Vertical Pump Motors

Model No: 324TTDR16007
Catalog No: M833B

Vertical Pump Motor, 50 HP, 3 Ph, 60 Hz, 230/460 V, 3600 RPM, 324HPV Frame, DP

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Product Information Packet: Model No: 324TTDR16007, Catalog No: M833B Vertical Pump Motor, 50 HP, 3 Ph, 60 Hz, 230/460 V, 3600 RPM, 324HPV Frame, DP

Nameplate Specifications

Phase	**3**	Output HP	**50 Hp**
Output KW	**37.0 kW**	Voltage	**230/460 V**
Speed	**3550 r/min**	Synchronous RPM	**3600 r/min**
Service Factor	**1.15**	Frame	**324HPV**
Enclosure	**Drip Proof**	Thermal Protection	**No Protection**
Efficiency	**93.6 %**	Ambient Temperature	**40 °C**
Frequency	**60 Hz**	Current	**112.0/56.0 A**
Power Factor	**88**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**B**
KVA Code	**F**	Drive End Bearing Size	**6311**
Opp Drive End Bearing Size	**6311**	UL	**Recognized**
CSA	**Y**	CE	**Y**
IP Code	**22**	Number of Speeds	**1**

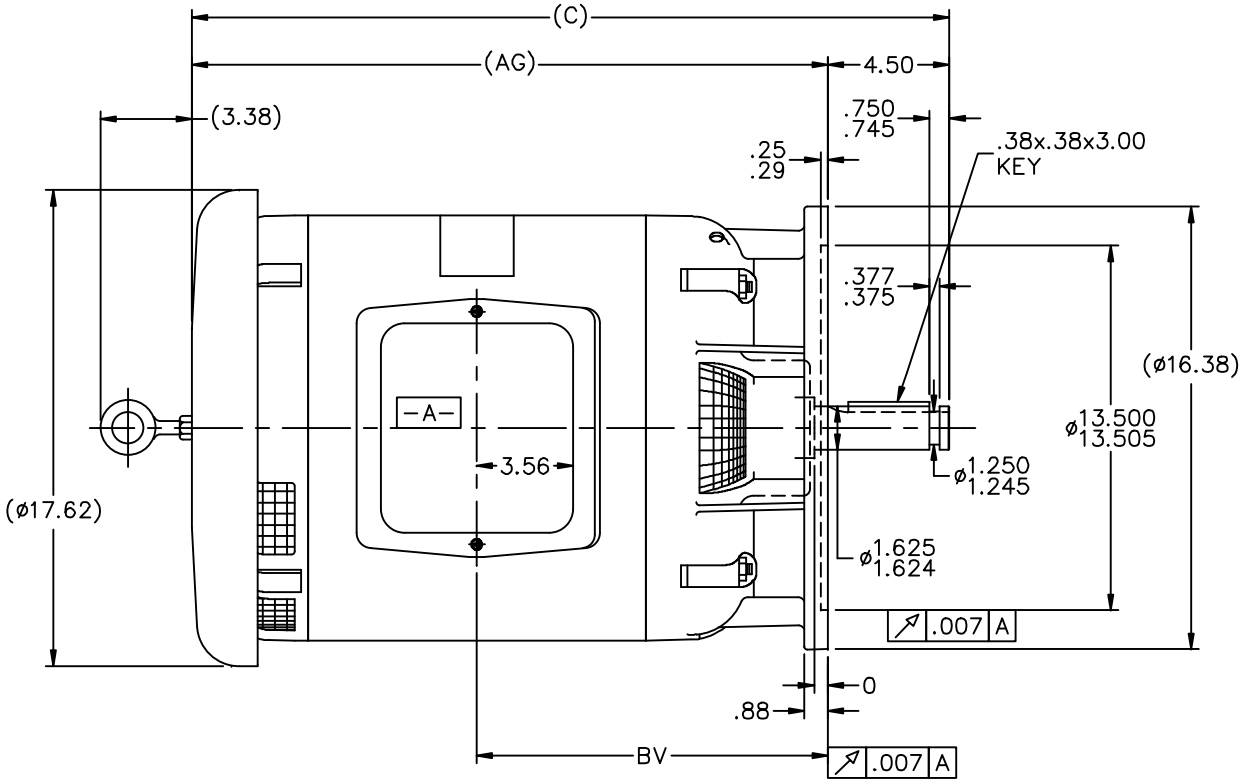
Technical Specifications

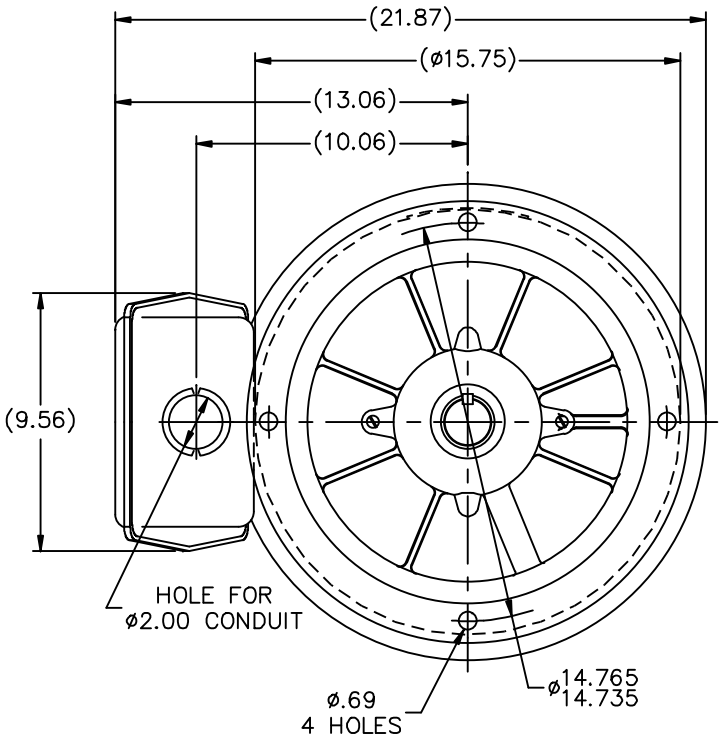
Electrical Type	**Squirrel Cage Induction Run**	Starting Method	**Across The Line**
