



# Elektrim NEMA Premium® 20N Series Performance Motors

**A New Standard for Unwavering Dependability in Demanding Conditions**

1-250 HP 3PH TEFC 60 Hz NEMA AC Foot Mounted and C-Face Motors

## Features

- Inverter Duty Rated: 10:1CT & 20:1VT
- Service Factor: up to 1.40
- 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
- Oversized ball bearings on both ends
- Designed for horizontal and vertical application
- 230/460V 60Hz, usable at 208V 60Hz (up to and including 100HP)
- 460V 60Hz double delta (125HP and up)
- Double rated for 190/380V 50Hz
- Class "F" insulation with rise below Class "B"
- Impregnation resin and winding wire Class "H" (DN2E200)
- F1 / F2 Convertible up to 286T frame
- Low vibration level (below 2.2 mm/sec)
- CSA-US certified, DOE approved, CE and NEMA Premium® marked

## Applications

Ideal for a wide variety of industrial applications that require a premium efficient motor, such as fans & blowers, pumps, conveyors, crushers, compressors, mixers and more.



# Maximum Performance in Your Toughest Industrial Applications

Part Number	HP	RPM	Frame	Torque			FLA			LRA		Efficiency			Power Factor			NEMA Design	Code	SF	WK <sup>2</sup> lb ft <sup>2</sup>	lbs
				FLT lb-ft	LRT %	BDT %	460V	575V	208V	460V	575V	FL	75%	50%	FL	75%	50%					
20NFM-3-1-18	1	1765	143T	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
20NFM-3-1-12		1160	145T	4.5	240	300	1.7	1.4	3.8	10	8	82.5	81.9	78.6	68	59	46	B	K	1.4	0.15	55
20NFM-3-1.5-36	1.5	3540	143T	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
20NFM-3-1.5-18		1750	145T	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
20NFM-3-1.5-12		1170	182T	6.7	190	280	2.4	1.9	5.3	14	11.2	87.5	86.9	84.5	68	59	47	B	J	1.4	0.4	85
20NFM-3-2-36	2	3525	145T	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
20NFM-3-2-18		1745	145T	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
20NFM-3-2-12		1170	184T	9	200	300	3	2.4	6.6	25	20	88.5	88.6	86.9	72	64	51	B	L	1.4	0.45	98
20NFM-3-3-36	3	3500	182T	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
20NFM-3-3-18		1775	182T	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
20NFM-3-3-12		1165	213T	13.5	260	360	4.2	3.4	9.3	32	25.6	89.5	89.5	88	74	68	56	B	K	1.4	1.45	205
20NFM-3-5-36	5	3535	184T	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
20NFM-3-5-18		1770	184T	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
20NFM-3-5-12		1170	215T	22.4	250	350	7	5.6	15.5	46	36.8	89.5	89.6	88.2	75	69	57	B	J	1.3	1.56	220
20NFM-3-7.5-36	7.5	3525	213T	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
20NFM-3-7.5-18		1765	213T	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
20NFM-3-7.5-12		1185	254T	33.2	320	350	10.4	8.3	23.0	77.5	62	91	90.6	88.6	74	67	54	A	K	1.3	2.63	321
<b>20NFM-3-10-36</b>	10	<b>3535</b>	<b>215T</b>	<b>14.8</b>	<b>300</b>	<b>335</b>	<b>11.4</b>	<b>9.1</b>	<b>25.2</b>	<b>93</b>	<b>74.4</b>	<b>90.2</b>	<b>90.4</b>	<b>89.3</b>	<b>91</b>	<b>88</b>	<b>80</b>	<b>A</b>	<b>J</b>	<b>1.3</b>	<b>0.5</b>	<b>173</b>
20NFM-3-10-18		1770	215T	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
20NFM-3-10-12		1180	256T	44.5	290	330	13.4	10.7	29.6	94	75.2	91	90.8	89.2	77	70	58	A	J	1.3	3.31	363
20NFM-3-15-36	15	3540	254T	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
20NFM-3-15-18		1775	254T	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
20NFM-3-15-12		1185	284T	66.4	470	380	19.5	15.6	43.1	180	144	91.7	91.2	89	79	73	61	A	L	1.3	5.19	371
