

# PRODUCT INFORMATION PACKET

Model No: 324THFCD9080

Catalog No: W563A

XRI®-841 Severe Duty Motor, 25 HP, 3 Ph, 60 Hz, 575 V, 1200 RPM, 324T Frame, TEFC



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### Nameplate Specifications

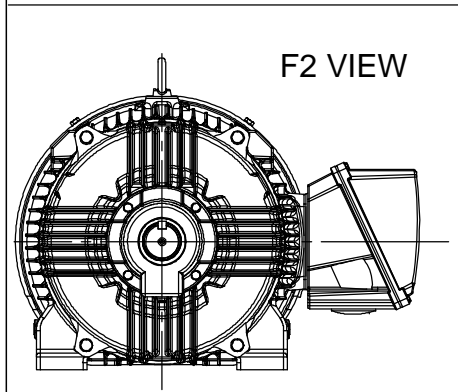
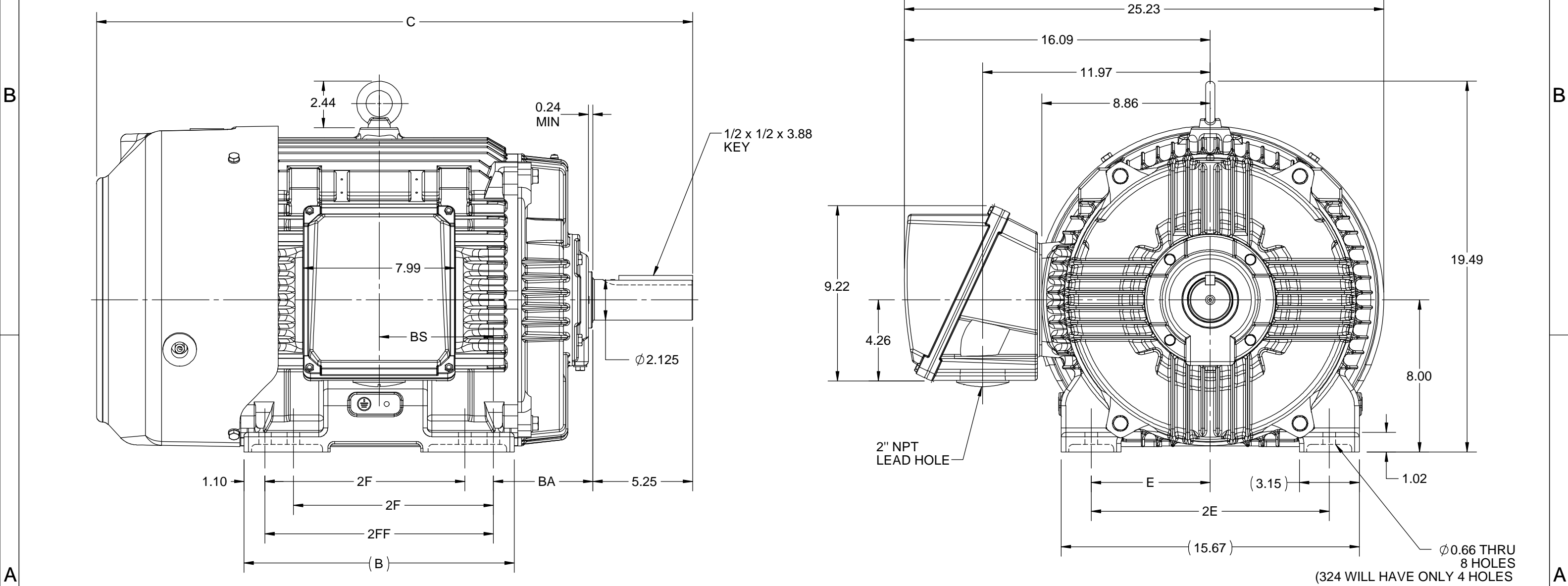
Phase	<b>3</b>	Output HP	<b>25 Hp</b>
Output KW	<b>18.7 kW</b>	Voltage	<b>575 V</b>
Speed	<b>1184 rpm</b>	Service Factor	<b>1.15</b>
Frame	<b>324T</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No Protection</b>	Efficiency	<b>93 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 Hz</b>
Current	<b>24.0 A</b>	Power Factor	<b>78.5</b>
Duty	<b>Continuous</b>	Insulation Class	<b>H</b>
Design Code	<b>B</b>	KVA Code	<b>G</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>
Number of Speeds	<b>1</b>	Hazardous Location	<b>DIVISION 2 T2B</b>

