

# PRODUCT INFORMATION PACKET

Model No: 324THFPA8086

Catalog No: Y583

Blue Max® Inverter Duty Encoder Motor, 25 HP, 3 Ph, 60 Hz, 230/460 V, 1200 RPM, 324TC Frame,  
TEBC-AXIAL



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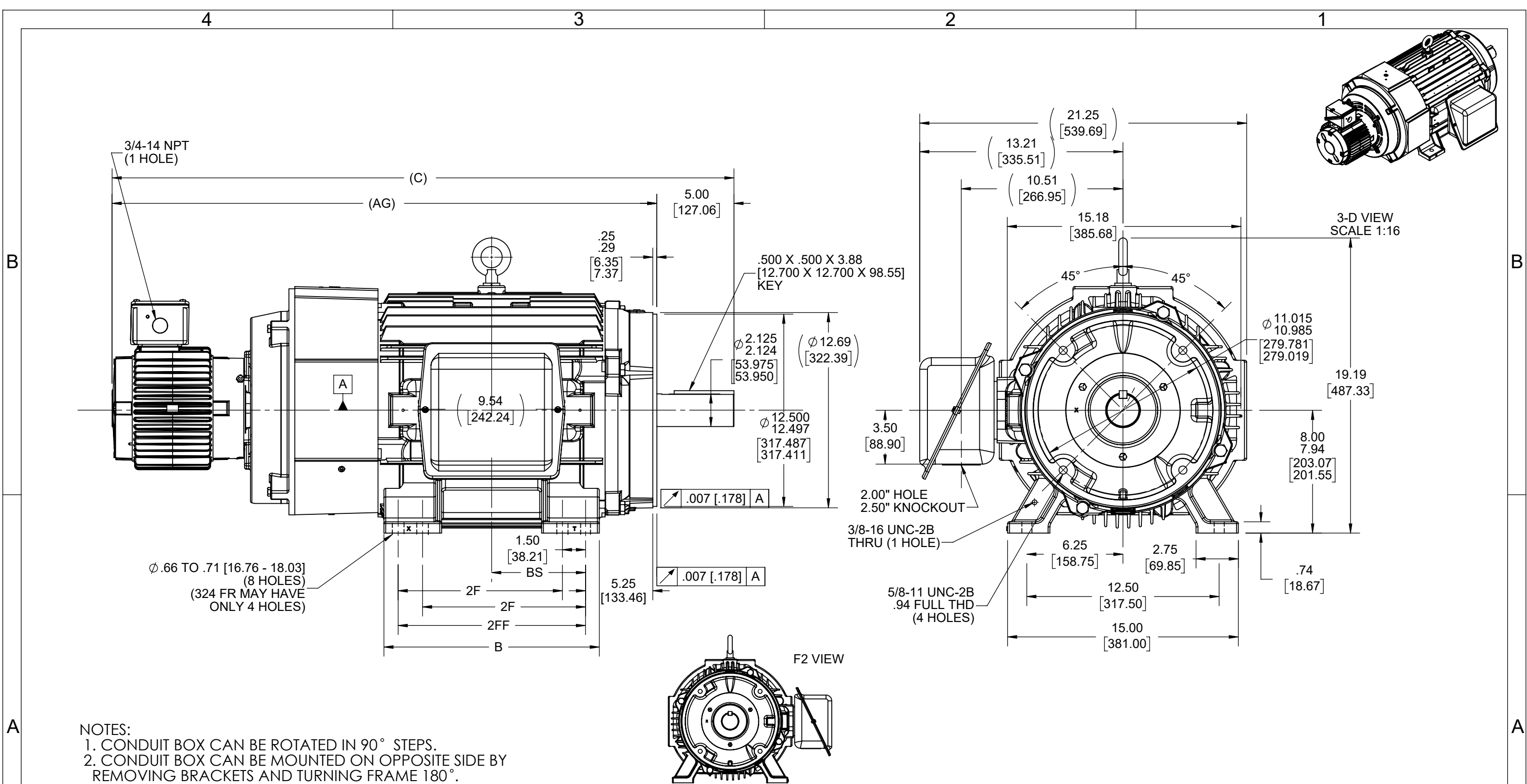
### Nameplate Specifications

