

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

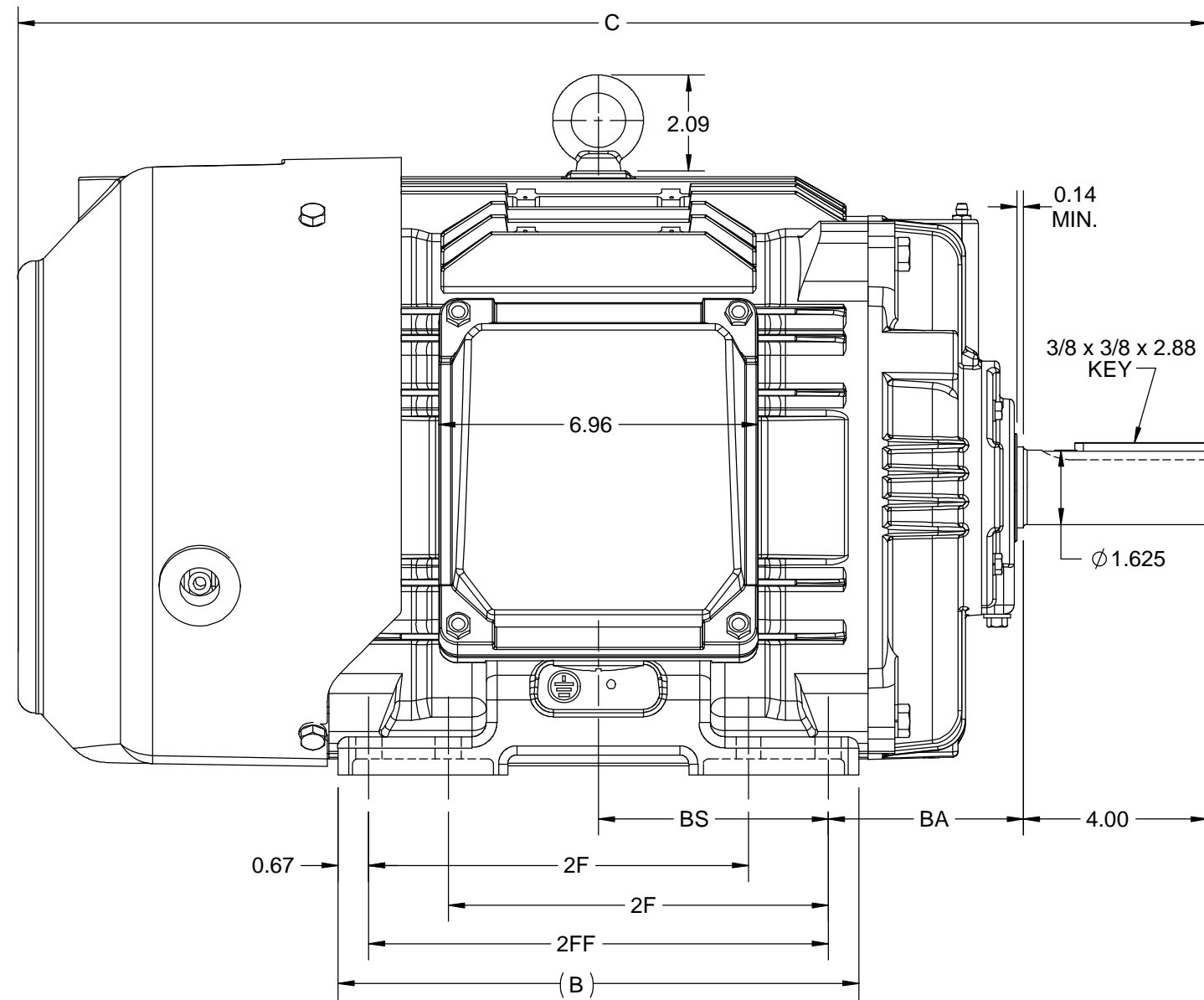
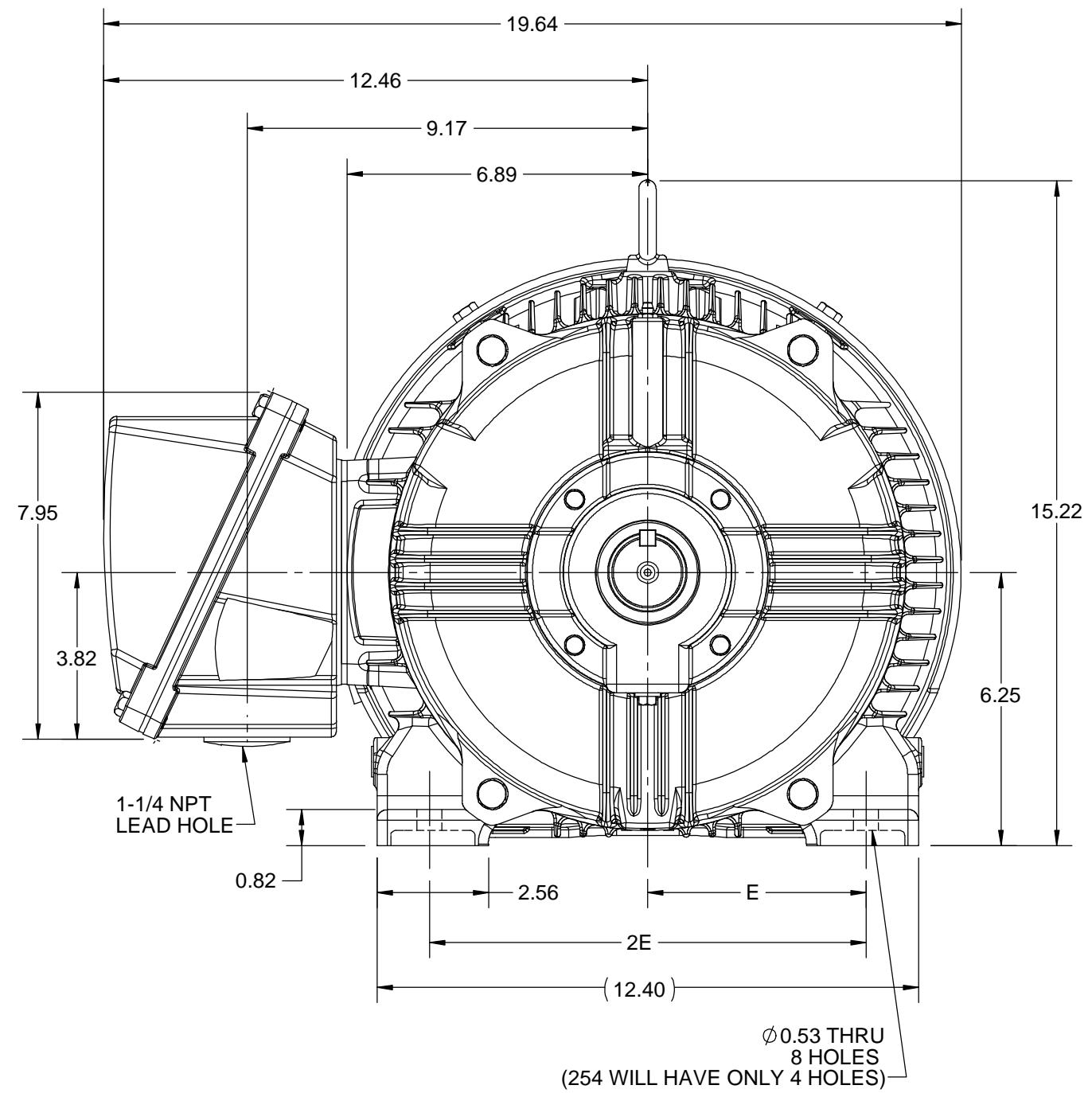
Output HP	15 Hp	Output KW	11.2 kW
Frequency	60 Hz	Voltage	460 V
Current	17.8 A	Speed	3545 rpm
Service Factor	1.15	Phase	3
Efficiency	91 %	Power Factor	87
Duty	Continuous	Insulation Class	H
Design Code	B	KVA Code	G
Frame	254T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient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

