

# W22 NEMA Brake Motors - NEMA Premium TEFC

## Standard Features

- Motors are compliant with DOE and NRCAN
- Three-phase, 2, 4, 6 and 8 pole, 60Hz
- Voltage: 208-230/460V, 575V
- Brake power supply: 220/230/240/460/575V
- Totally Enclosed Fan Cooled - TEFC (IP55) waterproof as per NEMA MG1 1.26.6 "Waterproof Machine"
- Die cast aluminum squirrel cage rotor
- Sealing (Drive End):
  - V'Ring sealing up to frame 324/6T.
  - WSeal® (double lipped V'Ring with a metallic cap) for frame 364/5T and 404/5T.
- Sealing (Non Drive End):
  - Lip Seal
- Ball bearings
- 1045 heat treated and stress relieved carbon steel shaft up to frame 364/5T and all 2 pole motors.
- 4140 for 404/5T in 4, 6 and 8 pole motors.
- Class "F" insulation for all frames. Temperature rise limited to Class "B" (80K)
- 575V rated motors have Spike Resistant WISE wire.
  - Protects against IGBT voltage spikes up to 2400V.
  - Exceeds NEMA MG1 Part 31.4.4.2
- Insulation System:
  - Dip and Bake Insulation system with class "H" resin up to frame 324/6T
  - CFRI Continuous Flow Resin Impregnation Insulation system with class "H" resin for frame 364/5T and 404/5T.
- NEMA design "B"
- Service Factor: 1.25
- Continuous duty (S1)
- 104°F (40°C) ambient temperature
- Altitude: 3300 ft (1000m)
- Double Gasketed terminal box
- Stainless steel nameplate with laser etching
- Paint: Synthetic enamel alkyd resin base
- Paint Plan:
  - 207A - Frames 143T to 215T
  - 203A - Frames 254T to 404/5T
- Color: RAL 5009 - Blue
- Fitted with closed rubber drain breathers
- Regreasable bearings for frames 254/6T and up
- All frames have dual mounting
- Normally closed brake
- Manual brake release up to frame 324/6T



**NEMA Premium**



Inverter Ratings				
Frames	Poles	Constant Torque	Variable Torque	VFD
143/5T - 404/5T	All	20:1	1000:1	Any
	All	1000:1*		WEG

\* Can only be achieved by a WEG VFD running in Sensorless Vector  
See page 7.6 for details

## Optional Features

- 50Hz
- Special voltages
- Special brake power supply voltages
- Special shafts
- Space heaters
- Labyrinth taconite seal available for all ratings
- Thermostats, Thermistors, RTD's (PT100)
- Additional terminal box
- Drip cover (canopy) for shaft down applications
- NEMA C & D flanges and Metric flanges for all ratings
- Roller bearings
- Special paint
- Microswitch to monitor the air gap or brake opening (from frame 182T and up)
- Degree of protection: IP56, IP65, IP66
- Forced ventilation
- Encoders
- No feet

