP



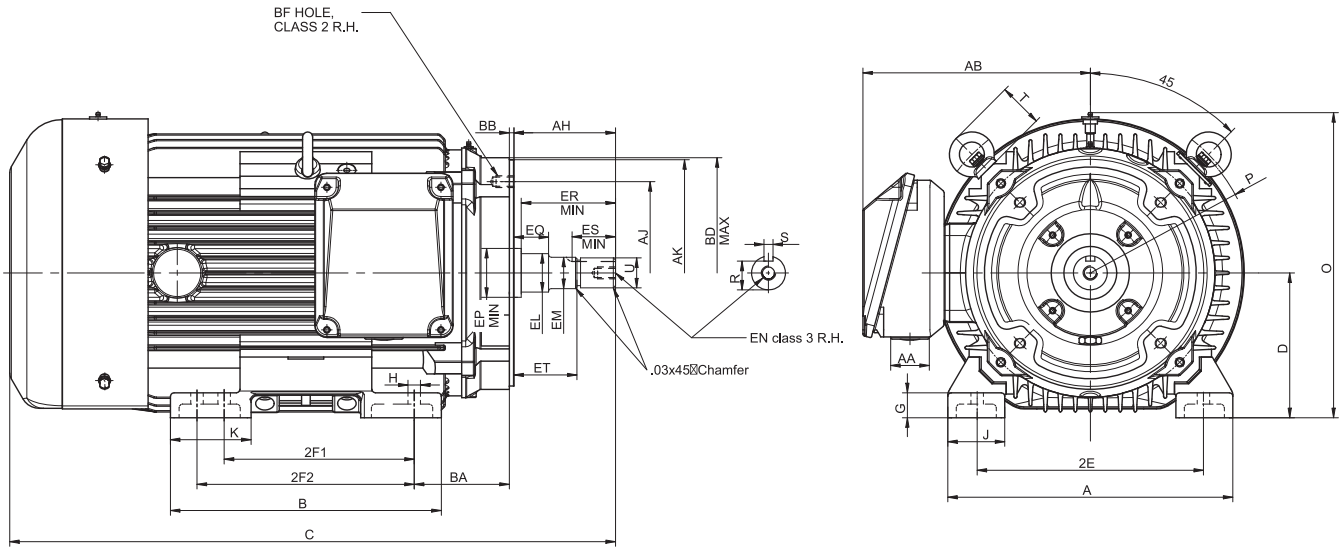
213JM/JP - 286JM/JP



Frame	U	AH	AJ	AK	BB	BD Max	BF #	BF Tap Size	BF Bolt Penetration Allowance	EL	EM	EN Tap Size	EN Tap Drill Depth Max	EN Bolt Penetration Allowance	EQ	Keyseat R	Keyseat ES Min	Keyseat S	ET
143 JP	0.8745 / 0.8740	7.343 / 7.281	5.875	4.500 / 4.497	0.156 / 0.125	6.50	4	3/8-16	0.56	1.156 / 1.154	1.0000 / 0.9995	3/8-16	1.12	0.85	1.578 / 1.548	0.771 / 0.756	1.65	0.190 / 0.188	5.952 / 5.922
145 JP										1.250 / 1.248									
182 JP										1.156 / 1.154					0.640 / 0.610				2.890 / 2.860
184 JP										1.250 / 1.248									
143 JM		4.281 / 4.219																	
145 JM																			
182 JM																			
184 JM																			
213 JP	1.2495 / 1.2490	8.156 / 8.094	7.250	8.500 / 8.497	0.312 / 0.250	9.0	4	1/2-13	0.75	1.750 / 1.748	1.3750 / 1.3745	3/8-16	1.12	0.85	2.390 / 2.360	1.112 / 1.097	1.65	0.252 / 0.250	5.890 / 5.860
215 JP																			
254 JP						10.0						1/2-13	1.50	1			2.53		
256 JP																			
284 JP			11.00	12.5001 / 2.495		14.0		5/8-11	0.94			1/2-13	1.50						5.895 / 5.855
286 JP																			
213 JM	0.8745 / 0.8740	4.281 / 4.219	7.250	8.500 / 8.497		9.0		1/2-13	0.75	1.250 / 1.248	1.0000 / 0.9995	3/8-16	1.1222	0.85	0.640 / 0.610	0.771 / 0.756	1.65	0.190 / 0.188	2.890 / 2.860
215 JM																			
254 JM	1.2495 / 1.2490	5.281 / 5.219				10.0				1.750 / 1.748	1.3750 / 1.3745	1/2-13	1.50	1		1.112 / 1.097	2.53	0.252 / 0.250	3.015 / 2.985
256 JM																			
284 JM			11.00	12.5001 / 2.495		14.0		5/8-11	0.94			1/2-13	1.50		0.645 / 0.605				3.020 / 2.980
286 JM																			

