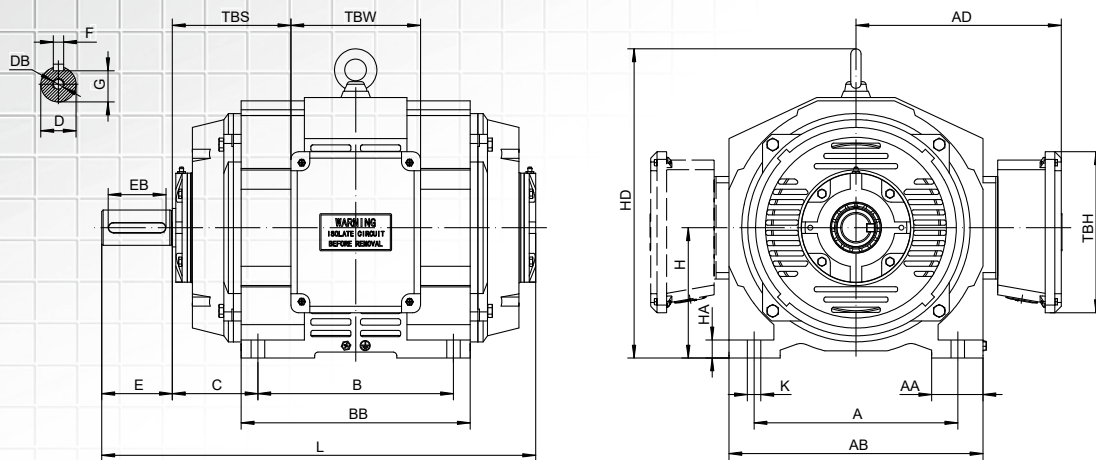


# TDC series IEC ODP(IP23) Three Phase Motor



## Overall & Installation Dimensions

Frame	Foot Mounting				Shaft					General							
	H	A	B	C	D	E	F	G	K	AA	AB	AD	HD	BB	L	HA	
160M/L	160	254	210/254	108	φ 42	110	12	37	φ 15	60	316	178+	381	305	579	21	
180M/L	180	279	241/279	121	φ 48	110	14	42.5	φ 15	80	360	200+	436	331	625	25	
200L	200	318	305	133	φ 55	110	16	49	φ 19	80	396	218+	479	357	676	28	
225S/M	2	225	356	311	149	φ 55	110	16	49	φ 19	90	458	249+	545	379	708	
	4,6,8															738	28.5
250M	2	250	406	349	168	φ 60	140	18	53	φ 24	95	506	273+	594	431	819	30
	4,6,8																
280S/M	2	280	457	368/419	190	φ 65	140	18	58	φ 24	110	560	290+	692	510	927	37
	4,6,8																

Frame	TBS	TBW	TBH	DB	Bearings		Cable Gland
					DE	NDE	
160M/L	147	176	210	M16	6309C3		2-M32 × 1.5
180M/L	172	176	210	M16	6311C3		2-M32 × 1.5
200L	185	202	251	M20	6312C3		2-M40 × 1.5
225S/M	204	202	251	M20	6313C3		2-M50 × 1.5
250M	228	234	278	M20	6314C3		2-M50 × 1.5
280S/M	267	265	300	M20	6316C3		2-M50 × 1.5