Poles	**2**	Rotation	**Reversible**
Resistance Main	**.15 O**	Mounting	**Round**
Motor Orientation	**Shaft Down**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Rolled Steel**
Shaft Type	**HP**	Overall Length	**29.56 in**
Frame Length	**14.0 in**	Shaft Diameter	**1 5/8 in**
Shaft Extension	**4.50 in**	Assembly/Box Mounting	**F1/F2 Capable**

Drawings

Connection Drawing	**A-EE7308**	Outline Drawing	**B-SS28314-1400**

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NOTES:
1. C'BOX CAN BE ROTATED IN 90° STEP.
2. NAMEPLATE TO BE READ FROM SHAFT END OF MOTOR
3. MAX. SHAFT RUNOUT .002

DASH	FRAME	C	AG	BV
1250	320	28.06	23.56	13.00
1400	320	29.56	25.06	13.75
1450	320	30.06	25.56	14.00
1500	320	30.56	26.06	14.12

NO.	REVISION	BY & DATE	CHK
16	REVISED NOTE # 2 (ECN 23047)	REP 01-16-2012	BW
15	ECN 16735	NJS 6/21/2010	BW
14	REVISED NAMEPLATE LOCATION 09-3901	MSG 9/22/2009	DR
13	REDRAWN IN AUTOCAD	TAT 07-22-2004	ML
12	REVISED TO NEC CONDUIT BOX CN 28428	BJW 02-04-2000	
11	FRAME TYPES NOW 320 CN 27400-327	DRS 08-23-1999	

TOLERANCES UNLESS SPECIFIED: DEC. ±.1 (INCHES); .X ±.1; .XX ±.03; .XXX ±.005; .XXXX ±.0005; ANG ±7'30"

