

# PRODUCT INFORMATION PACKET

marathon®  
Motors

Model No: 324TTDCD14049

Catalog No: U511A

Fire Pump Motor, 40 HP, 3 Ph, 60 Hz, 190/380-400 V, 1800 RPM, 324T Frame, DP



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RegalRexnord

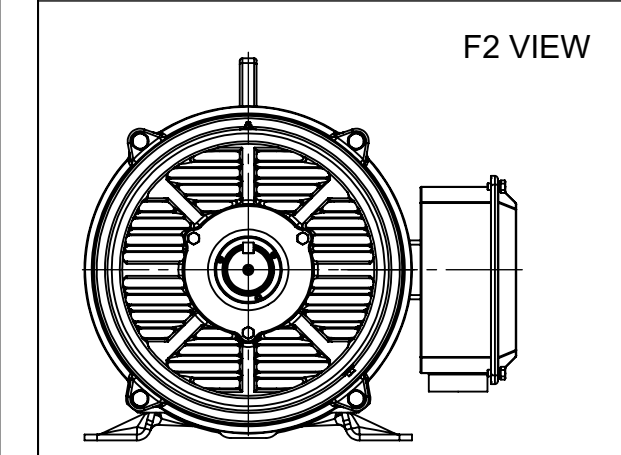
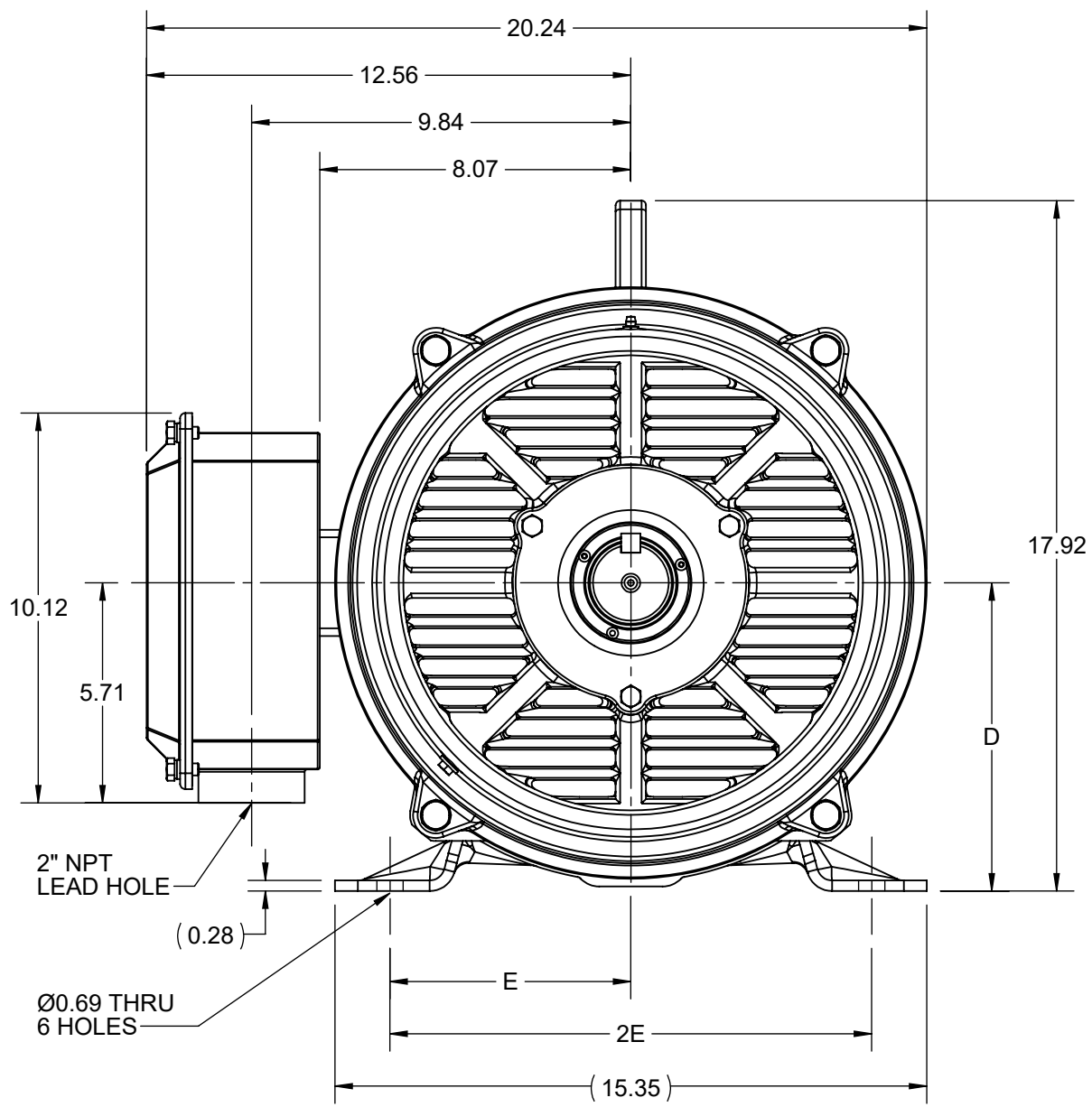
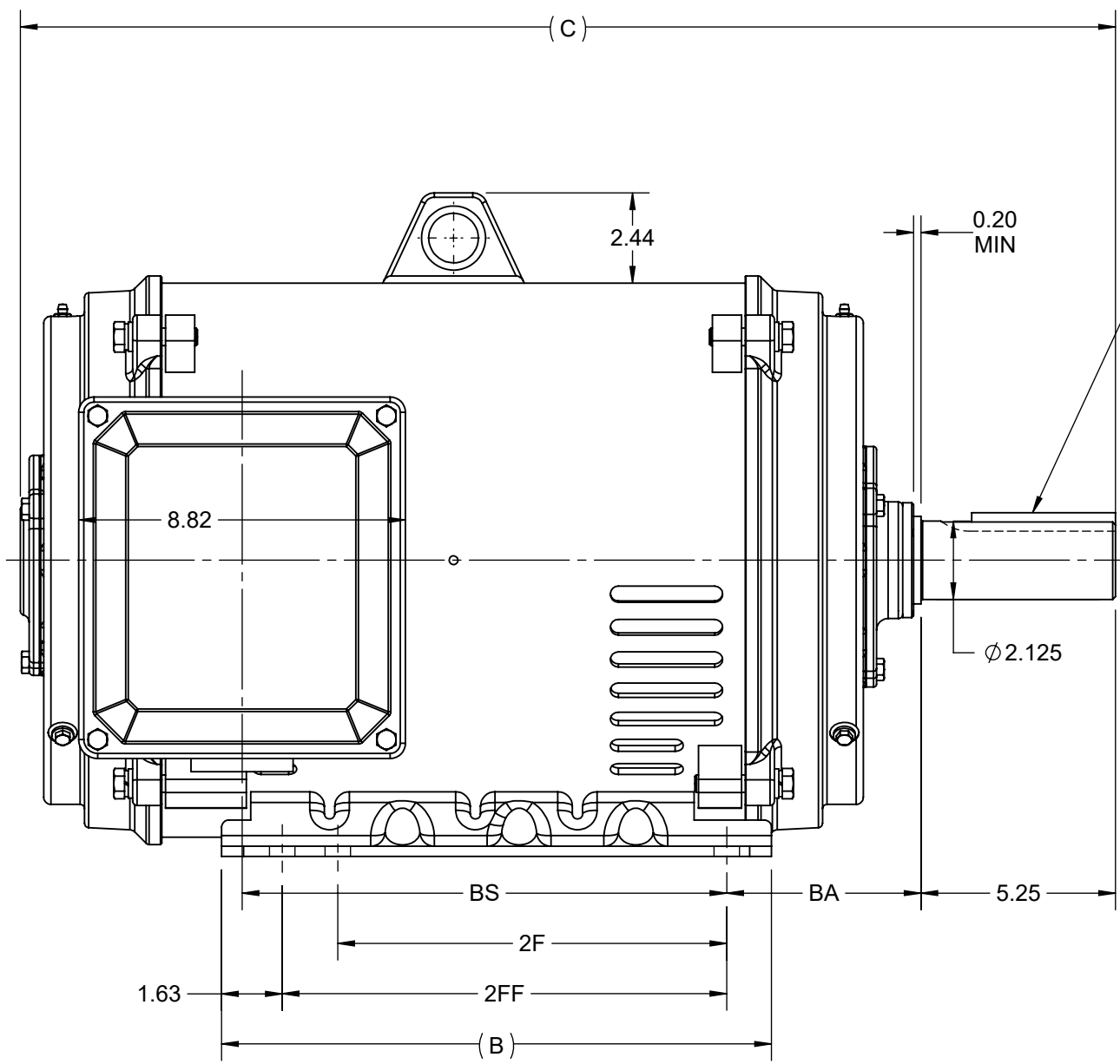
### Nameplate Specifications

