

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 324THFCD9076

Catalog No: W562A

XRI®-841 Severe Duty Motor, 25 HP, 3 Ph, 60 Hz, 460 V, 1200 RPM, 324T Frame, TEFC



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**RegalRexnord**

## Nameplate Specifications

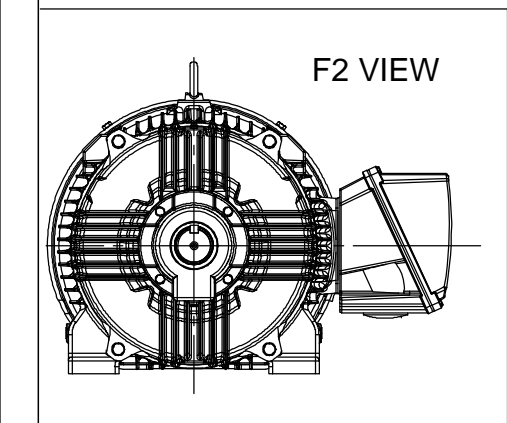
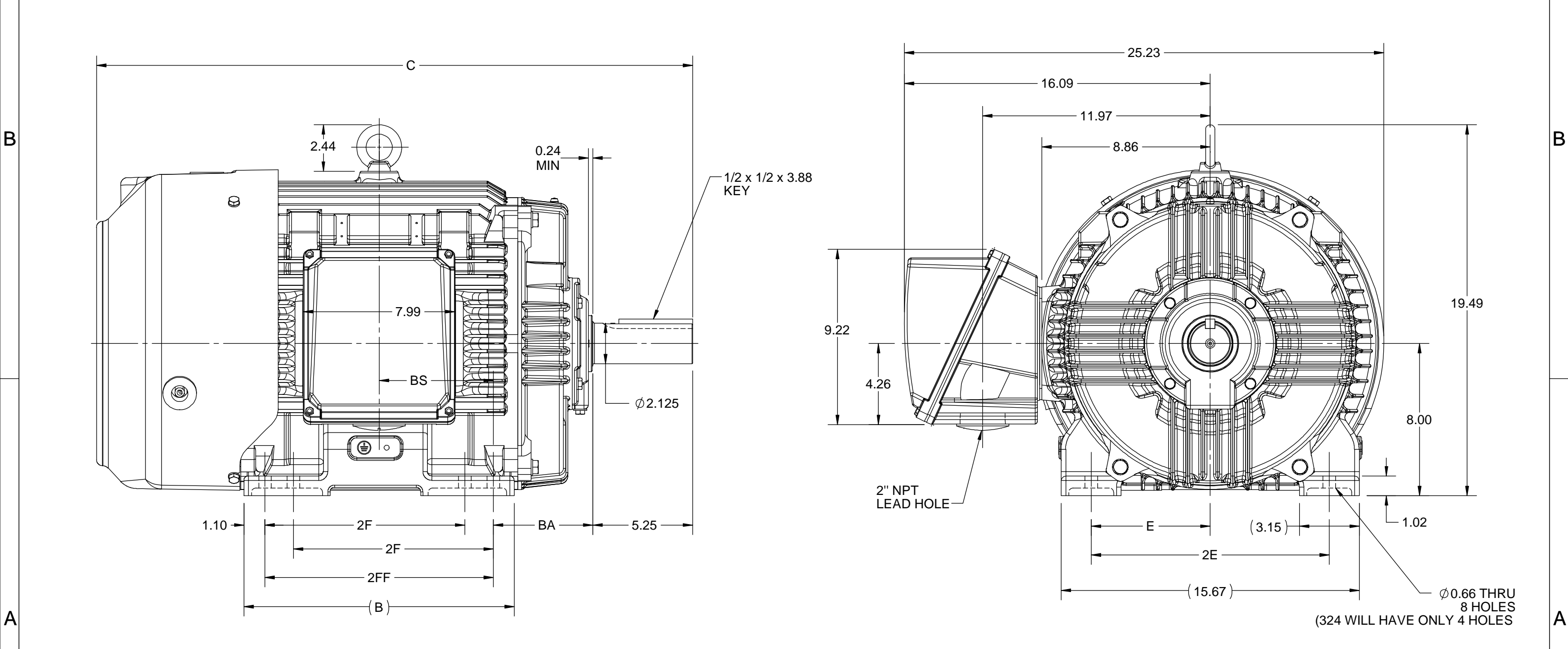
Phase	3	Output HP	25 Hp
Output KW	18.7 kW	Voltage	460 V
Speed	1184 rpm	Service Factor	1.15
Frame	324T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	93 %
Ambient Temperature	40 °C	Frequency	60 Hz
Current	32.0 A	Power Factor	78.5
Duty	Continuous	Insulation Class	H
Design Code	B	KVA Code	G
Drive End Bearing Size	6312	Opp Drive End Bearing Size	6212
UL	Listed	CSA	Y
CE	Y	IP Code	56
Number of Speeds	1	Hazardous Location	DIVISION 2 T2B


