

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 326TSHFS9005  
Catalog No: W578  
50,3600,TEFC,326TS,3/60/575  
Severe Duty



Regal and Marathon are trademarks of Regal Beloit Corporation or one of its affiliated companies.  
©2018 Regal Beloit Corporation, All Rights Reserved. MC017097E

**REGAL**<sup>®</sup>



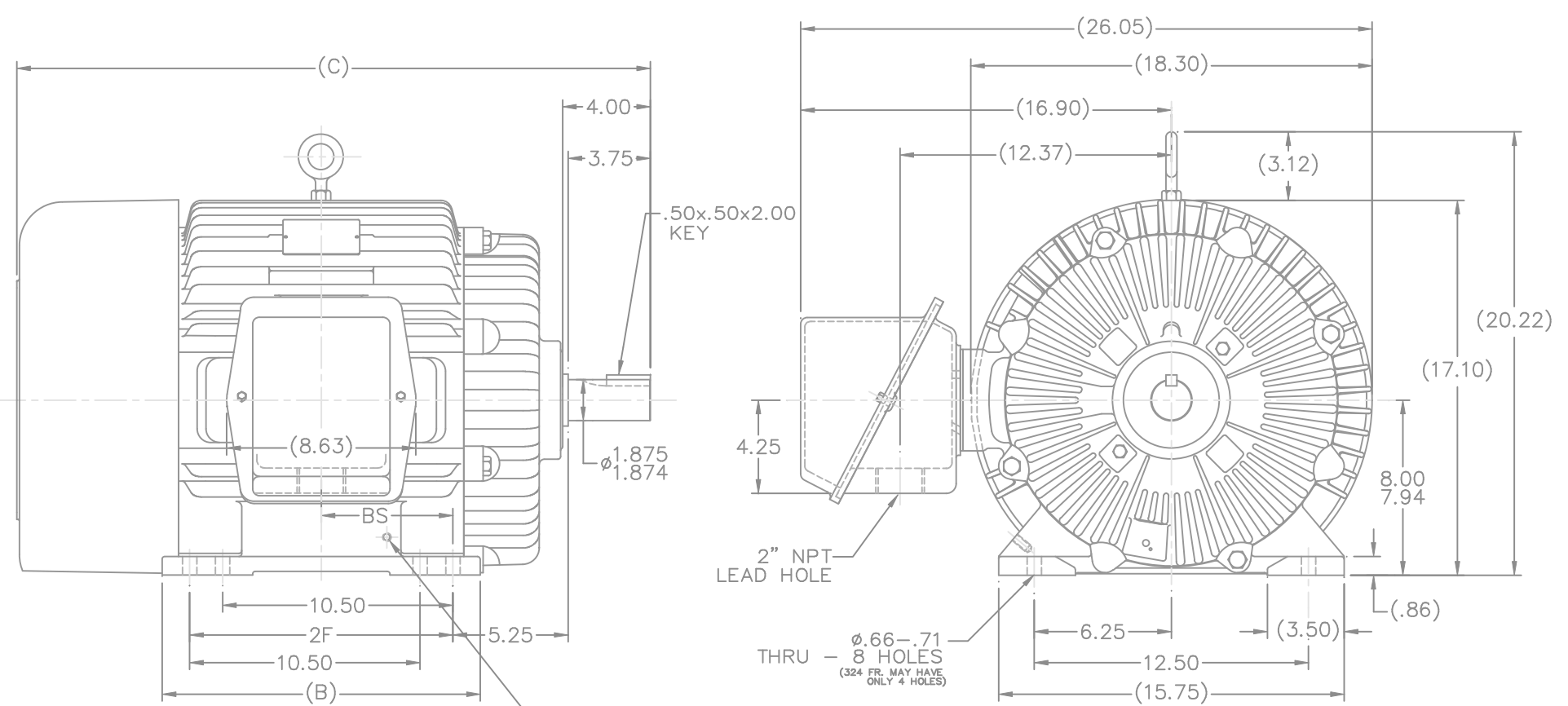
### Nameplate Specifications

Output HP	<b>50 Hp</b>	Output KW	<b>37.0 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>575 V</b>
Current	<b>45.0 A</b>	Speed	<b>3552 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>93 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>F</b>	Design Code	<b>B</b>
KVA Code	<b>G</b>	Frame	<b>326TS</b>
Enclosure	<b>Totally Enclosed Fan Cooled</b>	Overload Protector	<b>No</b>
Ambient Temperature	<b>40 °C</b>	Drive End Bearing Size	<b>6312</b>
Opp Drive End Bearing Size	<b>6311</b>	UL	<b>Recognized</b>
CSA	<b>Y</b>	CE	<b>Y</b>
IP Code	<b>56</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>2</b>	Rotation	<b>Reversible</b>
Mounting	<b>Rigid base</b>	Motor Orientation	<b>Horizontal</b>
Drive End Bearing	<b>Ball</b>	Opp Drive End Bearing	<b>Ball</b>
Frame Material	<b>Cast Iron</b>	Shaft Type	<b>TS</b>
Overall Length	<b>28.87 in</b>	Frame Length	<b>13.00 in</b>
