

# TDC Series NEMA Premium Efficiency 3-Phase Motors

## 7.5HP thru 250HP

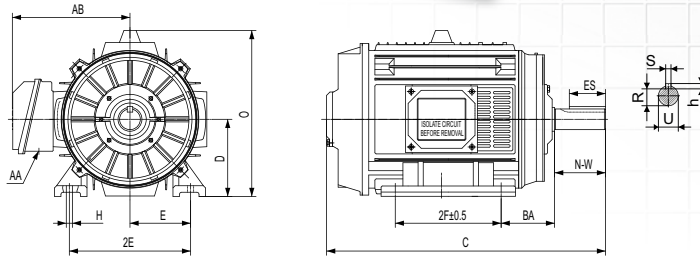
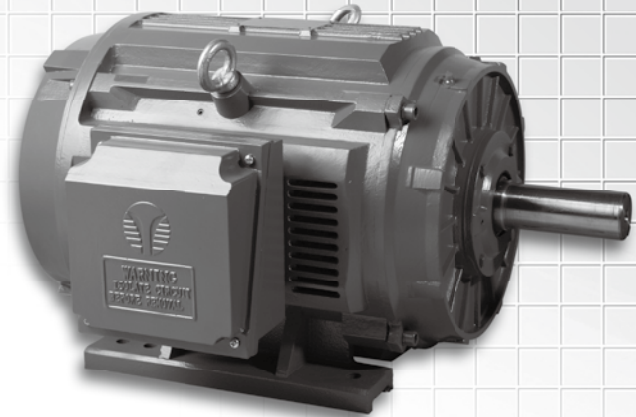
- 254T thru 449T
- Cast Iron ODP

### FEATURES

- Continuous Duty 40°C Ambient
- Cast Iron frames
- Ball Bearings
- IP23 Protection

### APPLICATIONS

- Pumps
- Compressors
- Fans
- Machine Tools
- Other General Purpose Three Phase Applications



Foot Mounted Figure 1

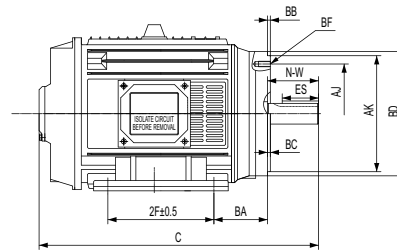
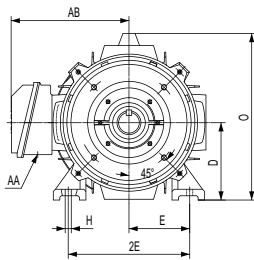


