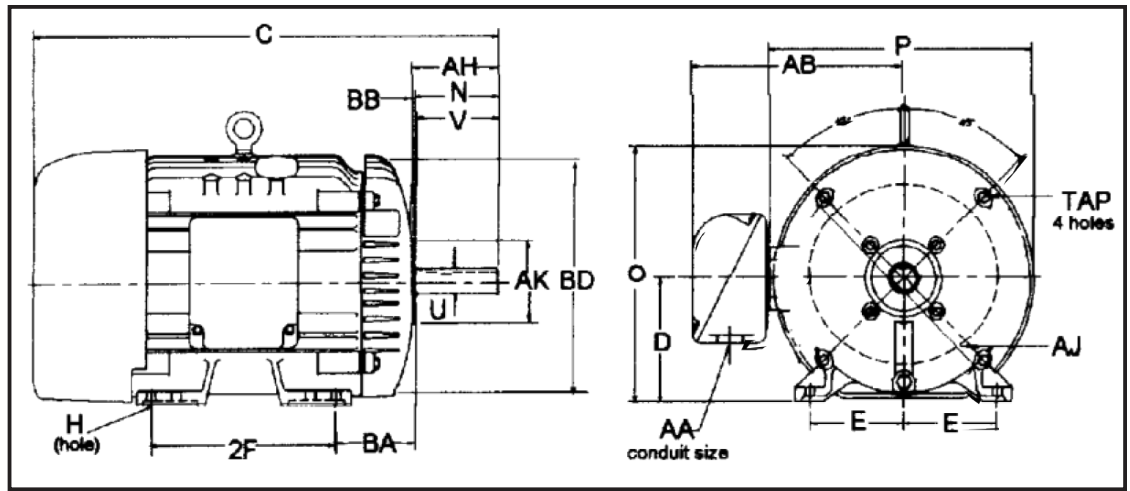
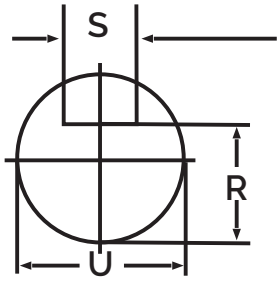


NEMA Motor Dimensions Reference Chart

hecoinc.com | 800-432-2645



Keyseat Dimensions	NEMA Shaft (U)	Key (R)	Dimen (S)
	3/8	21/64	flat
	1/2	29/64	flat
	5/8	33/64	3/16
	7/8	49/64	3/16
	1-1/8	63/64	1/4
	1-3/8	1-13/64	5/16
	1-5/8	1-13/32	3/8
	1-7/8	1-19/32	1/2
	2-1/8	1-27/32	1/2
	2-3/8	2-1/64	5/8
	2-1/2	2-3/16	5/8
	2-7/8	2-29/64	3/4
	3-3/8	2-7/8	7/8
	3-7/8	3-5/16	1



*After letter indicated the number is an approximate value. These dimensions are specific to each manufacturer.

