

NT Series

NEMA Standard Three Phase
Asynchronous TEFC Cast Iron Motors

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General Information:

NT series (Inverter Duty) NEMA standard three phase asynchronous motors are Totally Enclosed Fan Cooled motors, designed and manufactured to meet or exceed efficiency values of NEMA MG-1. The motor has the characteristics of high efficiency, low temperature rise, low noise and vibration, high starting torque, solid structure, durability, safety and reliability.

Wonder NT Series are UL and CSA certificated.

Wonder NEMA standard motors cover optional multiple designs of A, B, C, D, making them suitable for different types of applications. Special designs and manufacturing requirements can be customized, such as type TC or TD, class H insulation, or different voltage and frequency.

Main Tech Specifications:

- Frame Size: 140T - 440T
- Rated Power: 1-300HP
- Voltage: 230/460V, 460V, or 575 V
- Speed: 3600, 1200, 1800r/m
- Poles: 2, 4, 6
- Protection Class: IP55 or above
- Insulation Class: Class F or above
- NPT threaded terminal box
- Roller bearings on drive end (for motors of which the frame size is 440 and above)

NEMA Design A

Normal starting torque, high to medium starting current, high breakdown torque, maximum 5% slip. Able to handle heavy loads in a short time, well suited for variable speed operation, exhibiting low slip and high efficiency.

NEMA Design B

Starting torque is similar to type A, but sometimes lower. Providing a lower starting current. It locks the rotor torque in industrial applications but still allows the starting load. The slip is less than or equal to 5%. High efficiency and high full load power factor. Well suited for variable torque, constant torque and constant horsepower applications.

NEMA Design C

Provides high starting torque (higher than types A and B, usually more than 200% of the rated torque). It is often used to drive heavy starting loads. Low starting current. The slip is less than or equal to 5%. Medium efficiency motors, well suited for equipment with high inertia and high starting torques at start.

NEMA Design D

Provides the highest starting torque of all NEMA motor types. Low starting current and full load speed. High slip (ranging from 5-8% instead of 1-5%) creates a stronger torque. The motors can run almost at full speed without overloading, well suited for machinery with high peak loads.

Technical Specifications–Design A (1/2)

Motor Type	Rated Power	Current	Rated Speed	Power Factor			Efficiency			Locked Current	Rated Torque	Locked Torque/ Rated Torque	Maximum Torque/ Rated Torque	Sound LP	Weight
	HP	A (460V)	r/m	cosφ			η%			A	N.m	T _L /T _N	T _b /T _N	dB(A)	kg
				50%	75%	100%	50%	75%	100%						
3600min ⁻¹ (2 Pole)															
143	1	1.3	3445	0.64	0.77	0.84	80.9	83.2	83.6	15	2.0	1.95	2.5	71	55
143	1.5	1.9	3445	0.72	0.82	0.87	81.7	84.2	84.2	20	2.0	1.95	2.50	71	57
145	2	2.5	3445	0.73	0.84	0.88	84.7	86.6	86.0	25	4.1	2.20	2.40	71	62
182	3	3.7	3505	0.73	0.83	0.89	85.9	87.7	86.5	32	6.1	2.05	2.30	75	108
184	5	5.8	3505	0.80	0.88	0.92	88.5	89.5	88.5	46	10.2	2.00	2.15	75	117
213	7.5	8.6	3505	0.82	0.89	0.91	88.7	89.8	89.7	63.5	15.2	1.80	2.00	77	194
215	10	11.3	3505	0.84	0.90	0.92	90.0	90.7	90.4	81	20.3	1.85	2.00	77	209
254	15	17.0	3520	0.81	0.88	0.91	89.1	90.8	91.2	116	30.4	1.85	2.00	77	342
256	20	22.4	3515	0.85	0.90	0.92	90.7	91.9	91.2	145	40.5	1.80	2.00	77	348
284	25	28.2	3535	0.84	0.89	0.91	89.9	91.5	91.7	182.5	50.2	1.35	2.00	82	483
286	30	34.1	3525	0.80	0.88	0.90	90.4	92.0	91.7	217.5	60.3	1.60	2.00	82	527
324	40	45.3	3540	0.87	0.80	0.90	90.7	92.3	92.4	290	80.0	1.55	2.00	80	642
326	50	56.1	3550	0.80	0.87	0.90	91.6	93.0	93.0	362.5	100	1.80	2.00	80	697
364	60	67.8	3560	0.78	0.86	0.89	91.4	93.0	93.6	435	120	1.75	2.00	91	847
365	75	83.7	3565	0.88	0.81	0.90	92.4	93.7	93.8	542.5	151	1.50	2.00	91	904
405	100	109.7	3565	0.85	0.90	0.91	92.9	94.0	94.3	725	199	1.30	2.00	92	1266
444	125	137.1	3570	0.81	0.88	0.90	93.0	94.3	95.0	907.5	250	1.40	2.00	92	1641
445	150	163.1	3570	0.84	0.89	0.91	93.5	94.7	95.0	1085	298	1.45	2.00	92	1742
447	200	215.8	3570	0.85	0.90	0.91	94.1	95.2	95.4	1450	399	1.35	2.00	92	2207
449	250	271.6	3575	0.83	0.87	0.90	95.8	95.6	95.8	1825	498	1.10	1.75	93	2379
449	300	329.6	3575	0.81	0.88	0.90	95.7	95.6	95.8	2200	598	1.10	1.75	96	2800
1800min ⁻¹ (4 Pole)															
143	1	1.6	1725	0.48	0.61	0.69	82.1	85.4	85.5	15	4.1	2.75	3.00	60	57
145	1.5	2.2	1720	0.55	0.67	0.75	84.2	86.6	86.5	20	6	2.50	2.80	60	60
145	2	2.8	1720	0.53	0.65	0.76	84.1	86.7	86.5	25	8.1	2.35	2.70	60	64
182	3	3.7	1745	0.68	0.79	0.85	88.6	89.9	89.5	32	12.2	2.25	2.50	62	115
184	5	5.9	1740	0.76	0.84	0.88	90.1	90.6	89.5	46	20.3	2.00	2.25	62	119
213	7.5	9.0	1750	0.70	0.80	0.85	90.4	91.7	91.7	63.5	30.2	1.95	2.15	67	214
215	10	12.0	1745	0.71	0.81	0.85	90.6	91.8	91.7	81	40.7	2.05	2.00	67	221
254	15	17.7	1760	0.72	0.82	0.86	91.1	92.3	92.4	116	60.5	1.80	2.00	68	355
256	20	22.9	1755	0.76	0.84	0.88	92.0	93.0	93.0	145	80.8	1.75	2.00	68	381
284	25	28.1	1765	0.79	0.86	0.89	92.8	93.6	93.6	182.5	101	1.95	2.00	69	518
286	30	33.7	1760	0.79	0.86	0.89	93.2	93.8	93.6	217.5	121	2.05	2.00	69	520
324	40	44.7	1770	0.82	0.88	0.89	93.5	94.3	94.1	290	160	1.80	2.00	74	677
326	50	55.1	1770	0.82	0.88	0.90	93.8	94.6	94.5	362.5	201	1.95	2.00	74	728
364	60	68.0	1775	0.77	0.84	0.87	93.9	94.8	95.0	435	240	2.05	2.00	80	891
365	75	83.7	1775	0.76	0.83	0.88	93.9	94.8	95.4	542.5	300	2.05	2.00	80	957
405	100	111.6	1775	0.79	0.86	0.88	94.4	95.3	95.4	725	400	1.75	2.00	83	1319
444	125	136.4	1780	0.82	0.87	0.90	95.6	95.5	95.4	907.5	499	1.50	2.00	86	1645
445	150	163.0	1780	0.82	0.88	0.90	94.8	95.7	95.8	1085	598	1.50	2.00	86	1773
447	200	214.0	1785	0.83	0.89	0.91	95.2	95.9	96.2	1450	799	1.45	2.00	86	2320
449	250	270.5	1785	0.81	0.89	0.90	95.4	95.8	96.2	1825	998	1.25	1.75	89	2602
449	300	328.2	1785	0.81	0.90	0.89	95.3	95.6	96.2	2200	1198	1.25	1.75	92	2800

