



## FIRE PUMP MOTORS

# ODP FIRE PUMP MOTORS

## Applications:

For use on pumps designed for fire pump duty and installed per NFPA-20. These dripproof motors are intended for installation in relatively clean and dry environments. Fire Pump motors are not recommended for use with variable frequency drives.

## Features:

- 25 to 500 Horsepower
- 3600 & 1800 RPM's
- 250 frame Rolled Steel Construction
- 280 frame and Larger - Cast Iron Construction
- EPA Efficiency
- Ball Bearings
- Grease Fittings With Plugs All Ratings
- NEMA Design B, Code G
- 60 hz 230/460 and 460 volt motors and 50hz 190/380V and 380V at next lower HP, with 1.15SF on nameplate
- 280 Frame and larger Dual Voltage Motors – 12 leads suitable for Y-Delta, Low Voltage PWS, and Across The Line Start
- Single Voltage Motors – 12 leads suitable for Y-Delta, PWS, and Across The Line Start
- 40 C Max Ambient
- 1.15SF
- C-Face Kits Available Through 250HP
- For Special Designs Contact District Sales Office Near You
- Exterior Red Paint
- UL Listed and CSA Certified (UL1004A) and CE Marked



HP	RPM	Frame	Nom. Eff.	SF	Volts	Model #	Catalog #	Approx Shpg Wght (lbs)
25	3600	256T	91.0%	1.15	200/400	SSD2P25T62YAP5	LM80103	164
	3600	256T	91.0%	1.15	230/460	SSD2P25T61YAP5	LM80104	164
	1800	284T	91.7%	1.15	200/400	CCD4P25T62YAP5	LM80105	420
	1800	284T	91.7%	1.15	230/460	CCD4P25T61YAP5	LM80106	420
30	3600	284TS	91.0%	1.15	200/400	CCD2P30TS62YAP5	LM80107	318
	3600	284TS	91.0%	1.15	230/460	CCD2P30TS61YAP5	LM80108	318
	1800	286T	92.4%	1.15	200/400	CCD4P30T62YAP5	LM80109	364
	1800	286T	92.4%	1.15	230/460	CCD4P30T61YAP5	LM80110	364
40	3600	286TS	91.7%	1.15	200/400	CCD2P40TS62YAP5	LM80111	360
	3600	286TS	91.7%	1.15	230/460	CCD2P40TS61YAP5	LM80112	360
	1800	324TS	93.0%	1.15	200/400	CCD4P40TS62YAP5	LM80113	465
	1800	324TS	93.0%	1.15	230/460	CCD4P40TS61YAP5	LM80114	465
	1800	324T	93.0%	1.15	200/400	CCD4P40T62YAP5	LM80115	465
	1800	324T	93.0%	1.15	230/460	CCD4P40T61YAP5	LM80116	465
50	3600	324TS	92.4%	1.15	200/400	CCD2P50TS62YAP5	LM80117	415
	3600	324TS	92.4%	1.15	230/460	CCD2P50TS61YAP5	LM80118	415
	1800	326TS	93.0%	1.15	200/400	CCD4P50TS62YAP5	LM80119	515
	1800	326TS	93.0%	1.15	230/460	CCD4P50TS61YAP5	LM80120	515
	1800	326T	93.0%	1.15	200/400	CCD4P50T62YAP5	LM80121	515
	1800	326T	93.0%	1.15	230/460	CCD4P50T61YAP5	LM80122	515
60	3600	326TS	93.0%	1.15	200/400	CCD2P60TS62YAP5	LM80123	340
	3600	326TS	93.0%	1.15	230/460	CCD2P60TS61YAP5	LM80124	340
	1800	364TS	93.6%	1.15	200/400	CCD4P60TS62YAP5	LM80125	805
	1800	364TS	93.6%	1.15	230/460	CCD4P60TS61YAP5	LM80126	805
	1800	364T	93.6%	1.15	200/400	CCD4P60T62YAP5	LM80127	805
	1800	364T	93.6%	1.15	230/460	CCD4P60T61YAP5	LM80128	805
75	3600	364TS	93.0%	1.15	200/400	CCD2P75TS62YAP5	LM80129	950
	3600	364TS	93.0%	1.15	230/460	CCD2P75TS61YAP5	LM80130	950
	1800	365TS	94.1%	1.15	200/400	CCD4P75TS62YAP5	LM80131	766
	1800	365TS	94.1%	1.15	230/460	CCD4P75TS61YAP5	LM80132	766
	1800	365T	94.1%	1.15	200/400	CCD4P75T62YAP5	LM80133	766
	1800	365T	94.1%	1.15	230/460	CCD4P75T61YAP5	LM80134	766



Data subject to change without notice.

