

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 444THFCD19081

Catalog No: W636A

XRI®-841 Severe Duty Motor, 100 HP, 3 Ph, 60 Hz, 460 V, 1200 RPM, 444T Frame, TEFC



Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

©2022 Regal Rexnord Corporation, All Rights Reserved. MC017097E

RegalRexnord

Nameplate Specifications

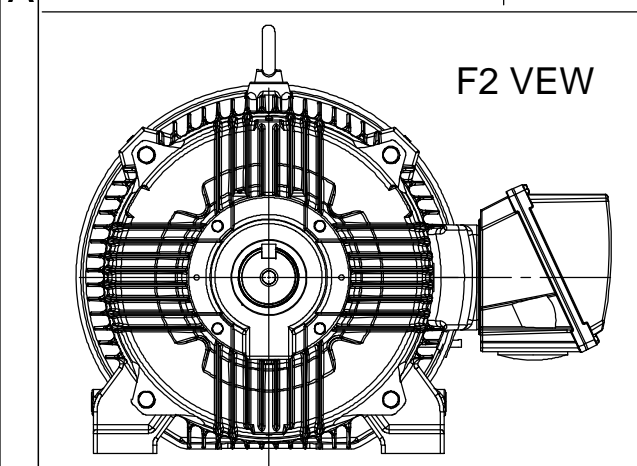
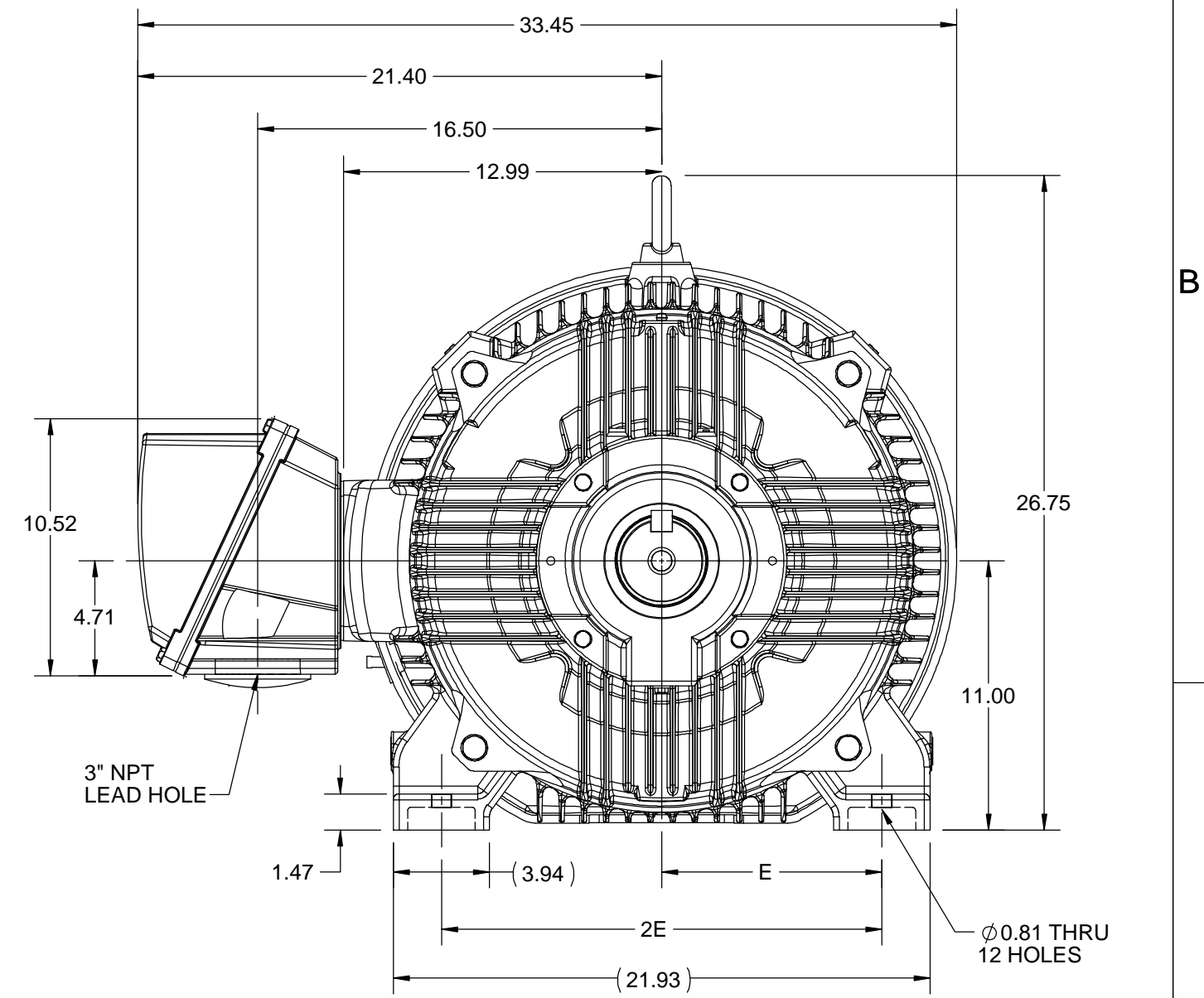