Technical Specifications–Design A (2/2)

Motor Type	Rated Power	Current	Rated Speed	Power Factor			Efficiency			Locked Current	Rated Torque	Locked Torque/ Rated Torque	Maximum Torque/ Rated Torque	Sound LP	Weight
	HP	A (460v)	r/m	cosφ			η%			A	N.m	T _L /T _N	T _b /T _N	dB(A)	kg
				50%	75%	100%	50%	75%	100%						
1200min ⁻¹ (6 Pole)															
145	1	1.6	1150	0.50	0.62	0.72	81.6	84.3	82.5	15	6.1	2.20	2.65	55	60
182	1.5	2.2	1160	0.54	0.66	0.74	85.4	87.8	87.5	20	9.1	2.05	2.50	56	104
184	2	2.9	1155	0.54	0.67	0.74	85.9	88.3	88.5	25	12.2	2.35	2.40	56	112
213	3	4.2	1170	0.55	0.67	0.75	86.3	88.5	89.5	32	18.2	2.00	2.30	58	198
215	5	6.6	1165	0.61	0.72	0.79	88.4	89.9	89.5	46	30.5	1.90	2.15	58	221
254	7.5	9.4	1170	0.64	0.75	0.82	89.5	91.1	91.2	63.5	45.4	1.90	2.05	60	315
256	10	12.6	1170	0.65	0.76	0.82	90.1	91.3	91.0	81	60.7	2.00	2.00	60	331
284	15	18.7	1170	0.65	0.76	0.82	90.9	92.1	91.7	116	90.4	2.05	2.00	63	456
286	20	24.9	1170	0.66	0.77	0.82	91.4	92.5	91.7	145	121	2.15	2.00	63	490
324	25	30.7	1175	0.65	0.76	0.82	92.1	93.1	93.0	182.5	150	2.10	2.00	64	662
326	30	36.8	1175	0.67	0.77	0.82	92.5	93.4	93.0	217.5	180	2.15	2.00	64	677
364	40	46.3	1180	0.74	0.82	0.86	93.0	94.0	94.1	290	240	2.10	2.00	66	886
365	50	56.6	1180	0.75	0.83	0.88	93.4	94.2	94.3	362.5	301	2.05	2.00	66	904
404	60	68.4	1185	0.75	0.83	0.87	93.6	94.6	94.5	435	361	2.05	2.00	68	1206
405	75	85.4	1185	0.77	0.84	0.87	93.8	94.7	94.5	542.5	452	2.00	2.00	68	1281
444	100	113.3	1185	0.76	0.84	0.87	94.3	95.2	95.0	725	601	1.85	2.00	74	1676
445	125	140.1	1185	0.78	0.85	0.88	94.5	95.3	95.2	907.5	749	1.75	2.00	74	1779
447	150	166.7	1185	0.78	0.85	0.88	94.9	95.7	95.8	1085	900	1.95	2.00	74	2474
449	200	219.7	1185	0.77	0.85	0.89	95.1	95.7	95.8	1450	1202	1.90	2.00	78	2639
449	250	287.6	1185	0.78	0.86	0.85	94.9	95.6	95.8	1825	1503	1.75	1.75	82	2796

Technical Specifications–Design B (1/2)

