

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 324TTDR16007

Catalog No: M833B

50 HP Vertical Solid Shaft P-Base Motor, 3 phase, 3600 RPM, 230/460 V, 324HPV Frame, ODP
Vertical Pump Motors



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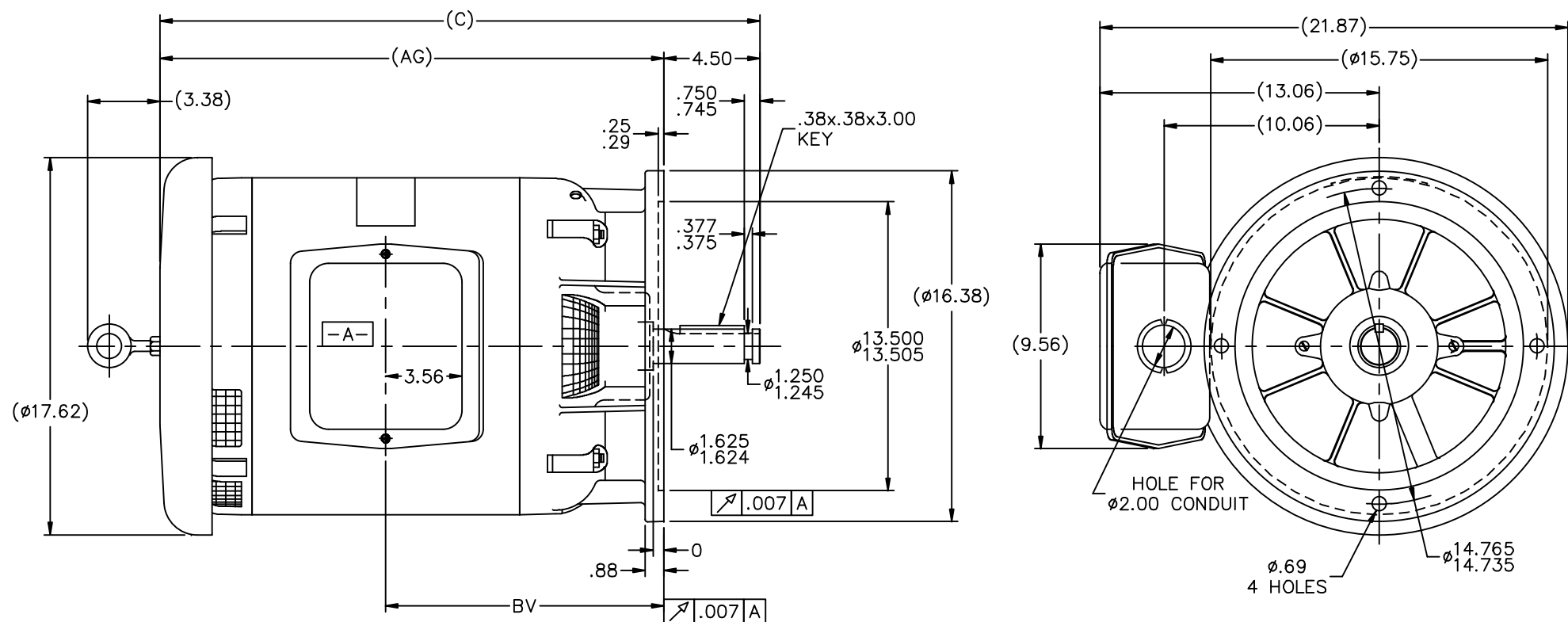
RegalRexnord

Nameplate Specifications

Output HP	50 Hp	Output KW	37.0 kW
Frequency	60 Hz	Voltage	230/460 V
Current	112.0/56.0 A	Speed	3550 rpm
Service Factor	1.15	Phase	3
Efficiency	93.6 %	Power Factor	88
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Frame	324HPV	Enclosure	Drip Proof
Thermal Protection	No	Ambient Temperature	40 °C
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 Ohms	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	14.00 in	Shaft Diameter	1.625 in
Shaft Extension	4.50 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	A-EE7308	Outline Drawing	B-SS28314-1400

