



FOR INDUSTRY PROFESSIONALS

The Motor Experts!



# UNIVERSAL FRACTIONAL HORSEPOWER and ECM REPLACEMENT MOTORS

# ECM REPLACEMENT MOTORS

**HORSEPOWER:** 1/3-1/2, 3/4 AND 1 HP

**VOLTAGE:** 1Ø, 115, 208-230 Vac

**SPEEDS:** 1075/Var

**ROTATION:** Auto-Rotation Sensing

**INPUTS:** 24Vac, Tap Inputs

**HERTZ:** 50/60 Hz

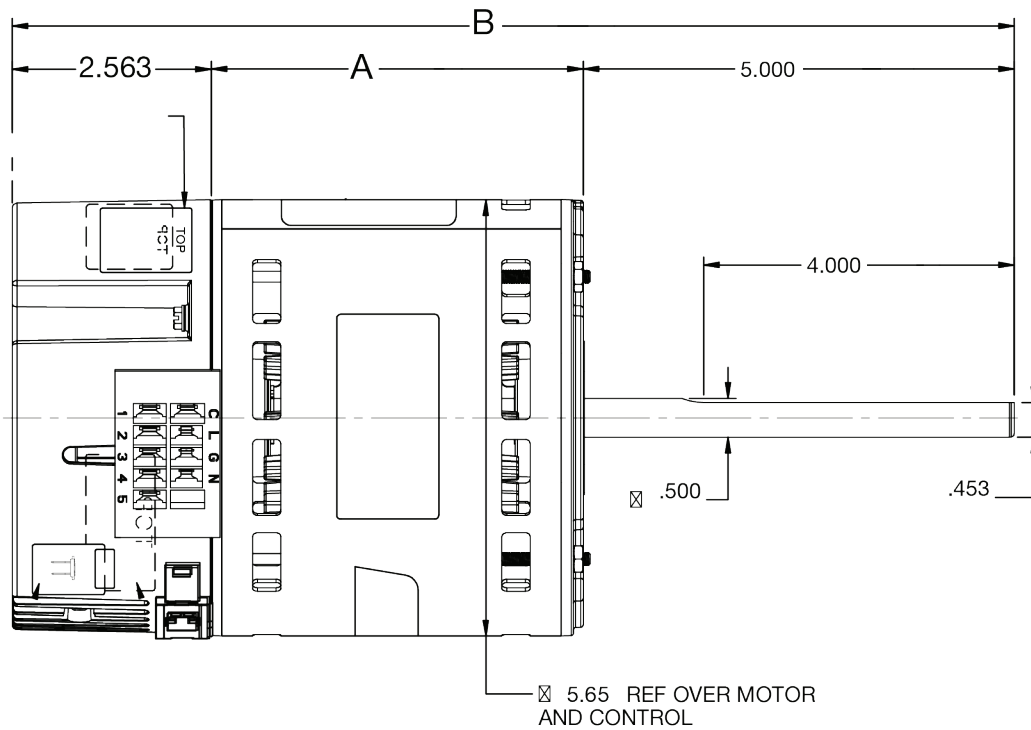
**OPERATION MODE:** Constant Torque

**FRAME:** NEMA® 48

**ENCLOSURE:** Open Air Over (OAO)

**EFFICIENCY:** Up to 82%

**MOUNTING:** Belly-band



CATALOG NUMBER	HP	VOLTS	AMPS	RPM	DIM. A	DIM. B
TP-EC13-50	1/2 -1/3	115/208-230	6.3/4.0-3.8	1075/Var	3.662	11.225
TP-EC13-75	3/4	115/208-230	9.3/5.8-5.4	1075/Var	4.037	11.600
TP-EC13-1	1	115/208-230	12.4/7.8-7.2	1075/Var	4.412	11.975