Motor Type	Rated Power	Current	Rated Speed	Power Factor			Efficiency			Locked Current	Rated Torque	Locked Torque/ Rated Torque	Maximum Torque/ Rated Torque	Sound LP	Weight
	HP	A (460v)	r/m	cosφ			η%			A	N.m	T _L /T _N	T _b /T _N	dB(A)	kg
				50%	75%	100%	50%	75%	100%						
3600min ⁻¹ (2 Pole)															
143	1	1.3	3445	0.64	0.77	0.84	80.9	83.2	83.6	15	2.0	1.95	2.5	71	55
143	1.5	1.9	3445	0.72	0.82	0.87	81.7	84.2	84.2	20	2.0	1.95	2.50	71	57
145	2	2.5	3445	0.73	0.84	0.88	84.7	86.6	86.0	25	4.1	2.20	2.40	71	62
182	3	3.7	3505	0.73	0.83	0.89	85.9	87.7	86.5	32	6.1	2.05	2.30	75	108
184	5	5.8	3505	0.80	0.88	0.92	88.5	89.5	88.5	46	10.2	2.00	2.15	75	117
213	7.5	8.6	3505	0.82	0.89	0.91	88.7	89.8	89.7	63.5	15.2	1.80	2.00	77	194
215	10	11.3	3505	0.84	0.90	0.92	90.0	90.7	90.4	81	20.3	1.85	2.00	77	209
254	15	17.0	3520	0.81	0.88	0.91	89.1	90.8	91.2	116	30.4	1.85	2.00	77	342
256	20	22.4	3515	0.85	0.90	0.92	90.7	91.9	91.2	145	40.5	1.80	2.00	77	348
284	25	28.2	3535	0.84	0.89	0.91	89.9	91.5	91.7	182.5	50.2	1.35	2.00	82	483
286	30	34.1	3525	0.80	0.88	0.90	90.4	92.0	91.7	217.5	60.3	1.60	2.00	82	527
324	40	45.3	3540	0.87	0.80	0.90	90.7	92.3	92.4	290	80.0	1.55	2.00	80	642
326	50	56.1	3550	0.80	0.87	0.90	91.6	93.0	93.0	362.5	100	1.80	2.00	80	697
364	60	67.8	3560	0.78	0.86	0.89	91.4	93.0	93.6	435	120	1.75	2.00	91	847
365	75	83.7	3565	0.88	0.81	0.90	92.4	93.7	93.8	542.5	151	1.50	2.00	91	904
405	100	109.7	3565	0.85	0.90	0.91	92.9	94.0	94.3	725	199	1.30	2.00	92	1266
444	125	137.1	3570	0.81	0.88	0.90	93.0	94.3	95.0	907.5	250	1.40	2.00	92	1641
445	150	163.1	3570	0.84	0.89	0.91	93.5	94.7	95.0	1085	298	1.45	2.00	92	1742
447	200	215.8	3570	0.85	0.90	0.91	94.1	95.2	95.4	1450	399	1.35	2.00	92	2207
449	250	271.6	3575	0.83	0.87	0.90	95.8	95.6	95.8	1825	498	1.10	1.75	93	2379
449	300	329.6	3575	0.81	0.88	0.90	95.7	95.6	95.8	2200	598	1.10	1.75	96	2800
1800min ⁻¹ (4 Pole)															
143	1	1.6	1725	0.48	0.61	0.69	82.1	85.4	85.5	15	4.1	2.75	3.00	60	57
145	1.5	2.2	1720	0.55	0.67	0.75	84.2	86.6	86.5	20	6	2.50	2.80	60	60
145	2	2.8	1720	0.53	0.65	0.76	84.1	86.7	86.5	25	8.1	2.35	2.70	60	64
182	3	3.7	1745	0.68	0.79	0.85	88.6	89.9	89.5	32	12.2	2.25	2.50	62	115
184	5	5.9	1740	0.76	0.84	0.88	90.1	90.6	89.5	46	20.3	2.00	2.25	62	119
213	7.5	9.0	1750	0.70	0.80	0.85	90.4	91.7	91.7	63.5	30.2	1.95	2.15	67	214
215	10	12.0	1745	0.71	0.81	0.85	90.6	91.8	91.7	81	40.7	2.05	2.00	67	221
254	15	17.7	1760	0.72	0.82	0.86	91.1	92.3	92.4	116	60.5	1.80	2.00	68	355
256	20	22.9	1755	0.76	0.84	0.88	92.0	93.0	93.0	145	80.8	1.75	2.00	68	381
284	25	28.1	1765	0.79	0.86	0.89	92.8	93.6	93.6	182.5	101	1.95	2.00	69	518
286	30	33.7	1760	0.79	0.86	0.89	93.2	93.8	93.6	217.5	121	2.05	2.00	69	520
324	40	44.7	1770	0.82	0.88	0.89	93.5	94.3	94.1	290	160	1.80	2.00	74	677
326	50	55.1	1770	0.82	0.88	0.90	93.8	94.6	94.5	362.5	201	1.95	2.00	74	728
364	60	68.0	1775	0.77	0.84	0.87	93.9	94.8	95.0	435	240	2.05	2.00	80	891
365	75	83.7	1775	0.76	0.83	0.88	93.9	94.8	95.4	542.5	300	2.05	2.00	80	957
405	100	111.6	1775	0.79	0.86	0.88	94.4	95.3	95.4	725	400	1.75	2.00	83	1319
444	125	136.4	1780	0.82	0.87	0.90	95.6	95.5	95.4	907.5	499	1.50	2.00	86	1645
445	150	163.0	1780	0.82	0.88	0.90	94.8	95.7	95.8	1085	598	1.50	2.00	86	1773
447	200	214.0	1785	0.83	0.89	0.91	95.2	95.9	96.2	1450	799	1.45	2.00	86	2320
449	250	270.5	1785	0.81	0.89	0.90	95.4	95.8	96.2	1825	998	1.25	1.75	89	2602
449	300	328.2	1785	0.81	0.90	0.89	95.3	95.6	96.2	2200	1198	1.25	1.75	92	2800

Technical Specifications–Design B (2/2)