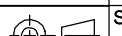
## Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	6	Rotation	Reversible
Resistance Main	.327 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Shaft Diameter	2.125 in
Assembly/Box Mounting	F1/F2 CAPABLE	Inverter Load	CONSTANT 2:1/VARIABLE 10:1
Connection Drawing	EE7300	Outline Drawing	SS312939-100

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4				3				2			1
DASH NO.	B	C	E	2E	2F	2FF	BA	BS	MOUNTING	FRAME	
100	12.71	29.85	6.25	12.50	---	10.50	5.25	5.25	F1 OR F2	324T	
200	14.21	31.35			10.50	12.00		6.00		324/326T	



DRAWING REVISION D	REVISION BY ASHOK N	REV DATE/© DATE 14/10/2020	PRIMARY DIMENSIONS ARE INCH mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY	DRAWN BY BISWA	 Regal Beloit America, Inc.		
ECO ECO-0194008	APPROVED BY GNK	DATE 14/10/2020		DATE 24/12/2018	DESCRIPTION  <b>OUTLINE</b> 324/326T FR-NEMA-SD & IEEE841		
ECO DESCRIPTION				APPROVED BY SBD			
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				REFERENCE			
				THIRD ANGLE PROJECTION 	SIZE B	DRAWING NUMBER SS312939	SHEET 1 OF 1

THREE PHASE - SINGLE VOLTAGE  
MOTOR - CONDUIT BOX @ 'A'