Truck Stock



Universal Replacement



Ready to Install



Replaces Thousands of OEM Models



Built-in 6,000 Volt surge protection



Industry-leading moisture protection

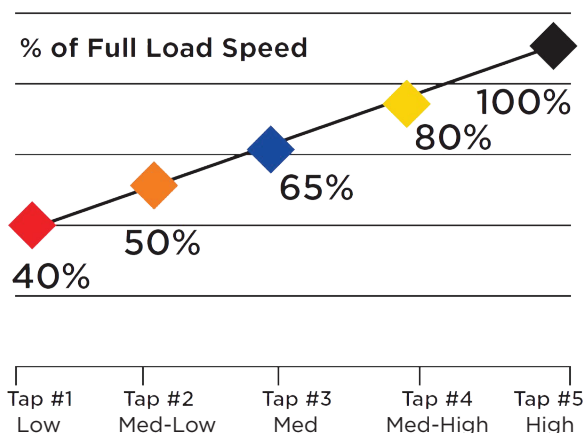


# Put this Hard-Working ECM Replacement Motor to Work for You!



## FEATURES AND BENEFITS

- Three SKUs
  - 1/3-1/2 HP
  - 3/4 HP
  - 1 HP
- Dual Voltage 115/208-230
- Replaces thousands of OEM models
- Auto Sensing Rotation Technology
- 2-year warranty
- Condensation drain in the control module
- Ball bearings



Speed taps are preprogrammed at these speed settings.



View the installation video

# Look for this Display!



Visit this spot in your store to find TradePro® Universal ECM Replacement Motors!

**GEM/AIRE**  
DISTRIBUTORS

**Baker**  
Distributing Company

**HEATING AND COOLING SUPPLY**  
A DIVISION OF GEM/AIRE

**CE**

**PEIRCE PHELPS**  
Succeeding By Helping Our Customers Succeed

**East Coast METAL DISTRIBUTORS**  
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**TEC**

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of Baton Rouge, L.L.C.



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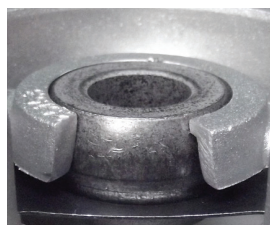
# UNIVERSAL FRACTIONAL HORSEPOWER MOTORS

## Features and Benefits



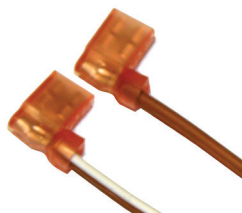
### Rugged Ball Bearing

Rugged Ball bearing design capable of handling high ambient conditions and excessive radial and axial loading.



### Self-Aligned Bearings

Revolutionary self-aligned bearing system which requires no further lubrication and is capable of all angle mounting. It is NOT a Babbitt style sleeve bearing.



### Insulated Connects

Run Capacitor connections for both Condenser fan and direct drive furnace blower motors are insulated for increased safety.

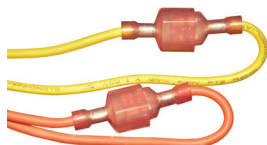
### Multi-HP Condenser

Multi-Horsepower motors are single speed with 2 leads designed to run at a range of load points that correspond to the rated horsepowers. They're easier to install with one less lead.



### Condenser Motor

Extended mounting bolts on lead end of motor. For shaft up application, simply reverse the direction of the bolts. Condenser fan models include Rheem® side shell holes and water slingers.



### Reversing Leads

The electrical reversing of leads simplifies rotation direction changes.