Motor Type	Rated Power	Current	Rated Speed	Power Factor			Efficiency			Locked Current	Rated Torque	Locked Torque/ Rated Torque	Maximum Torque/ Rated Torque	Sound LP	Weight
	HP	A (460v)	r/m	cosφ			η%			A	N.m	T _L /T _N	T _b /T _N	dB(A)	kg
				50%	75%	100%	50%	75%	100%						
1200min ⁻¹ (6 Pole)															
145	1	1.6	1150	0.50	0.62	0.72	81.6	84.3	82.5	15	6.1	2.20	2.65	55	60
182	1.5	2.2	1160	0.54	0.66	0.74	85.4	87.8	87.5	20	9.1	2.05	2.50	56	104
184	2	2.9	1155	0.54	0.67	0.74	85.9	88.3	88.5	25	12.2	2.35	2.40	56	112
213	3	4.2	1170	0.55	0.67	0.75	86.3	88.5	89.5	32	18.2	2.00	2.30	58	198
215	5	6.6	1165	0.61	0.72	0.79	88.4	89.9	89.5	46	30.5	1.90	2.15	58	221
254	7.5	9.4	1170	0.64	0.75	0.82	89.5	91.1	91.2	63.5	45.4	1.90	2.05	60	315
256	10	12.6	1170	0.65	0.76	0.82	90.1	91.3	91.0	81	60.7	2.00	2.00	60	331
284	15	18.7	1170	0.65	0.76	0.82	90.9	92.1	91.7	116	90.4	2.05	2.00	63	456
286	20	24.9	1170	0.66	0.77	0.82	91.4	92.5	91.7	145	121	2.15	2.00	63	490
324	25	30.7	1175	0.65	0.76	0.82	92.1	93.1	93.0	182.5	150	2.10	2.00	64	662
326	30	36.8	1175	0.67	0.77	0.82	92.5	93.4	93.0	217.5	180	2.15	2.00	64	677
364	40	46.3	1180	0.74	0.82	0.86	93.0	94.0	94.1	290	240	2.10	2.00	66	886
365	50	56.6	1180	0.75	0.83	0.88	93.4	94.2	94.3	362.5	301	2.05	2.00	66	904
404	60	68.4	1185	0.75	0.83	0.87	93.6	94.6	94.5	435	361	2.05	2.00	68	1206
405	75	85.4	1185	0.77	0.84	0.87	93.8	94.7	94.5	542.5	452	2.00	2.00	68	1281
444	100	113.3	1185	0.76	0.84	0.87	94.3	95.2	95.0	725	601	1.85	2.00	74	1676
445	125	140.1	1185	0.78	0.85	0.88	94.5	95.3	95.2	907.5	749	1.75	2.00	74	1779
447	150	166.7	1185	0.78	0.85	0.88	94.9	95.7	95.8	1085	900	1.95	2.00	74	2474
449	200	219.7	1185	0.77	0.85	0.89	95.1	95.7	95.8	1450	1202	1.90	2.00	78	2639
449	250	287.6	1185	0.78	0.86	0.85	94.9	95.6	95.8	1825	1503	1.75	1.75	82	2796

Technical Specifications–Design C

Motor Type	Rated Power	Current	Rated Speed	Power Factor			Efficiency			Locked Current	Rated Torque	Locked Torque/ Rated Torque	Maximum Torque/ Rated Torque	Sound LP	Weight
	HP	A (460V)	r/m	cosφ			η%			A	N.m	T _L /T _N	T _B /T _N	dB(A)	kg
				50%	75%	100%	50%	75%	100%						
1800min ⁻¹ (4 Pole)															
143	1	1.6	1755	41.2	60.0	68.0	81.50	85.00	85.90	15	2.99	3.32	3.96	67	23
145	1.5	2.2	1750	49.0	61.0	69.5	83.00	86.00	87.00	20	4.49	3.30	3.83	66	40
145	2	3.1	1740	47.4	60.6	69.0	86.20	87.70	87.50	22	6.07	3.42	3.35	67	43
182	3	3.7	1765	70.0	80.0	83.0	88.00	90.00	90.30	32	8.93	2.90	3.00	66	46
184	5	6.2	1750	72.0	81.0	83.5	89.00	90.00	90.00	47	15	2.81	2.98	66	54
213	7.5	9.0	1765	63.0	74.0	80.0	90.00	91.00	91.70	62	22.3	2.75	3.05	67	82
215	10	12.7	1760	64.2	75.2	80.1	92.10	92.60	92.20	78	29.5	2.59	3.19	68	86
254	15	19.2	1775	62.0	73.0	78.8	91.00	92.00	92.70	117	44.4	2.36	2.67	68	128
256	20	25.0	1755	65.3	75.5	79.6	93.00	93.70	93.40	132	59.0	2.34	2.51	69	160
284	25	31.0	1775	67.0	77.0	81.3	92.00	93.00	93.60	182	73.4	2.38	1.75	72	196
286	30	37.0	1775	68.5	78.2	82.0	93.00	93.90	93.80	204	88.5	2.44	2.56	65	204
324	40	48.0	1775	67.0	77.0	82.9	93.00	94.00	94.40	289	119	2.38	2.48	72	245
326	50	60.0	1775	70.9	79.3	82.1	95.1	95.1	94.5	345	148	2.25	2.37	70	284
364	60	68.0	1785	66.0	77.0	82.0	45.00	58.00	72.00	434	178	2.43	2.51	74	398
365	75	94.0	1785	65.5	75.3	78.4	95.60	96.00	95.80	523	221	2.21	2.30	75	435
405	100	124.0	1785	72.7	78.5	79.2	95.90	96.00	95.50	725	294	2.14	2.12	74	576
444	125	142.0	1785	83.0	86.0	86.6	95.00	95.00	95.40	887	368	2.25	2.05	72	786
445	150	168.0	1785	83.0	87.0	87.3	95.70	96.00	95.80	1095	441	2.79	2.10	73	776
447	200	223.0	1790	82.7	86.6	87.0	96.60	96.90	96.50	1297	587	2.40	2.08	74	1075
1600min ⁻¹ (6 Pole)															
145	1	1.7	1155	45.8	59.3	68.6	80.90	83.60	83.80	10	4.43	2.97	3.17	65	26
182	1.5	2.3	1180	50.0	62.0	69.0	84.00	87.00	87.90	17	9.10	2.90	3.39	68	45
184	2	3.3	1180	42.8	55.2	63.3	86.00	88.20	88.50	19	8.95	2.78	2.71	69	47
213	3	5.0	1184	46.0	60.0	63.0	87.00	89.00	89.80	33	13.4	2.80	3.69	68	45
215	5	7.7	1180	46.9	59.6	67.5	87.40	89.50	90.00	45	22.1	3.34	3.37	69	83
254	7.5	11.0	1184	50.0	63.0	70.2	88.00	90.00	91.00	65	33.4	2.41	2.74	69	128
256	10	15.0	1185	49.8	61.9	68.6	90.60	91.70	91.50	80	44.3	2.52	2.65	66	131
284	15	19.5	1185	58.0	70.0	77.4	90.00	91.00	92.00	114	65.4	2.20	2.57	70	194
286	20	26.0	1185	57.0	70.0	77.4	90.00	91.00	92.20	145	89.2	2.29	2.69	71	196
324	25	33.0	1185	52.0	65.0	75.7	91.00	92.00	93.00	179	110	2.55	2.51	69	246
326	30	36.8	1185	53.0	66.0	76.4	91.00	93.00	93.10	215	133	2.4	2.36	70	280
364	40	48.0	1190	72.0	80.0	83.7	93.00	94.00	94.10	290	178	2.09	2.52	70	368
365	50	62.0	1190	66.6	76.3	80.4	94.30	95.00	94.90	357	221	2.05	2.50	71	381
404	60	81.0	1195	58.2	68.6	73.1	94.10	95.00	95.10	437	264	2.85	2.35	71	528
405	75	93.0	1193	65.0	75.0	79.7	93.00	94.00	94.80	560	330	2.13	2.53	71	245
444	100	123.0	1192	68.0	77.0	80.3	94.00	95.00	95.00	729	441	2.19	2.32	74	742
445	125	152.0	1192	70.0	79.0	80.9	94.00	95.00	95.00	852	551	2.05	2.12	74	780
447	150	181.0	1193	63.0	78.0	80.8	94.00	96.00	95.80	1061	660	2.16	2.21	76	1030
449	200	246.0	1192	68.2	76.5	79.3	95.90	96.30	96.00	1376	881	2.30	2.09	77	1278