TO REVERSE ROTATION:  
INTERCHANGE ANY TWO LINE  
LEAD CONNECTIONS

TERMINAL BLOCK WHEN SPECIFIED

IF MOTOR HAS 9 LEADS

T1(U1) T1(U1) T1(U1) → L1

T2(V1) T2(V1) T2(V1) → L2

T3(W1) T3(W1) T3(W1) → L3

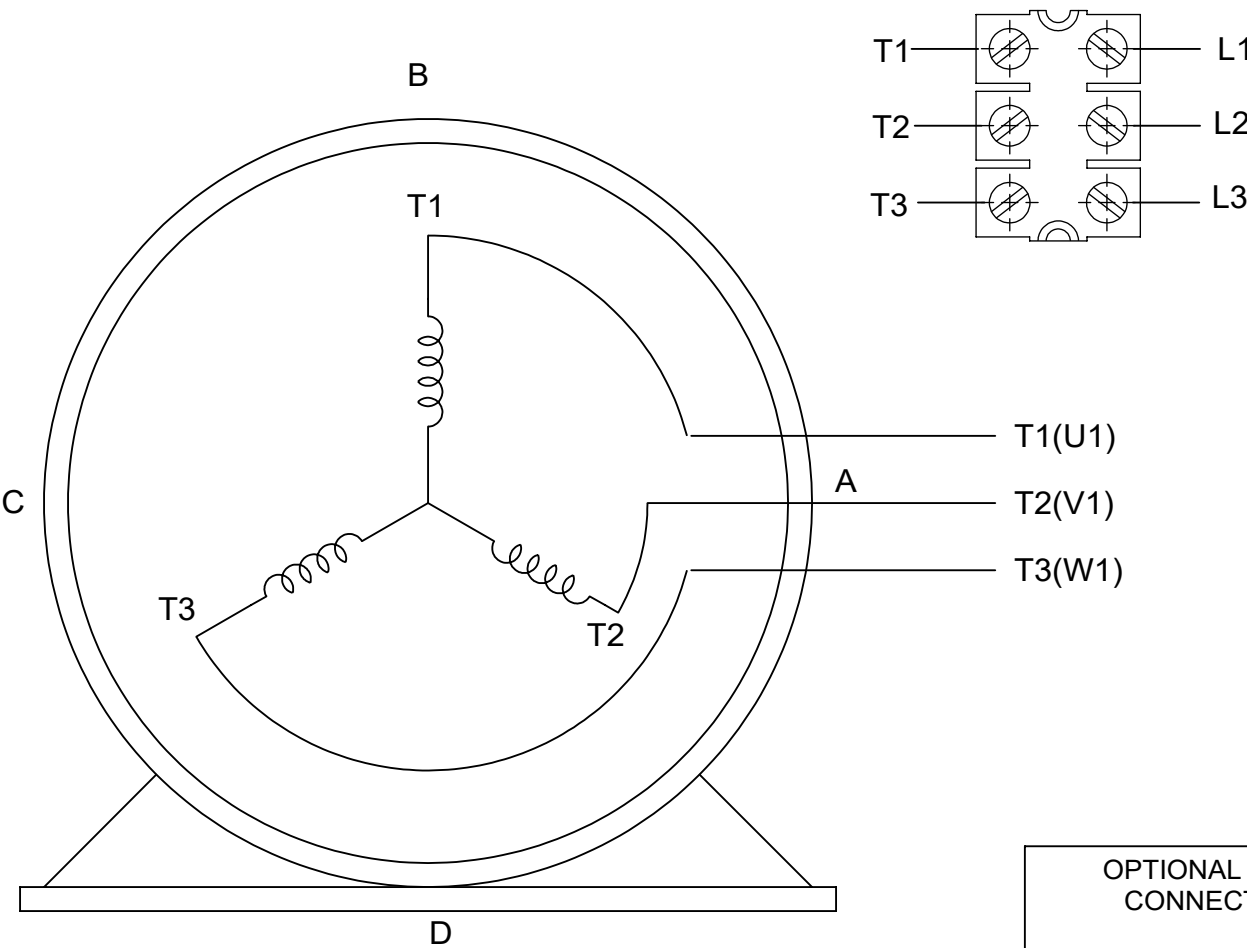
IF MOTOR HAS 6 LEADS

T1(U1) T1(U1) → L1

T2(V1) T2(V1) → L2

T3(W1) T3(W1) → L3

A-9806 DECAL




VIEW OF TERMINAL END

OPTIONAL CORD CONNECTION	
L1	WHITE
L2	RED
L3	BLACK

DRAWING REVISION AC	REVISION BY BS	REV DATE/© DATE 26/07/2022
REQUEST NUMBER CR-0010402	APPROVED BY SN	DATE 26/07/2022
REQUEST NUMBER DESCRIPTION DRAWING UPDATED		
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PRIMARY DIMENSIONS ARE INCH  
mm DIMENSIONS IN [BRACKETS]  
ARE FOR REFERENCE ONLY

DRAWN BY DA
DATE 03-26-1993
APPROVED BY TB
DATE 03-26-1993
REFERENCE
THIRD ANGLE PROJECTION

		Regal Beloit America, Inc.	
DESCRIPTION CONNECTION DIAGRAM EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR			
MATERIAL		PROCESS/FINISH	
SIZE A	DRAWING NUMBER EE7300		SHEET 1 OF 1