Output HP	<b>40 Hp</b>	Output KW	<b>30.0 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>190/380-400 V</b>
Current	<b>114.0/56.5-53.5 A</b>	Speed	<b>1775 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>93 %</b>	Power Factor	<b>84</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Frame	<b>324T</b>	Enclosure	<b>Drip Proof</b>
Thermal Protection	<b>No Protection</b>	Ambient Temperature	<b>50 °C</b>
Drive End Bearing Size	<b>6312</b>	Opp Drive End Bearing Size	<b>6311</b>
UL	<b>Listed</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>23</b>
Number of Speeds	<b>1</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Induction Run</b>	Starting Method	<b>Part Wdg Start Low Volt Only &amp; Wye Start Delta Run</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.265 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>T</b>	Overall Length	<b>28.55 in</b>
Frame Length	<b>14.46 in</b>	Shaft Diameter	<b>2.125 in</b>
Shaft Extension	<b>5.25 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Connection Drawing	<b>EE7308AA</b>	Outline Drawing	<b>SS620746-324T</b>

DASH NO.	B	C	D	E	2E	2F	2FF	BA	BS	MOUNTING	FRAME
100	14.85	28.38	8.00	6.25	12.50	10.50	12.00	5.25	11.90	F1 OR F2	324T
200		29.56							13.08		326T



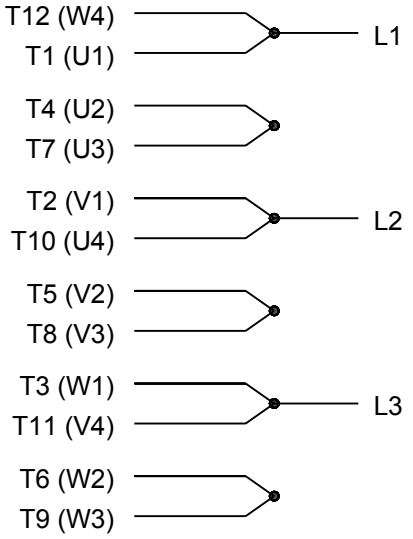
DRAWING REVISION C	REVISION BY RAM	REV DATE/© DATE 27/01/2022
REQUEST NUMBER CR-0006568	APPROVED BY SBD	DATE 27/01/2022
REQUEST NUMBER DESCRIPTION VIEWS UPDATED AS PER 3D		
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PRIMARY DIMENSIONS ARE INCH  
mm DIMENSIONS IN [BRACKETS]  
ARE FOR REFERENCE ONLY

