

# PRODUCT INFORMATION PACKET

Model No: 254THFCD9001

Catalog No: W544A

XRI®-841 Severe Duty Motor, 15 HP, 3 Ph, 60 Hz, 460 V, 3600 RPM, 254T Frame, TEFC



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### Nameplate Specifications

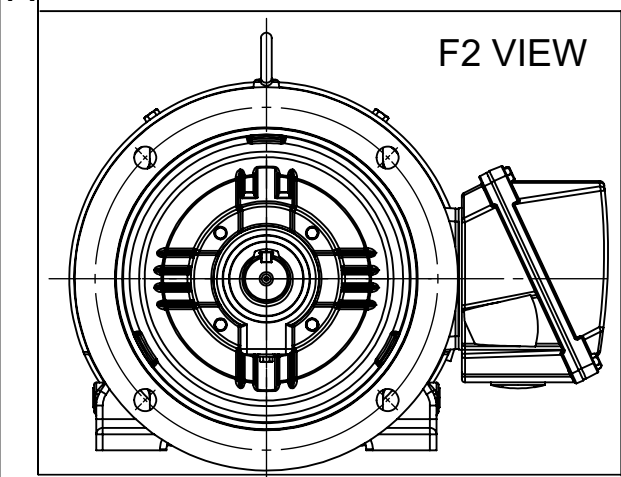
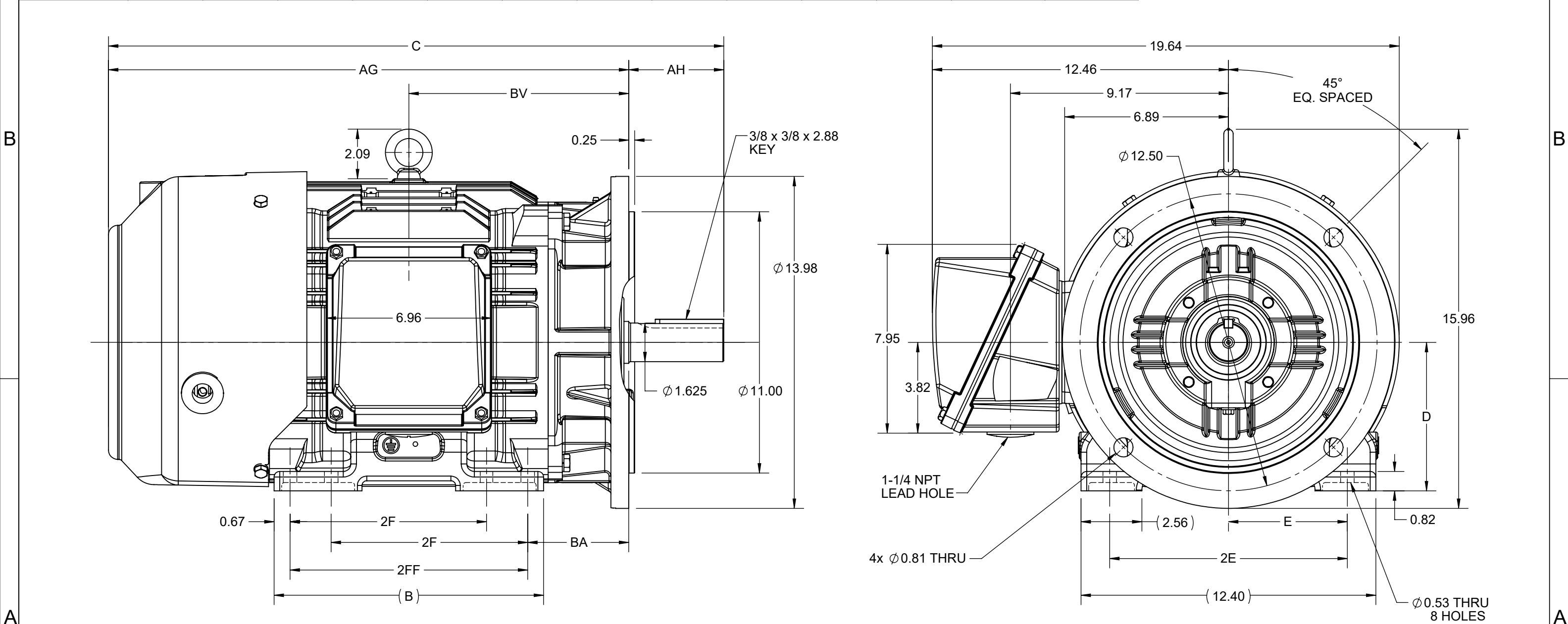
Phase	<b>3</b>	Output HP	<b>15 Hp</b>
Output KW	<b>11.2 kW</b>	Voltage	<b>460 V</b>
Speed	<b>3545 rpm</b>	Service Factor	<b>1.15</b>
Frame	<b>254T</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No Protection</b>	Efficiency	<b>91 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 Hz</b>
Current	<b>17.8 A</b>	Power Factor	<b>87</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>6309</b>	Opp Drive End Bearing Size	<b>6209</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>2</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.691 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>1.625 in</b>
Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>	Inverter Load	<b>CONSTANT 2:1/VARIABLE 10:1</b>
Connection Drawing	<b>EE7300</b>	Outline Drawing	<b>SS208560-100</b>