Frame	D	E	2F	H	N*	O*	P*	U	V	AA	AB*	AH*	AJ	AK	BA	B	BD*	TAP
42	2-5/8	1-3/4	1-11/16	9/32 slot	1-1/2	5	4-11/16	3/8	1-1/8	3/8	4-1/32	1-5/16	3-3/4	3	2-1/16	1/8	4-5/8	1/4-20
48	3	2-1/8	2-3/4	11/32 slot	1-7/8	5-7/8	5-11/16	1/2	1-1/2	1/2	4-3/8	1-11/16	3-3/4	3	2-1/2	1/8	5-5/8	1/4-20
56 56H	3-1/2	2-7/16	3 5	11/32 slot	2-7/16 2-1/8	6-7/8	6-5/8	5/8	1-7/8	1/2	5	2-1/16	5-7/8	4-1/2	2-3/4	1/8	6-1/2	3/8-16
143T 145T	3-1/2	2-3/4	4 5	11/32	2-1/2	6-7/8	6-5/8	7/8	2-1/4	3/4	5-1/4	2-1/8	5-7/8	4-1/2	2-1/4	1/8	6-1/2	3/8-16
182			4-1/2		2-11/16			7/8	2-1/4			2-1/8	5-7/8	4-1/2		1/8	6-1/2	3/8-16
184			5-1/2		2-11/16			7/8	2-1/4			2-1/8	5-7/8	4-1/2		1/8	6-1/2	3/8-16
182T 184T	4-1/2	3-3/4	4-1/2	13/32	3-9/16	8-11/16	7-7/8	1-1/8	2-3/4	3/4	5-7/8	2-5/8	7-1/4	8-1/2	2-3/4	1/4	9	1/2-13
213 215			5-1/2		3-1/2			1-1/8	3			2-3/4						
213T 215T	5-1/4	4-1/4	7 5-1/2	13/32	3-7/8	10-1/4	9-9/16	1-3/8	3-3/8	3/4	7-3/8	3-1/8	7-1/4	8-1/2	3-1/2	1/4	9	1/2-13
254U 256U			8-1/4		4-1/16			1-3/8	3-3/4			3-1/2						
254T 256T	6-1/4	5	10 8-1/4	17/32	4-5/16	12-7/8	12- 15/16	1-5/8	4	1	9-5/8	3-3/4	7-1/4	8-1/2	4-1/4	1/4	10	1/2-13
284U 286U			9-1/2		5-1/8			1-5/8	4-7/8			4-5/8						
284T 286T	7	5-1/2	11 9-1/2	17/32	4-7/8	14-5/8	14-5/8	1-7/8	4-5/8	1-1/2	13-1/8	4-3/8	9	10-1/2	4-3/4	1/4	11-1/4	1/2-13
284TS 286TS			11 9-1/2		4-7/8 3-3/8			1-5/8 3-1/4	4-5/8 3-1/4			4-3/8 3						
324U 326U			10-1/2		5-7/8			1-7/8	5-5/8			5-3/8						
324T 326T	8	6-1/4	12 10-1/2	21/32	5-7/8 5-1/2	16-1/2	16-1/2	1-7/8	5-5/8	2	14-1/8	5-3/8 5	11	12-1/2	5-1/4	1/4	13-3/8	5/8-11
324TS 326TS			12 10-1/2		5-1/2 3-15/16			2-1/8 1-7/8	5-1/4 3-3/4			5 3-1/2						
364U 365U			11-1/4		6-3/4			2-1/8	6-3/8			6-1/8						
364T 365T	9	7	12-1/4 11-1/4	21/32	6-3/4 6-1/4	18-1/2	18-1/4	2-1/8 2-3/8	6-3/8 5-7/8	2-1/2	15-1/16	6-1/8 5-5/8	11	12-1/2	5-7/8	1/4	13-3/8	5/8-11
364TS 365TS			12-1/4 11-1/4		6-1/4 4			2-3/8 1-7/8	5-7/8 3-3/4			5-5/8 3-1/2						
404U 405U			12-1/4		7-3/16			2-3/8	7-1/8			6-7/8						
404T 405T	10	8	13-3/4 12-1/4	13/16	7-3/16 7-5/16	20-5/16	20-1/8	2-3/8 2-7/8	7-1/8 7-1/4	3	18	6-7/8 7	11	12-1/2	6-5/8	1/4	13-7/8	5/8-11
404TS 405TS			13-3/4 12-1/4		7-5/16 4-1/2			2-7/8 2-1/8	7-1/4 4-1/4			7 4						
444U 445U			14-1/2		8-5/8	22-7/8	22-3/8	2-7/8	8-5/8			19-9/16						
444T 445T			16-1/2 14-1/2		8-5/8 8-1/2	22-7/8	22-3/8	2-7/8 3-3/8	8-5/8 8-1/2			19-9/16						
444TS 445TS			16-1/2 20		8-1/2 8-15/16	22-7/8	22-3/8	3-3/8 3-3/8	8-1/2 8-1/2	3		19-9/16						
447T 449T	11	9	25 13/16		22-15/16 22-15/16	22-3/4	22-3/4	3-3/8 3-3/8	8-1/2 8-1/2			21-11/16	14	16	7-1/2	1/4	16-3/4	5/8-11
447TS 449TS			25 20		22-15/16 4-15/16	22-3/8	22-3/8	2-3/8 2-3/8	4-3/4 4-3/4	4NPT	21-11/16	4-1/2						

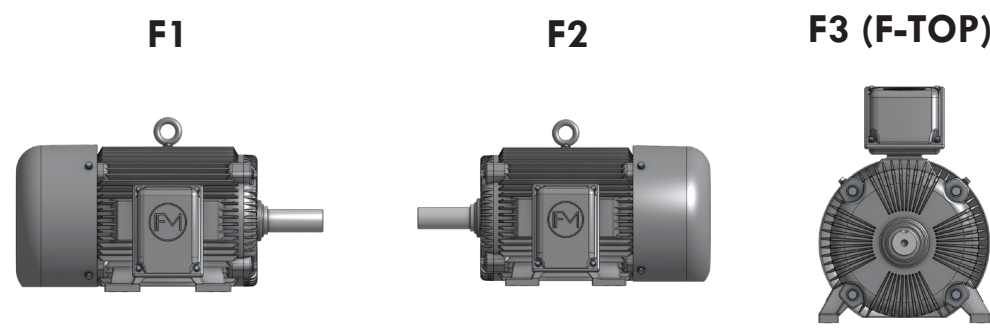
Frame Size Information

Suffix letters after the NEMA frame size indicates that the frame differs in some way from the standard frame. Below is a list of suffixes that may be found after the frame size and their definition.

A	DC Motor or Generator
C	"C" flange mounting on drive end **
D	"D" flange mounting on drive end **
E	Shaft dimensions for elevator motors in frames larger than the 326U frame
H	Frame with an "F" dimension larger than a frame without (small framed motors) Jet pump motors
J	Jet pump motors
JM	"C"-face mounted close coupling pump with mechanical seal
JP	"C"-face mounted close coupling pump - packed pump
K	Sump pump motor
LP & LPH	"P" flange mounting vertical solid shaft pump
P & PH	"P" flange mounting vertical hollow shaft pump
S	Standard short shaft
T	Included as part of a frame number-standard dimension
U	Included as part of a frame number-standard dimension
V	Vertical mounting
Y	Special mounting dimensions - manufactured specified
Z	Special shaft dimensions - manufactured specified

** If the face mounting is on the end opposite the drive, the suffix will be as follows: "FC" or "FD"

Mounting Assemblies



Additional Notes: These charts are provided for reference use only.

When a "C" flange has been added to a NEMA motor the "BA" dimensions are:	Frame:	"BA"	Dimensions: C, N, O, P, & AB are specific to each manufacturer. Please call for exact dimensions.
	143-5TC	2-3/4	
	182-4TC	3-1/2	
	213-5TC	4-1/4	
	254-6TC	4-3/4	