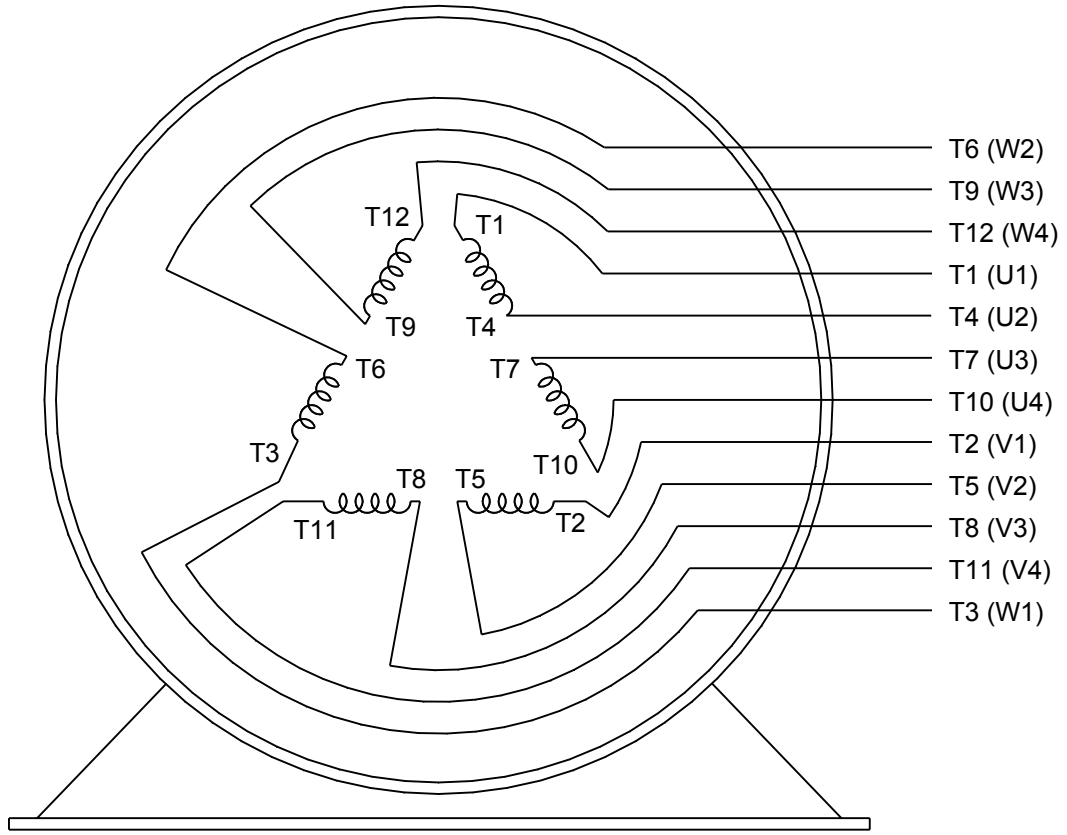
DRAWN BY XZ	Regal Beloit America, Inc.	
DATE 25/02/2016		
APPROVED BY	DESCRIPTION <b>OUTLINE</b> 324/326T FR NEMA ODP RS	
DATE	MATERIAL	PROCESS/FINISH
REFERENCE	SIZE B	DRAWING NUMBER SS620746
THIRD ANGLE PROJECTION	SHEET 1 OF 1	



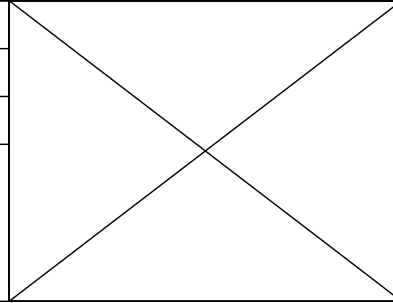
### LOW VOLTAGE



### HIGH VOLTAGE



DRAWING REVISION <b>K</b>	REVISION BY <b>AJW</b>	DATE <b>07-17-2015</b>
ECO <b>ECO-0081632</b>	APPROVED BY <b>T. VUE</b>	DATE <b>07-17-2015</b>
ECO DESCRIPTION <b>REV'D IEC MARKINGS PER IEC 60034-8</b>		
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DRAWN BY <b>LZ</b>
DATE <b>01-12-1994</b>
APPROVED BY <b>GK</b>
DATE <b>01-14-1994</b>
REFERENCE
THIRD ANGLE PROJECTION