Figure 2 C-Face, Foot Mounted

## Overall & Installation Dimensions

Frame	Foot Mounting				Shaft							General				C-Face					
	2E	2F	H	BA	N-W	U	S	h <sub>j</sub>	R	ES	C	D	O	AA	AB	AJ	AK	BB	BC	BD	BF
254T	10	8.25	0.53	4.25	4	1.625	0.375	0.375	1.416	2.91	25.2	6.25	13.81	1-1/4	10.1	-	-	-	-	-	-
256T		10		4.75												7.25	8.5	0.25	0.25	10	4*1/2-13
254TC		8.25		4.75												7.25	8.5	0.25	0.25	10	4*1/2-13
256TC		10		4.75												7.25	8.5	0.25	0.25	10	4*1/2-13
284T	11	9.5	0.53	4.75	4.62	1.875	0.5	0.5	1.591	3.28	27.1	7.0	15.47	1-1/2	10.81	9.0	10.5	0.25	0.25	11.25	4*1/2-13
286T		11		4.75												9.0	10.5	0.25	0.25	11.25	4*1/2-13
284TS		9.5		4.75												9.0	10.5	0.25	0.25	11.25	4*1/2-13
286TS		11		4.75												9.0	10.5	0.25	0.25	11.25	4*1/2-13
324T	12.5	10.5	0.66	5.25	5.25	2.125	0.5	0.5	1.845	3.91	29.1	8.0	16.34	2	12.89	11.0	12.5	0.25	0.25	14	4*5/8-11
326T		12		5.25												11.0	12.5	0.25	0.25	14	4*5/8-11
324TS		10.5		5.25												11.0	12.5	0.25	0.25	14	4*5/8-11
326TS		12		5.25												11.0	12.5	0.25	0.25	14	4*5/8-11
364T	14	11.25	0.66	5.88	5.88	2.375	0.625	0.625	2.021	4.28	31.9	9.0	19.35	3	14.1	11.0	12.5	0.25	0.25	14	8*5/8-11
365T		12.25		5.88												11.0	12.5	0.25	0.25	14	8*5/8-11
364TS		11.25		5.88												11.0	12.5	0.25	0.25	14	8*5/8-11
365TS		12.25		5.88												11.0	12.5	0.25	0.25	14	8*5/8-11
404T	16	12.25	0.81	6.62	7.25	2.875	0.75	0.75	2.45	5.65	36.5	10.0	21.54	3	15.16	11.0	12.5	0.25	0.25	15.5	8*5/8-11
405T		13.75		6.62												11.0	12.5	0.25	0.25	15.5	8*5/8-11
404TS		12.25		6.62												11.0	12.5	0.25	0.25	15.5	8*5/8-11
405TS		13.75		6.62												11.0	12.5	0.25	0.25	15.5	8*5/8-11
444T	18	14.5	0.81	7.5	8.5	3.375	0.875	0.875	2.88	6.91	43.3	11.0	23.66	3	13.65	14.0	16.0	0.25	0.25	18	8*5/8-11
445T		16.5		7.5												14.0	16.0	0.25	0.25	18	8*5/8-11
444TS		14.5		7.5												14.0	16.0	0.25	0.25	18	8*5/8-11
445TS		16.5		7.5												14.0	16.0	0.25	0.25	18	8*5/8-11
447T		20		7.5												14.0	16.0	0.25	0.25	18	8*5/8-11
449T		25		7.5												14.0	16.0	0.25	0.25	18	8*5/8-11
447TS	20	7.5	14.0	16.0	0.25	0.25	18	8*5/8-11													
449TS	25	7.5	14.0	16.0	0.25	0.25	18	8*5/8-11													