Super Premium Efficiency available upon request



Definite Purpose Motors



# W22 NEMA Brake Motors - NEMA Premium TEFC - Purchasing Data

Rated Output		NEMA Frame	List Price	List Price with 'C' Flange	List Price with 'D' Flange	Part Number	Full Load Current		Full Load Efficiency	Shipping Weight (lbs.)	Brake	
HP	RPM						460V	575V			Torque (ft.lb)	Size
1	3600	143/5T	\$1,218	\$1,328	\$1,452	BM000X02NPW22	1.43	1.14	78.5	41.9	12	10
	1800	143/5T	\$1,301	\$1,410	\$1,535	BM000X04NPW22	1.41	1.13	85.5	46.3	12	10
	1200	143/5T	\$1,684	\$1,793	\$1,918	BM000X06NPW22	1.73	1.38	82.5	58.4	12	10
	900	182/4T	\$2,003	\$2,128	\$2,261	BM000X08NPW22	2.30	1.84	78.5	108	44	14
1.5	3600	143/5T	\$1,338	\$1,447	\$1,572	BM001X02NPW22	1.96	1.57	84.0	46.3	12	10
	1800	143/5T	\$1,387	\$1,496	\$1,620	BM001X04NPW22	2.02	1.62	86.5	54	12	10
	1200	182/4T	\$1,935	\$2,060	\$2,193	BM001X06NPW22	2.54	2.03	87.5	83.6	44	14
	900	182/4T	\$2,139	\$2,264	\$2,397	BM001X08NPW22	2.70	2.16	82.5	124	44	14
2	3600	143/5T	\$1,397	\$1,507	\$1,631	BM002X02NPW22	2.56	2.05	85.5	57.3	12	10
	1800	143/5T	\$1,447	\$1,557	\$1,681	BM002X04NPW22	2.69	2.15	86.5	56.2	12	10
	1200	182/4T	\$2,185	\$2,309	\$2,442	BM002X06NPW22	3.23	2.58	88.5	101	44	14
	900	213/5T	\$3,146	\$3,287	\$3,435	BM002X08NPW22	3.39	2.71	85.5	169	59	16
3	3600	182/4T	\$1,980	\$2,104	\$2,237	BM003X02NPW22	3.63	2.90	86.5	101	44	14
	1800	182/4T	\$2,060	\$2,184	\$2,317	BM003X04NPW22	3.91	3.13	89.5	104	44	14
	1200	213/5T	\$2,771	\$2,911	\$3,059	BM003X06NPW22	4.41	3.53	89.5	141	59	16
	900	213/5T	\$3,795	\$3,936	\$4,084	BM003X08NPW22	4.56	3.65	85.5	196	59	16
5	3600	182/4T	\$2,190	\$2,314	\$2,447	BM005X02NPW22	5.90	4.72	88.5	101	44	14
	1800	182/4T	\$2,369	\$2,493	\$2,626	BM005X04NPW22	6.45	5.16	89.5	108	44	14
	1200	213/5T	\$3,359	\$3,500	\$3,647	BM005X06NPW22	6.83	5.46	89.5	182	59	16
	900	254/6T	\$4,956	\$5,229	\$5,549	BM005X08NPW22	7.58	6.06	87.5	300	111	18
7.5	3600	213/5T	\$2,787	\$2,927	\$3,075	BM007X02NPW22	8.76	7.01	89.5	159	59	16
	1800	213/5T	\$3,007	\$3,148	\$3,296	BM007X04NPW22	9.00	7.20	91.7	154	59	16
	1200	254/6T	\$4,330	\$4,604	\$4,923	BM007X06NPW22	9.48	7.58	91.0	304	111	18
	900	254/6T	\$6,470	\$6,743	\$7,063	BM007X08NPW22	11.1	8.88	87.5	326	111	18
10	3600	213/5T	\$4,005	\$4,146	\$4,294	BM010X02NPW22	11.6	9.28	90.2	183	59	16
	1800	213/5T	\$3,460	\$3,600	\$3,748	BM010X04NPW22	12.4	9.92	91.7	192	59	16
	1200	254/6T	\$5,432	\$5,705	\$6,025	BM010X06NPW22	12.9	10.3	91.0	331	111	18
	900	284/6T	\$8,535	\$8,871	\$9,285	BM010X08NPW22	13.4	10.7	90.2	437	192	20
15	3600	254/6T	\$4,870	\$5,144	\$5,463	BM015X02NPW22	17.2	13.8	91.0	278	111	18
	1800	254/6T	\$4,820	\$5,093	\$5,413	BM015X04NPW22	18.0	14.4	92.4	293	111	18
	1200	284/6T	\$8,306	\$8,642	\$9,056	BM015X06NPW22	17.9	14.3	91.7	443	192	20
	900	284/6T	\$9,887	\$10,222	\$10,636	BM015X08NPW22	19.4	15.5	90.2	481	192	20
20	3600	254/6T	\$5,682	\$5,955	\$6,275	BM020X02NPW22	23.2	18.6	91.0	311	111	18
	1800	254/6T	\$5,357	\$5,630	\$5,949	BM020X04NPW22	24.1	19.3	93.0	333	111	18
	1200	284/6T	\$9,474	\$9,810	\$10,224	BM020X06NPW22	24.2	19.4	91.7	490	192	20
	900	324/6T	\$11,683	\$12,088	\$12,572	BM020X08NPW22	28.3	22.6	91.0	542	295	25
25	3600	284/6TS	\$6,780	\$7,116	\$7,530	BM025X02NPW22	28.5	22.8	91.7	426	192	20
	1800	284/6T	\$6,460	\$6,795	\$7,209	BM025X04NPW22	29.5	23.6	93.6	452	192	20
	1200	324/6T	\$9,298	\$9,703	\$10,187	BM025X06NPW22	30.4	24.3	93.0	650	295	25
	900	324/6T	\$12,039	\$12,444	\$12,928	BM025X08NPW22	35.9	28.7	91.0	600	295	25
30	3600	284/6TS	\$7,431	\$7,767	\$8,180	BM030X02NPW22	33.8	27.0	91.7	456	192	20
	1800	284/6T	\$6,757	\$7,092	\$7,506	BM030X04NPW22	35.1	28.1	93.6	501	192	20
	1200	324/6T	\$10,472	\$10,877	\$11,361	BM030X06NPW22	35.8	28.6	93.0	644	295	25
	900	364/5T	\$18,033	\$18,907	\$20,007	BM030X08NPW22	37.0	29.6	92.4	902	391	25
40	3600	324/6TS	\$9,298	\$9,703	\$10,187	BM040X02NPW22	45.8	36.6	92.4	547	295	25
	1800	324/6T	\$8,297	\$8,702	\$9,186	BM040X04NPW22	47.1	37.7	94.1	582	295	25
	1200	364/5T	\$14,624	\$15,498	\$16,598	BM040X06NPW22	46.5	37.2	94.1	933	391	25
	900	364/5T	\$18,276	\$19,149	\$20,249	BM040X08NPW22	50.0	40.0	92.4	975	391	25
50	3600	324/6TS	\$10,142	\$10,548	\$11,031	BM050X02NPW22	56.1	44.9	93.0	584	295	25
	1800	324/6T	\$8,988	\$9,393	\$9,876	BM050X04NPW22	59.2	47.4	94.5	626	295	25
	1200	364/5T	\$16,034	\$16,908	\$18,008	BM050X06NPW22	57.4	45.9	94.1	968	391	25
	900	404/5T	\$24,992	\$25,866	\$26,966	BM050X08NPW22	60.0	48.0	93.0	1,118	391	25
60	3600	364/5TS	\$15,419	\$16,293	\$17,393	BM060X02NPW22	67.0	53.6	93.6	825	391	25
	1800	364/5T	\$14,671	\$15,545	\$16,645	BM060X04NPW22	68.3	54.6	95.0	968	391	25
	1200	404/5T	\$20,037	\$20,910	\$22,010	BM060X06NPW22	69.5	55.6	94.5	1,142	391	25
	900	404/5T	\$29,407	\$30,281	\$31,381	BM060X08NPW22	73.0	58.4	93.0	1,217	391	25
75	3600	364/5TS	\$17,850	\$18,724	\$19,824	BM075X02NPW22	81.9	65.5	93.6	847	391	25
	1800	364/5T	\$16,324	\$17,198	\$18,298	BM075X04NPW22	84.1	67.3	95.4	1,019	391	25
	1200	404/5T	\$21,370	\$22,244	\$23,344	BM075X06NPW22	84.9	67.9	94.5	1,195	391	25
100	3600	404/5TS	\$22,046	\$22,920	\$24,020	BM100X02NPW22	110	88.0	94.1	1,045	391	25
	1800	404/5T	\$20,694	\$21,568	\$22,668	BM100X04NPW22	111	88.8	95.4	1,246	391	25