DATA VOLTS: 460

## CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7300  
 OUTLINE: SS312939-324T  
 WINDING: HA32006005

NONE 4

MODEL #: 324THFCD9076

CAT #: W562A

MOUNTING: F1/F2 CAPABLE

## TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
25	18.7	1200	1184	324T	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV. (Ft)
3	60	460	32	LINE OR INVERTER	CONT	H	1.15	40	3300

F.L. EFF	93.0	3/4 LD EFF	93.0	1/2 LD EFF	92.4	GTD EFF	ELECT. TYPE
F.L. PF	78.5	3/4 LD PF	73.5	1/2 LD PF	62.0	92.4	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
111 LB-FT	182	200 LB-FT 180%	272 LB-FT 245%	60

SOUND PRESSURE	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APPROX. MOTOR
65 dBA	74 dBA	11.8 LB-FT²	375 LB-FT²	20 SEC.	2	582 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	ODE	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL	BALL						
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)
0.202	0.123	0.795	1.226	17.139	0.080

* N O T E S *		<p style="color: red;">If Inverter equals NONE, contact factory for further information</p> <p>INVERTER TORQUE: CONSTANT 2:1/VARIABLE 10:1</p> <p>INV. HP SPEED RANGE: NONE</p>
	<p>ENCODER: NONE</p> <p>NONE</p> <p>NONE</p> <p>NONE PPR</p>	
<p>PREPARED BY: ANUSHA M</p> <p>DATE: 3/31/2020</p>	<p>BRAKE: NONE</p> <p>NONE</p> <p>FT-LB: NA</p> <p>VOLTAGE: NONE</p> <p>HZ:</p>	

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

## Data Sheet

Date: 5/6/2020  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: \_\_\_\_\_

**marathon**<sup>®</sup>  
 Motors

324THFCD9076

Submittal

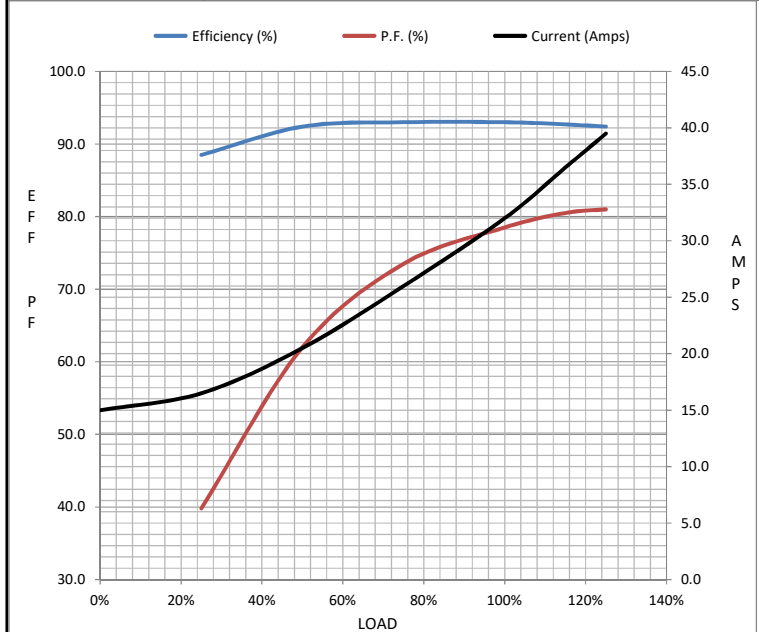
Data @ 460 V

## Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	15.0	16.5	20.5	26.0	32.0	36.5	39.5	182	
Torque (ft-lb)	0.00	27.5	55.0	82.5	111	127	139	200	
RPM	1200	1196	1192	1188	1184	1,180	1180	0	
Efficiency (%)		88.5	92.4	93.0	93.0	92.7	92.4		
P.F. (%)	4.5	39.8	62.0	73.5	78.5	80.5	81.0	36.0	