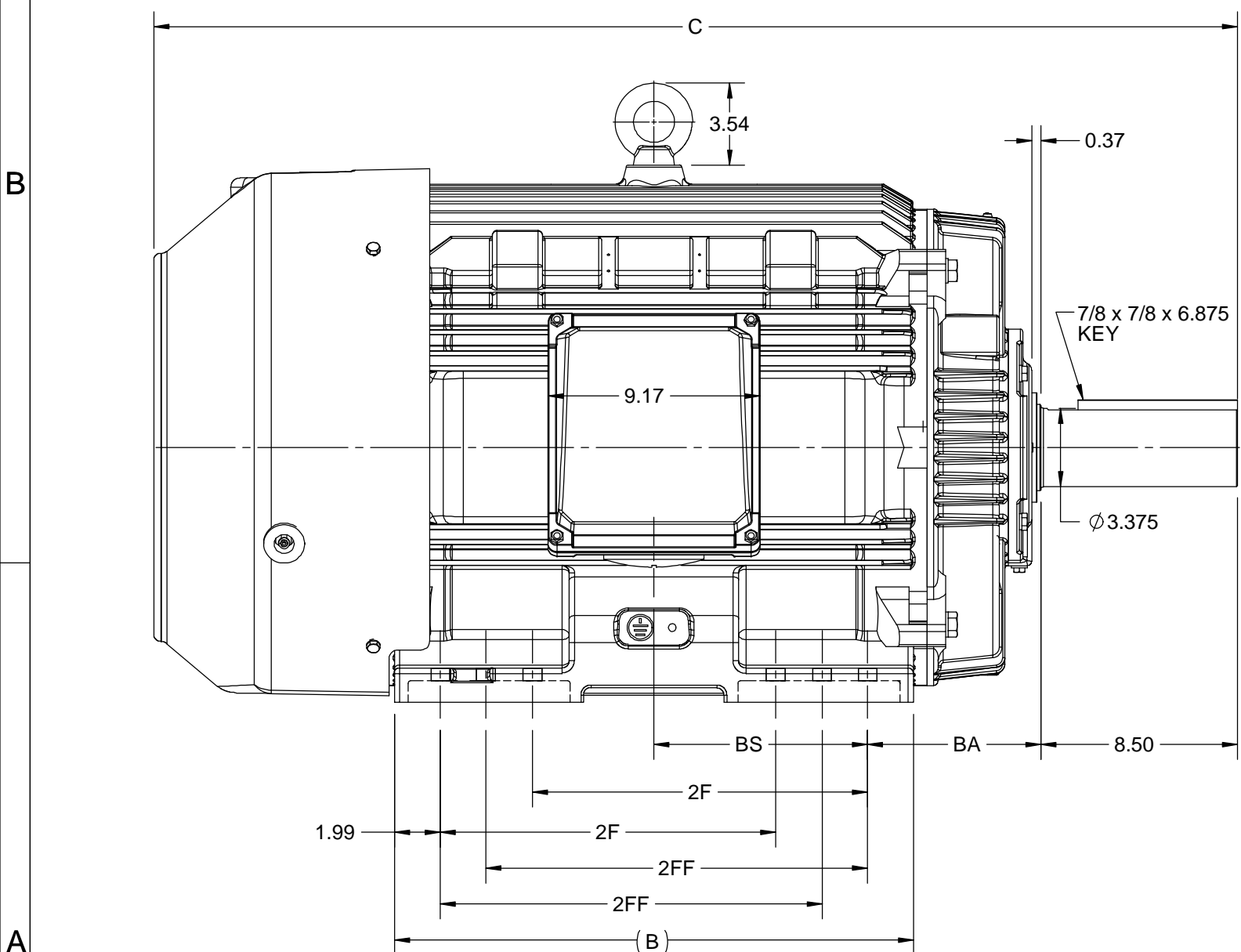
Output HP	100 Hp	Output KW	75.0 kW
Frequency	60 Hz	Voltage	460 V
Current	115.0 A	Speed	1190 rpm
Service Factor	1.15	Phase	3
Efficiency	95 %	Power Factor	86
Duty	Continuous	Insulation Class	H
Design Code	B	KVA Code	G
Frame	444T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6319	Opp Drive End Bearing Size	6317
UL	Listed	CSA	Y
CE	Y	IP Code	56
Hazardous Location	DIVISION 2 T2B	Number of Speeds	1