## FIXED FRACTIONAL

	VOLTS	SPEED	TRADEPRO®	HP	AMP	BEARING	CAP	MOTOR LENGTH (A) DIM
CONDENSER	208-230	825	TP-C16-1SP2-8	1/6	1	SAB	TP-CAP-5/440USA	4.607"
	208-230		TP-C25-1SP2-8	1/4	2.0	SAB	TP-CAP-5/440USA	4.857"
	208-230		TP-C33-1SP2-8	1/3	2.4	SAB	TP-CAP-75/440USA	5.607"
	208-230		TP-C50-1SP2-8	1/2	2.8	SAB	TP-CAP-10/440USA	6.357"
	208-230	1075	TP-C16-1SP2	1/6	1.2	SAB	TP-CAP-10/440USA	4.607"
	208-230		TP-C25-1SP2	1/4	1.4	SAB	TP-CAP-10/440USA	4.857"
	208-230		TP-C33-1SP2	1/3	1.7	SAB	TP-CAP-10/440USA	5.357"
	208-230		TP-C50-1SP2	1/2	2.5	SAB	TP-CAP-15/440USA	6.107"
208-230	TP-C75-1SP2	3/4	3.9	SAB	TP-CAP-15/440USA	6.357"		
Condenser Hi-Temp**	208-230	825	TP-C25-1SP2HT-8	1/4	2.1	BALL	TP-CAP-5/440USA	4.857"
	208-230		TP-C33-1SP2HT-8	1/3	2.4	BALL	TP-CAP-75/440USA	5.607"
	208-230	1075	TP-C25-1SP2HT	1/4	1.5	BALL	TP-CAP-5/440USA	5.107"
	208-230		TP-C33-1SP2HT	1/3	1.8	BALL	TP-CAP-75/440USA	5.607"
	208-230		TP-C50-1SP2HT	1/2	3.3	BALL	TP-CAP-10/440USA	5.857"
EVAPORATOR	208-230	1075 / 3 Spd*	TP-E25-3SP2	1/4	1.6	SAB	TP-CAP-10/440USA	4.902"
	115		TP-E25-3SP1	1/4	3.8	SAB	TP-CAP-10/440USA	4.902"
	208-230		TP-E33-3SP2	1/3	2.2	SAB	TP-CAP-10/440USA	5.152"
	115		TP-E33-3SP1	1/3	5.0	SAB	TP-CAP-10/440USA	5.152"
	208-230		TP-E50-3SP2	1/2	2.7	SAB	TP-CAP-10/440USA	5.902"
	115		TP-E50-3SP1	1/2	6	SAB	TP-CAP-10/440USA	5.652"
	208-230		TP-E75-3SP2	3/4	4.0	SAB	TP-CAP-15/440USA	6.152"
	115		TP-E75-3SP1	3/4	9.5	SAB	TP-CAP-15/440USA	5.902"

\*Speeds: Hi (1075), Med (900), Low (800)

