



ENCLOSURE CONSTRUCTION	TOTALLY ENCLOSED FAN COOLED TYPE					
MOUNT METHOD	FOOT MOUNTED			FLANGE MOUNTED		
APPEARANCE						
POLE(S)	2	4	6	2	4	6
OUT PUT (kW)	0.4	■	■	■	■	■
	0.75	■	■		■	●
	1.5	●	●	●	●	●
	2.2	●	●	●	●	●
	3.7	●	●	●	●	●
	5.5	●	●	●	●	●
	7.5	●	●	●	●	●
	11	●	●	●	●	●
	15	●	●	●	●	●
18.5	●			●		

Frame material : ■ Steel Plate ● Aluminum Diecast

TYPE-FORM

T I K K

T: Three-phase

I: Induction-motor

k: Squirrel-cage rotor

k: Double squirrel-cage type

F C K L A W 21

F: Totally-enclosed fan-cooled type

B: Belt drive

C: Direct drive

K: Rolling bearing

L: Flange type

A: Aluminum diecast frame

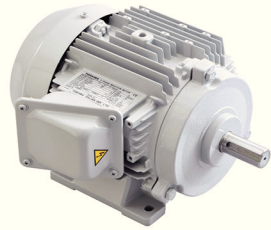
K: Steel plate frame

W: Outdoor use

8: World Energy Series 8

21: World Energy Series 21

* Note: "T" is omitted for motors rated 15kW or less

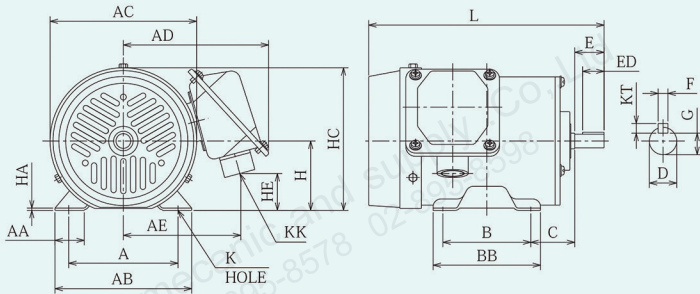


OUTLINE & DIMENSION

71M - 80M

TOSHIBA TOTALLY-ENCLOSED FAN -COOLED
HORIZONTAL FOOT-MOUNTED

Fr.71M-80M



FRAME	DIMENSIONS (mm)								
	A	AA	AB	AC	AD	AE	B	BB	C
71M	112	30	140	150	151	122	90	110	45
80M	125	35	165	170	157	129	100	130	50

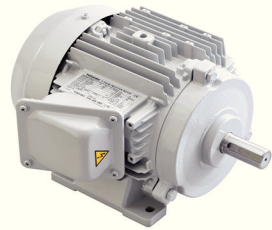
FRAME	DIMENSIONS (mm)								
	D	E	ED	F	G	H	HA	HC	HE
71M	14	30	22	5	11	71	2.3	146	38
80M	19	40	32	6	15.5	80	4.5	165	49

FRAME	DIMENSIONS (mm)				BEARINGS		WEIGHT* (kg)
	K	KK	KT	L	D.E	N.D.E	
71M	7	PF3/4	5	241	6203DDW	6203DDW	12
80M	10	PF3/4	6	273	6204DDW	6204DDW	16

*Weight : 4 poles motor.

ALL DATA SUBJECT TO CHANGE WITHOUT NOTICE.
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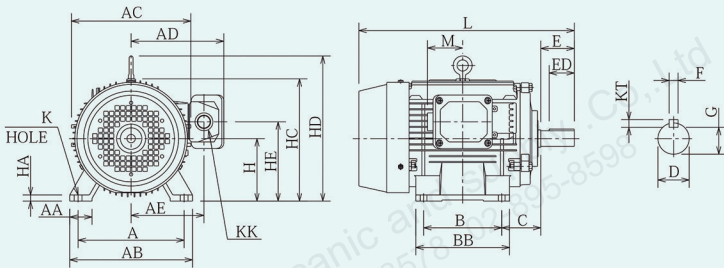
NOTES :
TOLERANCE ON DIMENSIONS "H", "D" AND
"F" TO IEC 60072.



