

# PRODUCT INFORMATION PACKET

Model No: 324TSHFCD9001

Catalog No: W571A

XRI®-841 Severe Duty Motor, 40 HP, 3 Ph, 60 Hz, 460 V, 3600 RPM, 324TS Frame, TEFC



Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

©2022 Regal Rexnord Corporation, All Rights Reserved. MC017097E

### Nameplate Specifications

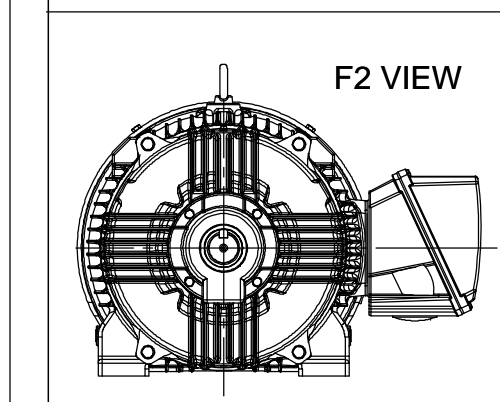
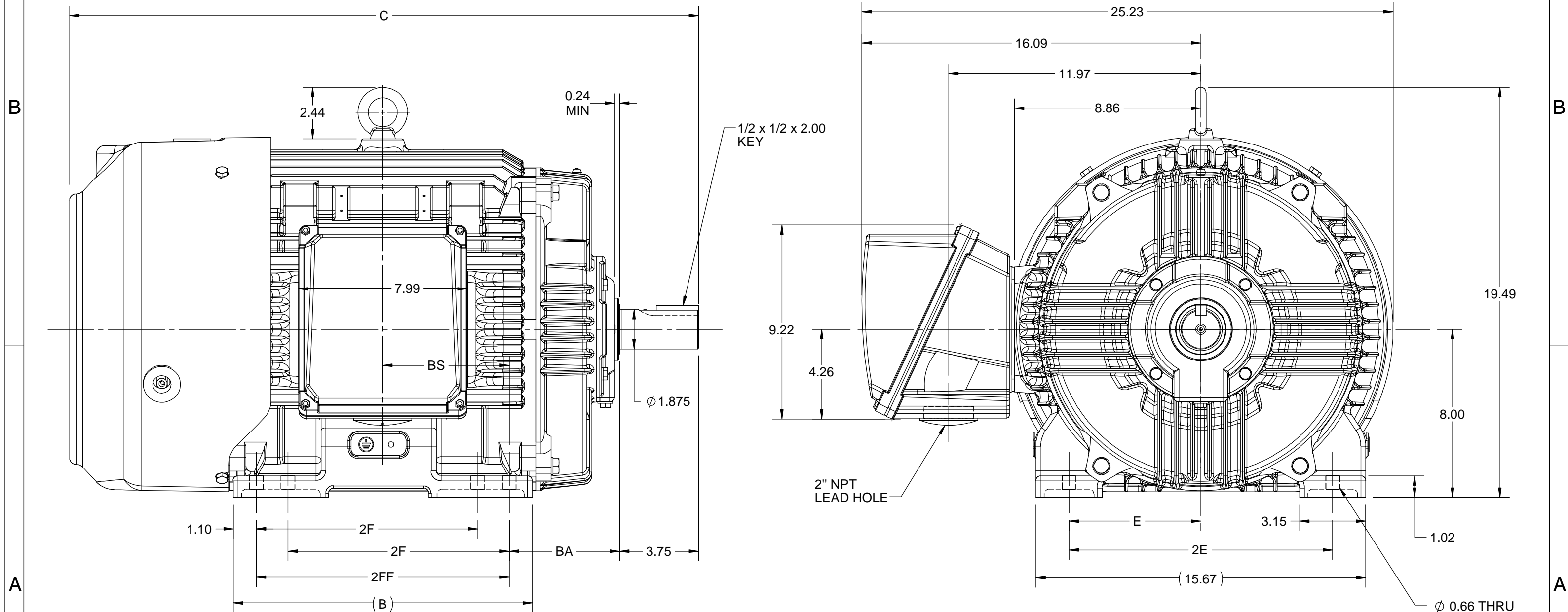
Output HP	<b>40 Hp</b>	Output KW	<b>30.0 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>460 V</b>
Current	<b>46.0 A</b>	Speed	<b>3565 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>92.4 %</b>	Power Factor	<b>88</b>
Duty	<b>Continuous</b>	Insulation Class	<b>H</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Frame	<b>324TS</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No Protection</b>	Ambient Temperature	<b>40 °C</b>
Drive End Bearing Size	<b>6312</b>	Opp Drive End Bearing Size	<b>6212</b>
UL	<b>Listed</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>56</b>
Hazardous Location	<b>DIVISION 2 T2B</b>	Number of Speeds	<b>1</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>
Resistance Main	<b>.1736 Ohms</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>	Shaft Diameter	<b>1.875 in</b>
Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>	Inverter Load	<b>CONSTANT 2:1/VARIABLE 10:1</b>
Connection Drawing	<b>EE7300U</b>	Outline Drawing	<b>SS312940-100</b>