# ODP FIRE PUMP MOTORS



HP	RPM	Frame	Nom. Eff.	SF	Volts	Model #	Catalog #	Approx Shpg Wght (lbs)
100	3600	365TS	93.0%	1.15	200/400	CCD2P100TS62YAP5	LM80135	730
	3600	365TS	93.0%	1.15	230/460	CCD2P100TS61YAP5	LM80136	730
	1800	404TS	94.1%	1.15	200/400	CCD4P100TS62YAP5	LM80137	1065
	1800	404TS	94.1%	1.15	230/460	CCD4P100TS61YAP5	LM80138	1065
	1800	404T	94.1%	1.15	200/400	CCD4P100T62YAP5	LM80139	1065
	1800	404T	94.1%	1.15	230/460	CCD4P100T61YAP5	LM80140	1065
125	3600	404TS	93.6%	1.15	200/400	CCD2P125TS62YAP5	LM80141	949
	3600	404TS	93.6%	1.15	230/460	CCD2P125TS61YAP5	LM80142	949
	1800	405TS	94.5%	1.15	200/400	CCD4P125TS62YAP5	LM80143	1070
	1800	405TS	94.5%	1.15	230/460	CCD4P125TS61YAP5	LM80144	1070
	1800	405T	94.5%	1.15	200/400	CCD4P125T62YAP5	LM80145	1070
	1800	405T	94.5%	1.15	230/460	CCD4P125T61YAP5	LM80146	1070
150	3600	405TS	93.6%	1.15	400	CCD2P150TS6011PYAP5	LM80147	983
	3600	405TS	93.6%	1.15	460	CCD2P150TS64PYAP5	LM80148	983
	1800	444TS	95.0%	1.15	400	CCD4P150TS6011PYAP5	LM80149	1265
	1800	444TS	95.0%	1.15	460	CCD4P150TS64PYAP5	LM80150	1265
	1800	444T	95.0%	1.15	400	CCD4P150T6011PYAP5	LM80151	1265
	1800	444T	95.0%	1.15	460	CCD4P150T64PYAP5	LM80152	1265
200	3600	444TS	94.5%	1.15	400	CCD2P200TS6011PYAP5	LM80153	1315
	3600	444TS	94.5%	1.15	460	CCD2P200TS64PYAP5	LM80154	1315
	1800	445TS	95.0%	1.15	400	CCD4P200TS6011PYAP5	LM80155	1412
	1800	445TS	95.0%	1.15	460	CCD4P200TS64PYAP5	LM80156	1412
	1800	445T	95.0%	1.15	400	CCD4P200T6011PYAP5	LM80157	1412
	1800	445T	95.0%	1.15	460	CCD4P200T64PYAP5	LM80158	1412
250	3600	445TS	94.5%	1.15	400	CCD2P250TS6011PYAP5	LM80159	1387
	3600	445TS	94.5%	1.15	460	CCD2P250TS64PYAP5	LM80160	1387
	1800	445TS	95.4%	1.15	400	CCD4P250TS6011PYAP5	LM80161	1428
	1800	445TS	95.4%	1.15	460	CCD4P250TS64PYAP5	LM80162	1428
	1800	445T	95.4%	1.15	400	CCD4P250T6011PYAP5	LM80163	1428
	1800	445T	95.4%	1.15	460	CCD4P250T64PYAP5	LM80164	1428
300	3600	447TS	95.0%	1.15	400	CCD2P300TS6011PYAP5	LM80165	2255
	3600	447TS	95.0%	1.15	460	CCD2P300TS64PYAP5	LM80166	2255
	1800	447TS	95.4%	1.15	400	CCD4P300TS6011PYAP5	LM80167	1952
	1800	447TS	95.4%	1.15	460	CCD4P300TS64PYAP5	LM80168	1952
	1800	447T	95.4%	1.15	400	CCD4P300T6011PYAP5	LM80169	1952
	1800	447T	95.4%	1.15	460	CCD4P300T64PYAP5	LM80170	1952
350	3600	447TS	95.0%	1.15	400	CCD2P350TS6011PYAP5	LM80171	2068
	3600	447TS	95.0%	1.15	460	CCD2P350TS64PYAP5	LM80172	2068
	1800	447TS	95.4%	1.15	400	CCD4P350TS6011PYAP5	LM80173	1950
	1800	447TS	95.4%	1.15	460	CCD4P350TS64PYAP5	LM80174	1950
	1800	447T	95.4%	1.15	400	CCD4P350T6011PYAP5	LM80175	1950
	1800	447T	95.4%	1.15	460	CCD4P350T64PYAP5	LM80176	1950
400	3600	447TS	95.4%	1.15	460	CCD2P400TS64PYAP5	LM80177	2150
	1800	447TS	95.4%	1.15	460	CCD4P400TS64PYAP5	LM80178	2214
450	3600	449TS	95.8%	1.15	460	CCD2P450TS64PYAP5	LM80179	2544
	1800	449TS	95.8%	1.15	460	CCD4P450TS64PYAP5	LM80180	2675
500	3600	449TS	95.8%	1.15	460	CCD2P500TS64PYAP5	LM80181	2544
	1800	449TS	95.8%	1.15	460	CCD4P500TS64PYAP5	LM80182	2695

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# TEFC FIRE PUMP MOTORS

## FOOT MOUNT

### Applications:

For use on pumps designed for fire pump duty and installed per NFPA-20. These TEFC motors are intended for installation in relatively damp, dusty and dirty environments. Fire Pump motors are not recommended for use with variable frequency drives.