20NFM-3-20-36	20	3540	256T	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
20NFM-3-20-18		1775	256T	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
20NFM-3-20-12		1185	286T	88.5	380	320	25.5	20.4	56.4	221	177	91.7	91.1	89.1	80	74	63	A	L	1.2	6.03	421
20NFM-3-25-36	25	3555	284TS	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
20NFM-3-25-18		1780	284T	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
20NFM-3-25-12		1190	324T	110	230	240	31.5	25	69.7	182	146	93	93.3	92.4	80	75	65	B	G	1.3	12.9	653
20NFM-3-30-36	30	3540	286TS	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
20NFM-3-30-18		1780	286T	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
20NFM-3-30-12		1190	326T	132	230	240	37	30	81.8	217	174	93	93.3	92.6	82	78	69	B	G	1.3	14.7	681
20NFM-3-40-36	40	3552	324TS	59	145	200	44	35	97.3	290	232	93	93.6	93.3	92	91	88	B	G	1.2	4	608
20NFM-3-40-18		1780	324T	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
20NFM-3-40-12		1192	364T	176	180	210	48.5	39	107.3	290	232	94.1	94.2	93.5	82	78	68	B	G	1.3	23.1	917
20NFM-3-50-36	50	3552	326TS	74	145	200	55	44	121.6	362	290	93	93.7	93.5	92	92	89	B	G	1.2	4.7	655
20NFM-3-50-18		1781	326T	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
20NFM-3-50-12		1191	365T	221	170	200	60	48	132.7	362	290	94.1	94.3	93.7	83	80	71	B	G	1.3	25.9	970
20NFM-3-60-36	60	3562	364TS	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
20NFM-3-60-18		1786	364T	177	140	200	67	54	148.2	435	348	95	95.6	95.3	88	87	80	B	G	1.2	15.5	926
20NFM-3-60-12		1192	404T	264	180	200	72	58	159.2	435	348	94.5	94.4	93.7	82	78	68	B	G	1.3	36.8	1127
20NFM-3-75-36	75	3560	365TS	111	120	200	81	65	179.1	542	434	94.1	94.8	94.7	92	91	89	B	G	1.2	7.9	933
20NFM-3-75-18		1787	365T	221	150	210	84	67	185.8	542	434	95.4	95.8	95.5	88	86	80	B	G	1.2	17.8	1012
20NFM-3-75-12		1191	405T	331	140	200	91	73	201.3	542	434	94.5	94.9	94.4	82	79	70	B	G	1.2	41.9	1210
20NFM-3-100-36	100	3565	405TS	147	170	240	109	87	241.1	725	580	95.4	95.6	95.3	90	88	83	B	G	1.2	10	1058
20NFM-3-100-18		1785	405T	294	220	230	108	86	238.8	790	632	95.4	95.9	95.7	91	89	84	B	G	1.2	29.8	1241
20NFM-3-100-12		1192	444T	441	190	200	123	98	272.0	725	580	95	94.9	93.9	80	75	65	B	G	1.2	64.1	1726
20NFM-3-125-36	125	3578	444TS	184	140	260	133	106	-	950	760	95.4	95.7	95.5	92	90	86	B	G	1.2	22.5	1488
20NFM-3-125-18		1788	444T	367	175	210	136	109	-	907	726	95.8	96.2	96.1	90	89	85	B	G	1.2	42.9	1662
20NFM-3-125-12		1192	445T	551	190	200	153	122	-	910	728	95.4	95.6	95.3	80	77	67	B	G	1.2	76.3	1931
20NFM-3-150-36	150	3578	445TS	220	160	270	159	127	-	1180	944	95.8	96.1	96	92	91	86	B	G	1.2	28.4	1594
20NFM-3-150-18		1788	445T	441	180	200	161	129	-	1085	868	95.8	96.2	96.1	91	90	86	B	G	1.2	52.7	1823
20NFM-3-200-36		200	3578	447TS	294	150	250	210	168	-	1500	1200	95.8	96.2	96.1	93	92	88	B	G	1.2	29.1
20NFM-3-200-18	1790		447T	587	170	200	218	174	-	1550	1240	96.5	96.7	96.2	89	87	81	B	G	1.2	68	2310
20NFM-3-250-36	250		3579	447TS	367	180	270	261	209	-	1900	1520	96.2	96.6	96.5	93	92	89	B	G	1.2	36.9
20NFM-3-250-18		1788	447T	735	160	200	267	214	-	1825	1460	96.2	96.6	96.5	91	9	85	B	G	1.2	81.5	2447

Motors can be modified from Footed to C-Face and vice versa. C-Face part number prefix = 20NCM. Larger horsepower motors up to 500HP and other speeds available by special order.

## SOLUTIONS TO MEET YOUR NEEDS

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