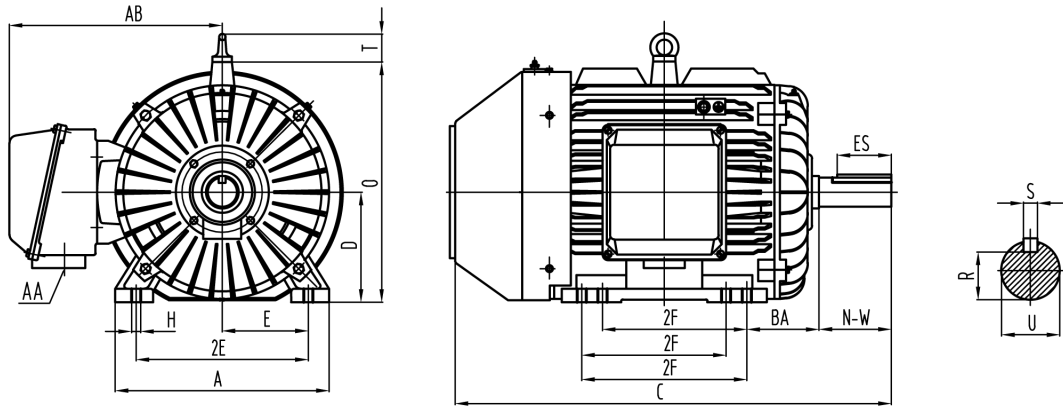
Technical Specifications–Design D

Motor Type	Rated Power	Current	Rated Speed	Power Factor			Efficiency			Locked Current	Rated Torque	Locked Torque/ Rated Torque	Maximum Torque/ Rated Torque	Sound LP	Weight
	HP	A (460v)	r/m	cosφ			η%			A	N.m	T _L /T _N	T _b /T _N	dB(A)	kg
				50%	75%	100%	50%	75%	100%						
1200min ⁻¹ (6 Pole)															
215	5	7.5	1130	0.484	0.615	0.701	88.4	89.9	89.5	39.4	22.9	2.36	3.34	58	221
254	7.5	10.5	1120	0.704	0.808	0.856	86.0	85.5	83.7	46.8	35.6	2.61	2.92	60	315
256	10	13.5	1120	0.542	0.677	0.759	84.9	85.8	85.2	85.8	46.4	3.78	4.10	60	331
284	15	20.0	1110	0.578	0.710	0.785	84.5	84.8	83.6	110.9	70.3	3.09	3.31	63	456
286	20	26.0	1105	0.626	0.750	0.816	85.7	85.6	84.2	142.9	94.1	3.02	3.28	63	490
324	25	32.0	1140	0.631	0.750	0.811	86.0	87.0	86.5	181.4	114.6	2.72	3.12	64	662
326	30	39.0	1040	0.655	0.768	0.824	86.7	87.3	86.6	209.6	137.8	2.63	3.02	64	677
364	40	53.0	1130	0.668	0.778	0.833	88.0	88.7	88.3	295.3	183.1	2.81	3.29	66	886
365	50	64.0	1135	0.688	0.793	0.843	88.4	89.1	88.6	359.9	229	2.77	3.23	66	904
404	60	75.5	1140	0.701	0.802	0.848	88.5	89.1	88.6	409.1	275.5	2.63	3.07	68	1206
405	75	91.0	1140	0.699	0.801	0.849	88.8	89.5	89.0	534.8	343.8	2.80	3.25	68	1281
444	100	113.3	1140	0.703	0.804	0.851	88.7	89.3	89.5	724	468	2.60	3.25	68	1676
365	50	56.6	1180	0.75	0.83	0.88	93.4	94.2	94.3	362.5	301	2.05	2.00	66	904
404	60	68.4	1185	0.75	0.83	0.87	93.6	94.6	94.5	435	361	2.05	2.00	68	1206
405	75	85.4	1185	0.77	0.84	0.87	93.8	94.7	94.5	542.5	452	2.00	2.00	68	1281
444	100	113.3	1185	0.76	0.84	0.87	94.3	95.2	95.0	725	601	1.85	2.00	74	1676

