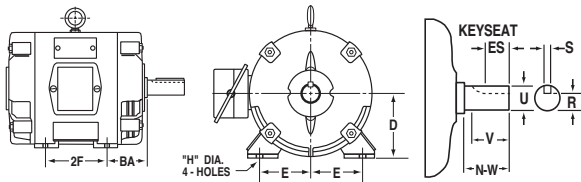


NEMA FRAME DIMENSIONS*

FOOT-MOUNTED AC MACHINES



* Dimensions in inches

FRAME DESIGNATION	D	E	2F	BA	H**	U	N-W	V MIN	KEYSEAT		
									R	ES MIN	S
42	2.62	1.75	1.69	2.06	0.28	0.3750	1.12		0.328		Flat
48	3.00	2.12	2.75	2.50	0.34	0.5000	1.50		0.453		Flat
48H	3.00	2.12	4.75	2.50	0.34	0.5000	1.50		0.453		Flat
56	3.50	2.44	3.00	2.75	0.34	0.6250	1.88		0.517	1.41	0.188
56H	3.50	2.44	5.00	2.75	0.34	0.6250	1.88		0.517	1.41	0.188
66	4.12	2.94	5.00	3.12	0.41	0.7500	2.25		0.644	1.91	0.188
143	3.50	2.75	4.00	2.25	0.34	0.7500	2.00	1.75	0.644	1.41	0.188
143T	3.50	2.75	4.00	2.25	0.34	0.8750	2.25	2.00	0.771	1.41	0.188
145	3.50	2.75	5.00	2.25	0.34	0.7500	2.00	1.75	0.644	1.41	0.188
145T	3.50	2.75	5.00	2.25	0.34	0.8750	2.25	2.00	0.771	1.41	0.188
182	4.50	3.75	4.50	2.75	0.41	0.8750	2.25	2.00	0.771	1.41	0.188
182T	4.50	3.75	4.50	2.75	0.41	1.1250	2.75	2.50	0.986	1.78	0.250
184	4.50	3.75	5.50	2.75	0.41	0.8750	2.25	2.00	0.771	1.41	0.188
184T	4.50	3.75	5.50	2.75	0.41	1.1250	2.75	2.50	0.986	1.78	0.250
203	5.00	4.00	5.50	3.12	0.41	0.7500	2.25	2.00	0.644	1.53	0.188
204	5.00	4.00	6.50	3.12	0.41	0.7500	2.25	2.00	0.644	1.53	0.188

213	5.25	4.25	5.50	3.50	0.41	1.1250	3.00	2.75	0.986	2.03	0.250
213T	5.25	4.25	5.50	3.50	0.41	1.3750	3.38	3.12	1.201	2.41	0.312
215	5.25	4.25	7.00	3.50	0.41	1.1250	3.00	2.75	0.986	2.03	0.250
215T	5.25	4.25	7.00	3.50	0.41	1.3750	3.38	3.12	1.201	2.41	0.312
224	5.50	4.50	6.75	3.50	0.41	1.0000	3.00	2.75	0.859	2.03	0.250
225	5.50	4.50	7.50	3.50	0.41	1.0000	3.00	2.75	0.859	2.03	0.250
254	6.25	5.00	8.25	4.25	0.53	1.1250	3.38	3.12	0.986	2.03	0.250
254U	6.25	5.00	8.25	4.25	0.53	1.3750	3.75	3.50	1.201	2.78	0.312
254T	6.25	5.00	8.25	4.25	0.53	1.625	4.00	3.75	1.416	2.91	0.375
256U	6.25	5.00	10.00	4.25	0.53	1.3750	3.75	3.50	1.201	2.78	0.312
256T	6.25	5.00	10.00	4.25	0.53	1.625	4.00	3.75	1.416	2.91	0.375
284	7.00	5.50	9.50	4.75	0.53	1.2500	3.75	3.50	1.112	2.03	0.250
284U	7.00	5.50	9.50	4.75	0.53	1.625	4.88	4.62	1.416	3.78	0.375
284T	7.00	5.50	9.50	4.75	0.53	1.875	4.62	4.38	1.591	3.28	0.500
284TS	7.00	5.50	9.50	4.75	0.53	1.625	3.25	3.00	1.416	1.91	0.375
286U	7.00	5.50	11.00	4.75	0.53	1.625	4.88	4.62	1.416	3.78	0.375
286T	7.00	5.50	11.00	4.75	0.53	1.875	4.62	4.38	1.591	3.28	0.500
286TS	7.00	5.50	11.00	4.75	0.53	1.625	3.25	3.00	1.416	1.91	0.375
324	8.00	6.25	10.50	5.25	0.66	1.625	4.88	4.62	1.416	3.78	0.375
324U	8.00	6.25	10.50	5.25	0.66	1.875	5.62	5.38	1.591	4.28	0.500
324S	8.00	6.25	10.50	5.25	0.66	1.625	3.25	3.00	1.416	1.91	0.375
324T	8.00	6.25	10.50	5.25	0.66	2.125	5.25	5.00	1.845	3.91	0.500
324TS	8.00	6.25	10.50	5.25	0.66	1.875	3.75	3.50	1.591	2.03	0.500
326	8.00	6.25	12.00	5.25	0.66	1.625	4.88	4.62	1.416	3.78	0.375
326U	8.00	6.25	12.00	5.25	0.66	1.875	5.62	5.38	1.591	4.28	0.500
326S	8.00	6.25	12.00	5.25	0.66	1.625	3.25	3.00	1.416	1.91	0.375
326T	8.00	6.25	12.00	5.25	0.66	2.125	5.25	5.00	1.845	3.91	0.500
326TS	8.00	6.25	12.00	5.25	0.66	1.875	3.75	3.50	1.591	2.03	0.500