# TDC1 Series IE1 Efficiency Motors Technical Data (IP23) (400V/50Hz)

Model	Power (KW)	Speed (r/min)	FL Current (A)	Eff (%)	PF (COSΦ)	Tn (N.M)	I <sub>st</sub> /I <sub>n</sub> (Times)	T <sub>st</sub> /T <sub>n</sub> (Times)	T <sub>min</sub> /T <sub>n</sub> (Times)	T <sub>max</sub> /T <sub>n</sub> (Times)	Moment of inertia (kg·m <sup>2</sup> )
2 Pole 3000 rpm Synchronous Speed 50Hz											
TDC1 160M1-2	11	2910	20.83	87.6	0.87	36.10	8.5	2.0	1.2	2.3	0.033200
TDC1 160M2-2	15	2910	28.06	88.7	0.87	49.23	8.5	2.0	1.2	2.3	0.043072
TDC1 160L-2	18.5	2910	33.60	89.3	0.89	60.71	8.5	2.0	1.1	2.3	0.051488
TDC1 180M-2	22	2920	39.7	89.9	0.89	71.95	8.5	2.0	1.1	2.3	0.064880
TDC1 200L1-2	30	2920	53.6	90.7	0.89	98.1	8	2.0	1.1	2.3	0.121104
TDC1 200L2-2	37	2920	65.8	91.2	0.89	121.0	8	2.0	1.1	2.3	0.138808
TDC1 225M-2	45	2930	78.7	91.7	0.90	146.7	8	2.0	1.0	2.3	0.193424
TDC1 250M-2	55	2930	97.9	92.1	0.88	179.3	8	2.0	1.0	2.3	0.311224
TDC1 280S-2	75	2930	131.2	92.7	0.89	244.5	7.5	2.0	0.9	2.3	0.558968
TDC1 280M-2	90	2930	155.2	93	0.90	293.3	7.5	2.0	0.9	2.3	0.636312
4 Pole 1500 rpm Synchronous Speed 50Hz											
TDC1 160M-4	11	1440	21.32	87.6	0.85	72.95	8	2.2	1.4	2.3	0.061272
TDC1 160L-4	15	1450	28.06	88.7	0.87	98.79	8	2.2	1.4	2.3	0.083032
TDC1 180M-4	18.5	1450	33.98	89.3	0.88	121.8	8	2.2	1.2	2.3	0.112672
TDC1 180L-4	22	1460	40.6	89.9	0.87	143.9	8	2.2	1.2	2.3	0.132328
TDC1 200L-4	30	1460	53.6	90.7	0.89	196.2	8	2.2	1.2	2.3	0.212752
TDC1 225S-4	37	1470	65.8	91.2	0.89	240.4	8	2.0	1.2	2.3	0.403512
TDC1 225M-4	45	1480	80.5	91.7	0.88	290.4	8	2.0	1.1	2.3	0.463272
TDC1 250M-4	55	1480	96.8	92.1	0.89	354.9	8	2.0	1.1	2.3	0.552784
TDC1 280S-4	75	1480	132.7	92.7	0.88	484.0	7.5	2.0	1.0	2.2	1.130280
TDC1 280M-4	90	1480	155.2	93	0.90	580.7	7.5	2.0	1.0	2.2	1.396856
6 Pole 1000 rpm Synchronous Speed 50Hz											
TDC1 160M-6	7.5	960	18.0	84.7	0.71	74.6	8	2.0	1.3	2.1	0.069808
TDC1 160L-6	11	960	24.5	86.4	0.75	109.4	8	2.0	1.2	2.1	0.087704
TDC1 180L-6	15	960	31.7	87.7	0.78	149.2	8	2.0	1.2	2.1	0.199488
TDC1 200L1-6	18.5	970	37.7	88.6	0.80	182.1	8	2.0	1.2	2.1	0.289176
TDC1 200L2-6	22	970	43.4	89.2	0.82	216.6	8	2.0	12.0	2.1	0.315560
TDC1 225M-6	30	975	56.5	90.2	0.85	293.8	7.5	2.0	1.2	2.1	0.444928
TDC1 250M-6	37	975	70.0	90.8	0.84	362.4	7.5	2.0	1.2	2.1	0.771816
TDC1 280S-6	45	980	83.6	91.4	0.85	438.5	7	2.0	1.1	2.0	1.344928
TDC1 280M1-6	55	980	100.4	91.9	0.86	536.0	7	2.0	1.1	2.0	1.599424
8 Pole 750 rpm Synchronous Speed 50Hz											
TDC1 160M1-8	4	730	9.9	80	0.73	52.3	7	1.8	1.2	2.1	0.060960
TDC1 160M2-8	5.5	720	12.8	83.5	0.74	73.0	7	1.8	1.2	2.1	0.072760
TDC1 160L-8	7.5	720	17.0	85	0.75	99.5	7	1.8	1.2	2.1	0.084750
TDC1 180L-8	11	730	23.7	88	0.76	143.9	7	1.8	1.1	2.1	0.205561
TDC1 200L-8	15	730	31.6	89	0.77	196.2	7	1.8	1.1	2.1	0.289175
TDC1 225S-8	18.5	730	39.0	90	0.76	242.0	7	1.8	1.1	2.1	0.392622
TDC1 225M-8	22	740	45.0	90.5	0.78	283.9	7	1.8	1.1	2.1	0.471080
TDC1 250M-8	30	740	60.2	91	0.79	387.2	7	1.8	1.1	2.1	0.816068
TDC1 280S-8	37	740	73.9	91.5	0.79	477.5	7	1.8	1.1	2.1	1.511832
TDC1 280M-8	45	740	89.4	92	0.79	580.7	7	1.8	0.9	2.1	1.808060