# T DC Series NEMA Premium Efficiency ODP Motor Technical Data-Design B (60Hz)

HP	Full Load Speed (r/min)	NEMA Frame	Full Load Current			Eff. 100%FL	Power Factor (cosΦ)	Full Load Torque lbf-ft	KVA Code	Locked Rotor		BDT (%FL)	Service Factor	W.T (lbs)
			I <sub>n</sub> 230V (A)	I <sub>n</sub> 460V (A)	I <sub>n</sub> 575V (A)					LRA 230V (A)	LRT (%FL)			
7.5	1170	254T	20.49	10.24	8.20	90.2	0.76	33.68	J	137	200	250	1.15	242.00
10	1170	256T	26.52	13.26	10.61	91.7	0.77	44.91	J	185	220	320	1.15	313.00
15	3540	254T	35.39	17.69	14.16	90.2	0.88	22.26	K	310	240	300	1.15	249.00
	1760	254T	35.96	17.98	14.38	93.0	0.84	44.78	J	300	260	330	1.15	273.00
	1175	284T	40.30	20.15	16.12	91.7	0.76	67.07	L	360	280	330	1.15	404.00
20	3530	256T	45.23	22.61	18.09	91.0	0.91	29.77	H	350	240	240	1.15	315.00
	1760	256T	45.76	22.88	18.31	93.0	0.88	59.71	J	400	280	310	1.15	370.00
	1175	286T	50.67	25.33	20.27	92.4	0.8	89.43	J	400	240	330	1.15	438.00
25	3550	284TS	60.06	30.03	24.02	91.7	0.85	37.00	H	415	280	330	1.15	394.00
	1770	284T	58.84	29.42	23.54	93.6	0.85	74.21	H	425	250	350	1.15	406.00
	1180	324T	61.39	30.69	24.56	93	0.82	111.32	J	460	300	380	1.15	546.00
30	3550	286TS	70.42	35.21	28.17	91.7	0.87	44.40	H	525	260	360	1.15	409.00
	1770	286T	68.62	34.31	27.45	94.1	0.87	89.05	H	520	260	360	1.15	431.00
	1180	326T	72.31	36.16	28.93	93.6	0.83	133.58	H	500	280	370	1.15	556.00
40	3560	324TS	90.07	45.04	36.03	92.4	0.9	59.04	H	650	270	320	1.15	530.00
	1770	324T	97.07	48.54	38.83	94.1	0.82	118.74	J	720	300	340	1.15	584.00
	1180	364T	93.65	46.82	37.46	94.1	0.85	178.11	H	700	250	270	1.15	736.50
50	3560	326TS	113.12	56.56	45.25	93.0	0.89	73.79	H	850	280	300	1.15	541.00
	1770	326T	117.95	58.98	47.18	94.5	0.84	148.42	J	960	300	340	1.15	606.00
	1180	365T	119.88	59.94	47.95	94.1	0.83	222.63	H	800	280	340	1.15	792.00
60	3560	364TS	136.41	68.20	54.56	93.6	0.88	88.55	H	1000	300	330	1.15	772.00
	1775	364T	135.94	67.97	54.38	95	0.87	177.61	H	1052	280	300	1.15	793.80
	1185	404T	141.54	70.77	56.62	94.5	0.84	266.03	H	1000	200	240	1.15	1019.00
75	3560	365TS	166.72	83.36	66.69	93.6	0.9	110.69	H	1150	300	330	1.15	842.00
	1775	365T	168.00	84.00	67.20	95	0.88	222.01	H	1183	280	370	1.15	863.00
	1185	405T	172.81	86.41	69.13	94.5	0.86	332.54	H	1200	200	240	1.15	1089.00
100	3570	405TS	219.85	109.93	87.94	93.6	0.91	147.18	H	1675	300	300	1.15	1025.00
	1780	405T	230.93	115.47	92.37	95.4	0.85	295.18	H	1700	280	320	1.15	1030.00
	1180	444T	229.21	114.60	91.68	95	0.86	445.27	H	1620	180	200	1.15	1656.00
125	3575	444TS	276.39	138.20	110.56	94.1	0.9	183.71	J	2200	300	400	1.15	1504.00
	1780	444T	278.82	139.41	111.53	95.4	0.88	368.97	J	2260	300	350	1.15	1546.00
	1180	445T	286.51	143.25	114.60	95	0.86	556.59	J	2230	175	200	1.15	1797.00
150	3575	445TS	331.67	165.84	132.67	94.1	0.9	220.45	H	2400	250	230	1.15	1610.00
	1780	445T	333.19	166.60	133.28	95.8	0.88	442.77	H	2430	270	290	1.15	1698.00
	1180	447T	340.94	170.47	136.38	95.8	0.86	667.90	H	2480	160	200	1.15	1921.00
200	3575	447TS	438.04	219.02	175.22	95	0.9	293.94	H	3350	200	230	1.15	1738.00
	1780	447T	439.26	219.63	175.71	95.8	0.89	590.36	H	3420	275	200	1.15	1934.00
	1180	449T	451.25	225.62	180.50	95.4	0.87	890.54	H	3360	160	200	1.15	2123.00
250	3575	449TS	547.55	273.78	219.02	95	0.9	367.42	H	4100	200	200	1.15	1954.00
	1780	449T	549.08	274.54	219.63	95.8	0.89	737.95	H	4150	200	210	1.15	2220.00