Flange: Replace 'M' with 'C' for C Flange  
 Replace 'M' with 'D' for D Flange  
 Voltage: Replace 'X' with '4' for 208-230/460V  
 Replace 'X' with '5' for 575V



# W22 NEMA Brake Motors - NEMA Premium

## TEFC - Motor Electrical Data

Rated Output		Full Load Speed (RPM)	NEMA Frame	Full Load Current (A)			Locked rotor current (l/l/n)	Locked rotor torque	Breakdown torque	Locked rotor time (s)	Weight (lb)	Noise level	Service Factor	Efficiency (%)			Power factor		
HP	kW			230V	460V	575V								50%	75%	100%	50%	75%	100%
1	0.75	3495	143/5T	2.86	1.43	1.14	8.2	280%	340%	22	41.9	68	1.25	74.0	77.0	78.5	0.69	0.79	0.84
		1760	143/5T	2.82	1.41	1.13	8.4	280%	350%	18	46.3	51	1.25	80.0	84.0	85.5	0.60	0.70	0.78
		1150	143/5T	3.46	1.73	1.38	6.2	300%	300%	28	58.4	49	1.25	77.0	82.0	82.5	0.45	0.57	0.66
		875	182/4T	4.60	2.30	1.84	6.0	300%	350%	22	108	50	1.25	74.0	77.0	78.5	0.32	0.42	0.52
1.5	1.1	3490	143/5T	3.92	1.96	1.57	8.9	350%	380%	21	46.3	68	1.25	81.5	84.0	84.0	0.70	0.80	0.84
		1755	143/5T	4.04	2.02	1.62	8.3	250%	340%	14	54	51	1.25	82.5	85.5	86.5	0.60	0.70	0.79
		1165	182/4T	5.08	2.54	2.03	8.0	320%	400%	16	83.6	52	1.25	84.0	86.5	87.5	0.45	0.54	0.62
		860	182/4T	5.40	2.70	2.16	5.5	250%	260%	17	124	50	1.25	80.0	82.5	82.5	0.43	0.54	0.62
2	1.5	3480	143/5T	5.12	2.56	2.05	8.9	350%	380%	17	57.3	68	1.25	82.5	85.5	85.5	0.71	0.80	0.86
		1750	143/5T	5.38	2.69	2.15	8.0	260%	300%	11	56.2	51	1.25	85.5	86.5	86.5	0.62	0.74	0.81
		1165	182/4T	6.46	3.23	2.58	7.5	300%	300%	31	101	52	1.25	86.5	88.5	88.5	0.46	0.58	0.66
		870	213/5T	6.78	3.39	2.71	7.6	240%	290%	39	169	52	1.25	82.5	84.0	85.5	0.45	0.55	0.65
3	2.2	3510	182/4T	7.26	3.63	2.90	8.3	240%	380%	41	101	69	1.25	82.5	86.5	86.5	0.75	0.84	0.88
		1760	182/4T	7.82	3.91	3.13	8.1	230%	340%	23	104	56	1.25	87.5	88.5	89.5	0.61	0.73	0.79
		1170	213/5T	8.82	4.41	3.53	7.0	200%	280%	58	141	55	1.25	86.5	88.5	89.5	0.50	0.63	0.70
		865	213/5T	9.12	4.56	3.65	6.8	230%	280%	44	196	52	1.25	84.0	85.5	85.5	0.50	0.63	0.71
5	3.7	3500	182/4T	11.8	5.90	4.72	7.5	230%	350%	25	101	69	1.25	86.5	88.5	88.5	0.76	0.85	0.89
		1755	182/4T	12.9	6.45	5.16	7.2	230%	320%	15	108	56	1.25	88.5	89.5	89.5	0.62	0.74	0.80
		1170	213/5T	13.7	6.83	5.46	6.6	190%	240%	57	182	55	1.25	88.5	89.5	89.5	0.58	0.70	0.76
		880	254/6T	15.2	7.58	6.06	5.3	190%	250%	44	300	54	1.25	85.5	87.5	87.5	0.49	0.62	0.70
7.5	5.5	3520	213/5T	17.5	8.76	7.01	7.2	210%	300%	27	159	72	1.25	87.5	89.5	89.5	0.75	0.84	0.88
		1765	213/5T	18.0	9.00	7.20	7.1	220%	310%	20	154	58	1.25	89.5	91.0	91.7	0.67	0.78	0.84
		1175	254/6T	19.0	9.48	7.58	6.8	250%	300%	30	304	59	1.25	89.5	90.2	91.0	0.63	0.74	0.80
		880	254/6T	22.2	11.1	8.88	5.3	200%	250%	33	326	54	1.25	85.5	87.5	87.5	0.50	0.63	0.71
10	7.5	3515	213/5T	23.2	11.6	9.28	7.2	210%	290%	24	183	72	1.25	89.5	90.2	90.2	0.79	0.87	0.90
		1760	213/5T	24.8	12.4	9.92	6.4	200%	300%	17	192	58	1.25	90.2	91.7	91.7	0.66	0.77	0.83
		1175	254/6T	25.8	12.9	10.3	6.5	230%	280%	26	331	59	1.25	90.2	91.0	91.0	0.63	0.74	0.80
		880	284/6T	26.8	13.4	10.7	5.6	200%	240%	32	437	54	1.25	89.5	90.2	90.2	0.61	0.72	0.78