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>6</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.327 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>	Shaft Diameter	<b>2.125 in</b>
Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>	Inverter Load	<b>CONSTANT 2:1/VARIABLE 10:1</b>
Outline Drawing	<b>SS312939-100</b>	Connection Drawing	<b>EE7300</b>

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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
ECO ECO-0194008	APPROVED BY GNK	DATE 14/10/2020
ECO DESCRIPTION <b>DRAWING UPDATED</b>		
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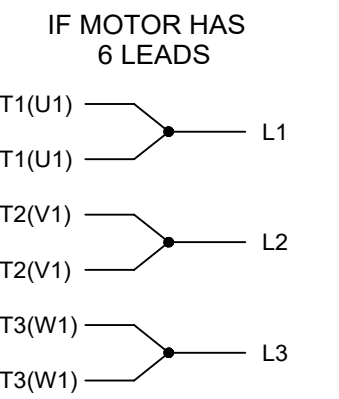
PRIMARY DIMENSIONS ARE INCH  
mm DIMENSIONS IN [BRACKETS]  
ARE FOR REFERENCE ONLY

DRAWN BY BISWA	Regal Beloit America, Inc.
DATE 24/12/2018	
APPROVED BY SBD	DESCRIPTION <b>OUTLINE</b> 324/326T FR-NEMA-SD & IEEE841
DATE 24/12/2018	MATERIAL
REFERENCE	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B
	DRAWING NUMBER <b>SS312939</b>
	SHEET 1 OF 1

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

TERMINAL BLOCK WHEN SPECIFIED

TO REVERSE ROTATION:  
INTERCHANGE ANY TWO LINE  
LEAD CONNECTIONS



VIEW OF TERMINAL END

**OPTIONAL CORD CONNECTION**

L1	WHITE
L2	RED
L3	BLACK

A-9806 DECAL

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

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



DATA VOLTS: 575

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7300  
 OUTLINE: SS312939  
 WINDING: HA32006005 NONE 3

REFERENCE MODEL #: 324THFCD9080  
 CAT #: W563A

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	575	25.6	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	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
111 LB-FT	146	200 LB-FT 180%	272 LB-FT 245%	60

SOUND PRESSURE	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX.
65 dBA	74 dBA	11.8 LB-FT²	375 LB-FT²	20 SEC.	2	601 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)
0.49375	0.3	1.9390625	2.9921875	41.8421875	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: _____
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FORM: 3531 REV\_4 2/27/06  
 \*\* Subject to change without notice.

Data Sheet

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



324THFCD9080

Submittal

Data @ 575 V

Motor Load Data

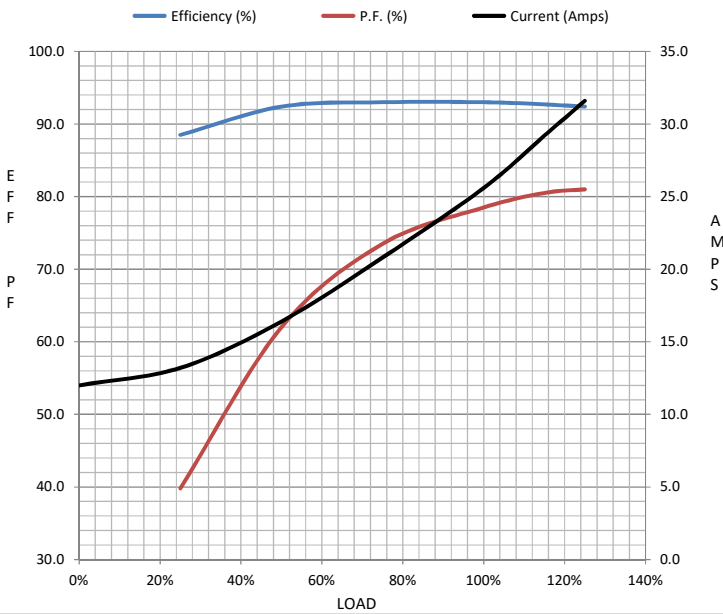
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	12.0	13.2	16.4	20.8	25.6	29.2	31.6	146
Torque (ft-lb)	0.00	27.5	55.0	82.5	111	127	139	200
RPM	1200	1196	1192	1188	1184	1,180	1180	0
Efficiency (%)		88.5	92.4	93.0	93.0	92.7	92.4	
P.F. (%)	4.5	39.8	62.0	73.5	78.5	80.5	81.0	36.0