### Features:

- 3 to 450 Horsepower
- 3600 & 1800 RPM's
- 180 Frame and Larger - Cast Iron Construction
- EPA Efficiency
- Ball Bearings
- Grease Fittings With Plugs All Ratings
- NEMA Design B, Code G
- 60hz 230/460 and 460 volt motors and 50hz 190/380V and 380V at next lower HP, with 1.15SF on nameplate
- 280 Frame and larger Dual Voltage Motors – 12 leads suitable for Y-Delta, Low Voltage PWS, and Across The Line Start
- Single Voltage Motors – 12 leads suitable for Y-Delta, PWS, and Across The Line Start
- 40 C Max Ambient
- 1.15SF
- C-Face Kits Available Through 250HP
- For Special Designs Contact District Sales Office Near You
- Exterior Red Paint
- UL Listed and CSA Certified (UL1004A) and CE Marked



HP	RPM	Frame	Nom. Eff.	SF	Volts	Model #	Catalog #	Approx Shpg Wght (lbs)
3	3600	182T	85.5	1.15	200/400	CCF2P3T62AP5	LM80050	84
	3600	182T	85.5	1.15	230/460	CCF2P3T61AP5	LM80051	84
	1800	182T	87.5	1.15	200/400	CCF4P3T62AP5	LM80052	90
	1800	182T	87.5	1.15	230/460	CCF4P3T61AP5	LM80053	90
5	3600	184T	87.5	1.15	200/400	CCF2P5T62AP5	LM80054	108
	3600	184T	87.5	1.15	230/460	CCF2P5T61AP5	LM80055	108
	1800	184T	87.5	1.15	200/400	CCF4P5T62AP5	LM80056	123
	1800	184T	87.5	1.15	230/460	CCF4P5T61AP5	LM80057	123
7.5	3600	213T	88.5	1.15	200/400	CCF2P7.5T62AP5	LM80058	188
	3600	213T	88.5	1.15	230/460	CCF2P7.5T61AP5	LM80059	188
	1800	213T	89.5	1.15	200/400	CCF4P7.5T62AP5	LM80060	194
	1800	213T	89.5	1.15	230/460	CCF4P7.5T61AP5	LM80061	194
10	3600	215T	89.5	1.15	200/400	CCF2P10T62AP5	LM80062	217
	3600	215T	89.5	1.15	230/460	CCF2P10T61AP5	LM80063	217
	1800	215T	89.5	1.15	200/400	CCF4P10T62AP5	LM80064	227
	1800	215T	89.5	1.15	230/460	CCF4P10T61AP5	LM80065	227
15	3600	254T	90.2	1.15	200/400	CCF2P15T62AP5	LM80066	370
	3600	254T	90.2	1.15	230/460	CCF2P15T61AP5	LM80067	370
	1800	254T	91.0	1.15	200/400	CCF4P15T62AP5	LM80068	365
	1800	254T	91.0	1.15	230/460	CCF4P15T61AP5	LM80069	365
20	3600	256T	90.2	1.15	200/400	CCF2P20T62AP5	LM80070	334
	3600	256T	90.2	1.15	230/460	CCF2P20T61AP5	LM80071	334
	1800	256T	91.0	1.15	200/400	CCF4P20T62AP5	LM80072	420
	1800	256T	91.0	1.15	230/460	CCF4P20T61AP5	LM80073	420
25	3600	284TS	91.0	1.15	200/400	CCF2P25TS62YAP5	LM80074	384
	3600	284TS	91.0	1.15	230/460	CCF2P25TS61YAP5	LM80075	384
	1800	284T	92.4	1.15	200/400	CCF4P25T62YAP5	LM80076	440
	1800	284T	92.4	1.15	230/460	CCF4P25T61YAP5	LM80077	440
30	3600	286TS	91.0	1.15	200/400	CCF2P30TS62YAP5	LM80078	428
	3600	286TS	91.0	1.15	230/460	CCF2P30TS61YAP5	LM80079	428
	1800	286T	92.4	1.15	200/400	CCF4P30T62YAP5	LM80080	494
	1800	286T	92.4	1.15	230/460	CCF4P30T61YAP5	LM80081	494
40	3600	324TS	91.7	1.15	200/400	CCF2P40TS62YAP5	LM80084	520
	3600	324TS	91.7	1.15	230/460	CCF2P40TS61YAP5	LM80085	520
	1800	324TS	93.0	1.15	200/400	CCF4P40TS62YAP5	LM80183	575
	1800	324TS	93.0	1.15	230/460	CCF4P40TS61YAP5	LM80184	575
	1800	324T	93.0	1.15	200/400	CCF4P40T62YAP5	LM80027	575
	1800	324T	93.0	1.15	230/460	CCF4P40T61YAP5	LM80086	575
50	3600	326TS	92.4	1.15	200/400	CCF2P50TS62YAP5	LM80028	540
	3600	326TS	92.4	1.15	230/460	CCF2P50TS61YAP5	LM80087	540
	1800	326TS	93.0	1.15	200/400	CCF4P50TS62YAP5	LM80186	675
	1800	326TS	93.0	1.15	230/460	CCF4P50TS61YAP5	LM80187	675
	1800	326T	93.0	1.15	200/400	CCF4P50T62YAP5	LM80029	675
	1800	326T	93.0	1.15	230/460	CCF4P50T61YAP5	LM80088	675