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DASH NO.	B	C	D	E	2E	2F	2FF	AG	AH	BA	BV	MOUNTING	FRAME
100	9.60	24.16	6.25	5.00	10.00	-	8.25	20.16	4.00	4.25	8.39	F1 OR F2	254TD
200	11.34	25.89				8.25	10.00	21.89			9.25		254/256TD



DRAWING REVISION A	REVISION BY RAM	REV DATE/© DATE 29/06/2022
REQUEST NUMBER CR-0009883	APPROVED BY SBD	DATE 29/06/2022
REQUEST NUMBER DESCRIPTION NEW DRAWING RELEASE		
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DRAWN BY RAM	 Regal Beloit America, Inc.
DATE 29/06/2022	
APPROVED BY SBD	DESCRIPTION <b>OUTLINE</b> 254/256TD FR NEMA SD & IEEE841 D-FLANGE KIT
DATE 29/06/2022	MATERIAL PROCESS/FINISH
REFERENCE SS208560	SIZE <b>B</b>
THIRD ANGLE PROJECTION	DRAWING NUMBER <b>SS208560B</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

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: 460

**CERTIFICATION DATA SHEET**

CONN. DIAGRAM: EE7300  
 REFERENCE MODEL #: 254THFCD9001  
 OUTLINE: SS208560  
 CAT #: W544A  
 WINDING: HA31602008 NONE 5  
 MOUNTING: F1/F2 CAPABLE

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN					
15	11.2	3600	3545	254T	TEFC	TFC	G	B					
PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV. (Ft)				
3	60	460	17.8	LINE OR INVERTER	CONT	H	1.15	40	3300				
F.L. EFF		91.0	3/4 LD EFF		91.0	1/2 LD EFF		90.6	GTD EFF		ELECT. TYPE		
F.L. PF		87.0	3/4 LD PF		83.5	1/2 LD PF		75.0	90.2	SQ CAGE INV RATED			
F.L. TORQUE		LR AMPS		L.R. TORQUE		B.D. TORQUE		F.L. RISE (° C)					
22.2	LB-FT	114		37.0	LB-FT	167%	60.0	LB-FT	270%	55			
SOUND PRESSURE		SOUND		ROTOR WK²		MAX. LOAD WK²		SAFE STALL TIME		STARTS/HOUR		APROX.	
75	dBA	84	dBA	1.20	LB-FT²	22	LB-FT²	20	SEC.	2		296	LB.
<b>*** SUPPLEMENTAL INFORMATION ***</b>													
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												
6309	6209												
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)								
0.448	0.236	1.436	1.134	41.882	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													
NONE PPR													
BRAKE: NONE													
NONE													
FT-LB: NA													
VOLTAGE: NONE HZ:													
PREPARED BY: _____													
DATE: 5/13/2020													
FORM: 3531 REV_4 2/27/06													
** Subject to change without notice.													