Technical Specifications

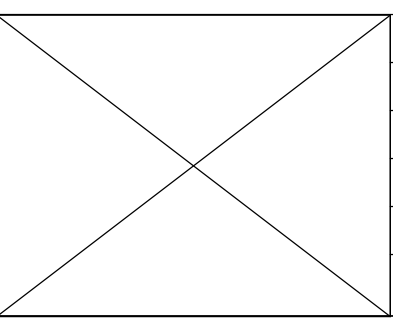
Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	6	Rotation	Reversible
Resistance Main	.0444 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Shaft Diameter	3.375 in
Assembly/Box Mounting	F1/F2 CAPABLE	Inverter Load	CONSTANT 2:1/VARIABLE 10:1
Outline Drawing	SS557668	Connection Drawing	EE7300U



This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:11/29/2022

4			3					
B	C	E	2E	2F	2FF	BA	BS	MOUNTING
22.44	46.83	9.00	18.00	14.50	16.50	7.50	9.24	F1 OR F2



DRAWING REVISION C	REVISION BY BISWA	DATE 15/10/2020
ECO ECO-0195135	APPROVED BY GNK	DATE 15/10/2020
DRAWING UPDATED		
<small>COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.</small>		



DRAWN BY BISWA	 Regal Beloit America, Inc.
DATE 24/12/2018	
APPROVED BY SBD	DESCRIPTION OUTLINE 444/445T FR-NEMA-SD & IEEE841
DATE 24/12/2018	MATERIAL
REFERENCE	PROCESS/FINISH
THIRD ANGLE PROJECTION 	SIZE B
	DRAWING NUMBER SS557668
	SHEET 1 OF 1

