

PRODUCT INFORMATION PACKET

Model No: 449TTFCD16553

Catalog No: E776A

XRI®-SD Severe Duty Motor, 400 HP, 3 Ph, 60 Hz, 460 V, 1800 RPM, 449T Frame, TEFC





Nameplate Specifications

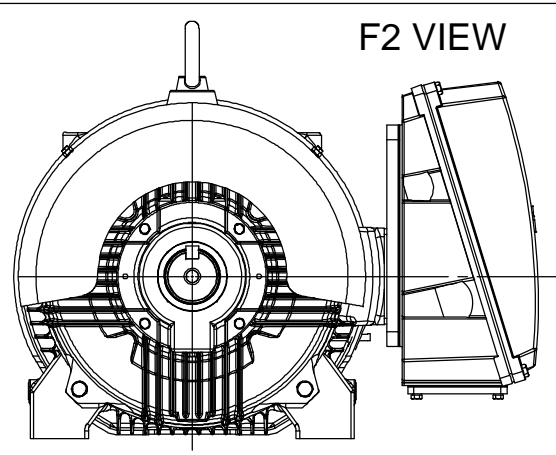
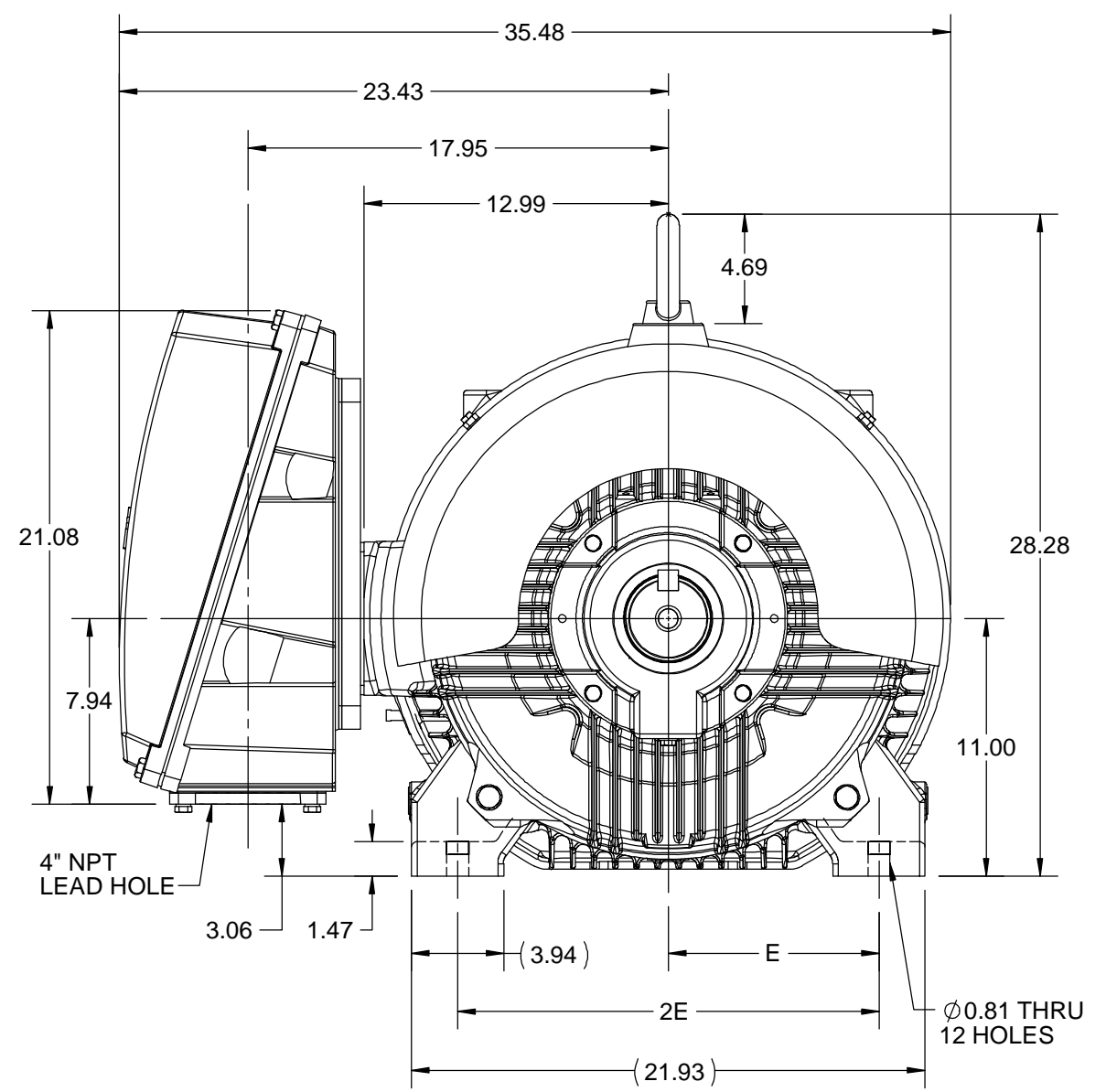
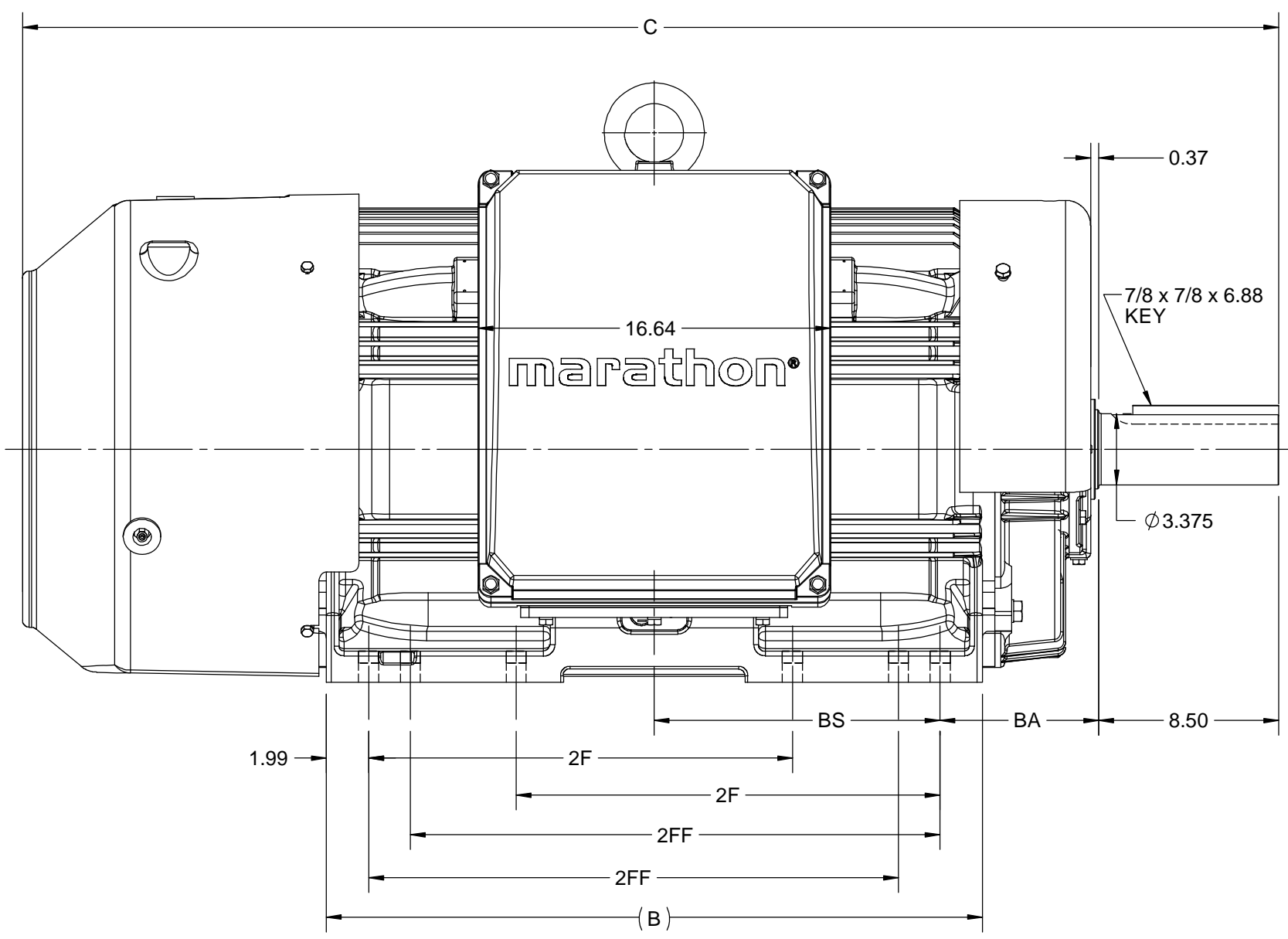
Output HP	400 Hp	Output KW	300.0 kW
Frequency	60 Hz	Voltage	460 V
Current	440.0 A	Speed	1788 rpm
Service Factor	1.15	Phase	3
Efficiency	96.2 %	Power Factor	88
Duty	Continuous	Insulation Class	H
Design Code	B	KVA Code	G
Frame	449T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6319	Opp Drive End Bearing Size	6317
UL	Listed	CSA	Y
CE	Y	IP Code	55
Hazardous Location	DIVISION 2 T2B	Number of Speeds	1