Frame	D	2E	2F	G	H	BA	A	AA	AB	B	C	J	O	P	T
143 JP	3.50	5.50	4.00	0.39	0.34	2.36	6.62	3/4	6.50	5.83	19.41	1.66	7.48	8.27	–
145 JP	3.50	5.50	5.00	0.39	0.34	2.36	6.62	3/4	6.50	7.00	20.36	1.66	7.48	8.27	–
182 JP	4.50	7.50	4.50	0.60	0.41	2.78	9.00	1	7.90	6.74	22.42	2.13	9.09	9.53	1.77
184 JP	4.50	7.50	5.50	0.60	0.41	2.78	9.00	1	7.90	8.31	22.43	2.13	9.09	9.53	1.77
143 JM	3.50	5.50	4.00	0.39	0.34	2.36	6.62	3/4	6.50	5.83	16.35	1.66	7.48	8.27	–
145 JM	3.50	5.50	5.00	0.39	0.34	2.36	6.62	3/4	6.50	7.00	17.30	1.66	7.48	8.27	–
182 JM	4.50	7.70	4.50	0.60	0.41	2.78	9.00	1	7.90	6.74	19.36	2.13	0.09	9.53	1.77
184 JM	4.50	7.70	5.50	0.60	0.41	2.78	9.00	1	7.90	8.31	19.36	2.13	0.09	9.53	1.77
213 JP	5.25	8.50	5.50	0.72	0.41	3.80	10.24	1	8.45	8.10	27.28	2.20	10.55	10.94	1.77
215 JP	5.25	8.50	5.50	0.72	0.41	3.80	10.24	1	8.45	9.60	27.91	2.20	10.55	10.94	1.77
254 JP	6.25	10.00	8.25	0.58	0.55	4.50	12.28	1 1/4	10.08	9.92	30.24	2.36	13.18	14.17	2.08
256 JP	6.25	10.00	10.00	0.58	0.55	4.50	12.28	1 1/4	10.08	11.65	32.01	2.36	13.18	14.17	2.08
284 JP	7.00	11.00	9.50	0.89	0.55	4.95	13.78	1 1/2	10.34	11.61	34.94	2.75	14.01	14.17	2.08
286 JP	7.00	11.00	11.00	0.89	0.55	4.95	13.78	1 1/2	10.34	13.11	34.94	2.75	14.01	14.17	2.08
213 JM	5.25	8.50	5.50	0.72	0.41	3.80	10.24	1	8.45	8.10	23.88	2.20	10.55	10.94	1.77
215 JM	5.25	8.50	7.00	0.72	0.41	3.80	10.24	1	8.45	9.60	24.11	2.20	10.55	10.94	1.77
254 JM	6.25	10.00	8.25	0.58	0.55	4.50	12.28	1 1/4	10.08	9.92	27.36	2.36	13.18	14.17	2.08
256 JM	6.25	10.00	10.00	0.58	0.55	4.50	12.28	1 1/4	10.08	11.65	29.13	2.36	13.18	14.17	2.08
284 JM	7.00	11.00	9.50	0.89	0.55	4.95	13.78	1 1/2	10.34	11.61	32.06	2.75	14.01	14.17	2.08
286 JM	7.00	11.00	11.00	0.89	0.55	4.95	13.78	1 1/2	10.34	13.11	32.06	2.75	14.01	14.17	2.08

Mounting Dimensions



Frame	U	AH	AJ	AK	BB	BD Max	BF			EL	EM
							#	Tap Size	Bolt Penetration Allowance		
324 JM	1.2495-1.2490	5.281-5.219	11	12.500-12.495	0.312-0.250	14	4	5/8-11	0.94	1.750-1.748	1.3750-1.3745
326 JM	1.2495-1.2490	5.281-5.219	11	12.500-12.495	0.312-0.250	14	4	5/8-11	0.94	1.750-1.748	1.3750-1.3745
364 JM	1.6245-1.6240	5.281-5.219	11	12.500-12.495	0.312-0.250	14	4	5/8-11	0.94	1.750-1.748	1.3750-1.3745
365 JM	1.6245-1.6240	5.281-5.219	11	12.500-12.495	0.312-0.250	14	4	5/8-11	0.94	1.750-1.748	1.3750-1.3745
324 JP	1.2495-1.2490	8.156-8.094	11	12.500-12.495	0.312-0.250	14	4	5/8-11	0.94	1.750-1.748	1.3750-1.3745
326 JP	1.2495-1.2490	8.156-8.094	11	12.500-12.495	0.312-0.250	14	4	5/8-11	0.94	1.750-1.748	1.3750-1.3745
364 JP	1.6245-1.6240	8.156-8.094	11	12.500-12.495	0.312-0.250	14	4	5/8-11	0.94	2.125-2.123	1.7500-1.7495
365 JP	1.6245-1.6240	8.156-8.094	11	12.500-12.495	0.312-0.250	14	4	5/8-11	0.94	2.125-2.123	1.7500-1.7495