Shaft Diameter	<b>1.875 in</b>	Shaft Extension	<b>4 in</b>
Assembly/Box Mounting	<b>F1/F2 Capable</b>		
Outline Drawing	<b>B-SS301080-1300</b>	Connection Diagram	<b>A-EE7300U</b>

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created: 07/02/2018



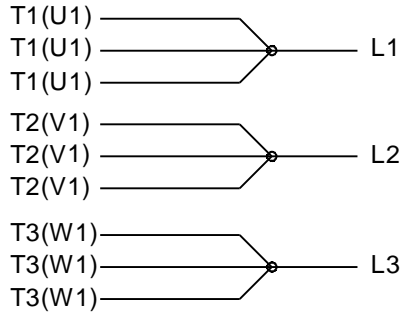
- NOTES:  
 1. BOX CAN BE ROTATED IN 90° STEPS.  
 2. BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.  
 3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

3/8-16 UNC-2B  
 (SEE B.O.M. FRAME FOR REQUIREMENT)

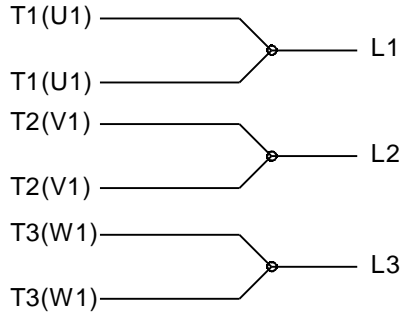
DASH	FR.	C	B	BS	2F
1150	324-TS	27.37	13.00	5.25	10.50
1300	324/6TS	28.87	14.50	6.00	12.00

				TOLERANCES UNLESS SPECIFIED		MARATHON ELECTRIC	DRAWN CAV 06-19-2002					
				DEC.	INCHES		CHK	ML 06-20-2002				
4	ADDED NOTE TO 3/8-16UNC-2B	RJW 03-28-2008	ML	.X	±.1	TITLE OUTLINE 320TS FRAME -TEFC	APPD	DD 06-21-2002				
3	REVISED DRAWING	RJW 04-05-2007		.XX	±.03		SCALE	5=23				
2	REDRAWN IN AUTOCAD	RWR 09-09-2004		.XXX	±.005		REF					
1	NEW DRAWING MU42162	CAV 06-21-2002	ML	.XXX	±.0005		MAT'L	FMF				
NO.	REVISION	BY & DATE	CHK	ANG	±7'30"	FINISH	PREV					
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT						RFP	CAD FILE	ss301080	SIZE	DRAWING NO.	PAGE 1 OF 1	REV.
						DIST	LB		B	SS301080		4