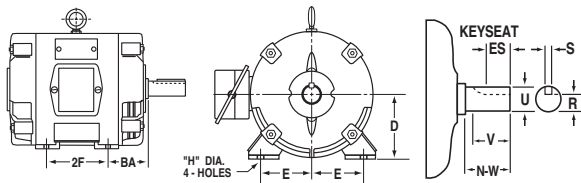
Reference: NEMA Stds. MG 1-2011, 4.4.1.

**Frames 48 to 66, inclusive: the H dimension is *Width of Slot*. Frames 143 to 505S, inclusive: the H dimension is *Diameter of Hole*.

NEMA FRAME DIMENSIONS

FOOT-MOUNTED AC MACHINES

—CONTINUED



* Dimensions in inches

FRAME DESIGNATION	D	E	2F	BA	H**	U	N-W	V MIN	KEYSEAT		
									R	ES MIN	S
364	9.00	7.00	11.25	5.88	0.66	1.875	5.62	5.38	1.591	4.28	0.500
364S	9.00	7.00	11.25	5.88	0.66	1.625	3.25	3.00	1.416	1.91	0.375
364U	9.00	7.00	11.25	5.88	0.66	2.125	6.38	6.12	1.845	5.03	0.500
364US	9.00	7.00	11.25	5.88	0.66	1.875	3.75	3.50	1.591	2.03	0.500
364T	9.00	7.00	11.25	5.88	0.66	2.375	5.88	5.62	2.021	4.28	0.625
364TS	9.00	7.00	11.25	5.88	0.66	1.875	3.75	3.50	1.591	2.03	0.500
365	9.00	7.00	12.25	5.88	0.66	1.875	5.62	5.38	1.591	4.28	0.500
365S	9.00	7.00	12.25	5.88	0.66	1.625	3.25	3.00	1.416	1.91	0.375
365U	9.00	7.00	12.25	5.88	0.66	2.125	6.38	6.12	1.845	5.03	0.500
365US	9.00	7.00	12.25	5.88	0.66	1.875	3.75	3.50	1.591	2.03	0.500
365T	9.00	7.00	12.25	5.88	0.66	2.375	5.88	5.62	2.021	4.28	0.625
365TS	9.00	7.00	12.25	5.88	0.66	1.875	3.75	3.50	1.591	2.03	0.500
404	10.00	8.00	12.25	6.62	0.81	2.125	6.38	6.12	1.845	5.03	0.500
404S	10.00	8.00	12.25	6.62	0.81	1.875	3.75	3.50	1.591	2.03	0.500
404U	10.00	8.00	12.25	6.62	0.81	2.375	7.12	6.88	2.021	5.53	0.625
404US	10.00	8.00	12.25	6.62	0.81	2.125	4.25	4.00	1.845	2.78	0.500