15	11	3530	254/6T	34.4	17.2	13.8	6.7	220%	270%	25	278	72	1.25	89.5	91.0	91.0	0.77	0.85	0.88
		1765	254/6T	36.0	18.0	14.4	6.5	230%	270%	17	293	64	1.25	91.0	91.7	92.4	0.68	0.78	0.83
		1175	284/6T	35.8	17.9	14.3	6.7	230%	270%	20	443	59	1.25	91.0	91.7	91.7	0.69	0.80	0.84
		880	284/6T	38.8	19.4	15.5	5.5	200%	230%	25	481	54	1.25	90.2	91.0	90.2	0.62	0.73	0.79
20	15	3520	254/6T	46.4	23.2	18.6	6.1	200%	240%	21	311	72	1.25	91.0	91.7	91.0	0.82	0.87	0.89
		1765	254/6T	48.2	24.1	19.3	6.5	230%	270%	15	333	64	1.25	91.7	92.4	93.0	0.68	0.79	0.84
		1175	284/6T	48.4	24.2	19.4	6.2	230%	260%	16	490	59	1.25	91.0	91.7	91.7	0.70	0.80	0.85
		880	324/6T	56.6	28.3	22.6	5.0	190%	220%	27	542	56	1.25	89.5	91.0	91.0	0.54	0.66	0.73
25	18.5	3535	284/6TS	57.0	28.5	22.8	6.3	200%	250%	17	426	72	1.25	91.0	91.7	91.7	0.82	0.87	0.89
		1765	284/6T	59.0	29.5	23.6	6.2	240%	270%	24	452	64	1.25	92.4	93.0	93.6	0.70	0.80	0.84
		1180	324/6T	60.8	30.4	24.3	6.2	210%	260%	26	650	62	1.25	91.7	93.0	93.0	0.65	0.77	0.82
		880	324/6T	71.8	35.9	28.7	5.2	200%	230%	23	600	56	1.25	89.5	91.0	91.0	0.51	0.64	0.71
30	22	3535	284/6TS	67.6	33.8	27.0	6.3	200%	250%	15	456	72	1.25	91.7	91.7	91.7	0.82	0.87	0.89
		1765	284/6T	70.2	35.1	28.1	6.1	240%	240%	20	501	64	1.25	93.0	93.0	93.6	0.70	0.80	0.84
		1180	324/6T	71.6	35.8	28.6	6.2	230%	260%	21	644	62	1.25	91.7	93.0	93.0	0.65	0.77	0.83
		880	364/5T	74.0	37.0	29.6	6.2	170%	240%	20	902	60	1.25	92.4	92.4	92.4	0.63	0.74	0.80
40	30	3555	324/6TS	91.6	45.8	36.6	6.4	230%	240%	22	547	74	1.25	91.7	92.4	92.4	0.82	0.87	0.89
		1770	324/6T	94.2	47.1	37.7	6.1	220%	240%	20	582	66	1.25	93.6	94.1	94.1	0.72	0.80	0.85
		1180	364/5T	93.0	46.5	37.2	6.4	200%	240%	21	933	66	1.25	93.6	93.6	94.1	0.73	0.82	0.86
		880	364/5T	100	50.0	40.0	6.0	170%	230%	18	975	60	1.25	92.4	93.0	92.4	0.66	0.76	0.81
50	37	3550	324/6TS	112	56.1	44.9	6.2	220%	230%	23	584	74	1.25	93.0	93.0	93.0	0.83	0.87	0.89
		1775	324/6T	118	59.2	47.4	6.2	230%	270%	15	626	66	1.25	93.0	94.1	94.5	0.66	0.77	0.83
		1180	364/5T	115	57.4	45.9	6.4	200%	240%	18	968	66	1.25	93.6	94.1	94.1	0.74	0.83	0.86
		880	404/5T	120	60.0	48.0	6.8	170%	260%	15	1,118	60	1.25	93.0	93.0	93.0	0.68	0.78	0.83
60	45	3560	364/5TS	134	67.0	53.6	6.6	200%	260%	14	825	79	1.25	91.7	93.0	93.6	0.81	0.88	0.90
		1775	364/5T	137	68.3	54.6	6.6	240%	260%	15	968	67	1.25	94.1	94.5	95.0	0.75	0.83	0.87
		1180	404/5T	139	69.5	55.6	6.4	200%	230%	20	1,142	68	1.25	94.1	94.5	94.5	0.74	0.82	0.86
		880	404/5T	146	73.0	58.4	6.5	180%	270%	13	1,217	60	1.25	93.0	93.0	93.0	0.68	0.78	0.83
75	55	3555	364/5TS	164	81.9	65.5	6.6	200%	260%	10	847	79	1.25	92.4	93.6	93.6	0.83	0.88	0.90
		1775	364/5T	168	84.1	67.3	6.4	240%	260%	14	1,019	67	1.25	94.5	95.0	95.4	0.73	0.82	0.86
		1180	404/5T	170	84.9	67.9	6.4	200%	230%	17	1,195	68	1.25	94.1	94.5	94.5	0.74	0.83	0.86
100	75	3555	404/5TS	220	110	88.0	6.5	200%	240%	14	1,045	79	1.25	93.0	94.1	94.1	0.85	0.90	0.91
		1775	404/5T	222	111	88.8	7.3	240%	260%	13	1,246	68	1.25	95.0	95.0	95.4	0.77	0.84	0.88