Data Sheet

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



254THFCD9001

Submittal

Data @ 460 V

Motor Load Data

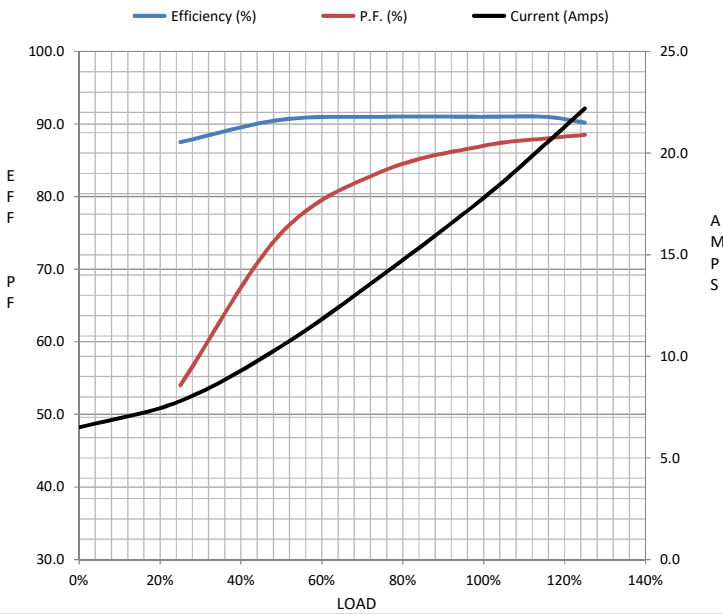
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	6.5	7.8	10.5	14.0	17.8	20.4	22.2	114
Torque (ft-lb)	0.00	5.5	11.0	16.5	22.2	25.5	27.8	37.0
RPM	3600	3585	3572	3560	3545	3535	3530	0
Efficiency (%)		87.5	90.6	91.0	91.0	91.0	90.2	
P.F. (%)	10.0	54.0	75.0	83.5	87.0	88.0	88.5	37.0

Motor Speed Data

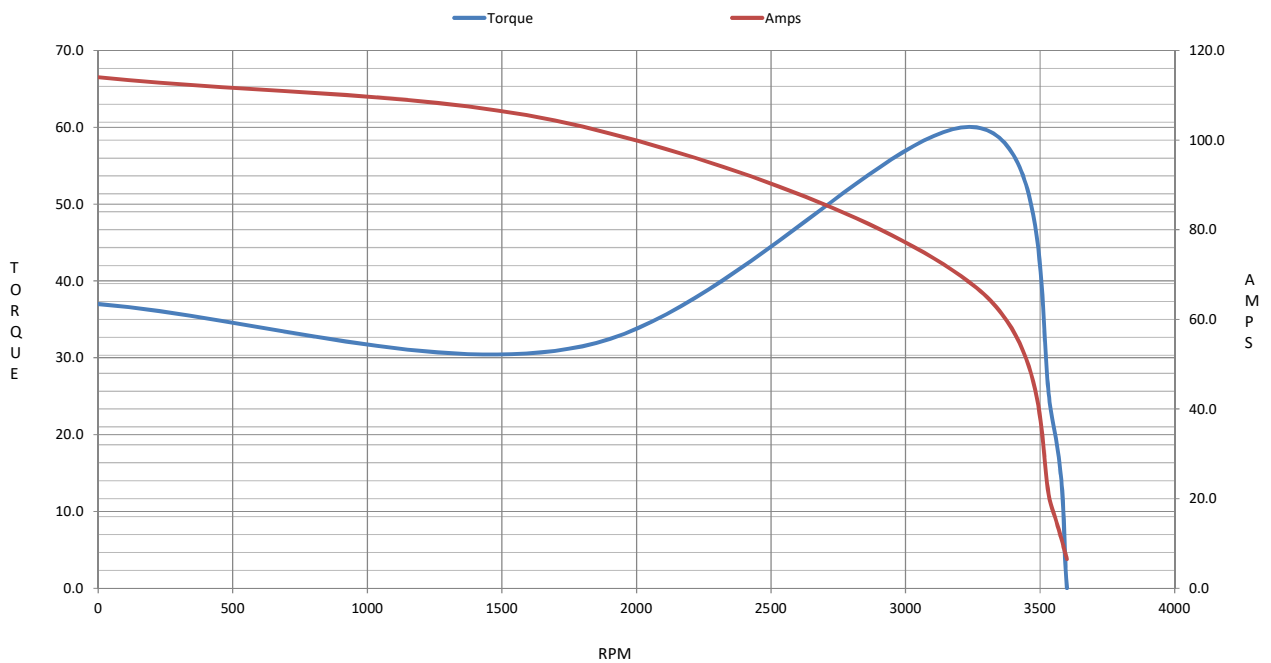
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3265	3545	3600
Current (Amps)	114	103	67.0	17.8	6.5
Torque (ft-lb)	37.0	31.5	60.0	22.2	0.00

Information Block

HP	15.0			
Sync. RPM	3600			
Frame	254			
Enclosure	TEFC			
Construction	TFC			
Voltage	460 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 wk <sup>2</sup>	1.20 Lb-Ft <sup>2</sup>			
Ref Wdg	HA31602008 NONE			
Sound Pressure @ 1M	75 dBA			
VFD Rating	CONSTANT 2:1/VARIABLE 10:1			
Outline Dwg	SS208560			
Conn. Diag	EE7300			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.4480	0.2360	1.4360	1.1340	41.8820



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 : 254THFCD9001

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

Catalog No : W544A

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**