## TDC2 Series IE2 Efficiency Motors Technical Data (IP23) (400V/50Hz)

Model	Power (KW)	Speed (r/min)	FL Current (A)	Eff (%)	PF (COSΦ)	Tn (N.M)	I <sub>st</sub> /I <sub>n</sub> (Times)	T <sub>st</sub> /T <sub>n</sub> (Times)	T <sub>min</sub> /T <sub>n</sub> (Times)	T <sub>max</sub> /T <sub>n</sub> (Times)	Moment of inertia (kg·m <sup>2</sup> )
<b>2 Pole 3000 rpm Synchronous Speed 50Hz</b>											
TDC2 160M1-2	11	2930	19.73	89.4	0.90	35.85	8.5	2.0	1.2	2.3	0.036488
TDC2 160M2-2	15	2940	26.64	90.3	0.90	48.72	8.5	2.0	1.2	2.3	0.049648
TDC2 160L-2	18.5	2940	32.64	90.9	0.90	60.09	8.5	2.0	1.1	2.3	0.060224
TDC2 180M-2	22	2945	38.6	91.3	0.90	71.34	8.5	2.0	1.1	2.3	0.064880
TDC2 200L1-2	30	2945	52.3	92	0.90	97.3	8	2.0	1.1	2.3	0.114024
TDC2 200L2-2	37	2945	64.2	92.5	0.90	120.0	8	2.0	1.1	2.3	0.131728
TDC2 225M-2	45	2950	77.7	92.9	0.90	145.7	8	2.0	1.0	2.3	0.199248
TDC2 250M-2	55	2960	94.6	93.2	0.90	177.4	8	2.0	1.0	2.3	0.346624
TDC2 280S-2	75	2960	128.2	93.8	0.90	242.0	7.5	2.0	0.9	2.3	0.633488
TDC2 280M-2	90	2960	153.4	94.1	0.90	290.4	7.5	2.0	0.9	2.3	0.725728
<b>4 Pole 1500 rpm Synchronous Speed 50Hz</b>											
TDC2 160M-4	11	1440	21.30	89.8	0.83	72.95	8	2.2	1.4	2.3	0.069360
TDC2 160L-4	15	1450	27.47	90.6	0.87	98.79	8	2.2	1.4	2.3	0.090176
TDC2 180M-4	18.5	1450	34.05	91.2	0.86	121.8	8	2.2	1.2	2.3	0.112672
TDC2 180L-4	22	1460	39.4	91.6	0.88	143.9	8	2.2	1.2	2.3	0.132328
TDC2 200L-4	30	1460	53.3	92.3	0.88	196.2	8	2.2	1.2	2.3	0.218448
TDC2 225S-4	37	1470	65.5	92.7	0.88	240.4	8	2.0	1.2	2.3	0.403512
TDC2 225M-4	45	1480	78.4	93.1	0.89	290.4	8	2.0	1.1	2.3	0.475112
TDC2 250M-4	55	1480	98.7	93.5	0.86	354.9	8	2.0	1.1	2.3	0.567600
TDC2 280S-4	75	1480	128.0	94	0.90	484.0	7.5	2.0	1.0	2.2	1.276080
TDC2 280M-4	90	1480	153.2	94.2	0.90	580.7	7.5	2.0	1.0	2.2	1.513496
<b>6 Pole 1000 rpm Synchronous Speed 50Hz</b>											
TDC2 160M-6	7.5	960	17.5	87.2	0.71	74.6	8	2.0	1.3	2.1	0.069808
TDC2 160L-6	11	960	23.9	88.7	0.75	109.4	8	2.0	1.2	2.1	0.096552
TDC2 180L-6	15	960	30.9	89.7	0.78	149.2	8	2.0	1.2	2.1	0.205560
TDC2 200L1-6	18.5	970	36.9	90.4	0.80	182.1	8	2.0	1.2	2.1	0.289176
TDC2 200L2-6	22	970	42.6	90.9	0.82	216.6	8	2.0	12.0	2.1	0.341936
TDC2 225M-6	30	975	55.6	91.7	0.85	293.8	7.5	2.0	1.2	2.1	0.536464
TDC2 250M-6	37	975	69.0	92.2	0.84	362.4	7.5	2.0	1.2	2.1	0.793944
TDC2 280S-6	45	980	82.4	92.7	0.85	438.5	7	2.0	1.1	2.0	1.428384
TDC2 280M1-6	55	980	99.2	93.1	0.86	536.0	7	2.0	1.1	2.0	1.766336