# W22 NEMA Brake Motors - NEMA Premium

## TEFC - Brake Electrical Data

The W22 brake motor can be supplied with full, half wave or special bridge rectifiers.

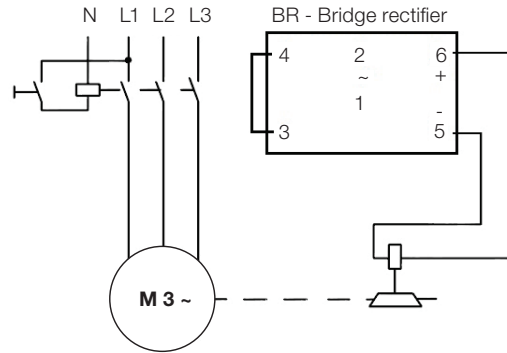
Rated voltage $V_{RMS}$ [Vca]	Brake size	Brake coil voltage [Vcc]	Wave form
110	10 to 25	103	Full
220-240		205	
380-415		180	
440-480	10 to 25	205	Half wave
525-575		250	

### Braking system

The W22 brake motor allows two braking system: normal braking or fast braking.

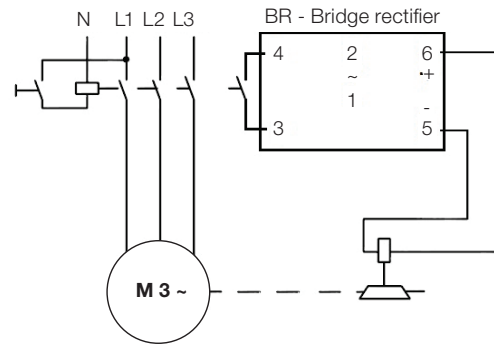
#### Normal braking

The bridge rectifier of the brake coil can be supplied directly from the motor terminals, without interruption.



#### Fast braking

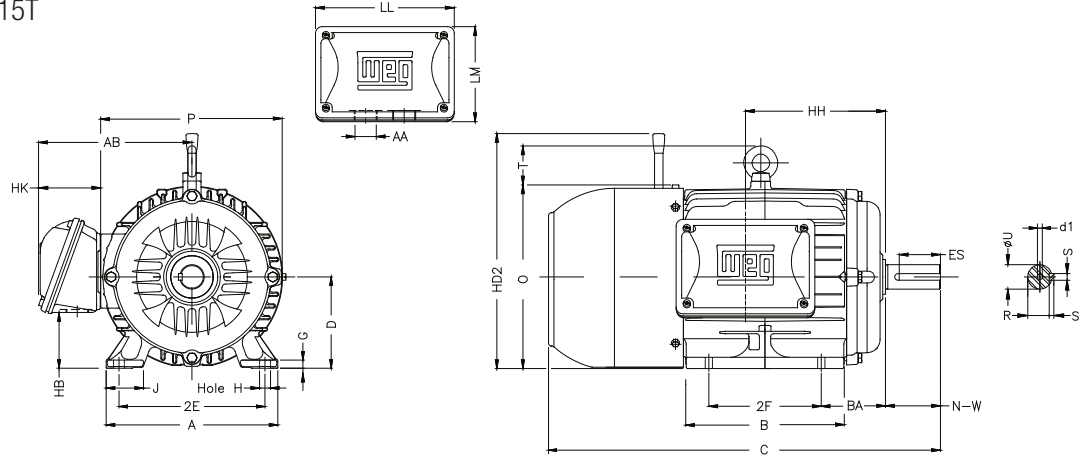
For fast braking, the bridge rectifier must be connected as shown.