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DASH NO.	4		3						MOUNTING	FRAME
	B	C	E	2E	2F	2FF	BA	BS		
100	9.60	24.15	5.00	10.00	-	8.25	4.25	4.13	F1 OR F2	254T
200	11.34	25.89			8.25	10.00				5.00

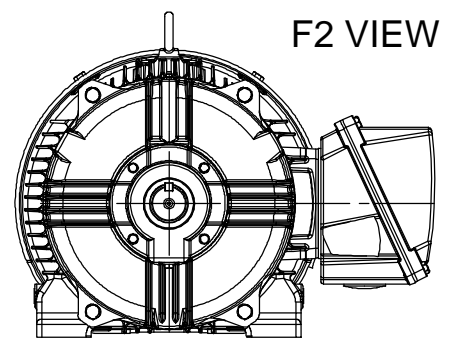


B

B

A

A



F2 VIEW

DRAWING REVISION E	REVISION BY BISWA	REV DATE/© DATE 10/07/2020
ECO ECO-0194249	APPROVED BY GNK	DATE 10/07/2020
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DRAWN BY BISWA	REGAL ® Regal Beloit America, Inc.
DATE 26/09/2018	
APPROVED BY SBD	DESCRIPTION OUTLINE 254T/256T FR-NEMA-SD & IEEE841
DATE 26/09/2018	MATERIAL
REFERENCE	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B
	DRAWING NUMBER SS208560
	SHEET 1 OF 1