OUTLINE & DIMENSION

90L - 132M

TOSHIBA TOTALLY-ENCLOSED FAN -COOLED
HORIZONTAL FOOT-MOUNTED Fr.90L-132M



FRAME	DIMENSIONS (mm)								
	A	AA	AB	AC	AD	AE	B	BB	C
90L	140	40	176	198	159	123.5	125	150	56
100L	160	40	200	198	159	123.5	140	168	63
112M	190	40	220	214	166	130.5	140	168	70
132S	216	50	260	252	240	178.5	140	175	89
132M	216	50	260	252	240	178.5	178	213	89

FRAME	DIMENSIONS (mm)									
	D	E	ED	F	G	H	HA	HC	HD	HE
90L	24	50	40	8	20	90	10	190	—	120
100L	28	60	45	8	24	100	12	200	—	120
112M	28	60	45	8	24	112	12	—	261	142
132S	38	80	63	10	33	132	15	—	303	167
132M	38	80	63	10	33	132	15	—	303	167

FRAME	DIMENSIONS (mm)					BEARINGS		WEIGHT* (kg)
	K	KK	KT	L	M	D.E	N.D.E	
90L	10	PF3/4	7	311.5	63	6205DDW	6304DDW	16
100L	12	PF3/4	7	350.5	63	6206DDW	6304DDW	21
112M	12	PF3/4	7	386	63	6207DDW	6305DDW	27
132S	12	Pf11/2	8	449.5	111	6308DDW	6306DDW	42
132M	12	Pf11/2	8	487.5	111	6308DDW	6306DDW	48

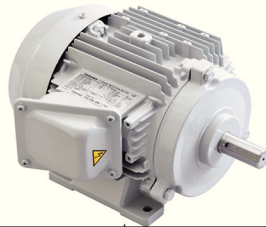
*Weight : 4 poles motor.

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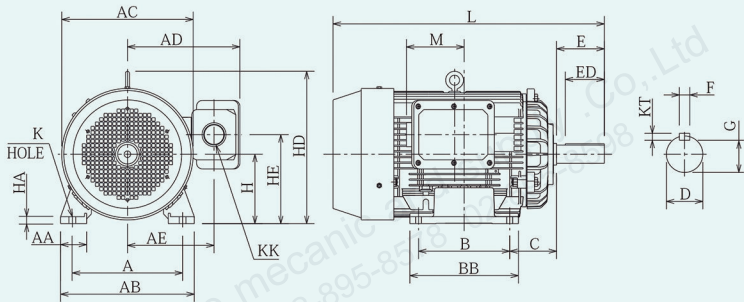
NOTES :
TOLERANCE ON DIMENSIONS "H", "D" AND
"F" TO IEC 60072.

OUTLINE & DIMENSION

160M - 160L



TOSHIBA TOTALLY-ENCLOSED FAN -COOLED
HORIZONTAL FOOT-MOUNTED Fr.160M-160L



FRAME	DIMENSIONS (mm)								
	A	AA	AB	AC	AD	AE	B	BB	C
160M	254	60	308	304	259	199.5	210	250	108
160L	254	60	308	304	259	199.5	254	294	108

FRAME	DIMENSIONS (mm)								
	D	E	ED	F	G	H	HA	HD	HE
160M	42	110	90	12	37	160	18	351	205
160L	42	110	90	12	37	160	18	351	205

FRAME	DIMENSIONS (mm)					BEARINGS		WEIGHT* (kg)
	K	KK	KT	L	M	D.E	N.D.E	
160M	14.5	PF 1 1/2	8	625	133	6310DDW	6208DDW	77
160L	14.5	PF 1 1/2	8	625	111	6310DDW	6208DDW	92

*Weight : 4 poles motor.

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NOTES :
TOLERANCE ON DIMENSIONS "H", "D" AND
"F" TO IEC 60072.