**IF MOTOR HAS 9 LEADS**

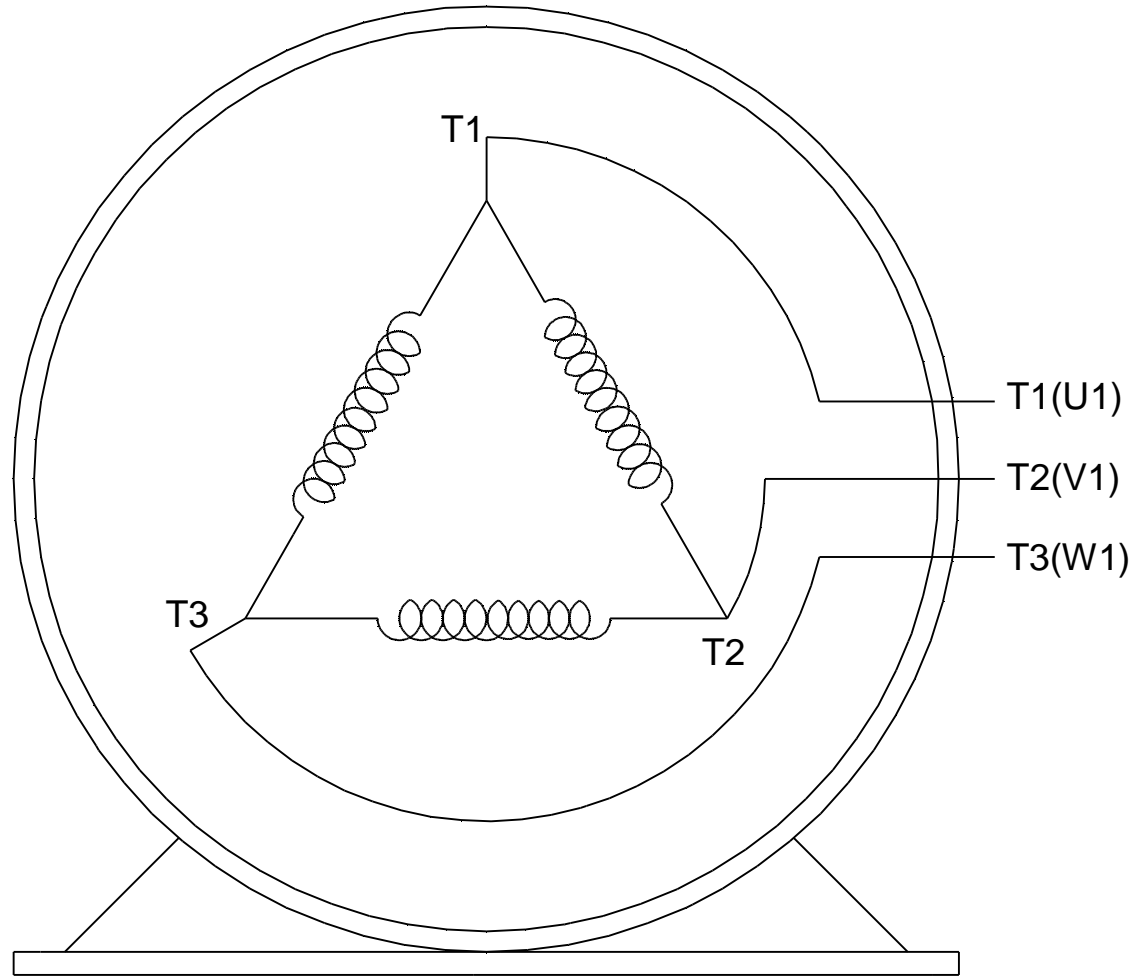
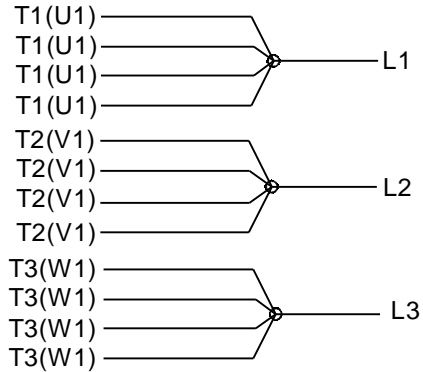