Motor Speed Data

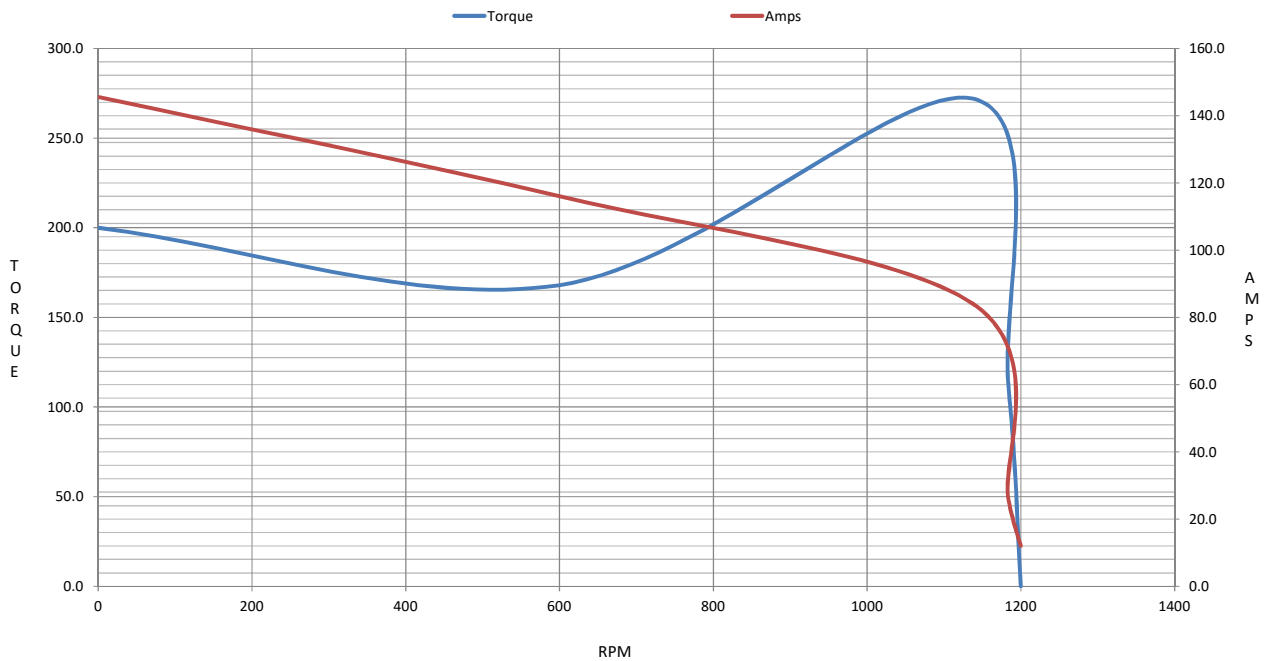
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1138	1184	1200
Current (Amps)	146	116	84.0	25.6	12.0
Torque (ft-lb)	200	168	272	111	0.00

Information Block

HP	25.0			
Sync. RPM	1200			
Frame	324			
Enclosure	TEFC			
Construction	TFC			
Voltage	575 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 wk <sup>2</sup>	11.8 Lb-Ft <sup>2</sup>			
Ref Wdg	HA32006005 NONE			
Sound Pressure @ 1M	65 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
0.3160	0.1920	1.2410	1.9150	26.7790



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 : 324THFCD9080

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

Catalog No : W563A

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**