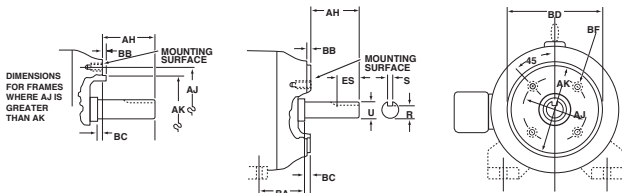
404T	10.00	8.00	12.25	6.62	0.81	2.875	7.25	7.00	2.450	5.65	0.750
404TS	10.00	8.00	12.25	6.62	0.81	2.125	4.25	4.00	1.845	2.78	0.500
405	10.00	8.00	13.75	6.62	0.81	2.125	6.38	6.12	1.845	5.03	0.500
405S	10.00	8.00	13.75	6.62	0.81	1.875	3.75	3.50	1.591	2.03	0.500
405U	10.00	8.00	13.75	6.62	0.81	2.375	7.12	6.88	2.021	5.53	0.625
405US	10.00	8.00	13.75	6.62	0.81	2.125	4.25	4.00	1.845	2.78	0.500
405T	10.00	8.00	13.75	6.62	0.81	2.875	7.25	7.00	2.450	5.65	0.750
405TS	10.00	8.00	13.75	6.62	0.81	2.125	4.25	4.00	1.845	2.78	0.500
444	11.00	9.00	14.50	7.50	0.81	2.375	7.12	6.88	2.021	5.53	0.625
444S	11.00	9.00	14.50	7.50	0.81	2.125	4.25	4.00	1.845	2.78	0.500
444U	11.00	9.00	14.50	7.50	0.81	2.875	8.62	8.38	2.450	7.03	0.750
444US	11.00	9.00	14.50	7.50	0.81	2.125	4.25	4.00	1.845	2.78	0.500
444T	11.00	9.00	14.50	7.50	0.81	3.375	8.50	8.25	2.880	6.91	0.875
444TS	11.00	9.00	14.50	7.50	0.81	2.375	4.75	4.50	2.021	3.03	0.625
445	11.00	9.00	16.50	7.50	0.81	2.375	7.12	6.88	2.021	5.53	0.625
445S	11.00	9.00	16.50	7.50	0.81	2.125	4.25	4.00	1.845	2.78	0.500
445U	11.00	9.00	16.50	7.50	0.81	2.875	8.62	8.38	2.450	7.03	0.750
445US	11.00	9.00	16.50	7.50	0.81	2.125	4.25	4.00	1.845	2.78	0.500
445T	11.00	9.00	16.50	7.50	0.81	3.375	8.50	8.25	2.880	6.91	0.875
445TS	11.00	9.00	16.50	7.50	0.81	2.375	4.75	4.50	2.021	3.03	0.625
447T	11.00	9.00	20.00	7.50	0.81	3.375	8.50	8.25	2.880	6.91	0.875
447TS	11.00	9.00	20.00	7.50	0.81	2.375	4.75	4.50	2.021	3.03	0.625
449T	11.00	9.00	25.00	7.50	0.81	3.375	8.50	8.25	2.880	6.91	0.875
449TS	11.00	9.00	25.00	7.50	0.81	2.375	4.75	4.50	2.021	3.03	0.625
504U	12.50	10.00	16.00	8.50	0.94	2.875	8.62	8.38	2.450	7.28	0.750
504S	12.50	10.00	16.00	8.50	0.94	2.125	4.25	4.00	1.845	2.78	0.500
505	12.50	10.00	18.00	8.50	0.94	2.875	8.62	8.38	2.450	7.28	0.750
505S	12.50	10.00	18.00	8.50	0.94	2.125	4.25	4.00	1.845	2.78	0.500

Reference: NEMA Stds. MG 1-2011, 4.4.1.

**Frames 48 to 66, inclusive: the H dimension is *Width of Slot*. Frames 143 to 505S, inclusive: the H dimension is *Diameter of Hole*.