**IF MOTOR HAS 6 LEADS**



A-9806 DECAL IF CALLED FOR

**IF MOTOR HAS 12 LEADS**



**VIEW OF TERMINAL END**

DRAWING REVISION <b>L</b>	REVISION BY <b>AJW</b>	DATE <b>05-04-2015</b>	TOLERANCES UNLESS OTHERWISE SPECIFIED:	DRAWN BY <b>DRS</b>	<b>Regal Beloit America, Inc.</b>																					
ECO <b>ECO-0077067</b>	APPROVED BY <b>EWH</b>	DATE <b>05-05-2015</b>	<table style="font-size: small; border-collapse: collapse;"> <tr> <td><u>DEC.</u></td> <td><u>INCH</u></td> <td><u>mm</u></td> <td><u>ANGLE</u></td> </tr> <tr> <td>.X</td> <td>±0.1</td> <td>[±2.5]</td> <td>±7° 30"</td> </tr> <tr> <td>.XX</td> <td>±0.02</td> <td>[±0.51]</td> <td></td> </tr> <tr> <td>.XXX</td> <td>±0.005</td> <td>[±0.127]</td> <td></td> </tr> <tr> <td>.XXXX</td> <td>±0.0005</td> <td>[±0.0127]</td> <td></td> </tr> </table>	<u>DEC.</u>			<u>INCH</u>	<u>mm</u>	<u>ANGLE</u>	.X	±0.1	[±2.5]	±7° 30"	.XX	±0.02	[±0.51]		.XXX	±0.005	[±0.127]		.XXXX	±0.0005	[±0.0127]		DATE <b>09-27-1996</b>
<u>DEC.</u>	<u>INCH</u>	<u>mm</u>	<u>ANGLE</u>																							
.X	±0.1	[±2.5]	±7° 30"																							
.XX	±0.02	[±0.51]																								
.XXX	±0.005	[±0.127]																								
.XXXX	±0.0005	[±0.0127]																								
ECO DESCRIPTION <b>UPDATED TO SOLIDWORKS</b>			APPROVED BY <b>GK</b>	DATE <b>09-30-1996</b>	MATERIAL	PROCESS/FINISH																				
COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.			REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 200 $\sqrt{\text{INCH}}$ 5.1 $\sqrt{\text{mm}}$	REFERENCE	SIZE <b>A</b>	DRAWING NUMBER <b>EE7300U</b>	SHEET <b>1 OF 1</b>																			
			mm SHOWN IN [BRACKETS]	THIRD ANGLE PROJECTION																						



Data Sheet

Date: 29-06-2017  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



326TSHFS9005

Submittal

Data @ 575 V

Motor Load Data

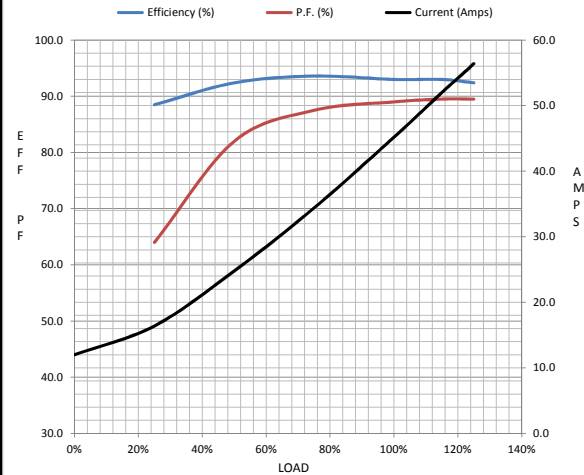
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	12.0	16.4	24.8	34.4	45.2	52.0	56.4	290
Torque (ft-lb)	0.00	18.0	37.0	55.0	74.0	85.0	93.0	118
RPM	3600	3590	3577	3565	3552	3,543	3535	0
Efficiency (%)		88.5	92.4	93.6	93.0	93.0	92.4	
P.F. (%)	8.0	64.0	82.0	87.5	89.0	89.5	89.5	29.5

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3400	3552	3600
Current (Amps)	290	264	172	45.2	12.0
Torque (ft-lb)	118	100	190	74.0	0.00

Information Block

HP	50.0			
Sync. RPM	3600			
Frame	326			
Enclosure	TEFC			
Construction	TFN			
Voltage	575 V			
Frequency	60 Hz			
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	65 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	5.8 Lb-Ft <sup>2</sup>			
Ref Wdg	3262102 NONE			
Sound Pressure @ 1M	78 dBA			
VFD Rating	CONSTANT 2:1			
Outline Dwg	B-SS301080-1300			
Conn. Diag	A-EE7300U			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1360	0.1010	0.7850	0.7090	27.8180



Speed -Torque Curve