CHARACTERISTICS & PERFORMANCE

CHARACTERISTICS AND PERFORMANCE OF 2POLES THREE PHASE MOTOR

2POLES

Rated Output kW	Frame Number	Hz	Volts	Full Load Current A	Full Load Speed min ⁻¹	No Load Current A	Locked Rotor Current % F/L	Locked Rotor Torque % F/L	Pull Up Torque % F/L	Break down Torque % F/L	Efficiency (%)			Power factor			Rotor Inertia J kg·m ²	Noise SPL dB(A)
											Full Load	75% Load	50% Load	Full Load	75% Load	50% Load		
0.37	71M	50	220	1.65	2800	0.83	550	220	210	220	71.0	72.0	68.0	87.0	79.0	66.0	0.00057	61
			380	0.95	2800	0.48	550	220	210	220	71.0	72.0	68.0	87.0	79.0	66.0		
			415	0.92	2830	0.57	600	260	250	260	72.0	71.0	66.0	82.5	71.0	58.0		
0.55	71M	50	220	2.20	2820	1.10	650	280	265	270	76.0	76.0	73.0	88.0	81.0	70.0	0.0007	61
			380	1.27	2820	0.64	650	280	265	270	76.0	76.0	73.0	88.0	81.0	70.0		
			415	1.27	2840	0.90	700	330	315	320	76.0	75.0	69.0	79.0	72.0	60.0		
0.75	80M	50	220	3.00	2840	1.30	600	200	190	240	75.0	76.0	75.0	88.0	82.0	72.0	0.00105	69
			380	1.73	2840	0.75	600	200	190	240	75.0	76.0	75.0	88.0	82.0	72.0		
			415	1.73	2860	0.94	650	238	226	286	75.0	74.5	71.0	82.0	75.0	62.0		
1.1	80M	50	220	4.40	2830	2.30	700	250	238	300	79.0	79.0	78.5	84.0	79.0	68.0	0.00152	63
			380	2.54	2830	1.33	700	250	238	300	79.0	79.0	78.5	84.0	79.0	68.0		
			415	2.54	2860	1.90	780	298	283	358	79.0	79.0	75.0	78.0	70.0	59.0		
1.5	90L	50	220	5.90	2800	2.34	600	185	180	215	78.0	79.0	78.0	89.0	84.0	75.0	0.00152	64
			380	3.40	2800	1.35	600	185	180	215	78.0	79.0	78.0	89.0	84.0	75.0		
			415	3.20	2830	1.80	700	220	215	255	79.0	79.0	77.0	84.5	76.0	63.0		
2.2	90L	50	220	8.20	2810	3.30	740	230	225	235	80.0	81.0	80.0	89.0	85.0	75.0	0.00208	64
			380	4.70	2810	1.90	740	230	225	235	80.0	81.0	80.0	89.0	85.0	75.0		
			415	4.60	2830	2.56	820	270	265	280	81.0	81.0	79.0	83.5	75.0	62.0		
3	112M	50	220	10.6	2830	3.50	820	295	265	280	82.0	81.0	80.0	91.0	87.0	79.0	0.00375	70
			380	6.10	2830	2.02	820	295	265	280	82.0	81.0	80.0	91.0	87.0	79.0		
			415	5.90	2860	2.70	940	350	315	330	83.0	80.5	78.0	86.0	79.0	68.0		
4	112M	50	220	14.2	2820	5.00	690	250	225	240	83.0	84.0	83.0	89.5	85.5	77.0	0.00375	70
			380	8.20	2820	2.90	690	250	225	240	83.0	84.0	83.0	89.5	85.5	77.0		
			415	8.00	2840	4.00	770	295	265	285	84.0	83.0	81.5	84.5	76.5	64.0		
5.5	132S	50	220	18.8	2890	6.34	830	235	225	295	85.0	84.0	81.5	90.5	86.0	78.5	0.00803	72
			380	10.9	2890	3.66	830	235	225	295	85.0	84.0	81.5	90.5	86.0	78.5		
			415	10.5	2920	4.50	940	280	265	350	85.5	84.5	81.5	85.5	83.0	75.0		
7.5	132S	50	220	24.8	2890	7.62	930	315	295	345	87.0	86.0	85.0	91.0	89.0	85.0	0.01050	72
			380	14.3	2890	4.40	930	315	295	345	87.0	86.0	85.0	91.0	89.0	85.0		
			415	13.8	2920	5.80	990	375	350	410	87.5	85.5	83.0	87.0	83.5	76.0		
11	160M	50	220	37.0	2880	9.86	680	225	195	255	87.0	86.0	84.0	90.5	89.5	84.5	0.02280	71
			380	21.4	2880	5.70	680	225	195	255	87.0	86.0	84.0	90.5	89.5	84.5		
			415	20.0	2900	7.62	800	265	230	300	87.5	86.0	83.5	87.0	83.0	75.0		
15	160M	50	220	49.0	2880	14.0	830	275	240	290	88.5	88.0	87.0	91.0	89.0	83.0	0.03000	71
			380	28.2	2880	8.10	830	275	240	290	88.5	88.0	87.0	91.0	89.0	83.0		
			415	27.0	2900	11.0	940	300	285	345	89.5	88.0	86.0	86.5	82.0	72.0		
18.5	160L	50	220	58.2	2900	15.5	920	320	270	310	91.0	90.0	88.0	91.5	88.0	76.0	0.03730	71
			380	33.6	2900	8.95	920	320	270	310	91.0	90.0	88.0	91.5	88.0	76.0		
			415	31.8	2920	11.5	1040	380	322	370	91.5	90.5	88.0	88.5	84.0	74.0		