

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 324THFCD19033

Catalog No: W574A

XRI®-841 Severe Duty Motor, 40 HP, 3 Ph, 60 Hz, 575 V, 1800 RPM, 324T Frame, TEFC



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RegalRexnord

Nameplate Specifications

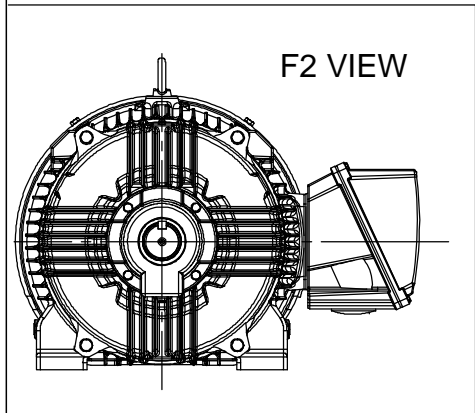
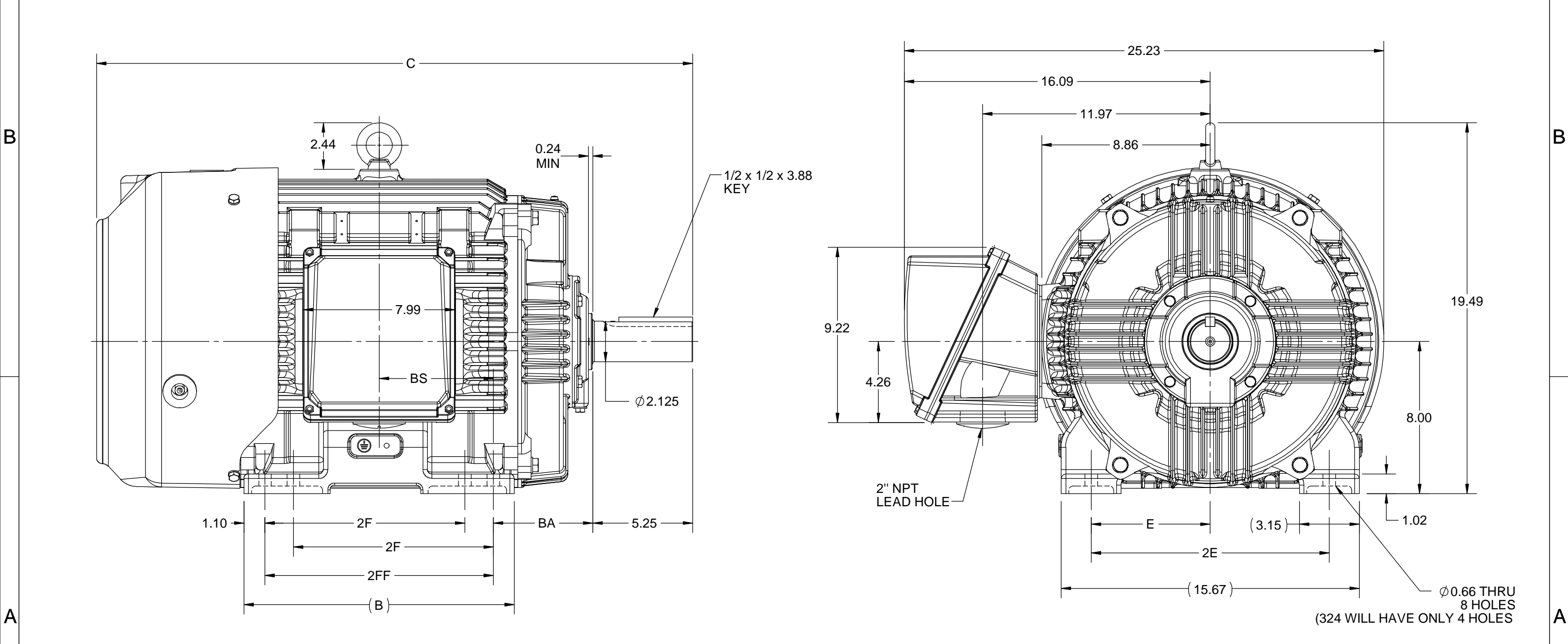
Output HP	40 Hp	Output KW	30.0 kW
Frequency	60 Hz	Voltage	575 V
Current	38.0 A	Speed	1782 rpm
Service Factor	1.15	Phase	3
Efficiency	94.1 %	Power Factor	84
Duty	Continuous	Insulation Class	H
Design Code	B	KVA Code	G
Frame	324T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6312	Opp Drive End Bearing Size	6212
UL	Listed	CSA	Y
CE	Y	IP Code	56
Hazardous Location	DIVISION 2 T2B	Number of Speeds	1



Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.18 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		<div>Regal Beloit America, Inc.</div>			
ECO ECO-0194008		APPROVED BY GNK		DATE 14/10/2020			DATE 24/12/2018					
ECO DESCRIPTION							APPROVED BY SBD		DESCRIPTION OUTLINE 324/326T FR-NEMA-SD & IEEE841			
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							REFERENCE		MATERIAL		PROCESS/FINISH	
							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

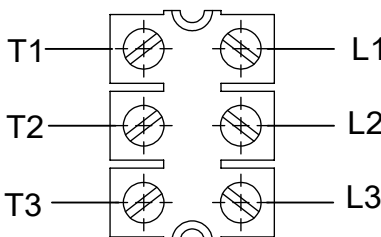
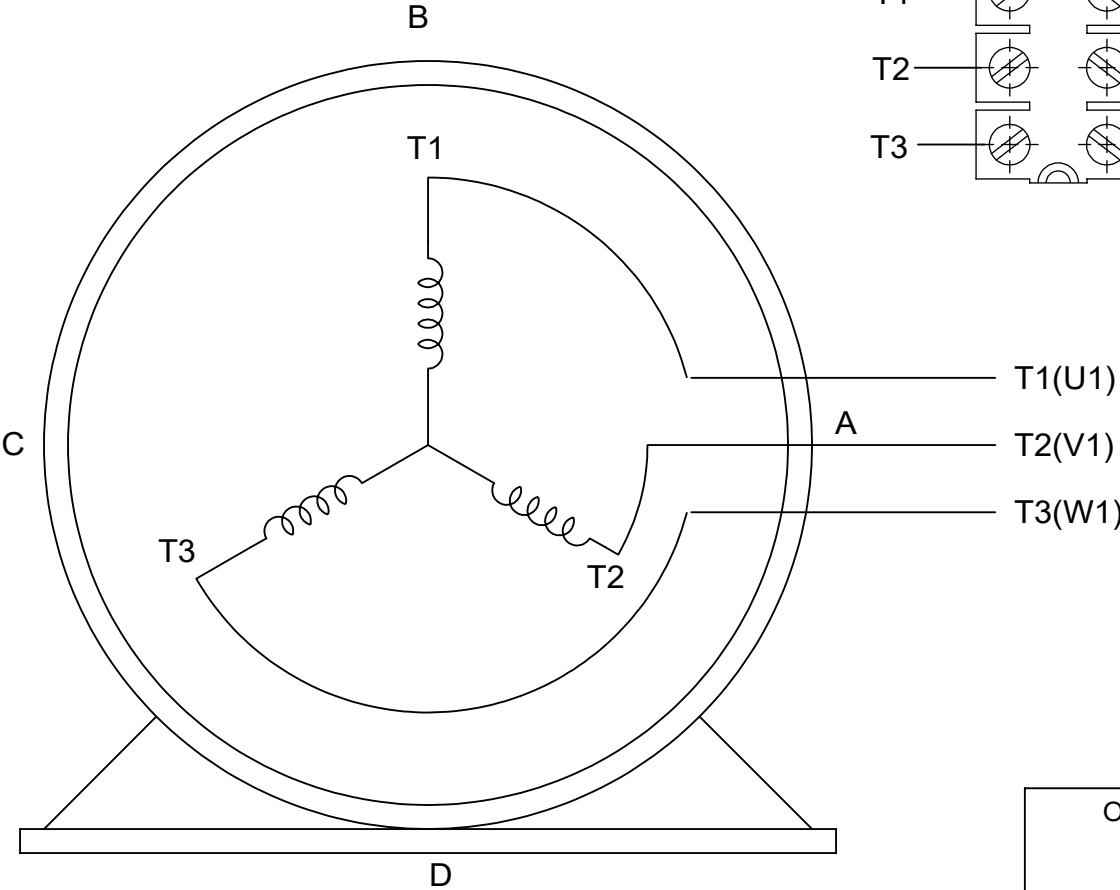
IF MOTOR HAS 6 LEADS