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:11/29/2022

DASH NO.	4		3				2		1	
	B	C	E	2E	2F	2FF	BA	BS	MOUNTING	FRAME
100	12.71	28.35	6.25	12.50	---	10.50	5.25	5.25	F1 OR F2	324TS
200	14.21	29.85			10.50	12.00		6.00		324/326TS



DRAWING REVISION D	REVISION BY ASHOK N	REV DATE/© DATE 13/10/2020
ECO ECO-0194008	APPROVED BY GNK	DATE 13/10/2020
ECO DESCRIPTION <b>DRAWING UPDATED</b> COPYRIGHT (PER REVISION DATE) 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.		

PRIMARY DIMENSIONS ARE INCH  
mm DIMENSIONS IN [BRACKETS]  
ARE FOR REFERENCE ONLY

DRAWN BY BISWA	<b>REGAL</b> ® Regal Beloit America, Inc.
DATE 24/10/2018	
APPROVED BY SBD	DESCRIPTION <b>OUTLINE</b> 324/326TS FR-NEMA-SD & IEEE841
DATE 24/10/2018	MATERIAL
REFERENCE	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE <b>B</b>
	DRAWING NUMBER <b>SS312940</b>
	SHEET 1 OF 1

### IF MOTOR HAS 9 LEADS

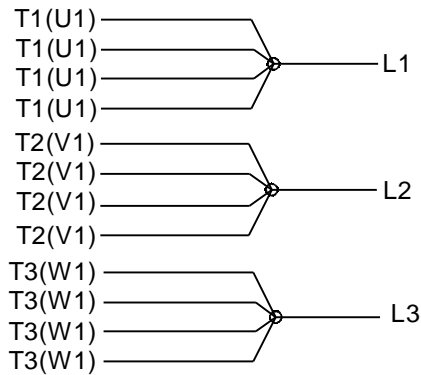


### IF MOTOR HAS 6 LEADS



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 $\sqrt{\text{mm}}$ mm SHOWN IN [BRACKETS]	REFERENCE	SIZE <b>A</b>	DRAWING NUMBER <b>EE7300U</b>	SHEET <b>1 OF 1</b>																			
				THIRD ANGLE PROJECTION																						



DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7300U  
 OUTLINE: SS312940-324TS  
 WINDING: HE32002008 NONE 1

MODEL #: 324TSHFCD9001  
 CAT #: W571A

MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
40	30	3600	3565	324TS	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV.(Ft)
3	60	460	46	LINE OR INVERTER	CONT	H	1.15	40	3300