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	4	Rotation	Reversible
Resistance Main	.009 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		
Outline Drawing	SS620973	Connection Drawing	EE7300U

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4				3				
B	C	E	2E	2F	2FF	BA	BS	MOUNTING
30.94	59.27	9.00	18.00	20.00	25.00	7.50	13.48	F1 OR F2



DRAWING REVISION B	REVISION BY BISWA	REV DATE/© DATE 09/10/2020
ECO ECO-0195135	APPROVED BY SBD	DATE 09/10/2020
ECO DESCRIPTION		
DRAWING UPDATED		
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PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

DRAWN BY BISWA	Regal Beloit America, Inc.
DATE 03/05/2020	
APPROVED BY SBD	DESCRIPTION OUTLINE 447/449T FR H/O-SD & IEEE 841
DATE 03/05/2020	MATERIAL
REFERENCE	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B
	DRAWING NUMBER SS620973
	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
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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: EE7300BH
 OUTLINE: SS620973
 WINDING: HA32804032 NONE 1

REFERENCE MODEL #: 449TTFCD16553
 CAT #: E776A

MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
400	298	1800	1788	447/449T	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB(° C)	ELEV.(Ft)
3	60	460	442	PWS & YDRUN OR INV	CONT	H	1.15	40	3300

F.L. EFF	96.2	3/4 LD EFF	96.5	1/2 LD EFF	96.4	GTD EFF	ELECT. TYPE
F.L. PF	88.0	3/4 LD PF	86.9	1/2 LD PF	81.9	95.8	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
1,175 LB-FT	2,960	3,000 LB-FT 255%	2,500 LB-FT 213%	85

SOUND PRESSURE	SOUND	ROTOR WK ²	MAX. LOAD WK ²	SAFE STALL TIME	STARTS/HOUR	APROX. MOTOR WGT
85 dBA	94 dBA	131.5 LB-FT ²	2500 LB-FT ²	20 SEC.	2	3154 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)
0.006	0.004	0.042	0.113	2.375	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: _____	BRAKE: NONE
DATE: 6/3/2020	NONE NONE
** Subject to change without notice.	FT-LB: NA
FORM: 3531 REV_4 2/27/06	VOLTAGE: NONE HZ:

Data Sheet

Date: 6/3/2020
 Customer: _____
 Attention: _____
 Submitted by: _____

449TTFCD16553



Submittal

Data @ 460 V

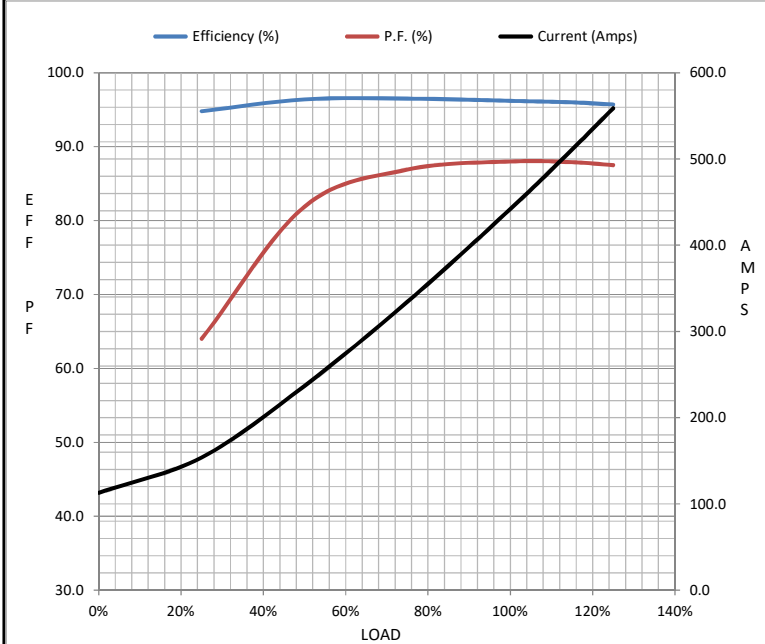
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	113	154	237	335	442	511	559	2,960	
Torque (ft-lb)	0.00	292	585	880	1,175	1,353	1,472	3,000	
RPM	1800	1797	1794	1791	1788	1,786	1784	0	
Efficiency (%)		94.8	96.4	96.5	96.2	96.0	95.7		
P.F. (%)	4.0	64.0	81.9	86.9	88.0	87.9	87.5	42.0	