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# TEFC FIRE PUMP MOTORS

## FOOT MOUNT



HP	RPM	Frame	Nom. Eff.	SF	Volts	Model #	Catalog #	Approx Shpg Wght (lbs)
60	3600	364TS	93.0	1.15	200/400	CCF2P60TS62YAP5	LM80030	875
	3600	364TS	93.0	1.15	230/460	CCF2P60TS61YAP5	LM80089	875
	1800	364TS	93.6	1.15	200/400	CCF4P60TS62YAP5	LM80188	975
	1800	364TS	93.6	1.15	230/460	CCF4P60TS61YAP5	LM80185	975
	1800	364T	93.6	1.15	200/400	CCF4P60T62YAP5	LM80031	975
	1800	364T	93.6	1.15	230/460	CCF4P60T61YAP5	LM80090	975
75	3600	365TS	93.0	1.15	200/400	CCF2P75TS62YAP5	LM80032	1000
	3600	365TS	93.0	1.15	230/460	CCF2P75TS61YAP5	LM80091	1000
	1800	365TS	94.1	1.15	200/400	CCF4P75TS62YAP5	LM80189	1025
	1800	365TS	94.1	1.15	230/460	CCF4P75TS61YAP5	LM80190	1025
	1800	365T	94.1	1.15	200/400	CCF4P75T62YAP5	LM80033	1025
	1800	365T	94.1	1.15	230/460	CCF4P75T61YAP5	LM80092	1025
100	3600	405TS	93.6	1.15	200/400	CCF2P100TS62YAP5	LM80034	1239
	3600	405TS	93.6	1.15	230/460	CCF2P100TS61YAP5	LM80093	1239
	1800	405TS	94.5	1.15	200/400	CCF4P100TS62YAP5	LM80191	1267
	1800	405TS	94.5	1.15	230/460	CCF4P100TS61YAP5	LM80192	1267
	1800	405T	94.5	1.15	200/400	CCF4P100T62YAP5	LM80035	1267
	1800	405T	94.5	1.15	230/460	CCF4P100T61YAP5	LM80094	1267
125	3600	444TS	94.5	1.15	400	CCF2P125TS6011PYAP5	LM80036	1750
	3600	444TS	94.5	1.15	460	CCF2P125TS64PYAP5	LM80095	1750
	1800	444TS	94.5	1.15	400	CCF4P125TS6011PYAP5	LM80193	1805
	1800	444TS	94.5	1.15	460	CCF4P125TS64PYAP5	LM80194	1805
	1800	444T	94.5	1.15	400	CCF4P125T6011PYAP5	LM80037	1805
	1800	444T	94.5	1.15	460	CCF4P125T64PYAP5	LM80096	1805
150	3600	445TS	94.5	1.15	400	CCF2P150TS6011PYAP5	LM80038	2191
	3600	445TS	94.5	1.15	460	CCF2P150TS64PYAP5	LM80097	2191
	1800	445TS	95.0	1.15	400	CCF4P150TS6011PYAP5	LM80195	2116
	1800	445TS	95.0	1.15	460	CCF4P150TS64PYAP5	LM80196	2116
	1800	445T	95.0	1.15	400	CCF4P150T6011PYAP5	LM80039	2116
	1800	445T	95.0	1.15	460	CCF4P150T64PYAP5	LM80098	2116
200	3600	445TS	95.0	1.15	400	CCF2P200TS6011PYAP5	LM80040	2262
	3600	445TS	95.0	1.15	460	CCF2P200TS64PYAP5	LM80099	2262
	1800	445TS	95.0	1.15	400	CCF4P200TS6011PYAP5	LM80197	2311
	1800	445TS	95.0	1.15	460	CCF4P200TS64PYAP5	LM80198	2311
	1800	445T	95.0	1.15	400	CCF4P200T6011PYAP5	LM80041	2311
	1800	445T	95.0	1.15	460	CCF4P200T64PYAP5	LM80100	2311
250	3600	449TS	95.4	1.15	400	CC449F2P250TS6011PYAP5	LM80042	2450
	3600	449TS	95.4	1.15	460	CC449F2P250TS64PYAP5	LM80101	2450
	1800	449TS	95.0	1.15	400	CC449F4P250TS6011PYAP5	LM80199	2600
	1800	449TS	95.0	1.15	460	CC449F4P250TS64PYAP5	LM80200	2600
	1800	449T	95.0	1.15	400	CC449F4P250T6011PYAP5	LM80043	2600
	1800	449T	95.0	1.15	460	CC449F4P250T64PYAP5	LM80102	2600
300	3600	449TS	95.4	1.15	400	CCF2P300TS6011PYAP5	LM80044	2702
	3600	449TS	95.4	1.15	460	CCF2P300TS64PYAP5	LM80019	2702
	1800	449TS	95.4	1.15	400	CCF4P300TS6011PYAP5	LM80201	3041
	1800	449TS	95.4	1.15	460	CCF4P300TS64PYAP5	LM80202	3041
	1800	449T	95.4	1.15	400	CCF4P300T6011PYAP5	LM80045	3041
	1800	449T	95.4	1.15	460	CCF4P300T64PYAP5	LM80018	3041
350	3600	449TS	95.4	1.15	400	CCF2P350TS6011PYAP5	LM80046	2898
	3600	449TS	95.4	1.15	460	CCF2P350TS64PYAP5	LM80021	2898
	1800	449TS	95.4	1.15	400	CCF4P350TS6011PYAP5	LM80203	3202
	1800	449TS	95.4	1.15	460	CCF4P350TS64PYAP5	LM80204	3202
	1800	449T	95.4	1.15	400	CCF4P350T6011PYAP5	LM80047	3202
	1800	449T	95.4	1.15	460	CCF4P350T64PYAP5	LM80020	3202
400	3600	5011LS	95.4	1.15	400	CC5011F2P400LS6011PYAP5	LM80048	5500
	3600	5011LS	95.4	1.15	460	CC5011F2P400LS64PYAP5	LM80023	5500
	1800	5011L	95.4	1.15	400	CC5011F4P400L6011PYAP5	LM80049	5500
	1800	5011L	95.4	1.15	460	CC5011F4P400L64PYAP5	LM80022	5500
450	1800	5011L	95.4	1.15	400	CC5011F4P450L6011PYAP5	LM80082	5500
	1800	5011L	95.4	1.15	460	CC5011F4P450L64PYAP5	LM80083	5500

