

# Your Complete Motor Solution Supplier

## Internal Company Contacts:

### Illinois Specialists:

Derek Dibble (773) 318-5550  
 Paul Gross (312) 388-3004

### Wisconsin Specialists:

Tom Pizur (262) 313-8188  
 Tom Roth: (262) 483-6679

## Motor Selection Information Required:

- Preferred Motor Manufacturer
- Existing Motor Model #, ID #, Spec #, Serial #
- Voltage & Phase (1 or 3)
- Frequency - 50 HZ/60 HZ
- Horsepower(HP)
- Revolutions Per Minute(RPM)
- Frame Size
- Enclosure
- TEFC (totally enclosed fan cooled)
  - TEBC (totally enclosed blower cooled)
  - TENV (totally enclosed, non-vent)
  - ODP (open drip proof)
  - WASHDOWN - (epoxy painted or stainless steel?)
  - EXPLOSION PROOF - what class and group?
- Mounting
  - foot mounted (vertical or horizontal)
  - P-base
  - C-face
  - D-flange
- Method of Starting (Across the line Motor Starter, Softstart, VFD)
- General Motor Application Info:
  - application (fan/pump/conveyor/mixer/etc.)

## Manufacturer Customer Service Contacts:



## Rockwell Automation

## TOSHIBA



### Illinois

Rockwell - FasTracChicago@ra.rockwell.com  
 Marathon - Kasey Enterprises - (630) 790-9783  
 Baldor - Windy City Baldor (630) 296-1400  
 WEG - (800) 275-4934 After Hours - (404) 431-1801  
 Leeson - RPM Midwest (630) 458-9511  
 Techtop - Industrial/Motion - (847) 303-0200  
 Toshiba Motors - 1-800-231-1412  
 SEW (Gearmotors) - Contact Motor Shop



### Wisconsin

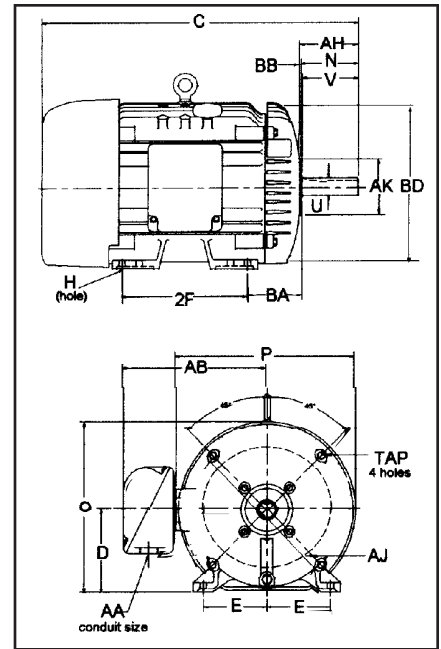
Rockwell - FasTracChicago@ra.rockwell.com  
 Marathon - Kasey Enterprises - (630) 790-9783  
 Baldor - Baldor Power Solutions - (262) 784-5940  
 WEG - (800) 275-4934 After Hours - (404) 431-1801  
 Leeson - Force Ind. Sales (414) 475-9222  
 Techtop - Industrial/Motion - (847) 303-0200  
 Toshiba Motors - 1-800-231-1412  
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## 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)
- 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"



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