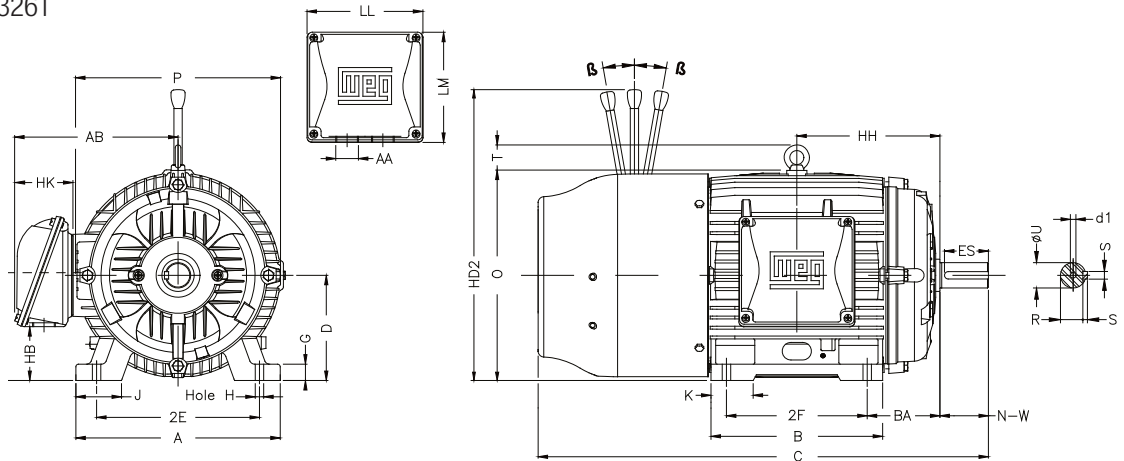
# W22 NEMA Brake Motors - NEMA Premium

## TEFC - Mechanical Data

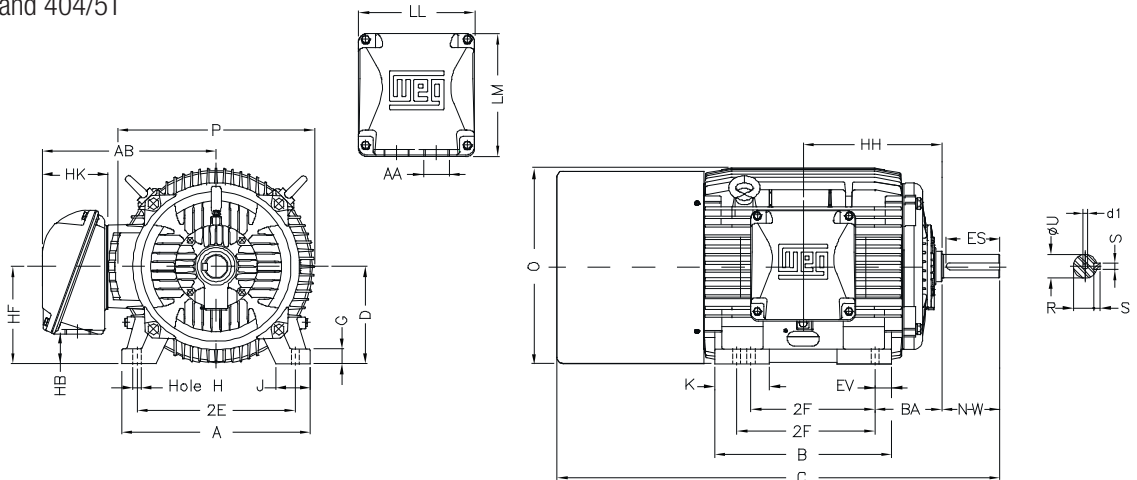
Frames 143T to 215T



Frames 254T to 326T



Frame 364/5T and 404/5T



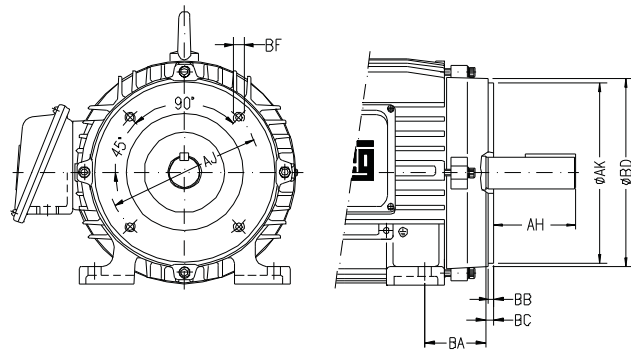
# W22 NEMA Brake Motors - NEMA Premium

## TEFC - Mechanical Data

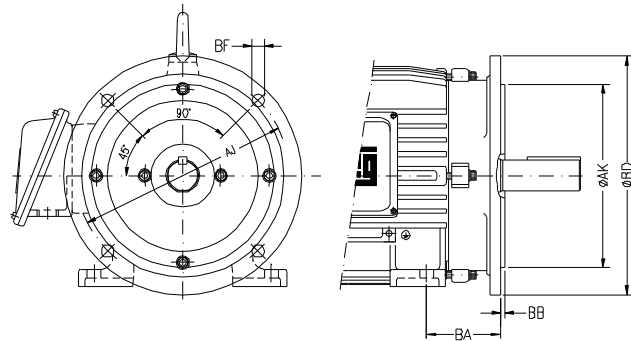
Frame	A	AA	AB	B	BA	C	D	EV	G	Shaft				
										U	N-W	ES	R	S
143/5T	6.457	NPT 3/4"	6.263	6.142	2.250	13.346	3.500		0.354	0.875	2.250	1.575	0.765	0.187
182/4T	8.661	NPT 1"	7.513	6.969	2.750	15.860	4.500		0.394	1.125	2.750	1.969	0.984	0.250
213/5T	9.764		8.609	8.858	3.500	19.517	5.250		0.669	1.375	3.375	2.480	1.203	0.313
254/6T	12.126	NPT 1 1/2"	10.483	11.732	4.250	24.945	6.250		0.827	1.625	4.000	2.756	1.406	0.375
284/6TS	13.780		11.073	13.071	4.750	26.557	7.000		1.023	1.625	3.250	2.480	1.406	0.375
284/6T					27.929				1.023	1.875	4.622	3.149	1.594	0.500
324/6TS	15.157	NPT 2"	12.575	14.567	5.250	29.616	8.000	1.300	1.875	3.750	2.756	1.594		
324/6T						31.116			2.125	5.250	3.937	1.844		
364/5TS	17.165	NPT 3"	16.016	15.760	5.875	32.276	9.000	1.654	1.480	1.875	3.748	1.968	1.591	
364/5T				15.512		34.251				2.375	5.874	4.330	2.019	0.625
404/5T	19.921		18.386	6.625	48.545	10.000	2.323	1.811	2.874	7.250	5.512	2.449	0.750	

Frame	Hole H	HB	HH	HK	J	K	LL	LM	O	P	2E	2F	d1	Bearings		Manual release	
														D.E.	N.D.E.	HD2	β
143/5T	0.344	1.727	4.750	2.733	1.437	-	5.961	4.215	7.122	7.047	5.500	4.000/5.000	A4	6205-ZZ	6204-ZZ	8.697	9°
182/4T	0.406	2.216	5.500	3.117	1.614		6.575	5.246	9.343	8.740	7.500	4.500/5.500		6207-ZZ	6206-ZZ	12.138	
213/5T		2.966	7.000		1.772	2.165			10.841	10.669	8.500	5.500/7.000		6308-ZZ	6207-ZZ	14.659	10°
254/6T	0.531	3.061	9.250	3.976	2.539	2.559	7.815	7.480	12.598	12.953	10.000	8.252/10.000	6309-C3	6209-Z-C3	17.195	9°	
284/6TS		3.535	10.250		3.110	2.874			14.067	14.173	11.000	9.500/11.000	6311-C3	6211-Z-C3	19.563	10°	
284/6T	0.657	4.811	11.250	4.705	3.189	3.189	9.055	8.661	15.953	15.827	12.500	10.500/12.000	6312-C3	6212-Z-C3	25.48		