Output HP	<b>25 Hp</b>	Output KW	<b>18.7 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>230/460 V</b>
Current	<b>67.0/33.5 A</b>	Speed	<b>1170 rpm</b>
Service Factor	<b>1</b>	Phase	<b>3</b>
Efficiency	<b>91.7 %</b>	Power Factor	<b>76</b>
Duty	<b>Continuous</b>	Insulation Class	<b>H</b>
Design Code	<b>INV</b>	KVA Code	<b>F</b>
Frame	<b>324TC</b>	Enclosure	<b>Totally Enclosed Blower cooled - Axial</b>
Thermal Protection	<b>Thermostat</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>43</b>
Number of Speeds	<b>1</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Duty</b>	Starting Method	<b>Inverter Only</b>
Poles	<b>6</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.345 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>40.54 in</b>
Frame Length	<b>14.75 in</b>	Shaft Diameter	<b>2.125 in</b>
Shaft Extension	<b>5 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Inverter Load	<b>CONSTANT 2000:1</b>		
Outline Drawing	<b>B-SS311268-1475</b>	Connection Drawing	<b>A-EE7308T</b>





NOTES:  
 1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.  
 2. CONDUIT 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.

DASH	FRAME	B	C	2F	2FF	BS	AG
1475	324T	14.00 [355.60]	40.54 [1029.72]	-	10.50 [266.70]	5.25 [133.35]	35.54 [902.72]
1625	326T	14.00 [355.60]	42.04 [1067.82]	10.50 [266.70]	12.00 [304.80]	6.00 [152.40]	37.04 [940.82]

DRAWING REVISION E	REVISION BY JVD	DATE 02-16-2021
ECO CR-0001165	APPROVED BY AK	DATE 02-16-2021
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TOLERANCES UNLESS OTHERWISE SPECIFIED:

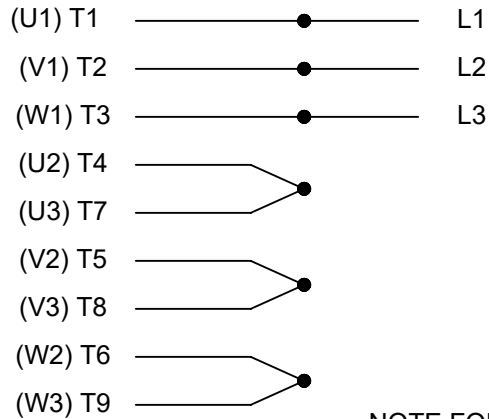
DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7° 30"
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	

REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381]  
 CORNER FILLETS: .02 [0.51]  
 MACHINED SURFACES: 200 INCH/mm 5.1  
 mm SHOWN IN [BRACKETS]

DRAWN BY MSG
DATE 01-10-2002
APPROVED BY TLB
DATE 01-14-2002
REFERENCE
THIRD ANGLE PROJECTION

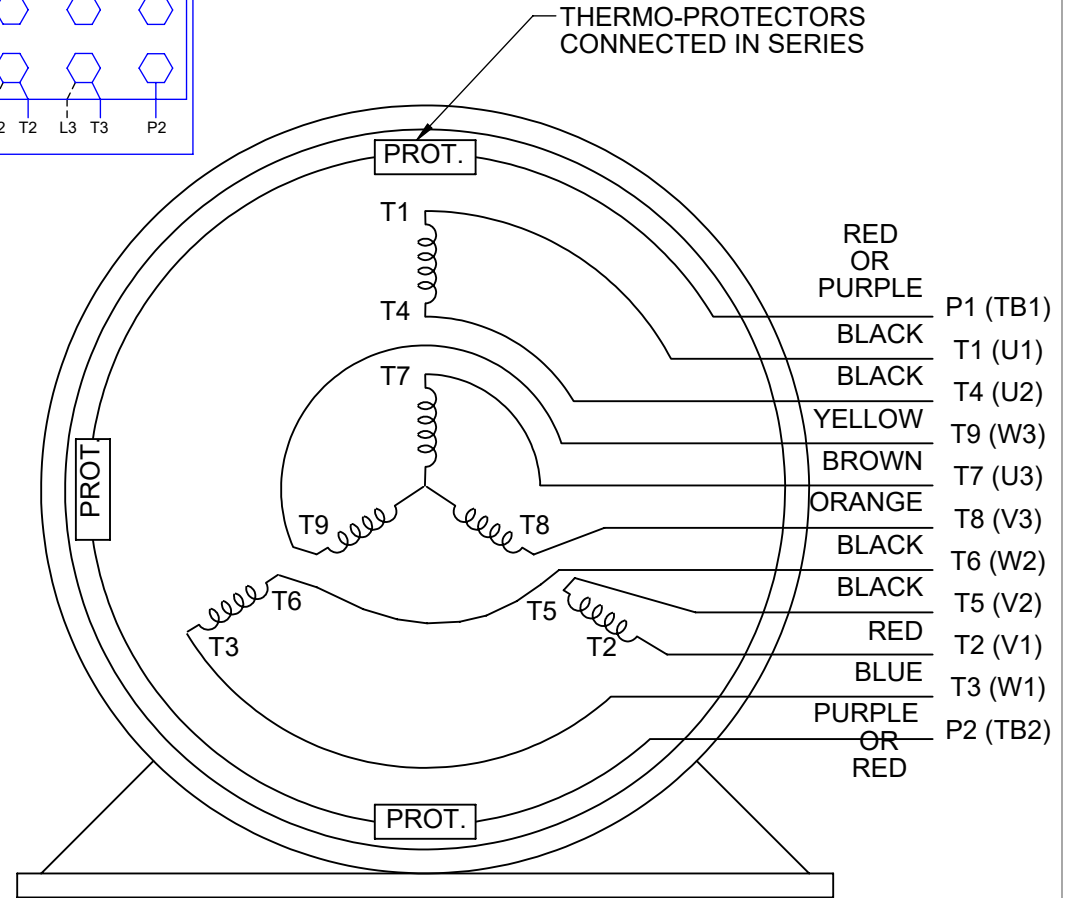
<b>REGAL</b> ™ Regal Beloit America, Inc.	
DESCRIPTION <b>OUTLINE</b> 320 FR. - BB - STD - 12.50 LAM - C'FACE	
MATERIAL	PROCESS/FINISH
SIZE <b>B</b>	DRAWING NUMBER <b>SS311268</b>
SHEET 1 OF 1	