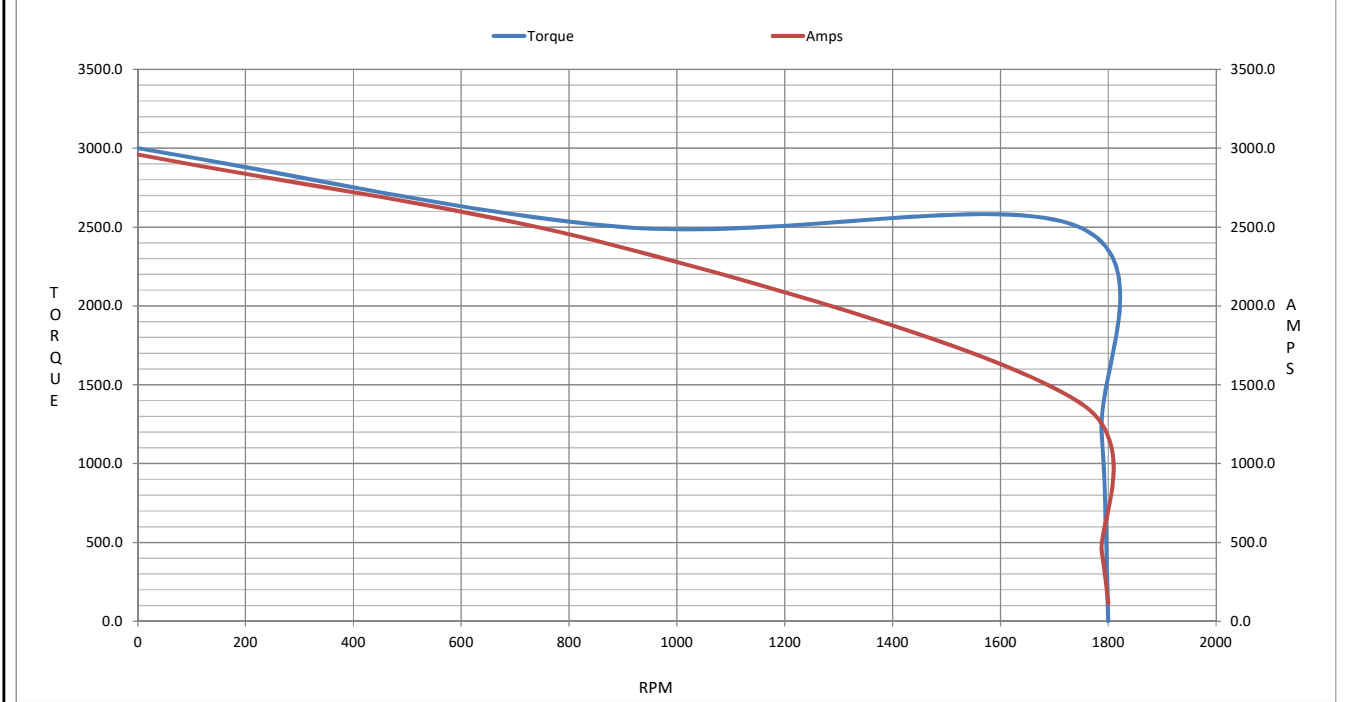
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1746	1788	1800
Current (Amps)	2,960	2,370	1,390	442	113
Torque (ft-lb)	3,000	2,500	2,500	1,175	0.00

Information Block				
HP	400.0			
Sync. RPM	1800			
Frame	160L			
Enclosure	TEFC			
Construction	TFC			
Voltage	460 V			
Frequency	60 Hz			
Design	N			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	85 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	3,300 feet			
Rotor/Shaft wk ²	131.5 Lb-Ft ²			
Ref Wdg	HA32804032 NONE			
Sound Pressure @ 1M	85 dBA			
VFD Rating	CONSTANT 2:1/VARIABLE 10:1			
Outline Dwg	037898-912			
Conn. Diag	EE7300BH			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0060	0.0040	0.0420	0.1130	2.3750



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 : 449TTFCD16553

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

Catalog No : E776A

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