<b>Regal Beloit America, Inc.</b>	
<b>CONN DIAGRAM-EXTERNAL</b> 3Ø-2/1 DELTA-12 LEADS	
MATERIAL	PROCESS/FINISH
SIZE <b>A</b>	DRAWING NUMBER <b>EE7308AA</b>
SHEET <b>1 OF 1</b>	



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 #: 324TTDCD14049  
 CONN. DIAGRAM: EE7308AA CAT #: U511A  
 OUTLINE: SS620746 CUSTOMER PART #: \_\_\_\_\_  
 WINDING: IE2L2004102 NONE 3 MOUNTING: F1/F2 CAPABLE  
 SPEED: \_\_\_\_\_

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
40	30	1800	1775	324T	DP	TDC	F	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	190/380-400	114/56.5-53.5	WS(LV ONLY) & YDRU	CONT	F	1.15	50	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	85.0	3/4 LD PF	82.0	1/2 LD PF	75.0	93.6	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
118 LB-FT	311	195 LB-FT 165%	265 LB-FT 225%	40

@ 3 FT.	POWER	ROTOR WK <sup>2</sup>	MAX. LOAD WK <sup>2</sup>	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
75 dBA	84 dBA	0.00 LB-FT <sup>2</sup>	0 LB-FT <sup>2</sup>	20 SEC.	2	0 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	NO	NONE	NO	NONE	RED (ENAMEL)

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	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
0.118	0.059	0.482	0.568	12.872	0.150	ODE

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

PREPARED BY: FAREEDA DUDEKULA	BRAKE: NONE
DATE: 8/30/2018	NONE NONE
	FT-LB: NA
	VOLTAGE: NONE HZ:
	UL: NONE

FORM: 3531 REV\_4 2/27/06

Data Sheet

324TTDCD14049

Date: 12/14/2018  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



Submittal

Data @ 400 V

Motor Load Data

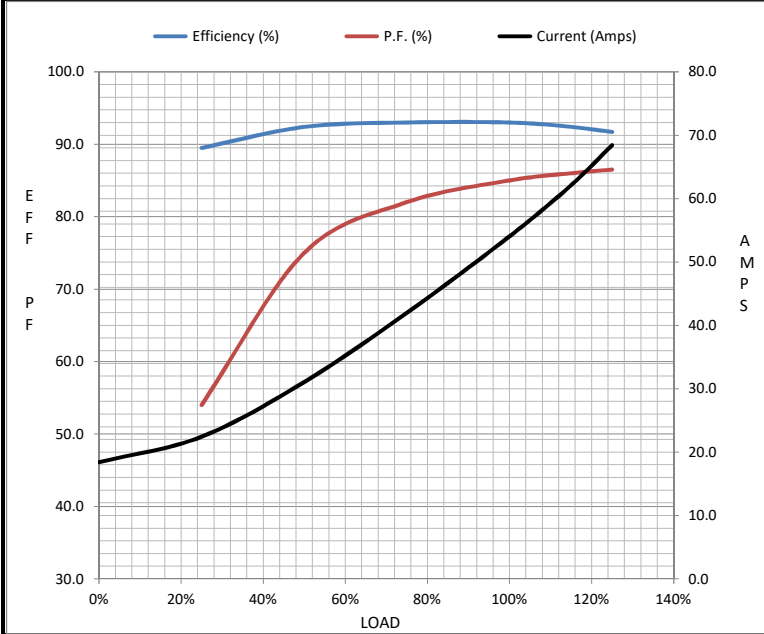
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	18.4	22.4	31.1	42.0	54.1	62.1	68.4	311
Torque (ft-lb)	0.00	29.5	59.0	88.5	118	136	149	195
RPM	1800	1795	1790	1782	1775	1,770	1768	0
Efficiency (%)		89.5	92.4	93.0	93.0	92.4	91.7	
P.F. (%)	5.5	54.0	75.0	82.0	85.0	86.0	86.5	38.0