NEMA FRAME DIMENSIONS*

TYPE C FACE-MOUNTING FOOT OR FOOTLESS AC MOTORS



* Dimensions in inches

FRAME DESIGNATIONS†	AJ	AK	BA	BB MIN	BC	BD MAX	BF HOLE			U	AH	KEYSEAT		
							NUMBER	TAP SIZE	BOLT PENETRATION ALLOWANCE			R	ES MIN	S
42C	3.750	3.000	2.062	0.16	-0.19	5.00	4	1/4-20		0.3750	1.312	0.328		Flat
48C	3.750	3.000	2.50	0.16	-0.19	5.625	4	1/4-20		0.5000	1.69	0.453		Flat
56C	5.875	4.500	2.75	0.16	-0.19	6.50	4	3/8-16		0.6250	2.06	0.517	1.41	0.188
66C	5.875	4.500		0.16	-0.19	6.50	4	3/8-16		0.7500	2.44	0.644		0.188
143TC and 145TC	5.875	4.500	2.75	0.16	+0.12	6.50	4	3/8-16	0.56	0.8750	2.12	0.771	1.41	0.188
182C and 184C	5.875	4.500		0.16	+0.12	6.50	4	3/8-16	0.56	0.8750	2.12	0.771		0.188
182TC and 184TC	7.250	8.500	3.50	0.25	+0.12	9.00	4	1/2-13	0.75	1.1250	2.62	0.986	1.78	0.250
182TCH and 184TCH	5.875	4.500	3.50	0.16	+0.12	6.50	4	3/8-16	0.56	1.1250	2.62	0.986	1.78	0.250
213C and 215C	7.250	8.500		0.25	+0.25	9.00	4	1/2-13	0.75	1.1250	2.75	0.986		0.250
213TC and 215TC	7.250	8.500	4.25	0.25	+0.25	9.00	4	1/2-13	0.75	1.3750	3.12	1.201	2.41	0.312
254UC and 256UC	7.250	8.500		0.25	+0.25	10.00	4	1/2-13	0.75	1.3750	3.50	1.201		0.312
254TC and 256TC	7.250	8.500	4.75	0.25	+0.25	10.00	4	1/2-13	0.75	1.625	3.75	1.416	2.91	0.375

284UC and 286UC	9.000	10.500		0.25	+0.25	11.25	4	1/2-13	0.75	1.625	4.62	1.416		0.375
284TC and 286TC	9.000	10.500	4.75	0.25	+0.25	11.25	4	1/2-13	0.75	1.875	4.38	1.591	3.28	0.500
284TSC and 286TSC	9.000	10.500	4.75	0.25	+0.25	11.25	4	1/2-13	0.75	1.625	3.00	1.416	1.91	0.375
324UC and 326UC	11.000	12.500		0.25	+0.25	14.00	4	5/8-11	0.94	1.875	5.38	1.591		0.500
324SC and 326SC	11.000	12.500		0.25	+0.25	14.00	4	5/8-11	0.94	1.625	3.00	1.416		0.375
324TC and 326TC	11.000	12.500	5.25	0.25	+0.25	14.00	4	5/8-11	0.94	2.125	5.00	1.845	3.91	0.500
324TSC and 326TSC	11.000	12.500	5.25	0.25	+0.25	14.00	4	5/8-11	0.94	1.875	3.50	1.591	2.03	0.500
364UC and 365UC	11.000	12.500		0.25	+0.25	14.00	8	5/8-11	0.94	2.125	6.12	1.845		0.500
364USC and 365USC	11.000	12.500		0.25	+0.25	14.00	8	5/8-11	0.94	1.875	3.50	1.591		0.500
364TC and 365TC	11.000	12.500	5.88	0.25	+0.25	14.00	8	5/8-11	0.94	2.375	5.62	2.021	4.28	0.625
364TSC and 365TSC	11.000	12.500	5.88	0.25	+0.25	14.00	8	5/8-11	0.94	1.875	3.50	1.591	2.03	0.500
404UC and 405UC	11.000	12.500		0.25	+0.25	15.50	8	5/8-11	0.94	2.375	6.88	2.021		0.625
404USC and 405USC	11.000	12.500		0.25	+0.25	15.50	8	5/8-11	0.94	2.125	4.00	1.845		0.500
404TC and 405TC	11.000	12.500	6.62	0.25	+0.25	15.50	8	5/8-11	0.94	2.875	7.00	2.450	5.65	0.750
404TSC and 405TSC	11.000	12.500	6.62	0.25	+0.25	15.50	8	5/8-11	0.94	2.125	4.00	1.845	2.78	0.500
444UC and 445UC	14.000	16.000		0.25	+0.25	18.00	8	5/8-11	0.94	2.875	8.38	2.450		0.750
444USC and 445USC	14.000	16.000		0.25	+0.25	18.00	8	5/8-11	0.94	2.125	4.00	1.845		0.500
444TC and 445TC	14.000	16.000	7.50	0.25	+0.25	18.00	8	5/8-11	0.94	3.375	8.25	2.880	6.91	0.875
444TSC and 445TSC	14.000	16.000	7.50	0.25	+0.25	18.00	8	5/8-11	0.94	2.375	4.50	2.021	3.03	0.625
447TC and 449TC	14.000	16.000	7.50	0.25	+0.25	18.00	8	5/8-11	0.94	3.375	8.25	2.880	6.91	0.875
447TSC and 449TSC	14.000	16.000	7.50	0.25	+0.25	18.00	8	5/8-11	0.94	2.375	4.50	2.021	3.03	0.625
504UC and 505C	14.500	16.500		0.25	+0.25	18.00	4	5/8-11	0.94	2.875	8.38	2.450		0.750
504SC and 505SC	14.500	16.500		0.25	+0.25	18.00	4	5/8-11	0.94	2.125	4.00	1.845		0.500

