

MAX-PE[®]

Totally Enclosed Fan Cooled



TECO   **Westinghouse**



NEMA
Premium



CC002A



TOTALLY ENCLOSED FAN COOLED

DESIGN FEATURES AND CONSTRUCTION

All TECO-Westinghouse Totally Enclosed Fan Cooled, T-Frame squirrel-cage induction motors are designed, manufactured and tested to meet or exceed the latest NEMA, IEEE and CSA standards.

- Motors are dual nameplated for 60 Hz (230/460V) and 50 Hz (190/380V) frequencies; 1.0 S.F. at 50 Hz.
- NEMA Design B
- 36 month warranty from date of manufacture
- UL recognized, Class F non-hygroscopic insulation system with heavy heat resistance enameled copper wire to provide longer winding life and reliability. Inverter rated; see below.
- Continuous rating with 1.15 Service Factor (1.00 Service Factor at 50 Hz)
- Design B torques as a minimum
- Class B temperature rise @ 40° C ambient
- Interchangeable F1 and F2 mounting
- Dual drilled feet - longer frame (i.e. 145T drilled also for 143T through 449T frame)
- Bi-directional rotation
- Dynamically balanced, die-cast aluminum rotor reduces overall system vibrations
- Pressed steel main conduit box is 90° rotatable, oversized and fully gasketed
- Neoprene lead and conduit box gaskets prevent the entry of moisture and contaminants
- Grounding terminal inside main box
- Rugged cast iron frame and end brackets for rigidity and excellent corrosion resistance
- Provisions for breather drains for vertical mount up or down as standard
- Rolled steel fan cover
- External fan is corrosion-resistant and also non-sparking
- Stainless steel nameplate; Zn plated hardware
- C-face (143T-449T) and D-flange (143-184 & 254T-449T) conversion kits are available
- Oversized, double shielded vacuum degassed ball bearings are for frames 140T-280T and open bearings with regreaseable provisions are for frames 280TS, 320T and larger.
- Rubber flinger provided on DE for frames 140T to 280T
- Labyrinth type metal flinger on both ends on frames 280TS, 320T and larger
- Suitable for Class I, Division II, Groups B, C, and D; Temperature Code T3C
- UL recognized, DOE certified, CSA approved, CE Marked, and EISA compliant
- Inverter rated per NEMA MG 1, Part 31
- S. F. will be 1.0 when applied on inverter
- Suitable for inverter use per NEMA MG-1, Part 3.4.4.2
- Inverter duty wire capable of withstanding voltage spikes up to 2200V
- Insulated bearings are available as an option. If not purchased, precautions should be taken to eliminate shaft currents that may be imposed on the motor by use with an inverter.
- Speed ranges 20:1 VT, 10:1 CT
- 9 leads for 5 HP and below, 12 leads for 7.5 - 125 HP, and 6 leads for 150 HP and higher.
- Available from 1 HP - 200 HP, footed, footed C-face and round body C-flange.

Note: Precautions should be taken to eliminate or reduce shaft currents and/or winding stresses that may be imposed on the motor by the inverter, as stated by NEMA MG-1, Part 31.