MARATHON ELECTRIC

DRAWN MJD 01-27-1999
CHK ML 02-01-1999
APPD DD 02-01-1999
SCALE 7=32
REF
FMF
PREV

TITLE OUTLINE - 320HP FR. DR. PR. - STEEL C' BOX - 'P' BASE
MAT'L.
FINISH
CAD FILE ss28314

RFP
DIST LB

SIZE B | DRAWING NO. SS28314 | PAGE OF | REV. 16

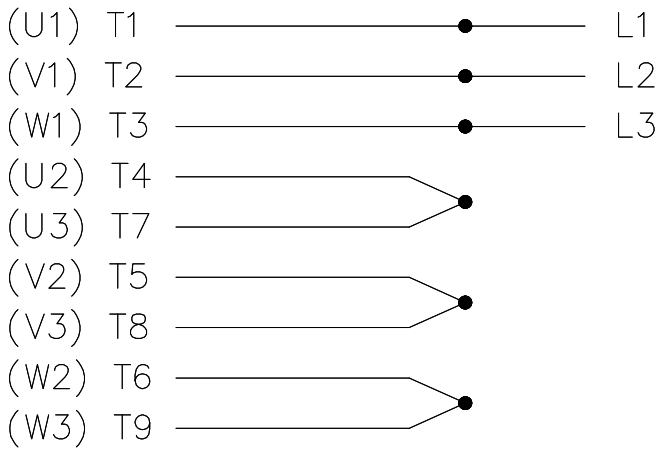
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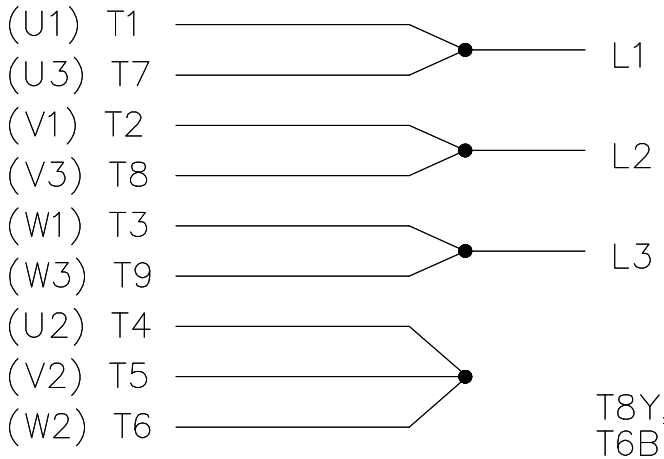
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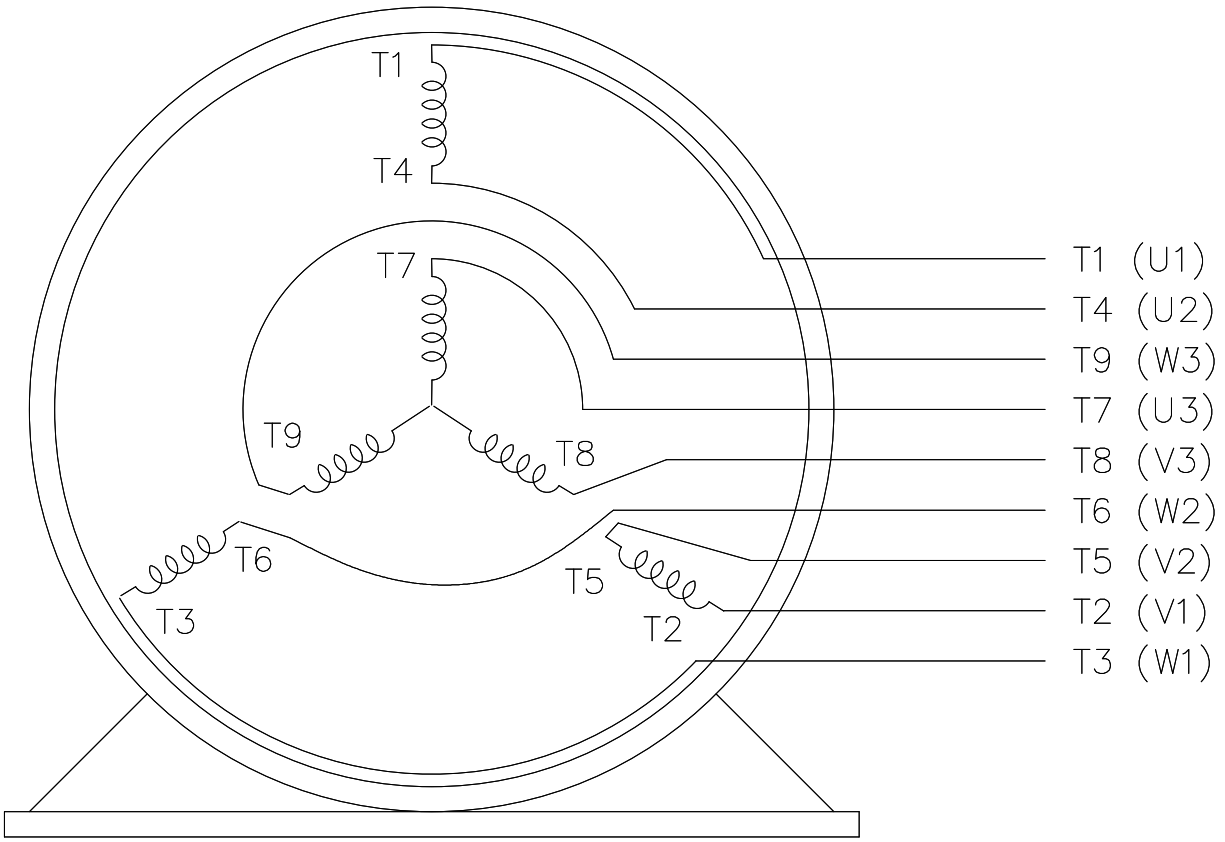
THREE PHASE
DUAL VOLTAGE MOTOR