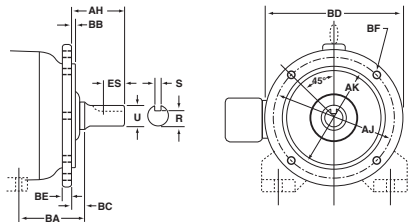
Reference: NEMA Stds. MG 1-2011, 4.4.4.

†See Pages 32-35 for dimensions D, E, 2F and H.

For tolerances on dimensions, face runout and permissible eccentricity of mounting rabbet, see NEMA Stds. MG 1-2011, 4.4.4, 4.11 and 4.12.

NEMA FRAME DIMENSIONS*

TYPE D FLANGE-MOUNTING FOOT OR FOOTLESS AC MOTORS



* Dimensions in inches

FRAME DESIGNATIONS†	AJ	AK	BA	BB MIN	BC	BD MAX	BE NOM	BF HOLE			U	AH	KEYSEAT		
								NUMBER	TAP SIZE	BOLT PENETRATION ALLOWANCE			R	ES MIN	S
143TD and 145TD	10.00	9.000	2.75	0.25	0.00	11.00	0.50	4	0.53	1.25	0.8750	2.25	0.771	1.41	0.188
182D and 184D	10.00	9.000		0.25	0.00	11.00	0.50	4	0.53	1.25	0.8750	2.25	0.771		0.188
182TD and 184TD	10.00	9.000	3.50	0.25	0.00	11.00	0.50	4	0.53	1.25	1.1250	2.75	0.986	1.78	0.250
213D and 215D	10.00	9.000		0.25	0.00	11.00	0.50	4	0.53	1.25	1.1250	3.00	0.986		0.250
213TD and 215TD	10.00	9.000	4.25	0.25	0.00	11.00	0.50	4	0.53	1.25	1.3750	3.38	1.201	2.41	0.312
254UD and 256UD	12.50	11.000		0.25	0.00	14.00	0.75	4	0.81	2.00	1.3750	3.75	1.201		0.312
254TD and 256TD	12.50	11.000	4.75	0.25	0.00	14.00	0.75	4	0.81	2.00	1.625	4.00	1.416	2.91	0.375
284UD and 286UD	12.50	11.000		0.25	0.00	14.00	0.75	4	0.81	2.00	1.625	4.88	1.416		0.375
284TD and 286TD	12.50	11.000	4.75	0.25	0.00	14.00	0.75	4	0.81	2.00	1.875	4.62	1.591	3.28	0.500
284TSD and 286TSD	12.50	11.000	4.75	0.25	0.00	14.00	0.75	4	0.81	2.00	1.625	3.25	1.416	1.91	0.375
324UD and 326UD	16.00	14.000		0.25	0.00	18.00	0.75	4	0.81	2.00	1.875	5.62	1.591		0.500
324SD and 326SD	16.00	14.000		0.25	0.00	18.00	0.75	4	0.81	2.00	1.625	3.25	1.416		0.375