324/6TS																0.660	4.251
364/5T	0.810	5.252	14.213	3.937	5.669	19.566	19.134	15.984	12.244/13.740	6316-C3							

"C" FLANGE DIMENSIONS									
NEMA FRAMES	BA	AJ	AK	BD	BF		BB	BC	AH
					NUMBER	TAP SIZE			
143/5TC	2.250	5.875	4.500	6.500	4	UNC 3/8"x16	0.156	0.125	2.125
182/4TC	2.750					UNC 1/2"x13			2.625
213/5TC	3.500	7.250	8.500	8.875		3.125			
254/6TC	4.250					3.75			
284/6TC	4.750	9.000	10.500	11.031	8	UNC 5/8"x11	0.250	0.250	4.375
284/6TSC									3.000
324/6TC	5.250								5.000
324/6TSC									3.500
364/5TC	5.875	11.000	12.500	15.551	8	UNC 5/8"x11	0.250	0.250	5.625
364/5TSC									3.500
404/5TC	6.625				8	UNC 5/8"x11	0.250	0.250	7.000
404/5TSC									4.000



"D" FLANGE DIMENSIONS							
NEMA FRAMES	BA	AJ	AK	BD	BF		BB
					NUMBER	TAP SIZE	
143/5TD	2.250	10.000	9.000	11.000	4	0.562	0.203
182/4TD	2.750						
213/5TD	3.500						
254/6TD	4.250						
284/6TD	4.750	12.500	11.000	14.000	8	0.828	0.203
284/6TSD							
324/6TD	5.250			18.000			
324/6TSD				17.716			
364/5TD	5.875	16.000	14.000	22.000	8	0.828	0.203
364/5TSD							
404/5TD	6.625	20.000	18.000	22.000	8	0.828	0.203
404/5TSD							



# Saw Arbor Motors

## TEFC

### Standard Features

- Three-phase, 2 and 4 pole, 60Hz
- Voltage:
  - 208-230/460 V
  - 575 V
- 80S-MS up to 90L-MS - IEC metric frames
- Die cast aluminum squirrel cage rotor
- Totally Enclosed Fan Cooled (IP54 according to IEC34-5 standard)
- Class 'F' insulation
- 104°F (40°C) ambient temperature
- 575V rated motors have Spike Resistant WISE wire.
  - Protects against IGBT voltage spikes up to 2400V.
  - Exceeds NEMA MG1 Part 31.4.4.2
- Duty S6 (50%ED)
- Altitude: 3300 ft (1000 m)
- 1045 carbon steel shaft
- Ball bearings
- F1 mount
- Service factor: 1.0
- Stainless steel nameplate
- Cast iron frame
- Dimensions according to IEC 72
- NPT threaded terminal box conduit hole
- LH or RH thread on shaft
- Paint: Enamel alkyd resin base
- Color: RAL 7022 (Dark Gray)
- WEG paint plan: 207A