Data subject to change without notice.



# CONNECTION DIAGRAMS

## MOTOR CONNECTION DIAGRAMS

All single speed and two-speed Lincoln motors are capable of across-the-line or autotransformer starting. Reference the lead connection diagram located on the nameplate or inside of the terminal box cover.

Single speed motors have reduced voltage start capability per the following chart.

Number of Motor Leads	Number of Rated Voltages	Lead Numbers	YDS	PWS
3	Single	1-3	No	No
6	Single	1-3, 7-9	No	Yes
	Dual	1-6	Yes <sup>(1)</sup>	No
9	Dual	1-9	No	No
12	Single	1-12	Yes	Yes
	Dual	1-12	Yes	No <sup>(2)</sup>

(1) YDS capability on lower voltage only.

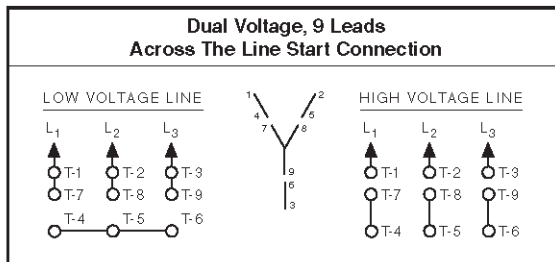
(2) PWS capability on lower voltage only.

\* (3) Lincoln Motors parallels leads; multiple T1, T2, T3, etc. Leads need to be paired up properly.

Model Number Voltage Codes: 61, 62

Frame Sizes: 56 - 256T

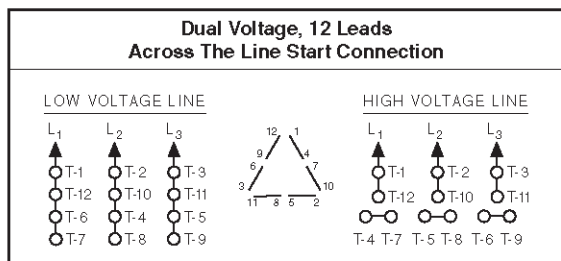
Leads: 9



Model Number Voltage Codes: 61, 61Y, 62

Frame Sizes: 284T - 405T

Leads: 12

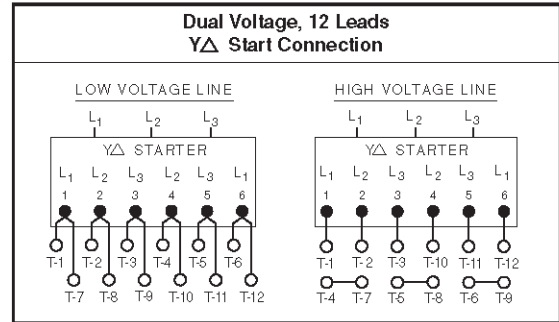


\* (3) Lincoln Motors has paralleled leads, for example two #1 leads, two #2 leads, two #3 leads, etc. These multiple leads must be paired up together and treated as one lead then follow the Connection Diagrams.