Frame	EN			EP Min	EQ	ER Min	Keyseat			ET
	Tap Size	Tap Drill Depth Max	Bolt Penetration Allowance				R	ES Min	S	
324 JM	1/2-13	1.5	1	2.125	0.645-0.605	5.25	1.112-1.097	2.53	0.252-0.250	3.020-2.980
326 JM	1/2-13	1.5	1	2.125	0.645-0.605	5.25	1.112-1.097	2.53	0.252-0.250	3.020-2.980
364 JM	1/2-13	1.5	1	2.756	0.645-0.605	5.25	1.112-1.097	2.53	0.252-0.250	3.020-2.980
365 JM	1/2-13	1.5	1	2.756	0.645-0.605	5.25	1.112-1.097	2.53	0.252-0.250	3.020-2.980
324 JP	1/2-13	1.5	1	2.125	2.395-2.355	8.125	1.112-1.097	2.53	0.252-0.250	5.895-5.855
326 JP	1/2-13	1.5	1	2.125	2.395-2.355	8.125	1.112-1.097	2.53	0.252-0.250	5.895-5.855
364 JP	1/2-13	1.5	1	2.5	2.395-2.355	8.125	1.416-1.401	2.53	0.377-0.375	5.895-5.855
365 JP	1/2-13	1.5	1	2.5	2.395-2.355	8.125	1.416-1.401	2.53	0.377-0.375	5.895-5.855

Frame	D	2E	2F	G	H	BA	A	AA	AB	B	C	J	O	P	T
324 JM	8.0000	12.5	10.5/-	1.38	0.66	5.25	15.8	2	12.6	15	33.38	3.15	16.9	17.9	2.5
326 JM	8.0000	12.5	10.50/12.0	1.38	0.66	5.25	15.8	2	12.6	15	33.38	3.15	16.9	17.9	2.5
364 JM	9.0000	14	11.25/-	1.49	0.66	5.88	17.5	3	13.6	15	35.42	3.35	18.7	19.9	2.5
365JM	9.0000	14	11.25/12.25	1.49	0.66	5.88	17.5	3	13.6	15	35.42	3.35	18.7	19.9	2.5
324 JP	8.0000	12.5	10.5/-	1.38	0.66	5.25	15.8	2	12.6	15	36.26	3.15	16.9	17.9	2.5
326 JP	8.0000	12.5	10.5/12.0	1.38	0.66	5.25	15.8	2	12.6	15	36.26	3.15	16.9	17.9	2.5
364 JP	9.0000	14	11.25/-	1.49	0.66	5.88	17.5	3	13.6	15	38.3	3.35	18.7	19.9	2.5
365 JP	9.0000	14	11.25/12.25	1.49	0.66	5.88	17.5	3	13.6	15	38.3	3.35	18.7	19.9	2.5

Construction Features

Frame			143T	145T	182T	184T	213T	215T	254T	256T	284T	286T
Mechanical features												
Nameplate markings			UR, CSA									
Mounting			F1, OPTIONAL F-2									
Frame	Material		Cast Iron FC-200									
Degree of protection (IP rating)			IP55									
Grounding			Simple grounding - one inside the terminal box and one on the frame (accessible from inside the terminal box)									
Cooling method (IC)			Totally enclosed fan-cooled (IC411)									
Fan	Material	2-4P	Polypropylene									
		6-12P	Polypropylene									
Fan cover	Material		Steel						Steel			
Endshields	Material		Cast Iron FC-200									
Drain Plug			Fitted with rubber drain plug									
Bearings	Shielded/clearance (DE)		C3						C3			
	Shielded/clearance (NDE)		C3						C3			
	Locating bearing configuration								NDE			
	Drive end	2P	6205	6205	6306	6306	6308	6308	6309	6309	6311	6311
		4 - 12P										
	Non-drive end	2P	6205	6205	6306	6306	6308	6308	6309	6309	6311	6311
		4 - 12P										
Bearing seal			V-ring									
Lubrication	Type of grease		Mobil Polyrex EM									
	Grease fitting		None						None			
Terminal block			None									
Terminal box	Material		Cast Iron FC-200									
Leads inlet	Main T-box	Size	NPT 3/4"	NPT 3/4"	NPT 1"	NPT 1"	NPT 1"	NPT 1"	NPT 1 1/2"	NPT 1 1/2"	NPT 1 1/2"	NPT 1 1/2"
	Plug		Flat plastic plug for transportation and storage									
Shaft	Material	2P	SAE 1040/45									
		4 - 12P										
	DE threaded hole	2P	-	-	-	-	-	-	-	-	-	-
		4 - 12P										
	NDE(*) threaded hole	2P	-	-	-	-	-	-	-	-	M12 x 1.25	
		4 - 12P										
Vibration velocity limit			0.15 in./sec peak									
Nameplate	Material		Stainless Steel AISI 304									
Painting	Type		207A						203A			
	Color		Blue RAL 5009 - High Efficiency and NEMA Premium Efficiency									
Design			B									
Voltage			208-230/460 V with 9 leads OR 575 v.						208-230/460 V with 12 leadsOR 575 v .			
Winding	Impregnation		Dip and Bake - Polyester									
	Insulation class		F (DT=80K)									
Service factor			1.25 for High Efficiency and NEMA Premium Efficiency									
Rotor			Aluminum die cast									
Space heater			OPTIONAL									