F.L. EFF	92.4	3/4 LD EFF	93.0	1/2 LD EFF	91.7	GTD EFF	91.7	ELECT. TYPE	SQ CAGE INV RATED
F.L. PF	88.0	3/4 LD PF	85.0	1/2 LD PF	77.5				

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
59.0 LB-FT	290	95.0 LB-FT 161%	162 LB-FT 275%	60

SOUND PRESSURE @	SOUND	ROTOR WK <sup>2</sup>	MAX. LOAD WK <sup>2</sup>	SAFE STALL TIME	STARTS/HOUR	APROX.	MOTOR
77 dBA	86 dBA	4.8 LB-FT <sup>2</sup>	25 LB-FT <sup>2</sup>	20 SEC.	2	595	LB.

\*\*\* SUPPLEMENTAL INFORMATION \*\*\*

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	DIVISION 2 T2B	NO	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE BALL	ODE BALL	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6312	6212						

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)
0.11	0.057	0.539	0.596	17.373	0.080

If Inverter equals NONE, contact factory for further information

* N O T E S *	INVERTER TORQUE: VARIABLE 10:1 INV. HP SPEED RANGE: NONE				
	ENCODER: NONE				
	NONE				
	NONE PPR				

PREPARED BY: ANUSHA M DATE: 3/10/2020	BRAKE: NONE NONE FT-LB: NA VOLTAGE: NONE	NONE	HZ:
--	---	------	-----

FORM: 3531 REV\_4 2/27/06  
 \*\* Subject to change without notice.

Data Sheet

324TSHFCD9001

Date: 3/10/2020  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: ANUSHA M



Submittal

Data @ 460 V

Motor Load Data

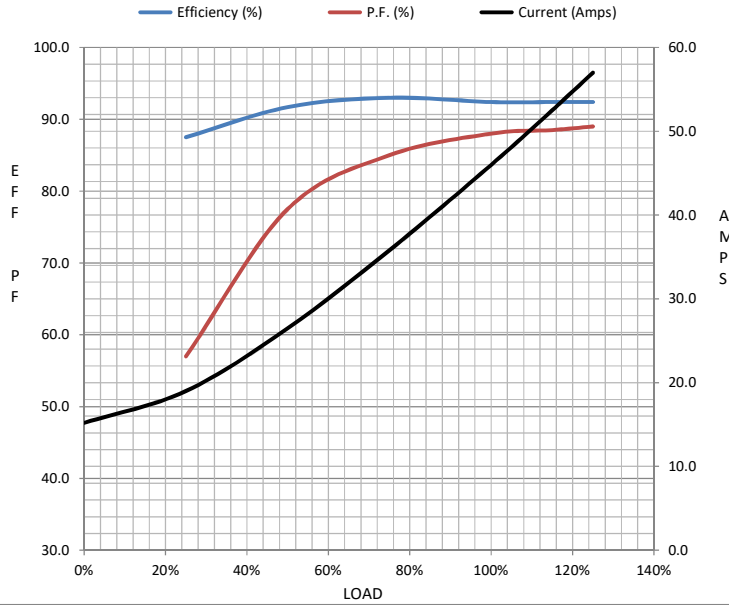
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	15.2	19.0	26.5	35.8	46.0	52.5	57.0	290
Torque (ft-lb)	0.00	14.6	29.3	44.0	59.0	68.0	74.0	95.0
RPM	3600	3592	3582	3575	3565	3,560	3555	0
Efficiency (%)		87.5	91.7	93.0	92.4	92.4	92.4	
P.F. (%)	8.0	57.0	77.5	85.0	88.0	88.5	89.0	30.0