MAX-PE™ PERFORMANCE DATA

HP	FULL LOAD RPM	FRAME SIZE	EFFICIENCY (%)				POWER FACTOR (%)			CURRENT				TORQUE				ROTOR WK2 (lb-ft ²)	NEMA CODE LETTER
			FULL LOAD		3/4 LOAD NOM.	1/2 LOAD NOM.	FULL LOAD	3/4 LOAD	1/2 LOAD	208V USA BALE (A)	230V LOAD (A)	460V LOAD (A)	LOCKED ROTOR (A)	FULL LOAD (lb-ft)	LOCKED ROTOR (%FLT)	PULL UP (%FLT)	BREAK DOWN (%FLT)		
			NOM.	MIN.															
1	3465	143T	82.5	80.0	81.5	78.5	85.0	79.5	68.5	3.0	2.6v8	1.34	15	1.515	350	365	400	0.046	N
	1745	143T	85.5	82.5	84.0	81.5	73.0	64.5	51.5	3.3	3.00	1.50	15	3.009	310	280	410	0.086	N
	1150	145T	82.5	80.0	82.5	80.0	65.5	57.0	44.5	3.8	3.46	1.73	15	4.566	250	220	300	0.122	N
1.5	3465	143T	84.0	81.5	84.0	81.5	83.5	77.0	65.0	4.4	4.00	2.00	20	2.273	340	280	350	0.052	M
	1730	145T	86.5	84.0	86.5	85.5	78.0	70.0	57.0	4.6	4.16	2.08	20	4.552	300	260	360	0.093	M
	1170	182T	87.5	85.5	85.5	82.5	63.5	55.0	42.5	5.6	5.06	2.53	20	6.731	210	190	350	0.313	M
2	3465	145T	86.5	84.0	86.5	85.5	86.0	80.5	70.0	5.6	5.03	2.52	25	3.031	350	315	390	0.064	L
	1740	145T	86.5	84.0	84.0	84.0	78.0	70.0	57.0	6.1	5.56	2.78	25	6.035	270	220	330	0.108	L
	1170	184T	88.5	86.5	88.5	86.5	70.5	63.0	50.5	6.6	6.00	3.00	25	8.975	180	150	270	0.423	L
3	3490	182T	88.5	86.5	90.2	89.5	90.0	87.0	79.5	7.8	7.06	3.53	32	4.513	280	250	380	0.190	K
	1755	182T	89.5	87.5	89.5	87.5	84.0	79.5	68.5	8.3	7.48	3.74	32	8.975	225	175	345	0.404	K
	1175	213T	89.5	87.5	89.5	87.5	78.0	70.5	58.5	8.9	8.04	4.02	32	13.41	210	180	340	0.918	K
5	3480	184T	88.5	86.5	89.5	89.5	92.5	91.0	85.5	12.7	11.40	5.72	46	7.544	290	230	320	0.272	J
	1745	184T	89.5	87.5	88.5	88.5	85.5	81.5	71.5	13.5	12.24	6.12	46	15.04	185	140	285	0.422	J
	1170	215T	91.0	89.5	91.0	89.5	82.5	77.0	65.5	13.8	12.48	6.24	46	22.44	190	160	300	1.224	J
7.5	3510	213T	91.0	89.5	91.0	90.2	89.0	87.0	80.0	19.2	17.30	8.67	64	11.22	200	175	275	0.448	H
	1755	213T	91.7	90.2	91.0	89.5	86.5	82.0	72.0	19.6	17.70	8.85	64	22.44	250	155	270	0.848	H
	1170	254T	91.0	89.5	91.0	89.5	80.5	75.0	64.0	21.2	19.10	9.59	64	33.66	240	215	270	2.158	H
10	3510	215T	91.0	89.5	91.7	91.0	89.5	88.5	82.5	25.4	23.00	11.5	81	14.96	220	180	260	0.573	H
	1755	215T	91.7	90.2	91.0	91.0	88.0	84.0	75.5	25.7	23.30	11.6	81	29.92	250	145	260	1.082	H
	1170	256T	91.0	89.5	91.7	90.2	80.5	75.0	64.0	28.3	25.60	12.8	81	44.87	225	185	250	2.872	H
15	3525	254T	92.4	91.0	92.4	91.7	91.5	90.5	86.0	36.7	33.20	16.6	116	22.34	210	180	270	1.088	G
	1765	254T	92.4	91.0	93.0	92.4	88.0	85.0	77.0	38.3	34.50	17.3	116	44.62	245	180	270	2.179	G
	1175	284T	92.4	91.0	93.0	93.0	83.5	79.5	70.5	40.3	36.40	18.2	116	67.03	215	180	230	6.823	G
20	3520	256T	92.4	91.0	93.0	93.6	92.5	91.5	88.0	48.4	43.80	21.9	145	29.83	210	180	260	1.407	G
	1760	256T	93.0	91.7	92.4	92.4	87.5	84.5	78.5	50.9	46.00	23.0	145	59.66	200	145	240	2.871	G
	1170	286T	91.7	90.2	92.4	92.4	84.0	81.0	73.0	53.7	48.60	24.3	145	89.75	210	160	225	8.340	G
25	3545	284TS	92.4	91.0	93.0	92.4	91.0	90.5	86.5	61.5	55.60	27.8	183	37.03	175	135	250	2.507	G
	1765	284T	93.6	92.4	93.6	93.6	86.0	83.0	77.0	64.4	58.20	29.1	183	74.37	205	165	240	4.586	G