# T DC Series Motors Dimensional Drawings

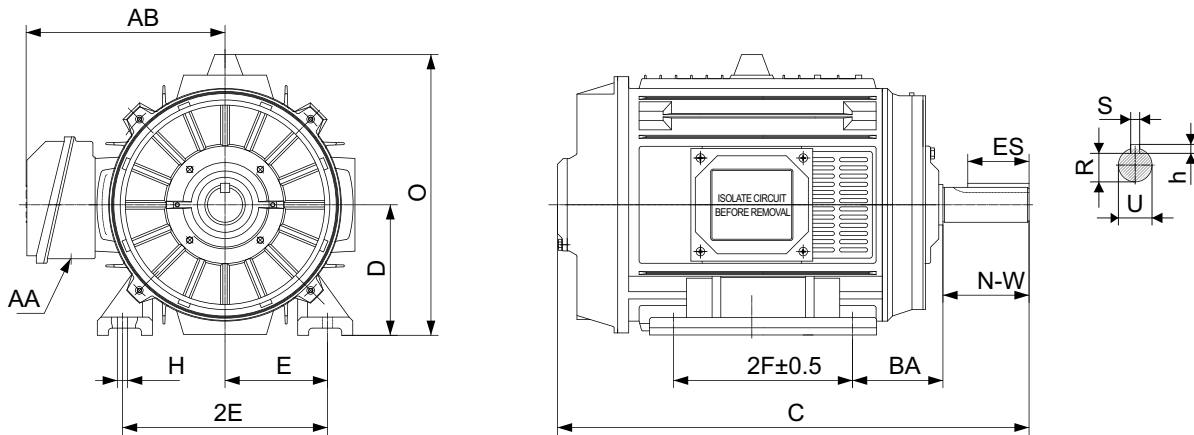


Figure 1 Foot Mounted

## Overall & Installation Dimensions

Frame	Foot Mounting				Shaft						General					
	2E	2F	H	BA	N-W	U	S	hj	R	ES	C	D	O	AA	AB	
254T	10	8.25	0.53	4.25	4	1.625	0.375	0.375	1.416	2.91	25.2	6.25	13.81	1-1/4	10.1	
256T		10		4.75												
254TC		8.25		4.75												
256TC		10		4.75												
284T	11	9.5	0.53	4.75	4.62	1.875	0.5	0.5	1.591	3.28	27.1	7.0	15.47	1-1/2	10.81	
286T		11			3.25	1.625	0.375	0.375	1.416	1.91						25.7
284TS		9.5			3.25	1.625	0.375	0.375	1.416	1.91						25.7
286TS		11			3.25	1.625	0.375	0.375	1.416	1.91						25.7
324T	12.5	10.5	0.66	5.25	5.25	2.125	0.5	0.5	1.845	3.91	29.1	8.0	16.34	2	12.89	
326T		12			3.75	1.875	0.5	0.5	1.591	2.03						27.6
324TS		10.5			3.75	1.875	0.5	0.5	1.591	2.03						27.6
326TS		12			3.75	1.875	0.5	0.5	1.591	2.03						27.6
364T	14	11.25	0.66	5.88	5.88	2.375	0.625	0.625	2.021	4.28	31.9	9.0	19.35	3	14.1	
365T		12.25			3.75	1.875	0.5	0.5	1.591	2.03						29.8
364TS		11.25			3.75	1.875	0.5	0.5	1.591	2.03						29.8
365TS		12.25			3.75	1.875	0.5	0.5	1.591	2.03						29.8
404T	16	12.25	0.81	6.62	7.25	2.875	0.75	0.75	2.45	5.65	36.5	10.0	21.54	3	15.16	
405T		13.75			4.25	2.125	0.5	0.5	1.845	2.78						33.5
404TS		12.25			4.25	2.125	0.5	0.5	1.845	2.78						33.5
405TS		13.75			4.25	2.125	0.5	0.5	1.845	2.78						33.5
444T	18	14.5	0.81	7.5	8.5	3.375	0.875	0.875	2.88	6.91	43.3	11.0	23.66	3	13.65	
445T		16.5			4.75	2.375	0.625	0.625	2.021	3.03						39.6
444TS		14.5			4.75	2.375	0.625	0.625	2.021	3.03						39.6
445TS		16.5			4.75	2.375	0.625	0.625	2.021	3.03						39.6
447T		20			8.5	3.375	0.875	0.875	2.88	6.91						51.8
449T		25			8.5	3.375	0.875	0.875	2.88	6.91						51.8
447TS		20			4.75	2.375	0.625	0.625	2.021	3.03						48.1
449TS		25			4.75	2.375	0.625	0.625	2.021	3.03						48.1