Bearings

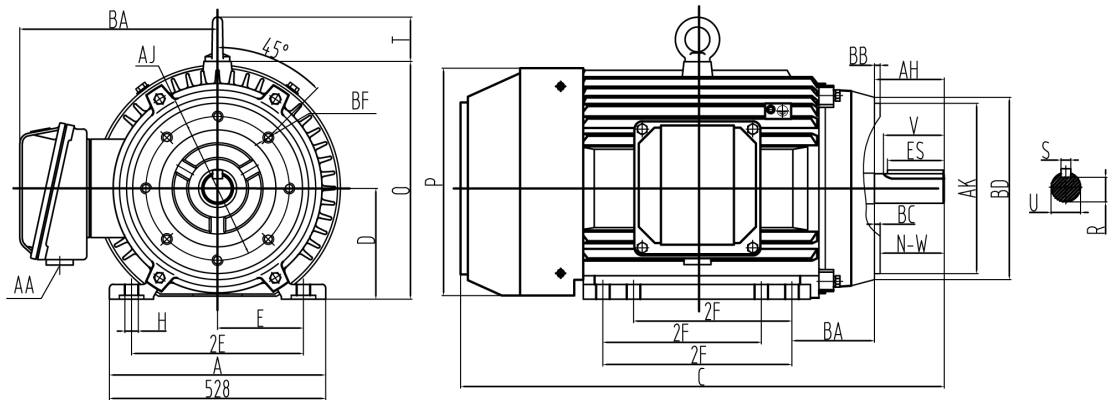
Frame	Driving End	Non-driving End	Pole
140T	6205 2Z/C3	6205 2Z/C3	2-6P
180T	6306 2Z/C3	6306 2Z/C3	2-6P
210T	6308 2Z/C3	6308 2Z/C3	2-6P
250T	6309/C3	6309/C3	2-6P
280T	6310/C3	6310/C3	2-6P
320T	6312/C3	6312/C3	2-6P
360T	6314/C3	6314/C3	2-6P
404/5T	6314/C3	6314/C3	2P
404/5T	6316/C3	6316/C3	4-6P
444/5T	6314/C3	6314/C3	2P
444/5T	NU318/C3	6318/C3	4-6P
447/9T	6314/C3	6314/C3	2P
447/9T	NU319/C3	6319/C3	4P
447/9T	NU322/C3	6319/C3	6P

Mounting and Overall Dimensions for Foot-mounted Motors with Single Straight-shaft Extension



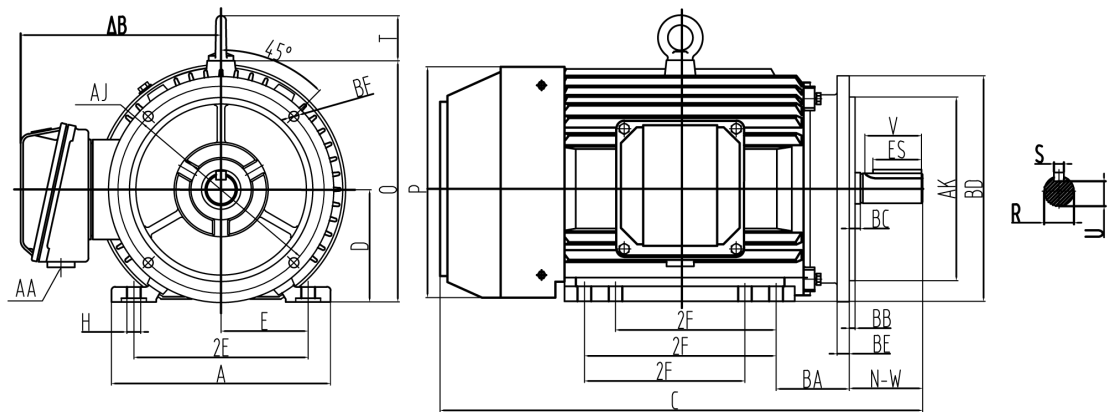
Frame Size	A Max	C	D	2E	2F	BA	H	N-W	O	R	S	T	U	ES Min	AA NPT	AB			
143T	7.00	12.99	3.50	5.5	4.00	2.25	0.34	2.25	6.89	0.771	0.188	1.421	0.875	1.41	0.75	6.10			
145T					5.00														
182T	9.00	16.14	4.50	7.5	4.50	2.75	0.41	2.75	8.69	0.986	0.250	1.700	1.125	1.78	0.75	7.87			
184T					5.50														
213T	10.24	20.47	5.25	8.5	5.50	3.50		3.38	10.74	1.201	0.312		1.375	2.41	1.00	8.66			
215T					7.00														
254T	12.50	25.47	6.25	10.0	8.25	4.25	0.53	4.00	13.07	1.416	0.375	2.047	1.625	2.91	1.25	10.24			
256T					10.00														
284T	13.74	27.83	7.00	11.0	9.50	4.75		4.62	14.41	1.591	0.500		1.875	3.28	1.50	12.20			
284TS		26.46								11.00	3.25						1.416	0.375	1.625
286T		27.83			3.25						1.591						0.500	1.875	3.28
286TS		26.46								1.416	0.375						1.625	1.91	
324T	15.28	30.97	8.00	12.5	10.50	5.25		0.66	5.25	16.03	1.845		0.500	2.400	2.125	3.91	2.00	13.39	
324TS		29.47					12.00					3.75			1.591	1.875			2.03
326T		30.97			3.75						5.25	1.845			2.125	3.91			
326TS		29.47					1.591				1.875	2.03							
364T	17.13	33.94	9.00	14.0	11.25	5.88	5.88		18.98	2.021	0.625	2.835	2.375	4.28	3.00	17.32			
364TS		31.81											12.25	3.75			1.591	0.500	1.875
365T		33.94			3.75					5.88	2.021			0.625			2.375	4.28	
365TS		31.807						1.591		0.500	1.875		2.03						
404T	19.06	39.20	10.00	16.0	12.25	6.63	0.81	7.25	21.08	2.450	0.750	2.835	2.875	5.65	3.00	18.70			
404TS		36.20											13.75	4.25			1.845	0.500	2.125
405T		39.20			4.25					7.25	2.450			0.750			2.875	5.65	
405TS		36.20								1.845	0.500		2.125	2.78					
444T	21.34	47.05	11.00	18.0	14.50	7.50		8.50	23.20	2.880	0.875		2.835	3.375	6.91	3.00	19.68		
444TS-2		43.30												16.50	4.75			2.021	0.625
445T		47.05			20.00					8.50	2.880				0.875			3.375	6.91
445TS-2		43.30								4.75	2.021			0.625	2.375			3.03	
447T		55.70			25.00			8.50	23.80	2.880	0.875			3.375	6.91	22.80			
447TS-2		50.80															4.75	2.021	0.625
449T		55.70			4.75					2.880	0.875						3.375	6.91	
449TS-2		50.80																	2.021
505US	24.72	46.09	12.50	20.0	18.00	8.50	0.94	4.75	27.00	2.450	0.750		2.875	3.00	4.00	24.30			
505UZ	24.72	52.96	12.50	20.0	18.00	8.50	0.94	11.62	27.00	3.309	1.000		3.875	10.00	4.00	24.30			
5010USS	24.72	50.42	12.50	20.0	32.00	8.50	0.94	4.75	27.00	2.021	0.625		2.375	2.38	4.00	24.30			
5010US	24.72	50.42	12.50	20.0	32.00	8.50	0.94	6.25	27.00	3.134	0.875		3.625	5.00	4.00	24.30			
5010UZ	24.72	57.29	12.50	20.0	32.00	8.50	0.94	11.62	27.00	3.817	1.000		4.375	10.00	4.00	24.30			
586T	24.72	66.34	12.50	23.0	25.00	10.00	1.18	6.25	34.17	3.817	1.000		4.375	8.66	2-NPT3	22.22			
587T	24.72	78.15	12.50	23.0	25.00	10.00	1.18	11.62	34.17	3.817	1.000		4.375	8.66	2-NPT3	22.22			
5810U2	29.92	71.68	14.50	23.0	36/32	10.00	1.20	6.25	30.76	3.134	0.875		3.625	5.00	4-NPT2	31.10			
5810U2	29.92	76.60	14.50	23.0	36/32	10.00	1.20	11.62	30.76	4.55	1.250		5.250	10.00	4-NPT2	31.10			