	1170	324T	93.0	91.7	93.6	93.6	83.0	80.0	71.5	67.0	60.60	30.3	183	112.2	200	155	205	11.877	G
30	3545	286TS	93.0	91.7	93.6	93.0	91.0	90.5	87.5	73.4	66.40	33.2	218	44.43	175	140	240	2.831	G
	1770	286T	93.6	92.4	93.6	93.6	87.5	85.5	79.5	75.9	68.60	34.3	218	88.99	200	160	235	5.274	G
	1175	326T	93.0	91.7	93.6	93.6	80.5	78.5	71.0	82.9	75.00	37.5	218	134.1	210	180	230	12.372	G
40	3550	324TS	94.1	93.0	94.5	94.1	90.0	89.0	84.5	97.8	88.40	44.2	290	59.16	150	130	240	3.590	G
	1770	324T	94.1	93.0	94.5	94.5	86.0	84.5	78.5	102.4	92.60	46.3	290	118.7	205	170	220	8.624	G
	1180	364T	94.1	93.0	94.5	94.1	86.5	84.5	78.0	101.7	92.00	46.0	290	178.0	200	150	220	17.937	G
50	3550	326TS	94.1	93.0	94.5	94.5	91.0	90.0	86.5	121.0	109.00	54.7	363	73.95	150	130	240	4.488	G
	1770	326T	94.5	93.6	95.0	95.0	87.0	86.0	80.5	125.8	113.80	56.9	363	148.3	210	170	220	10.124	G
	1180	365T	94.1	93.0	94.5	93.6	86.0	83.0	75.5	127.8	115.60	57.8	363	222.5	225	170	240	21.386	G
60	3550	364TS	94.1	93.0	94.5	94.1	93.0	92.0	88.5	142.0	128.00	64.2	435	88.74	145	130	240	7.379	G
	1775	364T	95.0	94.1	95.0	94.5	86.5	83.0	75.5	151.3	136.80	68.4	435	177.5	200	155	240	12.229	G
	1180	404T	94.5	93.6	94.5	94.1	87.0	86.5	80.5	151.0	136.60	68.3	435	267.0	200	185	245	33.535	G
75	3555	365TS	94.5	93.6	95.0	95.0	93.0	92.5	89.0	176.7	159.80	79.9	543	110.8	145	130	250	9.056	G
	1775	365T	95.4	94.5	95.4	95.0	86.5	83.5	75.5	188.2	170.20	85.1	543	221.8	200	165	250	14.674	G
	1180	405T	94.5	93.6	94.5	94.5	86.5	84.5	79.0	190.0	171.80	85.9	543	333.7	200	175	225	37.862	G
100	3560	405TS	95.4	94.5	95.8	95.4	92.0	91.5	88.5	237	214	107	725	147.5	140	125	270	10.77	G
	1775	405T	95.4	94.5	95.4	95.0	87.5	85.5	80.0	248	224	112	725	295.8	215	140	215	26.64	G
	1181	444T	95.0	94.1	94.5	93.6	82.5	80.0	73.0	263	238	119	725	444.6	140	110	230	56.00	G
125	3563	444TS	95.0	94.1	94.5	93.6	86.0	83.5	80.0	316	286	143	908	184.2	110	88	220	16.60	G
	1780	444T	95.4	94.5	95.0	94.1	85.0	83.0	77.0	323	292	146	908	368.7	130	100	220	44.30	G
	1182	445T	95.0	94.1	94.5	93.6	83.0	80.5	74.0	327	296	148	908	555.3	140	110	230	68.00	G
150	3566	445TS	95.0	94.1	94.5	93.6	87.0	84.5	81.0	-	-	170	1085	220.9	110	88	220	20.00	G
	1783	445T	95.8	95.0	95.4	94.5	85.0	83.0	78.0	-	-	175	1085	441.7	130	100	220	52.00	G
	1185	447T	95.8	95.0	95.4	94.5	83.5	81.0	74.0	-	-	176	1085	664.6	135	105	220	103.0	G
200	3572	447TS	95.4	94.5	95.0	94.1	89.0	85.0	81.0	-	-	226	1450	294.0	104	83	210	32.00	G
	1785	447T	96.2	95.4	95.8	95.0	87.0	83.5	78.5	-	-	230	1450	588.3	120	95	210	73.50	G
	1186	449T	95.8	95.0	95.4	94.5	84.0	81.0	74.0	-	-	233	1450	885.4	135	105	210	125.0	G

- Notes: 1. The data shown is typical values based on test according to IEEE standard 112, method B.
2. Breakdown & locked rotor torques are shown as average expected values.
3. Efficiency, power factor, speed and torque are the same for other voltages.
Current values vary inversely with voltage.
4. Tolerance according to NEMA MG1-12 & IEC60034-1.
5. Data subject to change without notice.



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