324TD and 326TD	16.00	14.000	5.25	0.25	0.00	18.00	0.75	4	0.81	2.00	2.125	5.25	1.845	3.91	0.500
324TSD and 326TSD	16.00	14.000	5.25	0.25	0.00	18.00	0.75	4	0.81	2.00	1.875	3.75	1.591	2.03	0.500
364UD and 365UD	16.00	14.000		0.25	0.00	18.00	0.75	4	0.81	2.00	2.125	6.38	1.845		0.500
364USD and 365USD	16.00	14.000		0.25	0.00	18.00	0.75	4	0.81	2.00	1.875	3.75	1.591		0.500
364TD and 365TD	16.00	14.000	5.88	0.25	0.00	18.00	0.75	4	0.81	2.00	2.375	5.88	2.021	4.28	0.625
364TSD and 365TSD	16.00	14.000	5.88	0.25	0.00	18.00	0.75	4	0.81	2.00	1.875	3.75	1.591	2.03	0.500
404UD and 405UD	20.00	18.000		0.25	0.00	22.00	1.00	8	0.81	2.25	2.375	7.12	2.021		0.625
404USD and 405USD	20.00	18.000		0.25	0.00	22.00	1.00	8	0.81	2.25	2.125	4.25	1.845		0.500
404TD and 405TD	20.00	18.000	6.62	0.25	0.00	22.00	1.00	8	0.81	2.25	2.875	7.25	2.450	5.65	0.750
404TSD and 405TSD	20.00	18.000	6.62	0.25	0.00	22.00	1.00	8	0.81	2.25	2.125	4.25	1.845	2.78	0.500
444UD and 445UD	20.00	18.000		0.25	0.00	22.00	1.00	8	0.81	2.25	2.875	8.62	2.450		0.750
444USD and 445USD	20.00	18.000		0.25	0.00	22.00	1.00	8	0.81	2.25	2.125	4.25	1.845		0.500
444TD and 445TD	20.00	18.000	7.50	0.25	0.00	22.00	1.00	8	0.81	2.25	3.375	8.50	2.880	6.91	0.875
444TSD and 445TSD	20.00	18.000	7.50	0.25	0.00	22.00	1.00	8	0.81	2.25	2.375	4.75	2.021	3.03	0.625
447TD and 449TD	20.00	18.000	7.50	0.25	0.00	22.00	1.00	8	0.81	2.25	3.375	8.50	2.880	6.91	0.875
447TSD and 449TSD	20.00	18.000	7.50	0.25	0.00	22.00	1.00	8	0.81	2.25	2.375	4.75	2.021	3.03	0.625
504UD and 505UD	22.00	18.000		0.25	0.00	25.00		8	0.81		2.875	8.62	2.450		0.750
504SD and 505SD	22.00	18.000		0.25	0.00	25.00		8	0.81		2.125	4.25	1.845		0.500

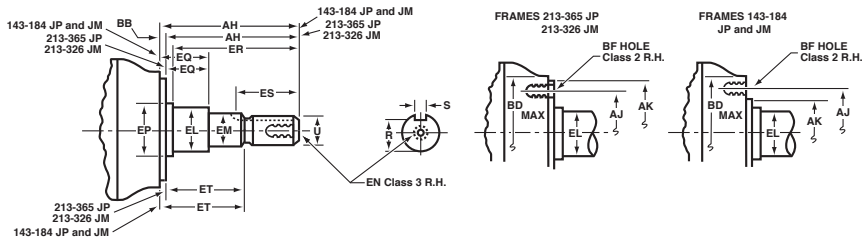
Reference: NEMA Stds. MG 1-2011, 4.4.4.

†See Pages 32-35 for dimensions D, E, 2F and H.

For tolerances on dimensions, face runout and permissible eccentricity of mounting rabbet, see NEMA Stds. MG 1-2011, 4.4.4, 4.11 and 4.12.

NEMA FRAME DIMENSIONS*

TYPE JM AND JP FACE-MOUNTING, CLOSE-COUPLED, AC PUMP MOTORS



* Dimensions in inches

FRAME DESIGNATIONS	U	AH†	AJ	AK	BB	BD MAX	BF		
							NUMBER	TAP SIZE	BOLT PENETRATION ALLOWANCE
143JM and 145JM	0.8745	4.281	5.875	4.500	0.156	6.62	4	3/8-16	0.56
	0.8740	4.219		4.497					
143JP and 145JP	0.8745	7.343	5.875	4.500	0.156	6.62	4	3/8-16	0.56
	0.8740	7.281		4.497					
182JM and 184JM	0.8745	4.281	5.875	4.500	0.156	6.62	4	3/8-16	0.56
	0.8740	4.219		4.497					