Motor Speed Data

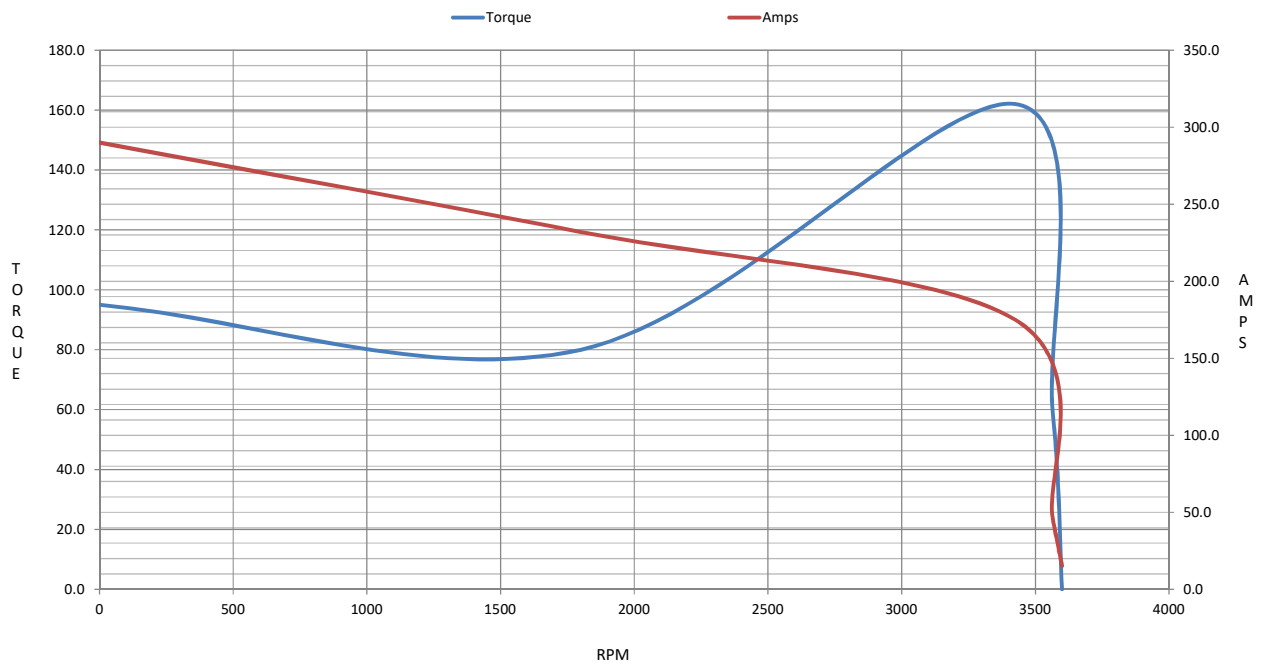
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3425	3565	3600
Current (Amps)	290	232	175	46.0	15.2
Torque (ft-lb)	95.0	80.0	162	59.0	0.00

Information Block

HP	40.0			
Sync. RPM	3600			
Frame	324			
Enclosure	TEFC			
Construction	TFC			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	60 ° C			
Duty	CONT			
Ambient	50 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	4.8 Lb-Ft <sup>2</sup>			
Ref Wdg	HE32002008 NONE			
Sound Pressure @ 1M	77 dBA			
VFD Rating	VARIABLE 10:1			
Outline Dwg	SS312940-324TS			
Conn. Diag	EE7300U			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1100	0.0570	0.5390	0.5960	17.3730



Speed -Torque Curve



## EC Declaration of Conformity

The undersigned representing  
the manufacturer:

Regal Beloit America  
100 East Randolph St.  
Wausau, WI 54401

and the authorized representative  
established within the Community:

Marathon Electric UK  
6F Thistleton Road Ind. Estate  
Market Overton  
Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : 324TSHFCD9001

(Model No. may contain prefix and/or suffix characters)

Catalog No : W571A

Rework No : N/A

Directives :

Low Voltage Directive 2014/35/EU

Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010)

EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

Authorized Representative:



Michael A. Logsdon  
Vice President, Technology

Authorized Representative in the Community:



Julian Clark  
Marketing Engineer

Created on 09/01/2022

**CE 22**