4

3

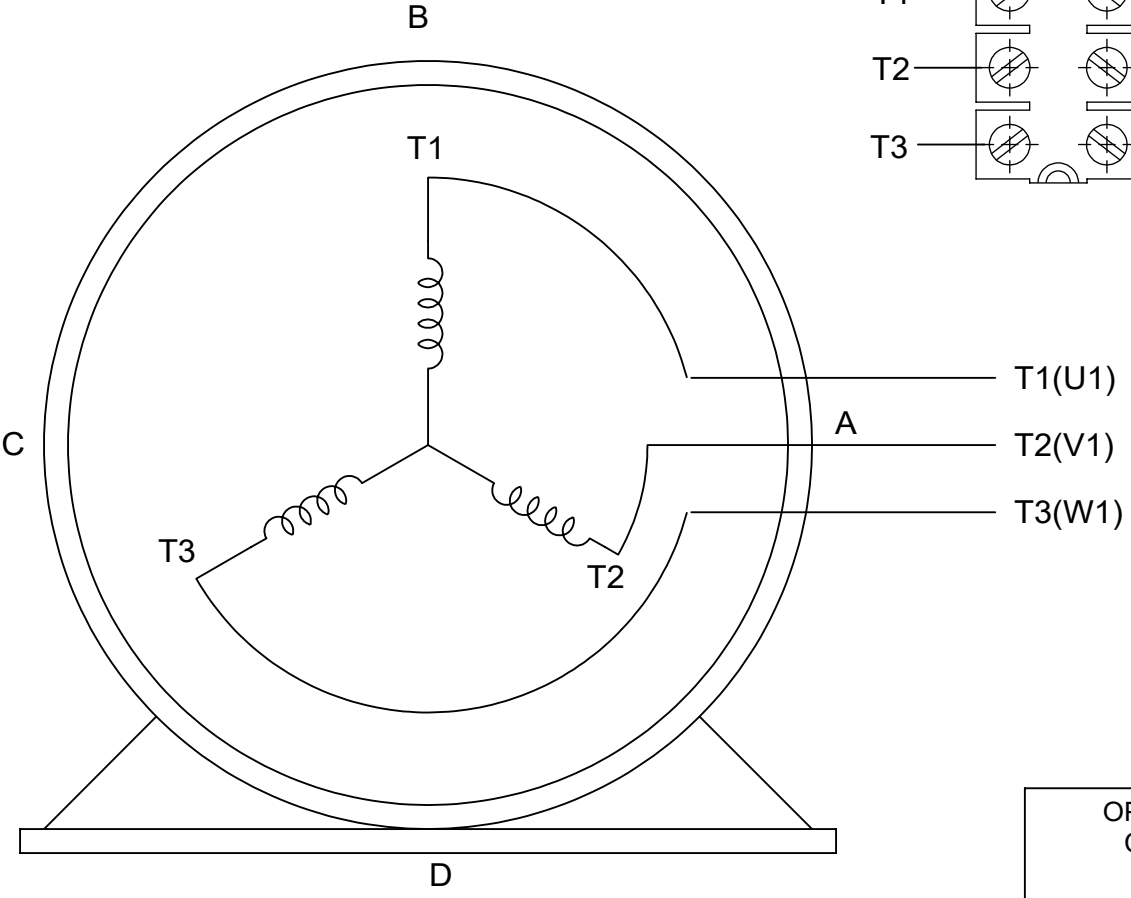
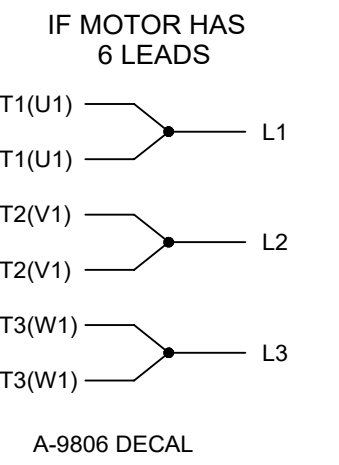
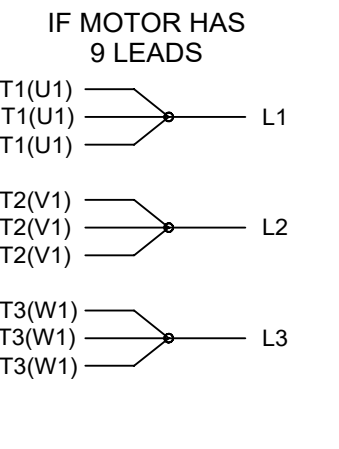
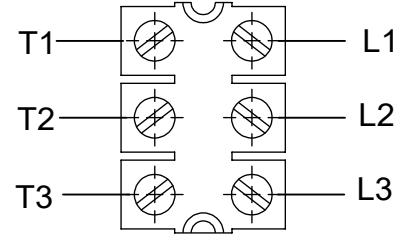
2

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 CONNECTION DIAGRAM EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR			
MATERIAL		PROCESS/FINISH	
SIZE A	DRAWING NUMBER EE7300		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.
*** 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												
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 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

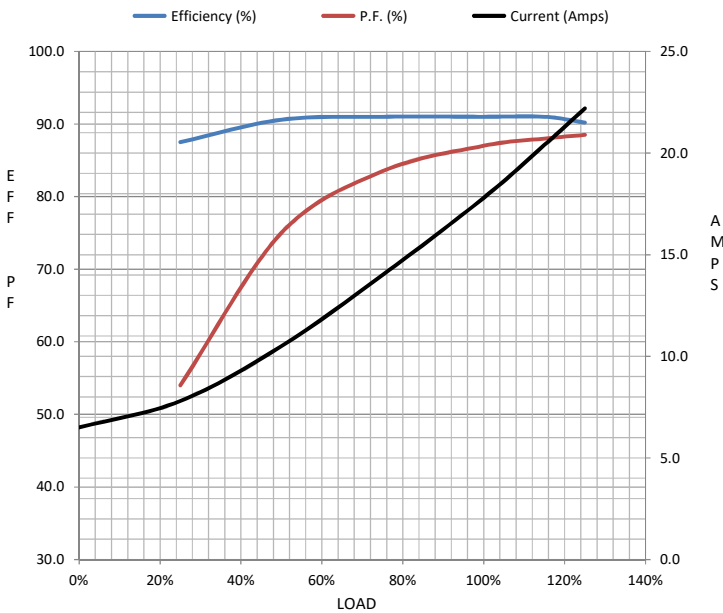
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	6.5	7.8	10.5	14.0	17.8	20.4	22.2	114
Torque (ft-lb)	0.00	5.5	11.0	16.5	22.2	25.5	27.8	37.0
RPM	3600	3585	3572	3560	3545	3535	3530	0
Efficiency (%)		87.5	90.6	91.0	91.0	91.0	90.2	
P.F. (%)	10.0	54.0	75.0	83.5	87.0	88.0	88.5	37.0