**HIGH VOLTAGE**



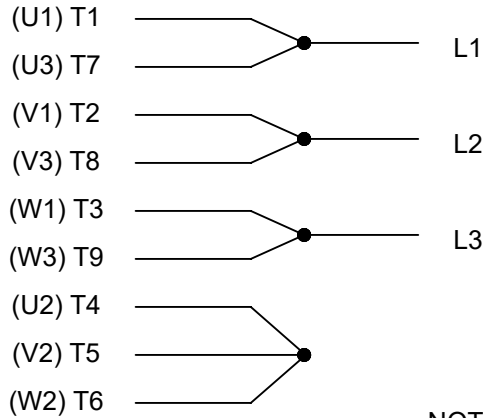
**THREE PHASE  
DUAL VOLTAGE MOTOR**

THERMO-PROTECTORS  
CONNECTED IN SERIES



NOTE FOR FACTORY USE ONLY:  
TO SURGE TEST FOR COMMON CONNECT:  
HIGH VOLT: CONNECT P1 TO T1  
THEN P2 TO L1  
LOW VOLT: CONNECT P1 TO T1 & T7,  
THEN P2 TO L1

**LOW VOLTAGE**



**VIEW OF TERMINAL END**

NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR MT2 PLANT

DRAWING REVISION T	REVISION BY ZR	DATE 01-14-2019		DRAWN BY SMC	Regal Beloit America, Inc.
ECO ECO-0159915	APPROVED BY DR	DATE 01-15-2019		DATE 05-13-1992	
ECO DESCRIPTION <b>ADDED TERMINAL CONNECTION DIAGRAM</b>				APPROVED BY TB	DESCRIPTION <b>CONN DIAGRAM-INTERNAL</b> 3 PHASE - DUAL VOLTAGE MOTOR
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			REFERENCE EE7308/EE7300	THIRD ANGLE PROJECTION	SIZE A



NONE	NONE	
- FT-LB	NONE V	NONE Hz

DATE: 06/21/2017 03:24:11 AM  
FORM 3531 REV.3 02/07/99  
\*\* Subject to change without notice.

Data Sheet

Date: 6/29/2017

324THFPA8086

Customer: \_\_\_\_\_



Attention: \_\_\_\_\_

Submittal

Submitted by: FAREEDA DUDEKULA

Data @ 460 V

Motor Load Data

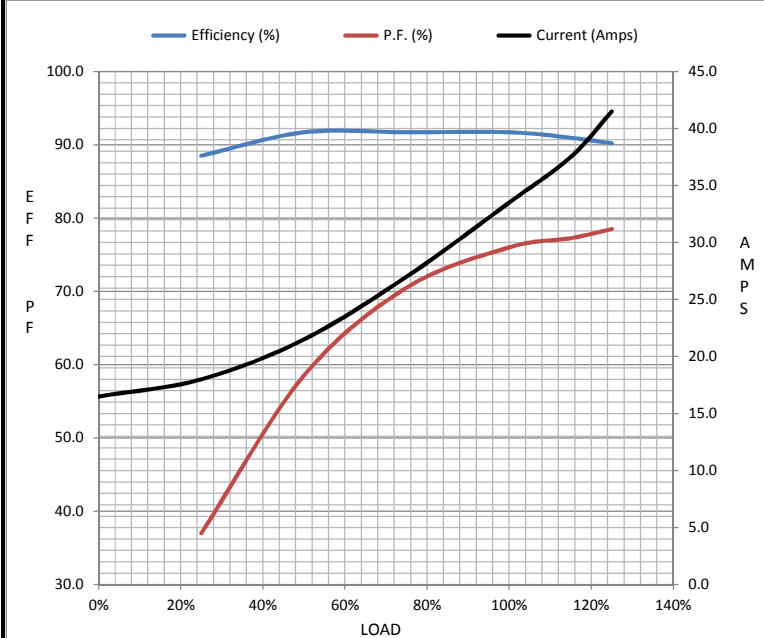
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	16.5	18.0	21.5	27.0	33.5	37.5	41.5	175
Torque (ft-lb)	0.00	27.5	55.0	84.0	112	127	142	180
RPM	1200	1195	1185	1175	1170	1,166	1160	0
Efficiency (%)		88.5	91.7	91.7	91.7	91.0	90.2	
P.F. (%)	4.0	37.0	58.5	70.5	76.0	77.3	78.5	37.0