IEC MOTOR  
FIRE PUMP MOTOR  
GOST MOTOR  
NEMA MOTOR  
DC MOTOR  
EC MOTOR



# DC Serie Fire Pump Motors' Main Performance Parameters(NEMA 415V 50HZ)

Serial NO.	Model NO.	Current (A) 380V	Current (A) 415V	Output (HP)	Hz/DC	Locked current A(standard) 380V	Locked current A(standard) 415V	Locked torque multiple (standard) %	Maximum torque multiple (standard) %	Minimum torque multiple (standard) %	Service factor	INS class	RPM	EFF %	Power factor
1	TDC254T15U2B	21.7	19.9	15	50	154	141	130	200	100	1.15	F	2920	87.6	0.9
2	TDC256T20U2B	28.5	26.1	20	50	194	177	130	200	100	1.15	F	2920	88.7	0.9
3	TDC284TS25U2B	35.4	32.5	25	50	243	222	130	200	100	1.15	F	2930	89.3	0.9
4	TDC286TS30U2B	42.3	38.7	30	50	289	264	130	200	100	1.15	F	2930	89.9	0.9
5	TDC286TS40U2B	55.2	50.6	40	50	387	354	125	200	100	1.15	F	2930	90.7	0.91
6	TDC324TS40U2B	55.2	50.6	40	50	387	354	125	200	100	1.15	F	2930	90.7	0.91
7	TDC324TS50U2B	68.7	62.9	50	50	482	441	120	200	100	1.15	F	2930	91.2	0.91
8	TDC326TS50U2B	68.7	62.9	50	50	482	441	120	200	100	1.15	F	2930	91.2	0.91
9	TDC326TS60U2B	81.9	75.0	60	50	578	529	120	200	100	1.15	F	2930	91.7	0.91
10	TDC364TS60U2B	81.9	75.0	60	50	578	529	120	200	100	1.15	F	2930	91.7	0.91
11	TDC364TS75U2B	100.9	92.4	75	50	722	661	105	200	95	1.15	F	2940	92.1	0.92
12	TDC365TS75U2B	100.9	92.4	75	50	722	661	105	200	95	1.15	F	2940	92.1	0.92
13	TDC365TS100U2B	133.6	122.3	100	50	965	883	105	200	95	1.15	F	2940	92.7	0.92
14	TDC405TS100U2B	133.6	122.3	100	50	965	883	105	200	95	1.15	F	2940	92.7	0.92
15	TDC404TS125U2B	166.5	152.4	125	50	1207	1105	100	200	90	1.15	F	2940	93	0.92
16	TDC405TS150U2B	197.0	180.4	150	50	1441	1319	100	200	90	1.15	F	2940	93.3	0.93
17	TDC444TS125U2B	164.7	150.8	125	50	1207	1105	100	200	90	1.15	F	2940	93	0.93
18	TDC445TS150U2B	197.0	180.4	150	50	1441	1319	100	200	90	1.15	F	2940	93.3	0.93
19	TDC444TS200U2B	261.3	239.2	200	50	1927	1764	70	175	65	1.15	F	2940	93.8	0.93
20	TDC447TS200U2B	261.3	239.2	200	50	1927	1764	70	175	65	1.15	F	2940	93.8	0.93
21	TDC447TS300U2B	391.1	358.1	300	50	3026	2770	70	175	65	1.15	F	2940	94	0.93
22	TDC447TS350U2B	456.2	417.8	350	50	3542	3243	70	175	65	1.15	F	2940	94	0.93
23	TDC449TS250U2B	325.9	298.4	250	50	2534	2320	70	175	65	1.15	F	2940	94	0.93
24	TDC449TS300U2B	391.1	358.1	300	50	3026	2770	70	175	65	1.15	F	2940	94	0.93
25	TDC449TS350U2B	456.2	417.8	350	50	3542	3243	70	175	65	1.15	F	2940	94	0.93
26	TDC449TS400U2B	521.4	477.4	400	50	4046	3704	70	175	65	1.15	F	2940	94	0.93
27	TDC 254T15U4B	21.9	20.1	15	50	154	141	160	200	110	1.15	F	1440	87.6	0.89