Motor Speed Data

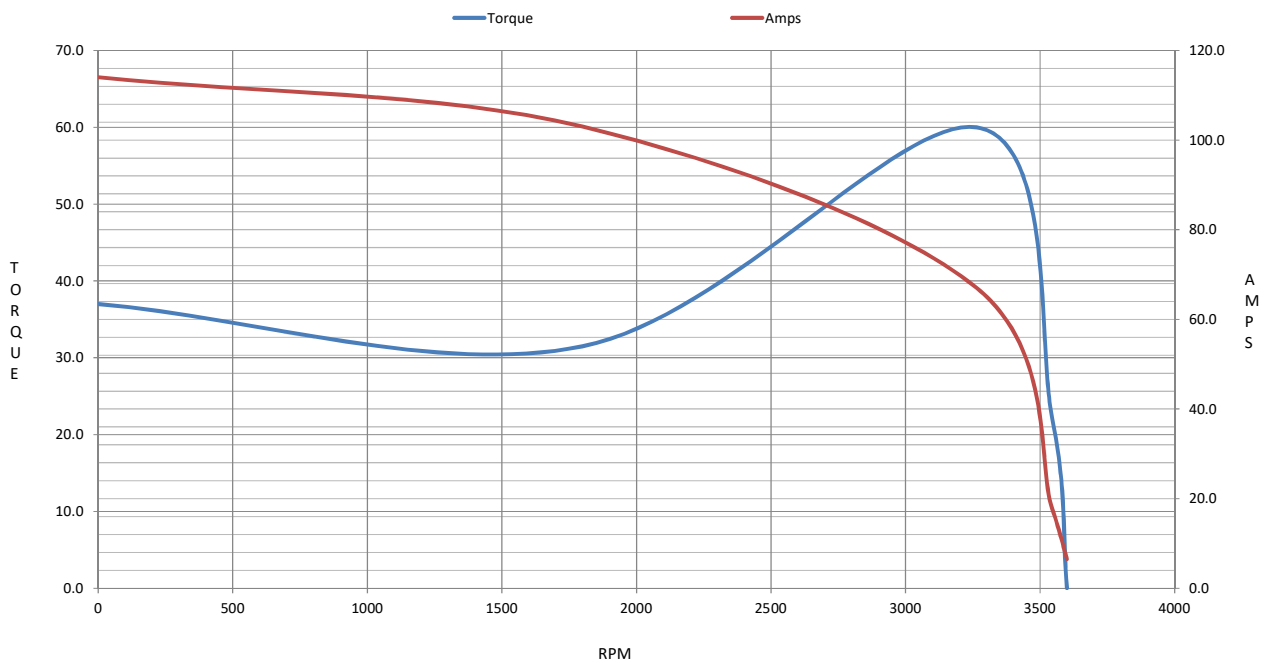
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3265	3545	3600
Current (Amps)	114	103	67.0	17.8	6.5
Torque (ft-lb)	37.0	31.5	60.0	22.2	0.00

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 ²	1.20 Lb-Ft ²			
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 :

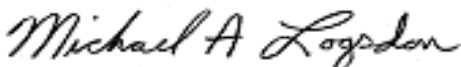
Low Voltage Directive 2014/35/EU

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