Model Number Voltage Codes: 61, 61Y, 62

Frame Sizes: 284T - 405T

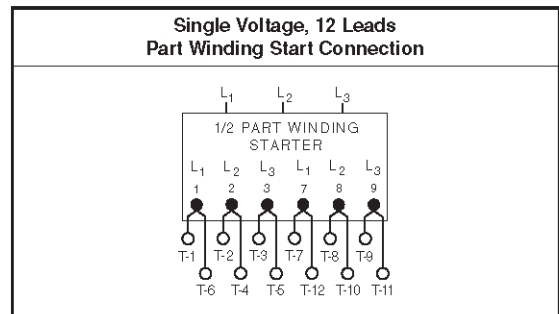
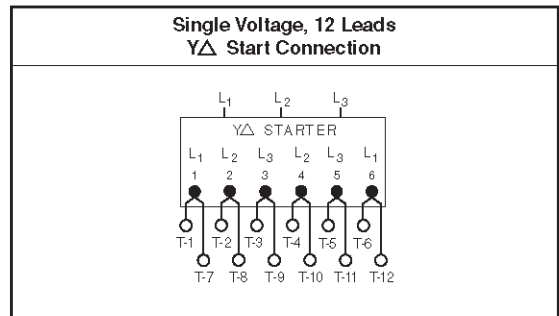
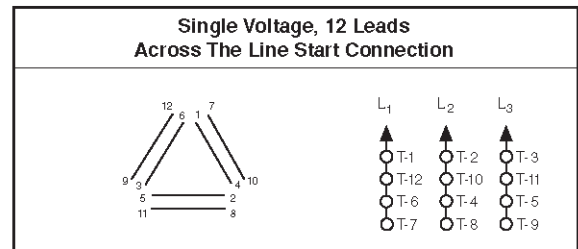
Leads: 12



Model Number Voltage Codes: 64PY, 65PY

Frame Sizes: 444T - 449T

Leads: 12

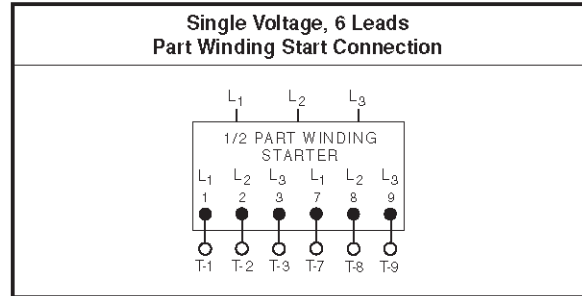
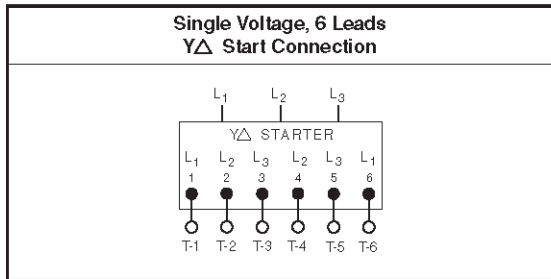
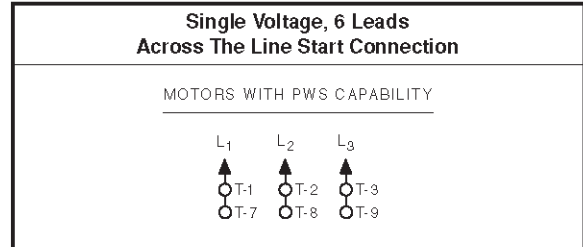
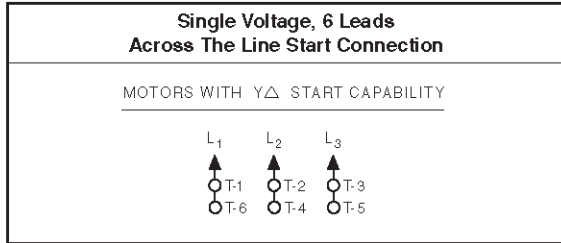


Data subject to change without notice.

# CONNECTION DIAGRAMS

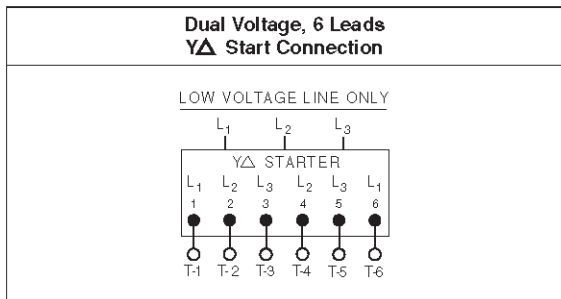
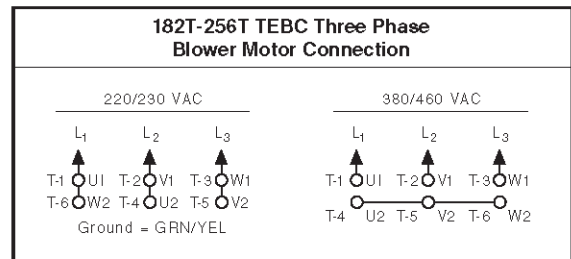
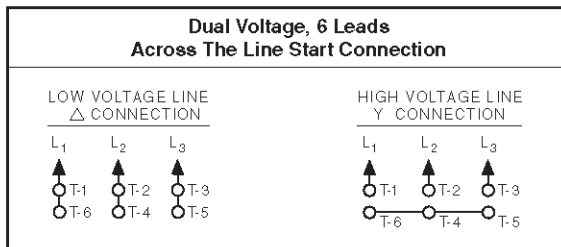
Model Number Voltage Codes: 64Y, 65Y, 55Y  
 Frame Sizes: 213T - 449T  
 Leads: 6