HIGH VOLTAGE



LOW VOLTAGE





VIEW OF TERMINAL END

REF.
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G
T6BZ, T2B, T6BL, T4AV, T6B, T4B

OPTIONAL CORD CONNECTION

L1	WHITE
L2	RED
L3	BLACK

DRAWING REVISION: J	REVISION BY: SB	REV DATE/ © DATE: 08/01/2025
REQUEST NUMBER: CR-0023654	APPROVED BY: SBD	DATE: 08/01/2025

REQUEST NUMBER DESCRIPTION
DRAWING TITLE BLOCK UPDATED

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DATE: 11/20/1990	
APPROVED BY: SAS	
DATE: 04/24/2003	
REFERENCE	
THIRD ANGLE PROJECTION	

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DESCRIPTION
CONN DIAGRAM-EXTERNAL
3Ø - DUAL VOLTAGE MOTOR

MATERIAL	PROCESS/FINISH

SIZE	DRAWING NUMBER	SHEET
A	4 of 5 EE7308	1 OF 1

Uncontrolled Copy

Data Sheet

Date: 11/30/2018
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon® electric

324TTDR16007

Submittal

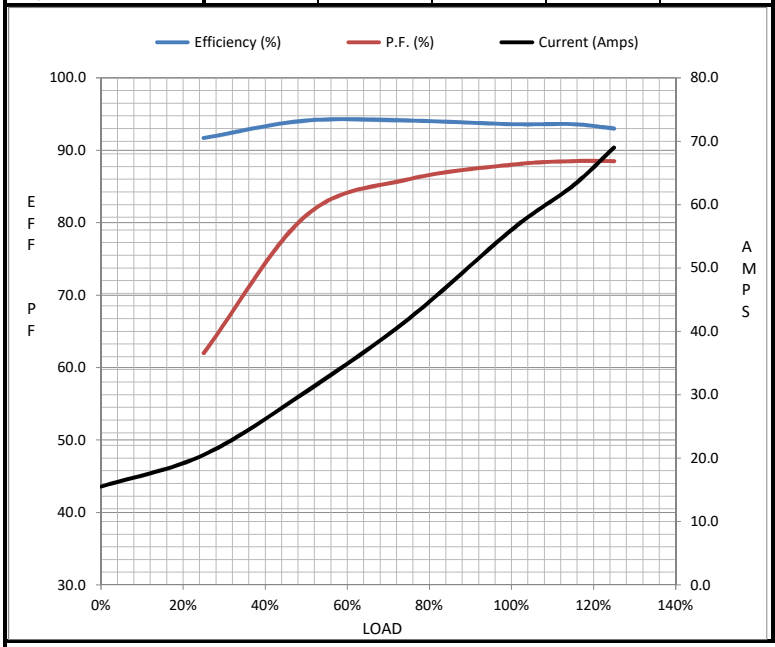
Data @ **460** V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	15.5	20.5	30.5	42.0	56.0	63.0	69.0	345	
Torque (ft-lb)	0.00	18.5	36.5	55.5	74.0	85.5	93.0	115	
RPM	3600	3590	3575	3565	3550	3,545	3540	0	
Efficiency (%)		91.7	94.1	94.1	93.6	93.6	93.0		
P.F. (%)	5.5	62.0	81.0	86.0	88.0	88.5	88.5	32.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3325	3550	3600
Current (Amps)	345	300	220	56.0	15.5
Torque (ft-lb)	115	100	210	74.0	0.00



Information Block

HP	50.0	
Sync. RPM	3600	
Frame	324	
Enclosure	DP	
Construction	TDR	
Voltage	230/460	V
Frequency	60	Hz
Design	B	
LR Code letter	F	
Service Factor	1.15	
Temp Rise @ FL	35	° C
Duty	CONT	
Ambient	40	° C
Elevation	1,000	feet
Rotor/Shaft wk²	3.1	Lb-Ft²
Ref Wdg	K2862135 R1	
Sound Pressure @ 1M	82	dBA
VFD Rating	NONE	
Outline Dwg	B-SS28314-1400	
Conn. Diag	A-EE7308	
Additional Specifications:		
0		
0		

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.1000	0.0630	0.4860	0.3700	17.4660

Speed -Torque Curve