Motor Speed Data

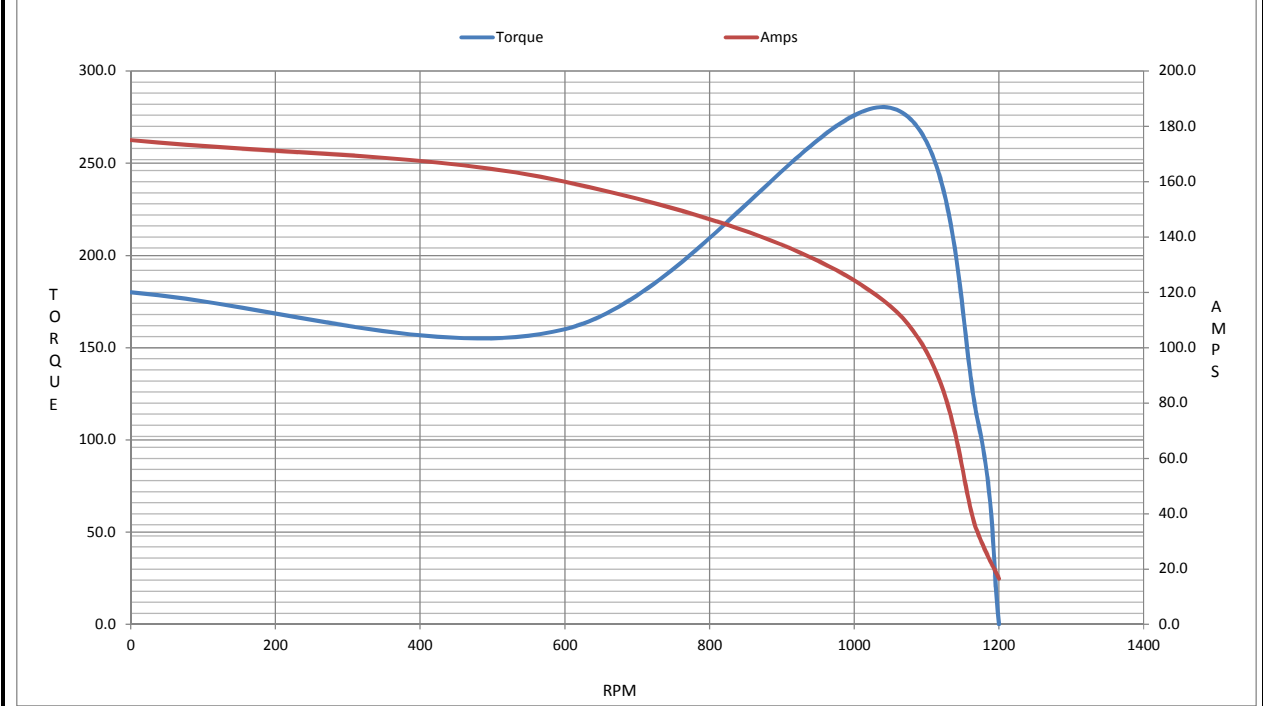
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1050	1170	1200
Current (Amps)	175	160	115	33.5	16.5
Torque (ft-lb)	180	160	280	112	0.00

Information Block

HP	25.0			
Sync. RPM	1200			
Frame	324			
Enclosure	TEBC			
Construction	TBP			
Voltage	230/460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	60 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	4.8 Lb-Ft <sup>2</sup>			
Ref Wdg	286685 F			
Sound Pressure @ 1M	75 dBA			
VFD Rating	CONSTANT 2000:1			
Outline Dwg	B-SS311268-1475			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.3430	0.2190	0.8550	0.5940	20.6340



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 : 324THFPA8086

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

Catalog No : Y583

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**