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
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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: 575

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7300
 REFERENCE MODEL #: 324THFCD19033
 OUTLINE: SS312939
 CAT #: W574A
 WINDING: HA32004007 NONE 3
 MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
40	30	1800	1782	324T	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV. (Ft)
3	60	575	38	LINE OR INVERTER	CONT	H	1.15	40	3300

F.L. EFF	94.1	3/4 LD EFF	94.1	1/2 LD EFF	93.6	GTD EFF	ELECT. TYPE
F.L. PF	84.0	3/4 LD PF	81.0	1/2 LD PF	72.5	93.6	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
118 LB-FT	232	212 LB-FT 180%	313 LB-FT 265%	55

SOUND PRESSURE	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX.
72 dBA	81 dBA	11.2 LB-FT²	275 LB-FT²	20 SEC.	2	657 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)
0.2765625	0.1484375	1.1421875	2.025	37.5625	0.080

* N O T E S *	If Inverter equals NONE, contact factory for further information	
	INVERTER TORQUE: CONSTANT 2:1/VARIABLE 10:1	
	INV. HP SPEED RANGE: NONE	
	ENCODER: NONE	
	NONE PPR	
PREPARED BY: _____ DATE: 5/13/2020		BRAKE: NONE NONE FT-LB: NA VOLTAGE: NONE HZ:

FORM: 3531 REV_4 2/27/06
 ** Subject to change without notice.

Data Sheet

Date: 5/6/2020
 Customer: _____
 Attention: _____
 Submitted by: _____

marathon
 Motors

324THFCD19033

Submittal

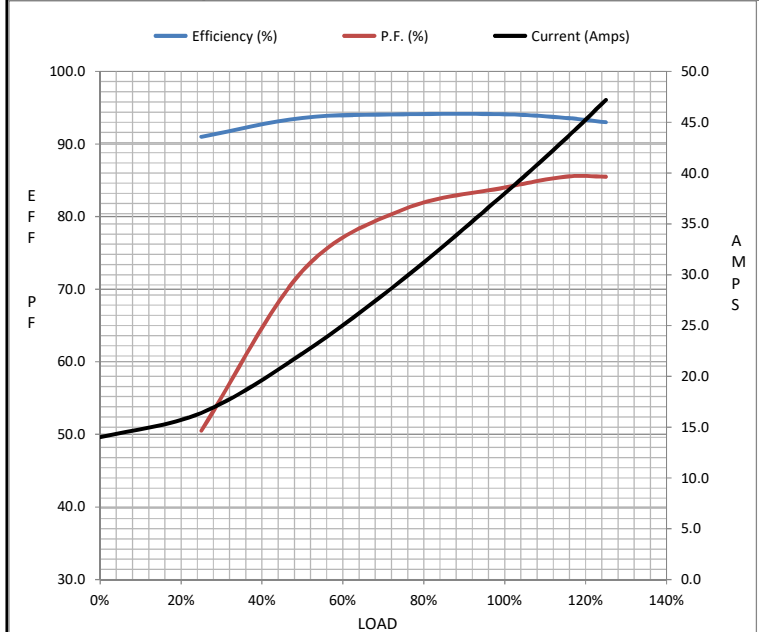
Data @ 575 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	14.0	16.4	22.2	29.6	38.0	43.4	47.2	232	
Torque (ft-lb)	0.00	29.3	58.5	88.3	118	136	149	212	
RPM	1800	1795	1790	1788	1782	1,780	1778	0	
Efficiency (%)		91.0	93.6	94.1	94.1	93.6	93.0		
P.F. (%)	5.0	50.5	72.5	81.0	84.0	85.5	85.5	32.0	