Model Number Voltage Code: 64P, 65P  
 Frame Sizes: 56 - 449T  
 Leads: 6



Model Number Voltage Code: 51  
 Frame Sizes: 56 - 405T  
 Leads: 6

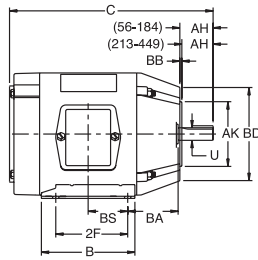
Inverter Duty TEBC Motors - Blower Motor  
 Model Number Prefix: AB  
 Frame Sizes: 182T-256T



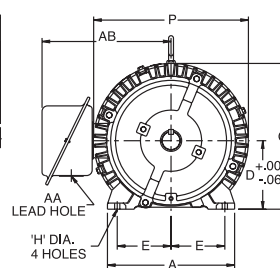
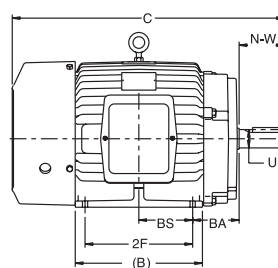
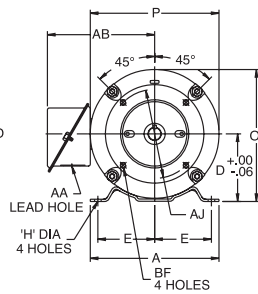
\*(3) Lincoln Motors has paralleled leads, for example two #1 leads, two #2 leads, two #3 leads, etc. These multiple leads must be paired up together and treated as one lead then follow the Connection Diagrams.

# NEMA QUICK REFERENCE DIMENSIONAL CHART

**Typical C-Face Motor**



**Typical Rigid Base Motor**



NEMA C-Face	BA Dimensions
143-5TC	2-3/4
182-4TC	3-1/2
213-5TC	4-1/4
254-6TC	4-3/4

Contact your Lincoln Sales Rep. for dimensions not shown.

Refer to the Leeson 1050 catalog for "C" dimensions.