\*\*158°F (70°C) Ambient Design

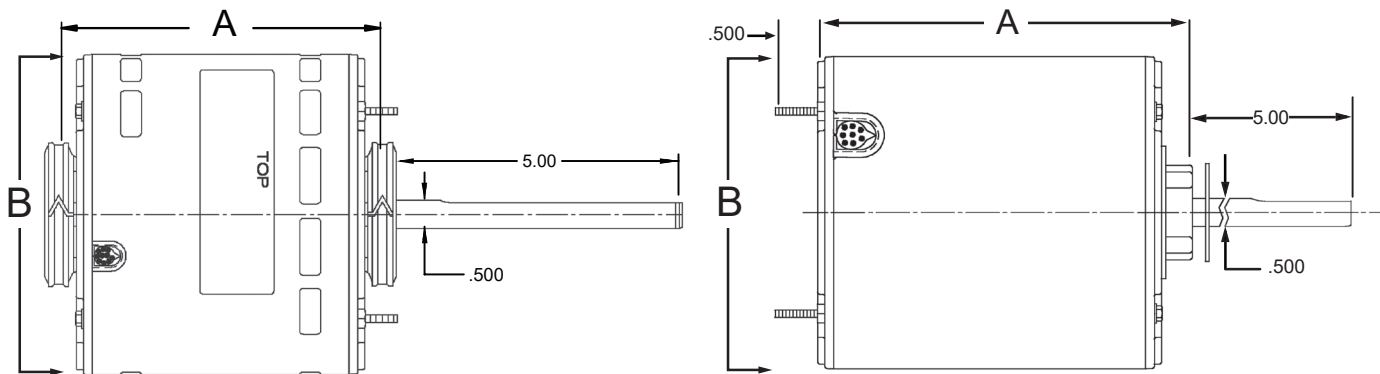
## Technical Specifications

### Multi-Horsepower

MULTI-HP MOTORS	VOLTS	SPEED	TRADEPRO®	HP	BEARING	CAP	MOTOR LENGTH (A) DIM	Full Load Amps					
								3/4 HP	1/2 HP	1/3 HP	1/4 HP	1/5 HP	1/6 HP
Condenser	208-230	825	TP-C33-MHP2-8	1/3 - 1/5	SAB	TP-CAP-75/440USA	5.857"	-	-	2.4	1.9	1.4	-
	208-230	1075	TP-C33-MHP2	1/3 - 1/6	SAB	TP-CAP-10/440USA	5.312"	-	-	1.8	1.7	1.5	1.3
	208-230		TP-C50-MHP2	1/2 - 1/5	SAB	TP-CAP-15/440USA	6.312"	-	2.6	2.3	1.9	1.7	-
Condenser Hi-Temp**	208-230	825	TP-C33-MHP2HT-8	1/3 - 1/5	BALL	TP-CAP-75/440USA	5.607"	-	-	2.4	1.9	1.4	-
	208-230	1075	TP-C33-MHP2HT	1/3 - 1/6	BALL	TP-CAP-75/440USA	4.312"	-	-	1.7	1.4	1.2	1.1
	208-230		TP-C50-MHP2HT	1/2 - 1/5	BALL	TP-CAP-15/440USA	6.357"	-	2.6	2.3	2	1.7	-
Direct Drive Blower	115	1075 / 3 Spd*	TP-E50-MHP1	1/2 - 1/6	SAB	TP-CAP-10/440USA	5.9"	-	7.3	6.9	5.5	3.6	2.8
	208-230		TP-E50-MHP2	1/2 - 1/6	SAB	TP-CAP-10/440USA	5.9"	-	3.6	3.5	2.8	1.9	1.3
	115		TP-E75-MHP1	3/4 - 1/5	BALL	TP-CAP-20/440USA	6.607"	8.1	6.6	4.6	3.8	3.1	-
	208-230		TP-E75-MHP2	3/4 - 1/5	BALL	TP-CAP-20/440USA	6.607"	3.8	3.7	2.5	1.8	1.7	-

\*Speeds: Hi (1075), Med (900), Low (800)

\*\*158°F (70°C) Ambient Design

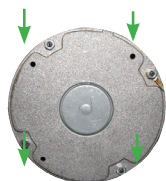


B Dim = 5.625" (5-5/8") All Motors are 48 Frame

## MOTOR SELECTION GUIDE

### How to choose the right motor?

- Determine the application. Condenser, Air Handler, or Furnace?
  - This helps identify the enclosure, voltage, and temperature rating to help ensure a good cross reference.
- Determine the motor speed. 825 RPM or 1075 RPM?
- Determine if the original motor is Original Equipment or Aftermarket Replacement?
  - Match OEM Motors by Amp draw. Watch out for large capacitors. Why?
    - If the original capacitor is more than 50% larger than the suggested new capacitor, you should choose the next size motor. Always install a new capacitor rated per the manufacturer's specifications.
  - Match Aftermarket Motors on Horsepower. Why?
    - Amp draw can be misleading.
- How does the motor mount? Side Shell brackets, self-forming screws, resilient base, belly band, or motor mounting studs? Make sure to choose the right TradePro replacement motor.



#### Mounting Screws

Includes special Trane® and Rheem® Mounting holes on Multi-horsepower Condenser Fan Motors



#### Multi-Horsepower

Includes Rheem® Side Shell Holes on Multi-horsepower Evaporator Models.



#### Extended Bolts

Reversible bolts provide for easier installation for condenser motors

## Why Buy TradePro Motors

TradePro motors are 100% functionally tested during manufacturing and then retested after final assembly for everything from input power to Hi-Pot (Insulation Verification) and continuity testing.

TradePro motors require compliance verification of incoming raw materials for dimensional, mechanical, and other quality specifications.

TradePro Furnace blower motors are rated for higher ambient temperatures so they can be used in more applications and in more regions.

## Cross Reference Guidelines

- Horsepower must be within +/- 10% of OEM
- Replacement motor voltage must match OEM exactly
- Minimum current rating should equal OEM maximum and should not exceed + 10%
- Speed should be within +/- 10% of OEM
- Capacitor value should match value on replacement motor label

Reasonable effort has been made to assure the accuracy of cross-reference information. However, final evaluation for suitable replacement is left to the installer.