IF MOTOR HAS 9 LEADS



IF MOTOR HAS 6 LEADS



A-9806 DECAL IF CALLED FOR

IF MOTOR HAS 12 LEADS



VIEW OF TERMINAL END

DRAWING REVISION L	REVISION BY AJW	DATE 05-04-2015	TOLERANCES UNLESS OTHERWISE SPECIFIED:	DRAWN BY DRS	Regal Beloit America, Inc.																					
ECO ECO-0077067	APPROVED BY EWH	DATE 05-05-2015	<table style="font-size: small; border-collapse: collapse;"> <tr> <td><u>DEC.</u></td> <td><u>INCH</u></td> <td><u>mm</u></td> <td><u>ANGLE</u></td> </tr> <tr> <td>.X</td> <td>±0.1</td> <td>[±2.5]</td> <td>±7' 30"</td> </tr> <tr> <td>.XX</td> <td>±0.02</td> <td>[±0.51]</td> <td></td> </tr> <tr> <td>.XXX</td> <td>±0.005</td> <td>[±0.127]</td> <td></td> </tr> <tr> <td>.XXXX</td> <td>±0.0005</td> <td>[±0.0127]</td> <td></td> </tr> </table>	<u>DEC.</u>			<u>INCH</u>	<u>mm</u>	<u>ANGLE</u>	.X	±0.1	[±2.5]	±7' 30"	.XX	±0.02	[±0.51]		.XXX	±0.005	[±0.127]		.XXXX	±0.0005	[±0.0127]		DATE 09-27-1996
<u>DEC.</u>	<u>INCH</u>	<u>mm</u>	<u>ANGLE</u>																							
.X	±0.1	[±2.5]	±7' 30"																							
.XX	±0.02	[±0.51]																								
.XXX	±0.005	[±0.127]																								
.XXXX	±0.0005	[±0.0127]																								
ECO DESCRIPTION UPDATED TO SOLIDWORKS <small>COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.</small>			APPROVED BY GK	MATERIAL PROCESS/FINISH																						
			DATE 09-30-1996			SIZE A		DRAWING NUMBER EE7300U		SHEET 1 OF 1																
<small>mm SHOWN IN [BRACKETS]</small>			THIRD ANGLE PROJECTION	4 of 7																						



DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7300U
 OUTLINE: SS557668-444T
 WINDING: HE32806005 NONE 1

MODEL #: 444THFCD19081
 CAT #: W636A

MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN	
100	75	1200	1190	444T	TEFC	TFC	G	B	
PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV.(Ft)
3	60	460	115	LINE OR INVERTER	CONT	H	1.15	40	3300
F.L. EFF	95.0	3/4 LD EFF	95.0	1/2 LD EFF	94.5	GTD EFF	94.5	ELECT. TYPE	
F.L. PF	86.0	3/4 LD PF	84.0	1/2 LD PF	77.0	94.5	SQ CAGE INV RATED		
F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE		B.D. TORQUE		F.L. RISE (° C)			
441 LB-FT	725	726 LB-FT	165%	1,082 LB-FT	245%	55			
SOUND PRESSURE @	SOUND	ROTOR WK ²	MAX. LOAD WK ²	SAFE STALL TIME	STARTS/HOUR	APROX.	MOTOR		
68 dBA	77 dBA	95.0 LB-FT ²	1400 LB-FT ²	25 SEC.	2	1982	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						
6319	6317						

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)
0.027	0.02	0.216	0.349	7.386	0.080

If Inverter equals NONE, contact factory for further information

* N O T E S *	INVERTER TORQUE: VARIABLE 10:1 INV. HP SPEED RANGE: NONE	
	ENCODER: NONE NONE NONE PPR	
	BRAKE: NONE NONE NONE FT-LB: NA VOLTAGE: NONE	
	HZ:	
PREPARED BY: ANUSHA M DATE: 3/10/2020		

FORM: 3531 REV_4 2/27/06

** Subject to change without notice.

Data Sheet

Date: 3/10/2020
 Customer: _____
 Attention: _____
 Submitted by: ANUSHA M



444THFCD19081

Submittal

Data @ 460 V

Motor Load Data

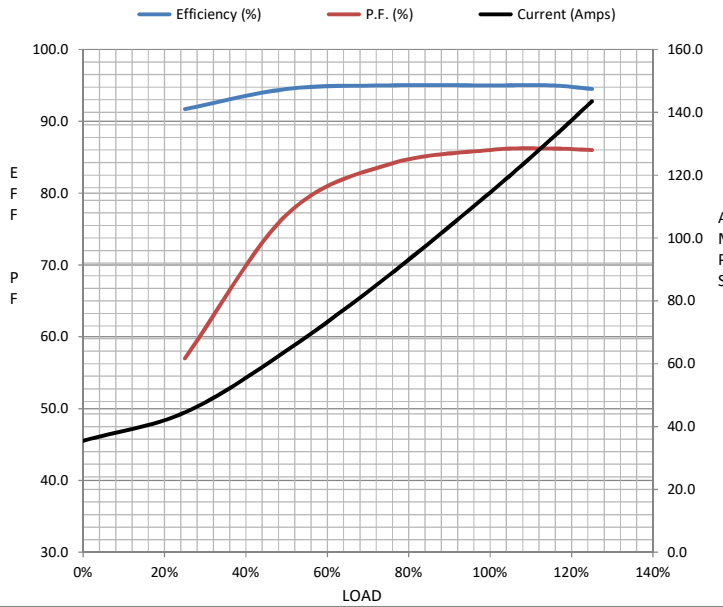
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	35.5	44.5	64.2	88.0	115	132	144	725	
Torque (ft-lb)	0.00	110	220	331	441	510	554	726	
RPM	1200	1198	1195	1192	1190	1,188	1186	0	
Efficiency (%)		91.7	94.5	95.0	95.0	95.0	94.5		
P.F. (%)	5.5	57.0	77.0	84.0	86.0	86.2	86.0	30.0	