Mounting and Overall Dimensions for C Face-mounted and Foot-mounted Motors



Frame Size	A Max	C	D	2E	2F	BA	H	N-W	O	R	S	T	U	ES Min	AA NPT	AB	AJ	AK	BB	BC	BD	No.	BF	
143T	7.00	12.99	3.5	5.5	4.00	2.75	0.34	2.25	6.886	0.771	0.188	1.421	0.875	1.41	0.75	6.100	5.88	5.88	0.16	+0.12	6.5	4	3/8-16	
145T					5.00																			
182T	9.00	16.14	4.5	7.5	4.50	3.50	0.41	2.75	8.693	0.986	0.250	1.700	1.125	1.78	0.75	7.874	7.25	7.25	0.25	+0.12	9	4	1/2-13	
184T					5.50																			
213T	10.24	20.47	5.3	8.5	5.50	4.25		3.75	10.741	1.201	0.312	1.700	1.375	2.41	1.00	8.661	7.25	7.25	0.25	+0.25	9	4	1/2-13	
215T					7.00																			
254T	12.50	25.47	6.3	10.0	8.25	4.75	0.53	4.00	13.073	1.416	0.375	2.047	1.625	2.91	1.25	10.240	7.25	7.25	0.25	+0.25	10	4	1/2-13	
256T					10.00																			
284T	13.74	27.83	7.0	11.0	9.50	4.75		4.62	14.410	1.591	0.500	2.047	1.875	3.28	1.50	12.200	9	9	0.25	+0.25	11.25	4	1/2-13	
284TS		26.46								3.25	1.416		0.375	1.625			1.91	9	9	0.25	+0.25			11.25
286T		27.83			4.62			1.591		0.500	1.875		3.28	9			9	0.25	0.25	11.25	4	1/2-13		
286TS		26.46			3.25			1.416		0.375	1.625		1.91	9			9	0.25	+0.25	11.25				
324T	15.28	30.97	8.0	12.5	10.50	5.25	0.66	5.25	16.033	1.845	0.500	2.400	2.125	3.91	2.00	13.386	11	11	0.25	+0.25	14	4	5/8-11	
324TS		29.47								3.75			1.591	1.875			2.03	11	11	0.25	+0.25			14
326T		30.97			12.00			5.25		1.845			2.125	3.91			4	5/8-11						
326TS		29.47						3.75		1.591			1.875	2.03					11	11	0.25	+0.25	14	
364T	17.13	33.94	9.0	14.0	11.25	5.88		5.88	18.976	2.021	0.625	2.835	2.375	4.28	3.00	17.323	11	11	0.25	+0.25	14	8	5/8-11	
364TS		31.81								3.75	1.591		0.500	1.875			2.03	11	11	0.25	+0.25	14	8	5/8-11
365T		33.94			12.25			5.88		2.021	0.625		2.375	4.28			11	11	0.25	+0.25	14	8	5/8-11	
365TS		31.81						3.75		1.591	0.500		1.875	2.03			11	11	0.25	+0.25	14	8	5/8-11	
404T	19.06	39.20	10.0	16.0	12.25	6.63	0.66	7.25	21.083	2.450	0.750	2.835	2.875	5.65	3.00	18.700	11	11	0.25	+0.25	15.5	8	5/8-11	
404TS		36.20								4.25	1.845		0.500	2.125			2.78	11	11	0.25	+0.25	15.5	8	5/8-11
405T		39.20			13.75			7.25		2.450	0.750		2.875	5.65			11	11	0.25	+0.25	15.5	8	5/8-11	
405TS		36.20						4.25		1.845	0.500		2.125	2.78			11	11	0.25	+0.25	15.5	8	5/8-11	
444T	21.34	47.05	11.0	18.0	14.50	7.50	0.81	8.50	23.200	2.880	0.875	2.835	3.375	6.91	3.00	19.678	14	14	0.25	+0.25	18	8	5/8-11	
444TS-2		43.30								4.75	2.021		0.625	2.375			3.03	14	14	0.25	+0.25	18	8	5/8-11
445T		47.05			16.50			8.50		2.880	0.875		3.375	6.91			14	14	0.25	+0.25	18	8	5/8-11	
445TS-2		43.30						4.75		2.021	0.625		2.375	3.03			14	14	0.25	+0.25	18	8	5/8-11	
447T		55.70			20.00			8.50	23.800	2.880	0.875		3.375	6.91			22.800	14	14	0.25	+0.25	18	8	5/8-11
447TS-2		50.80						4.75		2.021	0.625		2.375	3.03				14	14	0.25	+0.25	18	8	5/8-11
449T		55.70			25.00			8.50		2.880	0.875		3.375	6.91				14	14	0.25	+0.25	18	8	5/8-11
449TS-2		50.80						4.75		2.021	0.625		2.375	3.03				14	14	0.25	+0.25	18	8	5/8-11