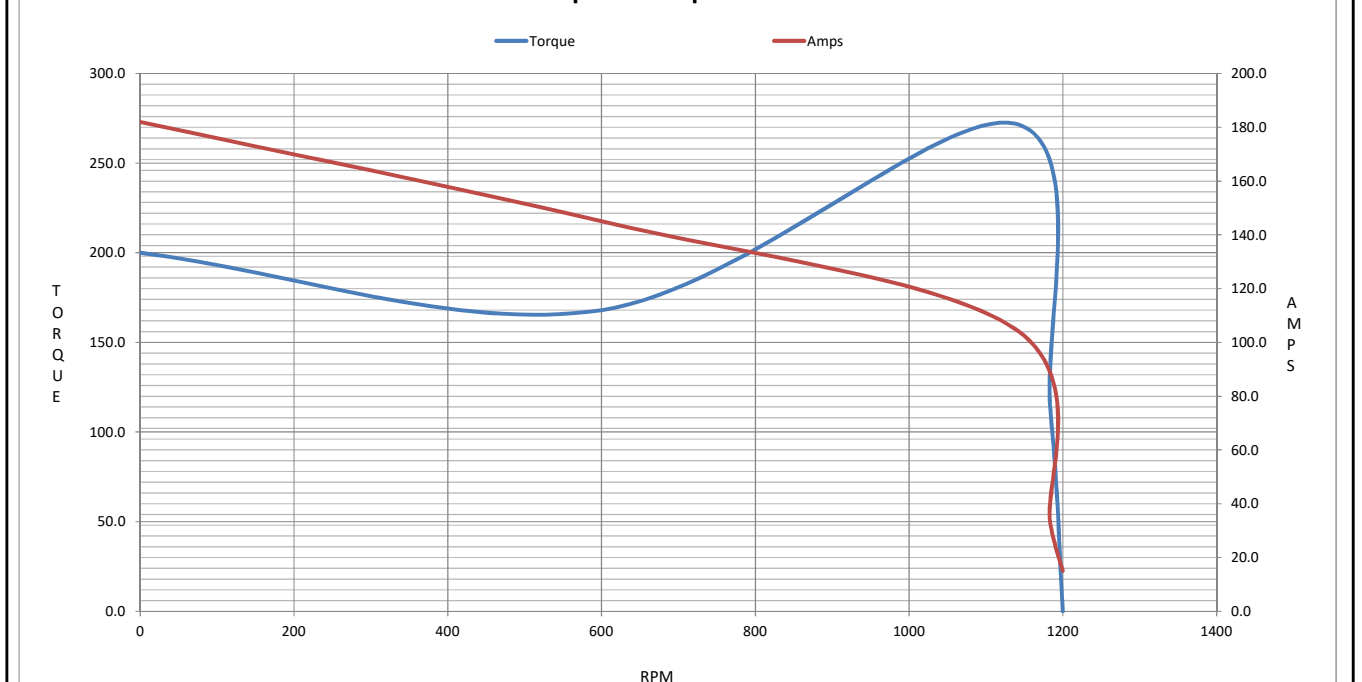
## Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1138	1184	1200
Current (Amps)	182	145	105	32.0	15.0
Torque (ft-lb)	200	168	272	111	0.00



Information Block				
HP		25.0		
Sync. RPM		1200		
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		40	° C	
Elevation		3,300	feet	
Rotor/Shaft wk²		11.8	Lb-Ft²	
Ref Wdg		HA32006005 NONE		
Sound Pressure @ 1M		65	dBA	
VFD Rating		CONSTANT 2:1/VARIABLE 10:1		
Outline Dwg		SS312939-324T		
Conn. Diag		EE7300		
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.2020	0.1230	0.7950	1.2260	17.1390

## 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 : 324THFCD9076

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

Catalog No : W562A

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**