FRAME	D	E	2F	H	U	N-W	AA	AH	AJ	AK	BA	BB (MIN)	BD (MAX)	BF
48	3.00	2.12	2.75	.34 SLOT	.5000	1.50	1/2	1.69	3.750	3.000	2.50	.13	5.62	1/4-20
56	3.50	2.44	3.00	.34 SLOT	.6250	1.88	1/2	2.06	5.875	4.500	2.75	.13	6.50	3/8-16
56H	3.50	2.44	5.00	.34 SLOT	.6250	1.88	1/2	2.06	5.875	4.500	2.75	.13	6.50	3/8-16
143T	3.50	2.75	4.00	.34	.8750	2.25	3/4	2.12	5.875	4.500	2.25	.13	6.50	3/8-16
145T	3.50	2.75	5.00	.34	.8750	2.25	3/4	2.12	5.875	4.500	2.25	.13	6.50	3/8-16
182	4.50	3.75	4.50	.41	.8750	2.25	3/4	2.12	5.875	4.500	2.75	.13	6.50	3/8-16
184	4.50	3.75	5.50	.41	.8750	2.25	3/4	2.12	5.875	4.500	2.75	.13	6.50	3/8-16
182T	4.50	3.75	4.50	.41	1.125	2.75	3/4	2.62	7.250	8.500	2.75	.25	9.00	1/2-13
184T	4.50	3.75	5.50	.41	1.125	2.75	3/4	2.62	7.250	8.500	2.75	.25	9.00	1/2-13
213	5.25	4.25	5.50	.41	1.125	3.00	1	2.75	7.250	8.500	3.50	.25	9.00	1/2-13
215	5.25	4.25	7.00	.41	1.125	3.00	1	2.75	7.250	8.500	3.50	.25	9.00	1/2-13
213T	5.25	4.25	5.50	.41	1.375	3.38	1	3.12	7.250	8.500	3.50	.25	9.00	1/2-13
215T	5.25	4.25	7.00	.41	1.375	3.38	1	3.12	7.250	8.500	3.50	.25	9.00	1/2-13
254U	6.25	5.00	8.25	.53	1.375	3.75	1-1/4	3.50	7.250	8.500	4.25	.25	10.00	1/2-13
256U	6.25	5.00	10.00	.53	1.375	3.75	1-1/4	3.50	7.250	8.500	4.25	.25	10.00	1/2-13
254T	6.25	5.00	8.25	.53	1.625	4.00	1-1/4	3.75	7.250	8.500	4.25	.25	10.00	1/2-13
256T	6.25	5.00	10.00	.53	1.625	4.00	1-1/4	3.75	7.250	8.500	4.25	.25	10.00	1/2-13
284U	7.00	5.50	9.50	.53	1.625	4.88	1-1/2	4.62	9.000	10.500	4.75	.25	11.25	1/2-13
286U	7.00	5.50	11.00	.53	1.625	4.88	1-1/2	4.62	9.000	10.500	4.75	.25	11.25	1/2-13
284T	7.00	5.50	9.50	.53	1.875	4.62	1-1/2	4.38	9.000	10.500	4.75	.25	11.25	1/2-13
286T	7.00	5.50	11.00	.53	1.875	4.62	1-1/2	4.38	9.000	10.500	4.75	.25	11.25	1/2-13
284TS	7.00	5.50	9.50	.53	1.625	3.25	1-1/2	3.00	9.000	10.500	4.75	.25	11.25	1/2-13
286TS	7.00	5.50	11.00	.53	1.625	3.25	1-1/2	3.00	9.000	10.500	4.75	.25	11.25	1/2-13
324U	8.00	6.25	10.50	.66	1.875	5.62	2	5.38	11.000	12.500	5.25	.25	14.00	5/8-11
326U	8.00	6.25	12.00	.66	1.875	5.62	2	5.38	11.000	12.500	5.25	.25	14.00	5/8-11
324T	8.00	6.25	10.50	.66	2.125	5.25	2	5.00	11.000	12.500	5.25	.25	14.00	5/8-11
326T	8.00	6.25	12.00	.66	2.125	5.25	2	5.00	11.000	12.500	5.25	.25	14.00	5/8-11
324TS	8.00	6.25	10.50	.66	1.875	3.75	2	3.50	11.000	12.500	5.25	.25	14.00	5/8-11
326TS	8.00	6.25	12.00	.66	1.875	3.75	2	3.50	11.000	12.500	5.25	.25	14.00	5/8-11
364U	9.00	7.00	11.25	.66	2.125	6.38	2-1/2	6.12	11.000	12.500	5.88	.25	14.00	5/8-11
365U	9.00	7.00	12.25	.66	2.125	6.38	2-1/2	6.12	11.000	12.500	5.88	.25	14.00	5/8-11
364T	9.00	7.00	11.25	.66	2.375	5.88	2-1/2	5.62	11.000	12.500	5.88	.25	14.00	5/8-11
365T	9.00	7.00	12.25	.66	2.375	5.88	2-1/2	5.62	11.000	12.500	5.88	.25	14.00	5/8-11
364TS	9.00	7.00	11.25	.66	1.875	3.75	2-1/2	3.50	11.000	12.500	5.88	.25	14.00	5/8-11
365TS	9.00	7.00	12.25	.66	1.875	3.75	2-1/2	3.50	11.000	12.500	5.88	.25	14.00	5/8-11
404U	10.00	8.00	12.25	.81	2.375	7.12	3	6.88	11.000	12.500	6.62	.25	15.50	5/8-11
405U	10.00	8.00	13.75	.81	2.375	7.12	3	6.88	11.000	12.500	6.62	.25	15.50	5/8-11
404T	10.00	8.00	12.25	.81	2.875	7.25	3	7.00	11.000	12.500	6.62	.25	15.50	5/8-11
405T	10.00	8.00	13.75	.81	2.875	7.25	3	7.00	11.000	12.500	6.62	.25	15.50	5/8-11
404TS	10.00	8.00	12.25	.81	2.125	4.25	3	4.00	11.000	12.500	6.62	.25	15.50	5/8-11
405TS	10.00	8.00	13.75	.81	2.125	4.25	3	4.00	11.000	12.500	6.62	.25	15.50	5/8-11
444U	11.00	9.00	14.50	.81	2.875	8.62	3	8.38	14.000	16.000	7.50	.25	18.00	5/8-11
445U	11.00	9.00	16.50	.81	2.875	8.62	3	8.38	14.000	16.000	7.50	.25	18.00	5/8-11
444T	11.00	9.00	14.50	.81	3.375	8.50	3	8.25	14.000	16.000	7.50	.25	18.00	5/8-11
445T	11.00	9.00	16.50	.81	3.375	8.50	3	8.25	14.000	16.000	7.50	.25	18.00	5/8-11
444TS	11.00	9.00	14.50	.81	2.375	4.75	3	4.50	14.000	16.000	7.50	.25	18.00	5/8-11
445TS	11.00	9.00	16.50	.81	2.375	4.75	3	4.50	14.000	16.000	7.50	.25	18.00	5/8-11
447T	11.00	9.00	20.00	.81	3.375	8.50	3	8.25	14.000	16.000	7.50	.25	18.00	5/8-11
449T	11.00	9.00	25.00	.81	3.375	8.50	3	8.25	14.000	16.000	7.50	.25	18.00	5/8-11
447TS	11.00	9.00	20.00	.81	2.375	4.75	4 NPT	4.50	14.000	16.000	7.50	.25	18.00	5/8-11
449TS	11.00	9.00	25.00	.81	2.375	4.75	4 NPT	4.50	14.000	16.000	7.50	.25	18.00	5/8-11
5011LS	12.47	10.00	36.00	1.062	2.875	5.75	4.00	-	-	-	8.50	-	-	-
5011L	12.47	10.00	36.00	1.062	4.000	9.50	4.00	-	-	-	8.50	-	-	-

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