182JP and 184JP	0.8745	7.343	5.875	4.500	0.156	6.62	4	3/8-16	0.56
	0.8740	7.281		4.497	0.125				
213JM and 215JM	0.8745	4.281	7.250	8.500	0.312	9.00	4	1/2-13	0.75
	0.8740	4.219		8.497	0.250				
213JP and 215JP	1.2495	8.156	7.250	8.500	0.312	9.00	4	1/2-13	0.75
	1.2490	8.094		8.497	0.250				
254JM and 256JM	1.2495	5.281	7.250	8.500	0.312	10.00	4	1/2-13	0.75
	1.2490	5.219		8.497	0.250				
254JP and 256JP	1.2495	8.156	7.250	8.500	0.312	10.00	4	1/2-13	0.75
	1.2490	8.094		8.497	0.250				
284JM and 286JM	1.2495	5.281	11.000	12.500	0.312	14.00	4	5/8-11	0.94
	1.2490	5.219		12.495	0.250				
284JP and 286JP	1.2495	8.156	11.000	12.500	0.312	14.00	4	5/8-11	0.94
	1.2490	8.094		12.495	0.250				
324JM and 326JM	1.2495	5.281	11.000	12.500	0.312	14.00	4	5/8-11	0.94
	1.2490	5.219		12.495	0.250				
324JP and 326JP	1.2495	8.156	11.000	12.500	0.312	14.00	4	5/8-11	0.94
	1.2490	8.094		12.495	0.250				
364JP and 365JP	1.6245	8.156	11.000	12.500	0.312	14.00	4	5/8-11	0.94
	1.6240	8.094		12.495	0.250				

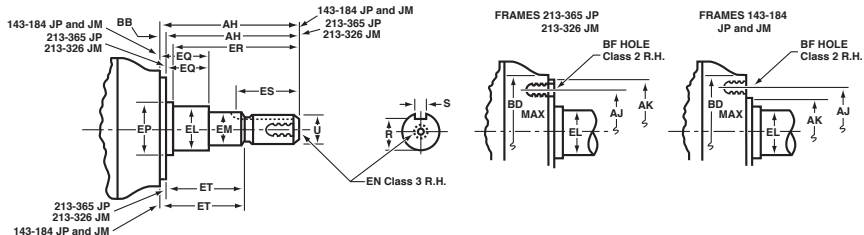
Reference: NEMA Stds. MG 1-2011, 18.250.

†AH dimension measured with the shaft pulled by hand away from the motor to the limit of end play.

For tolerances on face runout, permissible eccentricity of mounting rabbet and permissible shaft runout, see NEMA Stds. MG 1-2011, 18.250, Tables 1 and 2.

NEMA FRAME DIMENSIONS*

TYPE JM AND JP FACE-MOUNTING, CLOSE-COUPLED, AC PUMP MOTORS



* Dimensions in inches

FRAME DESIGNATIONS	EL	EM	EN			EP MIN	EQ†	ER MIN	KEYSEAT			ET†
			TAP SIZE	TAP DRILL DEPTH MAX	BOLT PENETRATION ALLOWANCE				R	ES MIN	S	
143JM and 145JM	1.156	1.0000	3/8-16	1.12	0.75	1.156	0.640	4.25	0.771-0.756	1.65	0.190-0.188	2.890
	1.154	0.9995										2.860
143JP and 145JP	1.156	1.0000	3/8-16	1.12	0.75	1.156	1.578	7.312	0.771-0.756	1.65	0.190-0.188	5.952
	1.154	0.9995										1.548
182JM and 184JM	1.250	1.0000	3/8-16	1.12	0.75	1.250	0.640	4.25	0.771-0.756	1.65	0.190-0.188	2.890
	1.248	0.9995										0.610

182JP and 184JP	1.250	1.0000	3/8-16	1.12	0.75	1.250	1.578	7.312	0.771-0.756	1.65	0.190-0.188	5.952
	1.248	0.9995					1.548					5.922
213JM and 215JM	1.250	1.0000	3/8-16	1.12	0.75	1.750	0.640	4.25	0.771-0.756	1.65	0.190-0.188	2.890
	1.248	0.9995					0.610					2.860
213JP and 215JP	1.750	1.3750	1/2-13	1.50	1.00	1.750	2.390	8.125	1.112-1.097	2.53	0.252-0.250	5.890
	1.748	1.3745					2.360					5.860
254JM and 256JM	1.750	1.3750	1/2-13	1.50	1.00	1.750	0.640	5.25	1.112-1.097	2.53	0.252-0.250	3.015
	1.748	1.3745					0.610					2.985
254JP and 256JP	1.750	1.3750	1/2-13	1.50	1.00	1.750	2.390	8.125	1.112-1.097	2.53	0.252-0.250	5.890
	1.748	1.3745					2.360					5.860
284JM and 286JM	1.750	1.3750	1/2-13	1.50	1.00	2.125	0.645	5.25	1.112-1.097	2.53	0.252-0.250	3.020
	1.748	1.3745					0.605					2.980
284JP and 286JP	1.750	1.3750	1/2-13	1.50	1.00	2.125	2.390	8.125	1.112-1.097	2.53	0.252-0.250	5.895
	1.748	1.3745					2.360					5.855
324JM and 326JM	1.750	1.3750	1/2-13	1.50	1.00	2.125	0.645	5.25	1.112-1.097	2.53	0.252-0.250	3.020
	1.748	1.3745					0.605					2.980
324JP and 326JP	1.750	1.3750	1/2-13	1.50	1.00	2.125	2.395	8.125	1.112-1.097	2.53	0.252-0.250	5.895
	1.748	1.3745					2.355					5.855
364JP and 365JP	2.125	1.7500	1/2-13	1.50	1.00	2.500	2.395	8.125	1.416-1.401	2.53	0.377-0.375	5.895
	2.123	1.7495					2.355					5.855