### Optional Features

- Special voltages
- Specially dimensioned shaft
- Terminal Box with metric threaded cable entries
- Stainless steel shaft
- Double shaft
- F2 mount



# Saw Arbor Motors

## TEFC - Purchasing Data

Rated Output		IEC Frame	List Price	Part Number	Full Load Current		Full Load Efficiency	Shipping Weight (lbs.)	Overall Length "C" Dim. (in.)
HP	RPM				460V	575V			
3	3600	80S	\$1,483	SR003X02S6	4.29	3.43	80.5	85	18.543
	3600	80M	\$1,977	SR005X02S6	6.65	5.32	85.0	100	20.512
5	1800	90L	\$2,737	SR005X04S6	7.03	5.62	84.5	143	26.476
	3600	80L	\$2,479	SR007X02S6	9.76	7.81	87.4	122	22.48
7.5	1800	90L	\$3,053	SR007X04S6	10.1	8.08	85.3	165	26.476
	3600	90L	\$3,458	SR010X02S6	12.3	9.84	85.0	166	26.476
10	1800	90L	\$3,862	SR010X04S6	14.1	11.3	85.5	178	26.476

Shaft: Replace 'R' with 'L' for left side shaft  
 Voltage: Replace 'X' with '4' for 208-230/460V  
 Replace 'X' with '5' for 575V

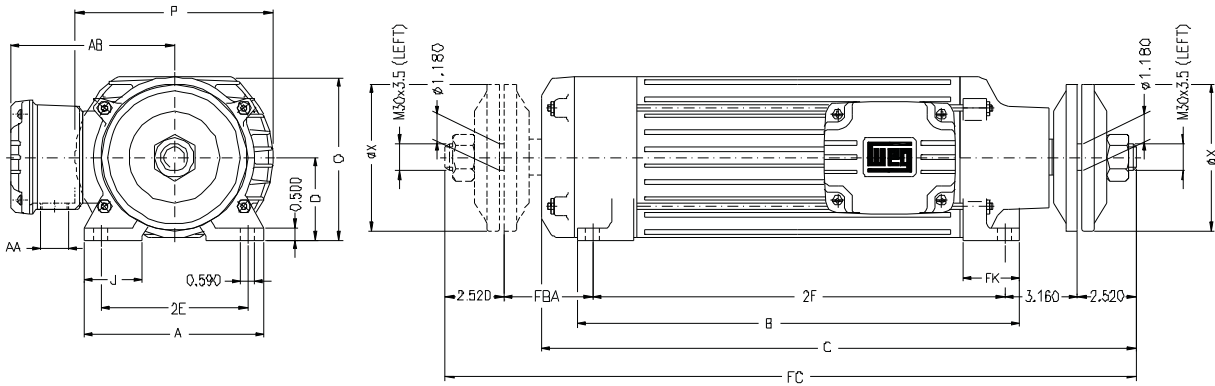
# Saw Arbor Motors

## TEFC - Electrical Data

Rated Output		Full Load Speed (RPM)	NEMA Frame	Full Load Current (A)			Locked rotor current (I/LIn)	Locked rotor torque	Breakdown torque	Locked rotor time (s)	Weight (lb)	Noise level	Service Factor	Efficiency (%)			Power factor		
HP	kW			230V	460V	575V								50%	75%	100%	50%	75%	100%
3	2.2	3500	80S	8.58	4.29	3.43	7.3	330%	370%	9	85	62	1.0	76.0	79.5	80.5	0.65	0.75	0.80
		3470	80M	13.3	6.65	5.32	8	340%	410%	7	100	62	1.0	82.0	84.5	85.0	0.66	0.77	0.82
5	3.7	1740	90L	14.1	7.03	5.62	8	380%	410%	8	143	51	1.0	82.0	84.0	84.5	0.58	0.71	0.78
		3490	80L	19.5	9.76	7.81	9.2	400%	460%	5	122	62	1.0	85.2	87.0	87.4	0.64	0.75	0.81
7.5	5.5	1730	90L	20.2	10.1	8.08	8.2	370%	400%	7	165	51	1.0	83.5	85.0	85.3	0.60	0.74	0.80
		3480	90L	24.6	12.3	9.84	8.5	400%	420%	7	166	68	1.0	82.0	84.5	85.0	0.77	0.86	0.90
10	7.5	1720	90L	28.2	14.1	11.3	8	400%	400%	6	178	51	1.0	84.5	85.5	85.5	0.57	0.71	0.78

# Saw Arbor Motors

## TEFC - Mechanical Data



IEC FRAMES	2E	J	A	P	AB	2F	FK	FK1	B	FBA	D	O	C	FC	AA	X	BEARINGS	
																	D.E.	N.D.E.
80S						10.236			12.008				18.543	22.440				
80M	7.480	1.378	8.858	7.480	5.984	12.205	1.772	1.772	13.976	3.150	3.150	6.063	20.512	24.409	NPT0.75"	4.724	6307-ZZ	6207-ZZ
80L						14.173			15.949				22.480	26.377				
90L	6.299	2.500	7.756	8.189	6.575	20.079	2.441	4.960	21.378	3.150	3.543	6.968	26.476	29.842	NPT1"	6.299	6308-ZZ	6208-ZZ