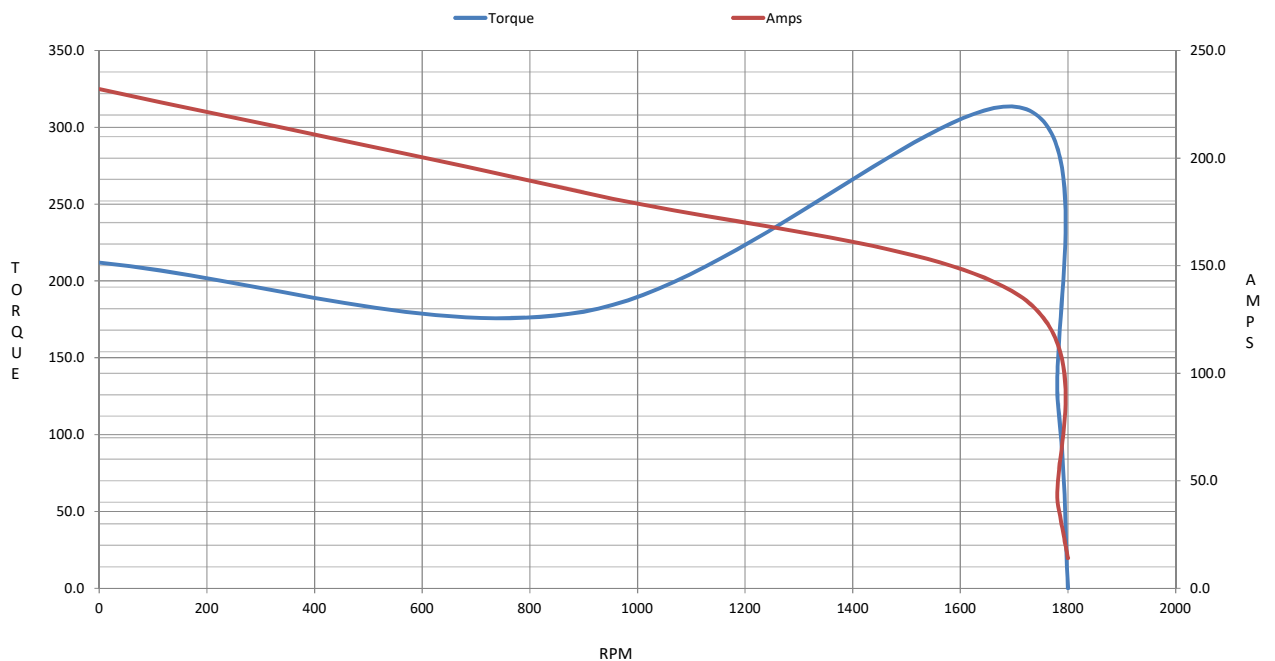
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1710	1782	1800
Current (Amps)	232	184	136	38.0	14.0
Torque (ft-lb)	212	180	313	118	0.00



Information Block				
HP		40.0		
Sync. RPM		1800		
Frame		324		
Enclosure		TEFC		
Construction		TFC		
Voltage		575	V	
Frequency		60	Hz	
Design		B		
LR Code letter		G		
Service Factor		1.15		
Temp Rise @ FL		55	° C	
Duty		CONT		
Ambient		40	° C	
Elevation		3,300	feet	
Rotor/Shaft wk²		11.2	Lb-Ft²	
Ref Wdg		HA32004007 NONE		
Sound Pressure @ 1M		72	dBA	
VFD Rating		CONSTANT 2:1/VARIABLE 10:1		
Outline Dwg		SS312939		
Conn. Diag		EE7300		
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1770	0.0950	0.7310	1.2960	24.0400

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 : 324THFCD19033

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

Catalog No : W574A

Rework No : N/A

Directives :

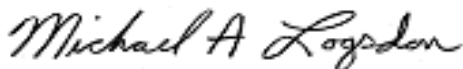
Low Voltage Directive 2014/35/EU

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

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