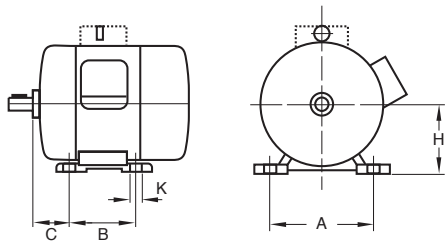
Reference: NEMA Stds. MG 1-2011, 18.250.

†EQ and ET dimensions measured with the shaft pulled by hand away from the motor to the limit of end play.

For tolerances on face runout, permissible eccentricity of mounting rabbet and permissible shaft runout, see NEMA Stds. MG 1-2011, 18.250, Tables 1 and 2.

IEC MOUNTING DIMENSIONS*

FOOT-MOUNTED AC AND DC MACHINES



* Dimensions in inches

FRAME NUMBER	H	A	B	C	K	BOLT OR SCREW
56 M	2.20	3.55	2.80	1.40	0.23	M5
63 M	2.48	3.95	3.15	1.55	0.28	M6
71 M	2.79	4.40	3.55	1.75	0.28	M6
80 M	3.14	4.90	3.95	1.95	0.40	M8
90 S	3.54	5.50	3.95	2.20	0.40	M8
90 L	3.54	5.50	4.90	2.20	0.40	M8
100 S	3.93	6.30	4.40	2.50	0.48	M10
100 L	3.93	6.30	5.50	2.50	0.48	M10
112 S	4.40	7.50	4.50	2.75	0.48	M10
112 M	4.40	7.50	5.50	2.75	0.48	M10
132 S	5.19	8.50	5.50	3.50	0.48	M10
132 M	5.19	8.50	7.00	3.50	0.48	M10

160 S	6.29	10.00	7.00	4.25	0.58	M12
160 M	6.29	10.00	8.25	4.25	0.58	M12
160 L	6.29	10.00	10.00	4.25	0.58	M12
180 S	7.08	11.00	8.00	4.75	0.58	M12
180 M	7.08	11.00	9.50	4.75	0.58	M12
180 L	7.08	11.00	11.00	4.75	0.58	M12
200 S	7.87	12.50	9.00	5.25	0.73	M16
200 M	7.87	12.50	10.50	5.25	0.73	M16
200 L	7.87	12.50	12.00	5.25	0.73	M16
225 S	8.85	14.00	11.25	5.85	0.73	M16
225 M	8.85	14.00	12.25	5.85	0.73	M16
250 S	9.84	16.00	12.25	6.60	0.95	M20
250 M	9.84	16.00	13.75	6.60	0.95	M20
280 S	11.02	18.00	14.50	7.50	0.95	M20
280 M	11.02	18.00	16.50	7.50	0.95	M20
315 S	12.40	20.00	16.00	8.50	1.11	M24
315 M	12.40	20.00	18.00	8.50	1.11	M24
355 S	13.97	24.00	19.70	10.00	1.11	M24
355 M	13.97	24.00	22.05	10.00	1.11	M24
355 L	13.97	24.00	24.80	10.00	1.11	M24
400 S	15.74	27.00	22.05	11.00	1.38	M30
400 M	15.74	27.00	24.80	11.00	1.38	M30
400 L	15.74	27.00	27.95	11.00	1.38	M30

IEC Stds. 60072-1:1991.

Dimensions, except for bolt and screw sizes, are shown in inches (rounded off). Bolt and screw sizes are shown in millimeters.

For tolerances on dimensions, see IEC Stds. 60072-1:1991, 6.1, Foot-Mounted Machines, Table 1. (Note: Data in IEC tables is shown in millimeters.)