	HP	TRADEPRO®	U.S. MOTORS®	CENTURY®	ECONOMASTER®	FASCO	MARS®	PACKARD	MARATHON®	DAYTON®
<b>CONDENSER</b>	1/6	TP-C16-1SP2-8	1873	FSE1018S	EM3403	D798	10403	60825	X465	-
	1/4	TP-C25-1SP2-8	1874	FSE1028S	EM3404	D934	10404	40825	X450	-
	1/3	TP-C33-1SP2-8*	1875	FSE1038S	EM3405	D936	10405	30825	X451	-
	1/2	TP-C50-1SP2-8	1870	-	EM3746	D713	10746	-	X452	-
	1/3	TP-C33-1SP2HT-8*	1875H	FE1038SF	EM3469F	-	20469	30825F	-	AMB19
	1/4	TP-C25-1SP2HT-8	1874H	FE1028SF	EM3404F	-	20404	40825F	-	-
	1/3 - 1/5	TP-C33-MHP2-8*	5464	FE6001	EM3469	D2826	10469	45488B	-	-
	1/6	TP-C16-1SP2	1859	FSE1016S	EM3727	D917	10727	43727	X411	4M261
	1/4	TP-C25-1SP2	1860	FSE1026S	EM3728	D909	10728	43728	X412	4M205
	1/3	TP-C33-1SP2	1861	FSE1036S	EM3729	D908	10729	43729	X413	4M206
	1/2	TP-C50-1SP2	1862	FSE1056S	EM3730	D907	10730	43730	X414	4M207
	3/4	TP-C75-1SP2	1868	FSE1076S	EM3731	D933	10731	43731	X095	4M208
	1/4	TP-C25-1SP2-HT	1860H	FSE1026SF	EM3728F	-	20728	43732F	-	-
	1/3	TP-C33-1SP2-HT	1861H	FSE1036SF	EM3729F	-	20729	43733F	-	-
	1/2	TP-C50-1SP2-HT	1862H	FSE1056SF	EM3730F	-	20730	43734F	-	-
	1/3 - 1/6	TP-C33-MHP2	5462	FE6000	EM3465	D2827	10465	45458B	-	-
1/3 - 1/6	TP-C33-MHP2-MAX	3323	ORM5458	EM3465	-	10465	45458B	-	-	
1/2 - 1/5	TP-C50-MHP2	5465	FE6002	EM3568	-	10468	-	-	-	

\*440 Volt Cap Required

	HP	TRADEPRO®	U.S. MOTORS®	CENTURY®	ECONOMASTER®	FASCO	MARS®	PACKARD	MARATHON®	DAYTON®
<b>EVAPORATOR</b>	1/4	TP-E25-3SP2	1971	D1026	EM3584	D725	10584	43584	X001	4M097
	1/4	TP-E25-3SP1	1863	DL1026	EM3583	D721	10583	43583	X000	4M096
	1/3	TP-E33-3SP2	1972	D1036	EM3586	D923	10586	43586	X003	4M099
	1/3	TP-E33-3SP1	1864	DL1036	EM3585	D727	10585	43585	X002	4M098
	1/2	TP-E50-3SP2	1973	D1056	EM3588	D703	10588	43588	X005	4M101
	1/2	TP-E50-3SP1	1865	DL1056	EM3587	D701	10587	43587	X004	4M100
	3/4	TP-E75-3SP2	8905	D1076	EM3590	D729	10590	43590	X010	4M184
	3/4	TP-E75-3SP1	8904	DL1076	EM3589	D728	10589	43589	X009	4M183
	1/2 - 1/6	TP-E50-MHP2	5461	FD6000	EM3588	D833	10464	45461	-	4ME34
	1/2 - 1/6	TP-E50-MHP1	5460	FDL6001	EM3463	D2835	10463	45460	-	4ME32
	3/4 - 1/5	TP-E75-MHP2	5471	FD6001	EM3467	D2833	10467	45471	-	4ME28
	3/4 - 1/5	TP-E75-MHP1	5470	FDL6002	EM3466	D2832	10466	45470	-	4ME26

	HP	VOLTAGE	TRADEPRO®	EVERGREEN®	FLEX TOTALINE®	PACKARD	U.S. MOTORS®	MARS®
<b>ECM</b>	1/3	115V	TP-EC13-50	6103E	P257-FLEX1370	46012	5632	10860
	1/3	208-230V		6203E	P257-FLEX1373	46012		
	1/2	115V		6105E	P257-FLEX1370	46012		
	1/2	208-230V		6205E	P257-FLEX1373	46012		
	3/4	115V	TP-EC13-75	6107E	P257-FLEX1371	46034	5642	10861
	3/4	208-230v		6207E	P257-FLEX1374	46034		
	1	115V	TP-EC13--1	6110E	P257-FLEX1372	46001	5652	
	1	208-230V		6210E	P257-FLEX1375	46001		