Motor Speed Data

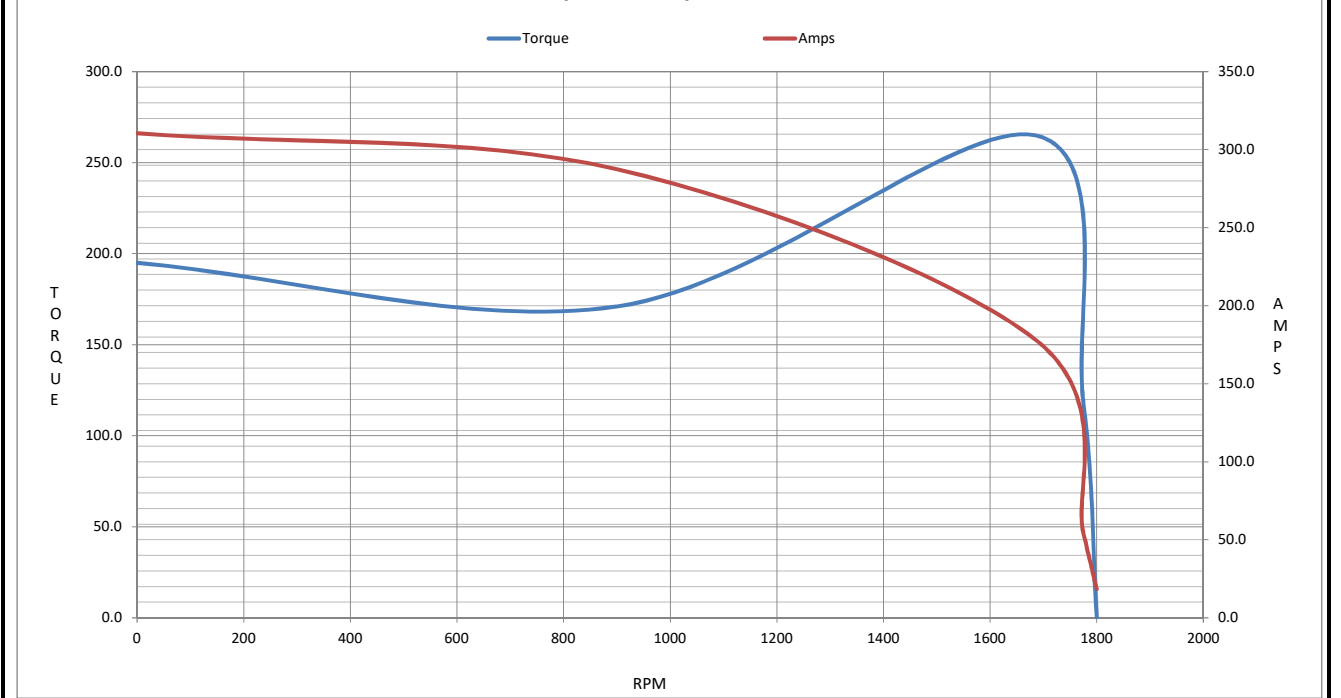
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1685	1775	1800
Current (Amps)	311	288	178	54.1	18.4
Torque (ft-lb)	195	171	265	118	0.00

Information Block

HP	40.0			
Sync. RPM	1800			
Frame	324			
Enclosure	DP			
Construction	TDC			
Voltage	190/380-400 V			
Frequency	60 Hz			
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	40 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	0.00 Lb-Ft <sup>2</sup>			
Ref Wdg	IE2L2004102 NONE			
Sound Pressure @ 1M	75 dBA			
VFD Rating	NONE			
Outline Dwg	SS620746			
Conn. Diag	EE7308AA			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1180	0.0590	0.4820	0.5680	12.8720



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 : 324TTDCD14049

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

Catalog No : U511A

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**