# TDC3 Series IE3 Efficiency Motors Technical Data (IP23) (400V/50Hz)

Model	Power (KW)	Speed (r/min)	FL Current (A)	Eff (%)	PF (COSΦ)	Tn (N.M)	I <sub>st</sub> /I <sub>n</sub> (Times)	T <sub>st</sub> /T <sub>n</sub> (Times)	T <sub>min</sub> /T <sub>n</sub> (Times)	T <sub>max</sub> /T <sub>n</sub> (Times)	Moment of inertia (kg·m <sup>2</sup> )
2 Pole 3000 rpm Synchronous Speed 50Hz											
TDC3 160M1-2	11	2930	19.34	91.2	0.90	35.85	8.5	2.0	1.2	2.3	0.041424
TDC3 160M2-2	15	2940	26.18	91.9	0.90	48.72	8.5	2.0	1.2	2.3	0.049648
TDC3 160L-2	18.5	2940	31.76	92.4	0.91	60.09	8.5	2.0	1.1	2.3	0.061352
TDC3 180M-2	22	2945	38.5	92.7	0.89	71.34	8.5	2.0	1.1	2.3	0.077320
TDC3 200L1-2	30	2945	52.1	93.3	0.89	97.3	8	2.0	1.1	2.3	0.138808
TDC3 200L2-2	37	2945	64.0	93.7	0.89	120.0	8	2.0	1.1	2.3	0.160064
TDC3 225M-2	45	2950	75.9	94	0.91	145.7	8	2.0	1.0	2.3	0.274928
TDC3 250M-2	55	2960	93.5	94.3	0.90	177.4	8	2.0	1.0	2.3	0.355472
TDC3 280S-2	75	2960	125.6	94.7	0.91	242.0	7.5	2.0	0.9	2.3	0.663288
TDC3 280M-2	90	2960	150.3	95	0.91	290.4	7.5	2.0	0.9	2.3	0.785344
4 Pole 1500 rpm Synchronous Speed 50Hz											
TDC3 160M-4	11	1450	20.68	91.4	0.84	72.45	8	2.2	1.4	2.3	0.082840
TDC3 160L-4	15	1450	27.33	92.1	0.86	98.8	8	2.2	1.4	2.3	0.110000
TDC3 180M-4	18.5	1460	33.5	92.6	0.86	121.0	8	2.2	1.2	2.3	0.124240
TDC3 180L-4	22	1460	39.2	93	0.87	143.9	8	2.2	1.2	2.3	0.155464
TDC3 200L-4	30	1470	57.1	93.6	0.81	194.9	8	2.2	1.2	2.3	0.235528
TDC3 225S-4	37	1470	65.4	93.9	0.87	240.4	8	2.0	1.2	2.3	0.462704
TDC3 225M-4	45	1470	79.3	94.2	0.87	292.3	8	2.0	1.1	2.3	0.522472
TDC3 250M-4	55	1470	95.4	94.6	0.88	357.3	8	2.0	1.1	2.3	0.612032
TDC3 280S-4	75	1480	131.0	95	0.87	484.0	7.5	2.0	1.0	2.2	1.596824
TDC3 280M-4	90	1480	160.5	95.2	0.85	580.7	7.5	2.0	1.0	2.2	1.746760
6 Pole 1000 rpm Synchronous Speed 50Hz											
TDC3 160M-6	7.5	960	16.2	89.1	0.75	74.6	8	2.0	1.3	2.1	0.069808
TDC3 160L-6	11	960	23.1	90.3	0.76	109.4	8	2.0	1.2	2.1	0.108352
TDC3 180L-6	15	960	30.1	91.2	0.79	149.2	8	2.0	1.2	2.1	0.223784
TDC3 200L1-6	18.5	970	36.4	91.7	0.80	182.1	8	2.0	1.2	2.1	0.306760
TDC3 200L2-6	22	970	42.5	92.2	0.81	216.6	8	2.0	12.0	2.1	0.359528
TDC3 225M-6	30	975	53.0	92.9	0.88	293.8	7.5	2.0	1.2	2.1	0.536464
TDC3 250M-6	37	975	67.3	93.3	0.85	362.4	7.5	2.0	1.2	2.1	0.793944
TDC3 280S-6	45	980	83.5	93.7	0.83	438.5	7	2.0	1.1	2.0	1.762192
TDC3 280M-6	55	980	99.3	94.1	0.85	536.0	7	2.0	1.1	2.0	2.058416