28	TDC 256T20U4B	28.9	26.4	20	50	194	177	150	200	105	1.15	F	1445	88.7	0.89
29	TDC 284T25U4B	35.8	32.8	25	50	243	222	150	200	105	1.15	F	1450	89.3	0.89
30	TDC 286T30U4B	42.7	39.1	30	50	289	264	150	200	105	1.15	F	1460	89.9	0.89
31	TDC 324T40U4B	56.5	51.7	40	50	387	354	140	200	100	1.15	F	1460	90.7	0.89
32	TDC 326T50U4B	70.2	64.3	50	50	482	441	140	200	100	1.15	F	1470	91.2	0.89
33	TDC364T60U4B	83.8	76.7	60	50	578	529	140	200	100	1.15	F	1480	91.7	0.89
34	TDC365T75U4B	103.1	94.4	75	50	722	661	140	200	100	1.15	F	1480	92.1	0.9
35	TDC405T100U4B	136.6	125.1	100	50	965	883	125	200	100	1.15	F	1480	92.7	0.9
36	TDC405T125U4B	170.2	155.8	125	50	1207	1105	110	200	100	1.15	F	1480	93	0.9
37	TDC444T125U4B	170.2	155.8	125	50	1207	1105	110	200	100	1.15	F	1480	93	0.9
38	TDC444T150U4B	203.6	186.4	150	50	1441	1319	110	200	100	1.15	F	1480	93.3	0.9
39	TDC445T150U4B	203.6	186.4	150	50	1441	1319	110	200	100	1.15	F	1480	93.3	0.9
40	TDC445T200U4B	267.0	244.5	200	50	1927	1764	100	200	90	1.15	F	1480	93.8	0.91
41	TDC447T200U4B	267.0	244.5	200	50	1927	1764	100	200	90	1.15	F	1480	93.8	0.91
42	TDC447T250U4B	333.0	305.0	250	50	2534	2320	80	175	75	1.15	F	1480	94	0.91
43	TDC449T250U4B	333.0	305.0	250	50	3026	2320	80	175	75	1.15	F	1480	94	0.91
44	TDC449T300U4B	399.7	365.9	300	50	3026	2770	80	175	75	1.15	F	1480	94	0.91
45	TDC449T350U4B	466.3	426.9	350	50	3542	3243	80	175	75	1.15	F	1480	94	0.91
46	TDC 254T7.5U6B	13.2	12.1	7.5	50	84	77	150	200	105	1.15	F	955	83.1	0.78
47	TDC 256T10U6B	15.4	14.1	10	50	107	98	150	200	105	1.15	F	960	84.7	0.78
48	TDC 284T15U6B	25.0	22.9	15	50	154	141	140	200	100	1.15	F	960	86.4	0.79
49	TDC 286T20U6B	32.9	30.1	20	50	194	177	135	200	100	1.15	F	965	87.7	0.79
50	TDC 324T25U6B	40.7	37.3	25	50	243	222	135	200	100	1.15	F	965	88.6	0.79
51	TDC 326T30U6B	48.5	44.4	30	50	289	264	135	200	100	1.15	F	975	89.2	0.79
52	TDC364T40U6B	63.2	57.8	40	50	387	354	135	200	100	1.15	F	975	90.2	0.8
53	TDC365T50U6B	78.4	71.8	50	50	482	441	135	200	100	1.15	F	980	90.8	0.8
54	TDC404T60U6B	93.5	85.6	60	50	578	529	135	200	100	1.15	F	980	91.4	0.8
55	TDC405T75U6B	114.8	105.1	75	50	722	661	135	200	100	1.15	F	980	91.9	0.81
56	TDC444T100U6B	151.9	139.1	100	50	965	883	125	200	100	1.15	F	980	92.6	0.81
57	TDC445T125U6B	189.3	173.3	125	50	1207	1105	125	200	100	1.15	F	980	92.9	0.81
58	TDC447T150U6B	226.2	207.1	150	50	1441	1319	120	200	100	1.15	F	980	93.3	0.81
59	TDC449T200U6B	300.0	274.7	200	50	1927	1764	120	175	100	1.15	F	980	93.8	0.81
60	TDC449T250U6B	374.2	342.6	250	50	2534	2320	100	175	90	1.15	F	980	94	0.81