Mounting and Overall Dimensions for D Face-mounted and Foot-mounted Motors



Frame Size	A Max	C	D	2E	2F	BA	H	N-W	O	R	S	T	U	ES Min	AA NPT	AB	AJ	AK	BB	BC	BD	No.	BF				
143T	7.00	12.99	3.50	5.5	4.00	2.75	0.34	2.25	6.89	0.771	0.188	1.421	0.875	1.41	0.75	6.100	10	9	0.25	0	11	4	0.53				
145T					5.00																						
182T	9.00	16.14	4.50	7.5	4.50	3.50	0.41	2.75	8.69	0.986	0.250	1.700	1.125	1.78	0.75	7.874	10	9	0.25	0	11	4	0.53				
184T					5.50																						
213T	10.24	20.47	5.25	8.5	5.50	4.25		3.38	10.74	1.201	0.312		1.375	2.41	1.00	8.661	10	9	0.25	0	11	4	0.53				
215T					7.00																						
254T	12.50	25.47	6.25	10.0	8.25	4.75	0.53	4.00	13.07	1.416	0.375	2.047	1.625	2.91	1.25	10.240	12.5	11	0.25	0	11	4	0.81				
256T					10.00																						
284T	13.74	27.83	7.00	11.0	9.50	4.75		5.88	4.62	14.41	1.591		0.500	2.047	1.875	3.28	1.5	12.200	12.5	11	0.25	0	14	4	0.81		
284TS		26.46			3.25						1.416		0.375		1.625	1.91			12.5	11	0.25	0	14	4	0.81		
286T		27.83			4.62						1.591		0.500		1.875	3.28			12.5	11	0.25	0	14	4	0.81		
286TS		26.46			3.25						1.416		0.375		1.625	1.91			12.5	11	0.25	0	14	4	0.81		
324T	15.28	30.97	8.00	12.5	10.50	5.25	0.66	5.25	16.03	1.845	0.500	2.400	2.125	3.91	2.00	13.386	16	14	0.25	0	18	4	0.81				
324TS		29.47			3.75					1.591			1.875	2.03			16	14	0.25	0	18	4	0.81				
326T		30.97			5.25					1.845			2.125	3.91			16	14	0.25	0	18	4	0.81				
326TS		29.47			3.75					1.591			1.875	2.03			16	14	0.25	0	18	4	0.81				
364T	17.13	33.94	9.00	14.0	11.25	5.88		5.88	18.98	2.021	0.625	2.835	2.375	4.28	3.00	17.323	16	14	0.25	0	18	4	0.81				
364TS		31.81			3.75					1.591	0.500		1.875	2.03			16	14	0.25	0	18	4	0.81				
365T		33.94			5.88					2.021	0.625		2.375	4.28			16	14	0.25	0	18	4	0.81				
365TS		31.81			3.75					1.591	0.500		1.875	2.03			16	14	0.25	0	18	4	0.81				
404T	19.06	39.20	10.00	16.0	12.25	6.63	0.81	7.25	21.08	2.450	0.750	2.835	2.875	5.65	3.00	18.700	20	18	0.25	0	22	8	0.81				
404TS		36.20			4.25					1.845	0.500		2.125	2.78			20	18	0.25	0	22	8	0.81				
405T		39.20			7.25					2.450	0.750		2.875	5.65			20	18	0.25	0	22	8	0.81				
405TS		36.20			4.25					1.845	0.500		2.125	2.78			20	18	0.25	0	22	8	0.81				
444T	21.34	47.05	11.00	18.0	14.50	7.50		0.81	8.50	23.20	2.880	0.875	2.835	3.375		6.91	19.678	20	18	0.25	0	22	8	0.81			
444TS-2		43.30			4.75						2.021	0.625		2.375		3.03		20	18	0.25	0	22	8	0.81			
445T		47.05			8.50						2.880	0.875		3.375		6.91		20	18	0.25	0	22	8	0.81			
445TS-2		43.30			4.75						2.021	0.625		2.375		3.03		20	18	0.25	0	22	8	0.81			
447T		55.70			20.00				8.50	23.80	2.880	0.875		3.375		6.91		22.800	20	18	0.25	0	22	8	0.81		
447TS-2		50.80									4.75	2.021		0.625		2.375			3.03	20	18	0.25	0	22	8	0.81	
449T		55.70									25.00	8.50		2.880		0.875			3.375	6.91	20	18	0.25	0	22	8	0.81
449TS-2		50.80																									



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