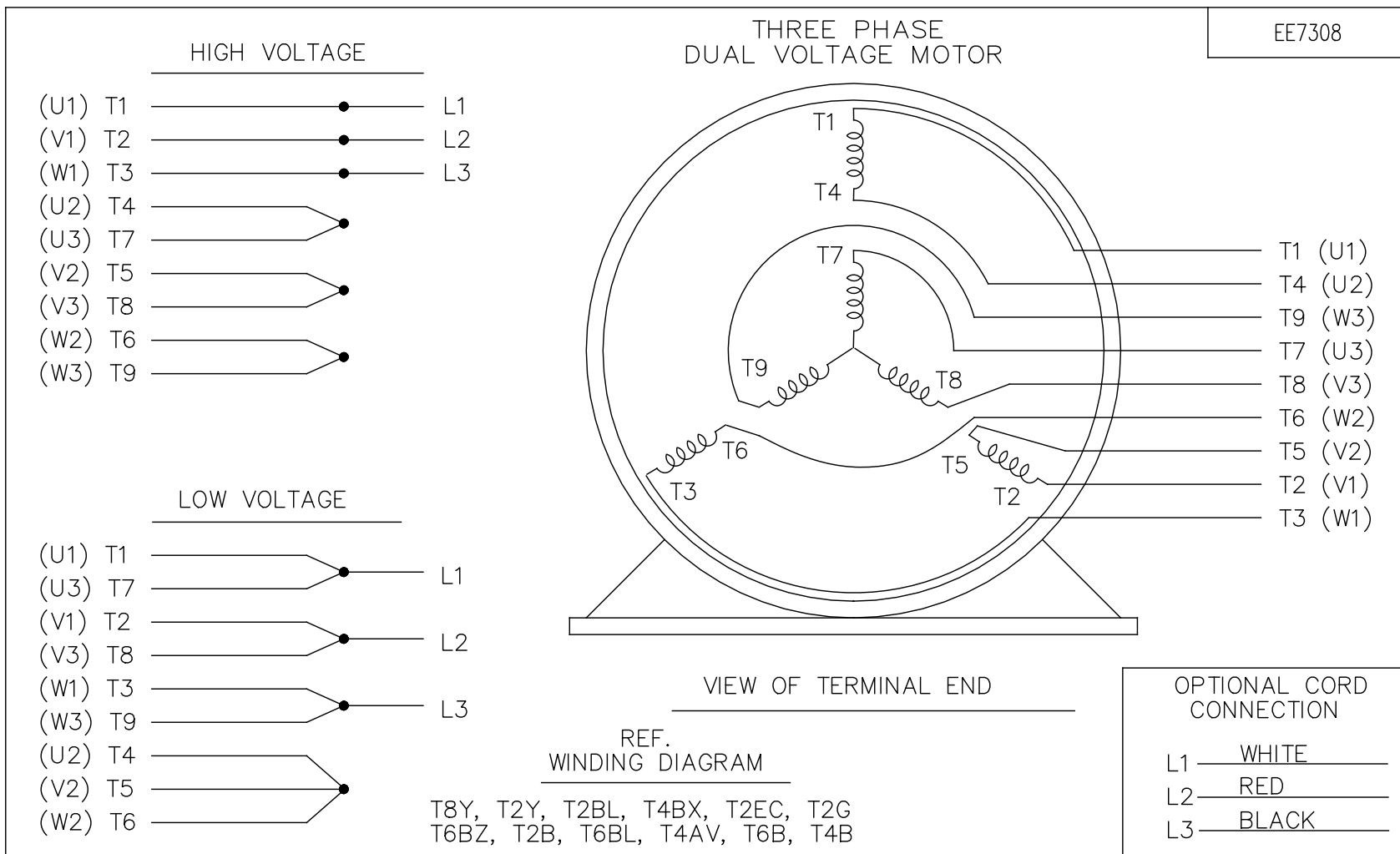


NOTES:

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

16	REVISED NOTE # 2 (ECN 23047)	REP 01-16-2012	BW	TOLERANCES UNLESS SPECIFIED		DRAWN MJD 01-27-1999
15	ECN 16735	NJS 6/21/2010	BW	DEC. INCHES		CHK ML 02-01-1999
14	REVISED NAMEPLATE LOCATION 09-3901	MSG 9/22/2009	DR	.X ±.1		APPD DD 02-01-1999
13	REDRAWN IN AUTOCAD	TAT 07-22-2004	ML	.XX ±.03		SCALE 7=32
12	REVISED TO NEC CONDUIT BOX CN 2842B	BJW 02-04-2000	.XXX ±.005			REF
11	FRAME TYPES NOW 320 CN 27400-327	DRS 06-23-1999	.XXXX ±.0005		MAT'L	FMF
NO.	REVISION	BY & DATE	CHK	ANG	FINISH	PREV
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				DIST LB		DRAWING NO. SS28314
						PAGE OF 16



NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED		DRAWN RM	11/20/1990
					DEC.	INCHES		
5	CHG TO REGAL LOGO	SL 09/10/2015	AB				CHK	ML 11/21/1990
4	REVISED IEC NOTATIONS	MSG 11/15/2011	CMN	.X	±.1		APPD	SAS 04/24/2003
3	ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194	MSG 5/10/2010	MJS	.XX	±.02		SCALE	1=1
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS	.XXX	±.005		REF	
1	REDRAWN	RM 11/20/1990		.XXXX	±.0005		FMF	
					±7'30"		PREV	
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					DIST WP		A	EE7308 5



P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER: _____ CUSTOMER P.O. #: _____
ORDER #: _____ REFERENCE MODEL #: 324TTDR16007
CONN. DIAGRAM: A-EE7308 CAT #: N/A
OUTLINE: B-SS28314-1400 CUSTOMER PART #: _____
WINDING: K2862135 R1 1 MOUNTING: F1/F2 CAPABLE
SPEED: _____

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
50	37	3600	3550	324HPV	DP	TDR	F	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	230/460	112/56	ACROSS THE LINE	CONT	F	1.15	40	3300

F.L. EFF	93.6	3/4 LD EFF	94.1	1/2 LD EFF	94.1	GTD EFF	ELECT. TYPE
F.L. PF	88.0	3/4 LD PF	86.0	1/2 LD PF	81.0	92.4	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
74.0 LB-FT	345	115 LB-FT 155%	210 LB-FT 284%	35

@ 3 FT.	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
82 dBA	91 dBA	3.1 LB-FT²	0 LB-FT²	15 SEC.	0	425 LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
P-BASE	STANDARD	ROUND	SHAFT DOWN	NO	NONE	YES	RODENT	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	HP	NONE	NONE	1045 HOT ROLLED (C-204)	ROLLED STEEL
6311	6311						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
0.1	0.063	0.486	0.37	17.466	0.150	ODE

* N O T E S *		INVERTER TORQUE: NONE INV. HP SPEED RANGE: NONE ENCODER: NONE NONE NONE NONE PPR
PREPARED BY: FAREEDA DUDEKULA DATE: 9/11/2018		BRAKE: NONE NONE NONE FT-LB: NA VOLTAGE: NONE HZ: UL: V-INS, CONST UL REC

FORM: 3531 REV_4 2/27/06

Data Sheet

Date: 11/30/2018

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



324TTDR16007

Submittal

Data @ 460 V

Motor Load Data

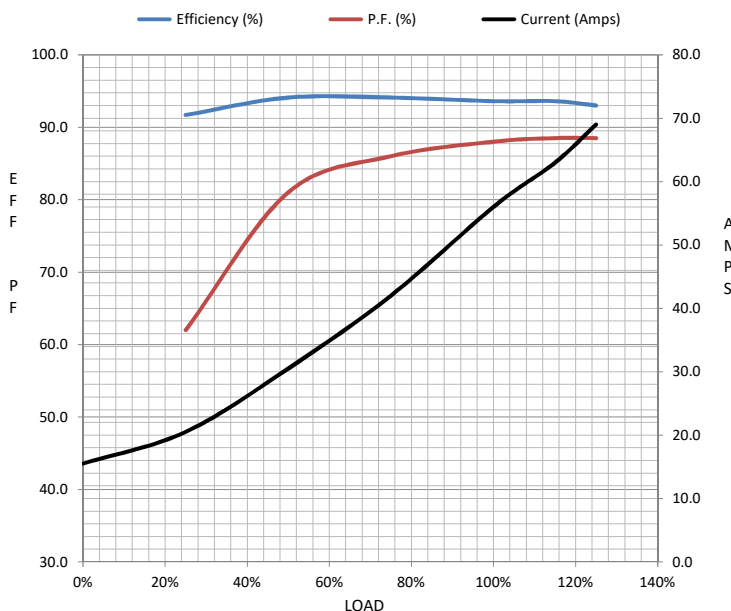
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	15.5	20.5	30.5	42.0	56.0	63.0	69.0	345	
Torque (ft-lb)	0.00	18.5	36.5	55.5	74.0	85.5	93.0	115	
RPM	3600	3590	3575	3565	3550	3,545	3540	0	
Efficiency (%)		91.7	94.1	94.1	93.6	93.6	93.0		
P.F. (%)	5.5	62.0	81.0	86.0	88.0	88.5	88.5	32.0	

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