Motor Speed Data

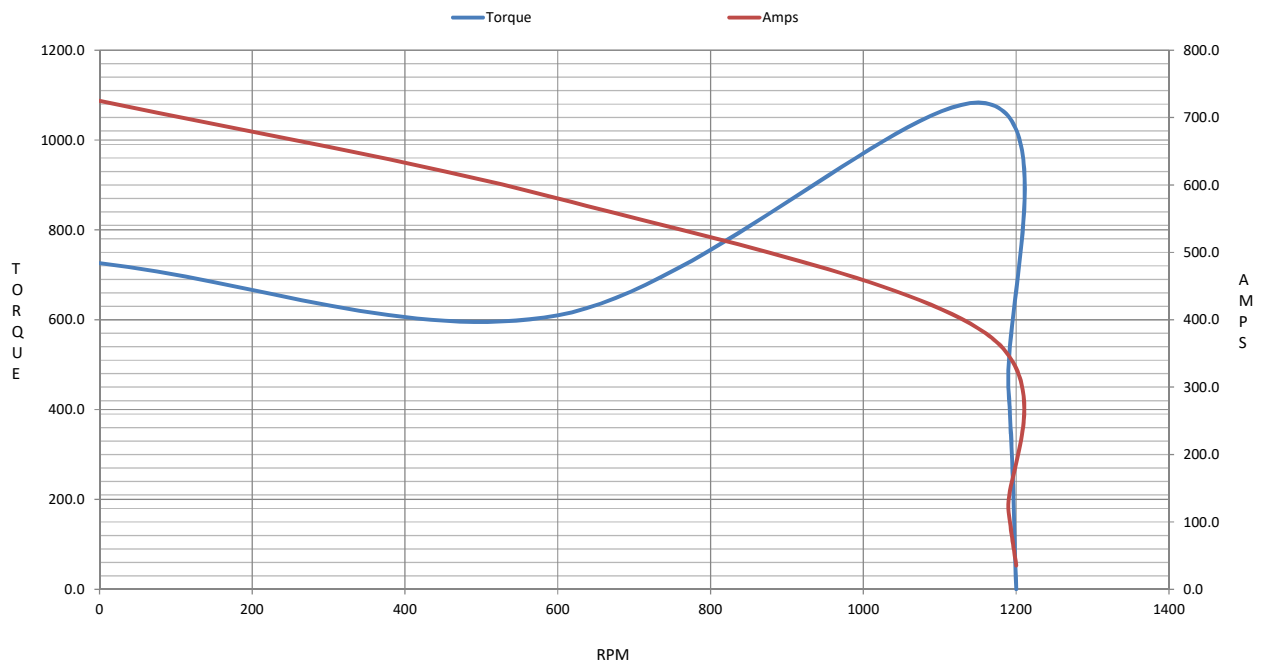
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1160	1190	1200
Current (Amps)	725	580	380	115	35.5
Torque (ft-lb)	726	610	1,082	441	0.00

Information Block

HP	100.0			
Sync. RPM	1200			
Frame	444			
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	50 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	95.0 Lb-Ft ²			
Ref Wdg	HE32806005 NONE			
Sound Pressure @ 1M	68 dBA			
VFD Rating	VARIABLE 10:1			
Outline Dwg	SS557668-444T			
Conn. Diag	EE7300U			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0270	0.0200	0.2160	0.3490	7.3860



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 : 444THFCD19081

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

Catalog No : W636A

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