

PRODUCT INFORMATION PACKET

Model No: 449THFCD8037

Catalog No: Y580A

Blue Max® Inverter Duty Encoder Motor, 300 HP, 3 Ph, 60 Hz, 460 V, 1800 RPM, 449T Frame, TEFC



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Nameplate Specifications

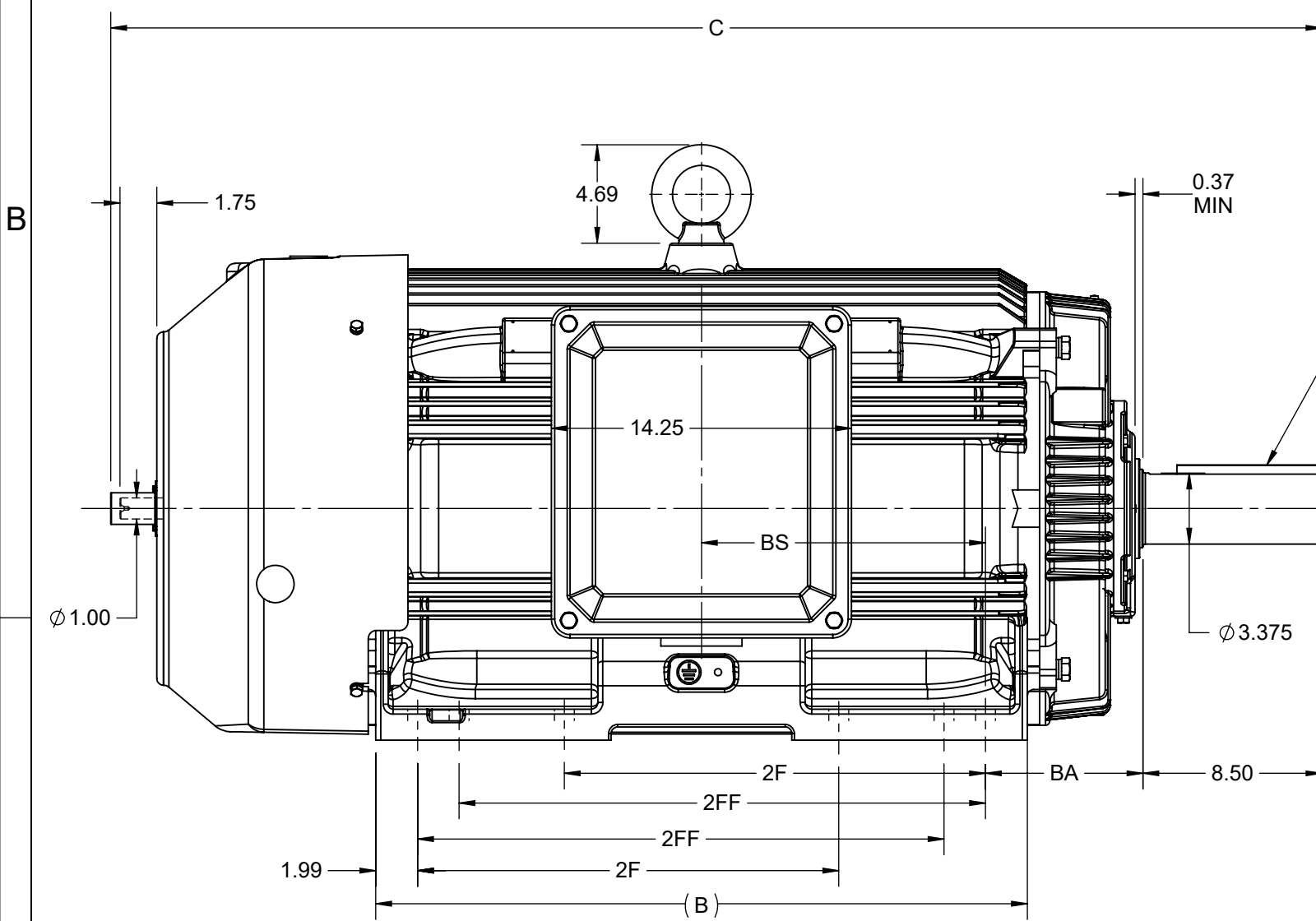
Output HP	300 Hp	Output KW	224.0 kW
Frequency	60 Hz	Voltage	460 V
Current	318.0 A	Speed	1785 rpm
Service Factor	1	Phase	3
Efficiency	95.8 %	Power Factor	91.5
Duty	Continuous	Insulation Class	H
Design Code	INV	KVA Code	K
Frame	449T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	Thermostat	Ambient Temperature	40 °C
Drive End Bearing Size	6319	Opp Drive End Bearing Size	6317
UL	Recognized	CSA	Y
CE	Y	IP Code	55
Number of Speeds	1		

Technical Specifications

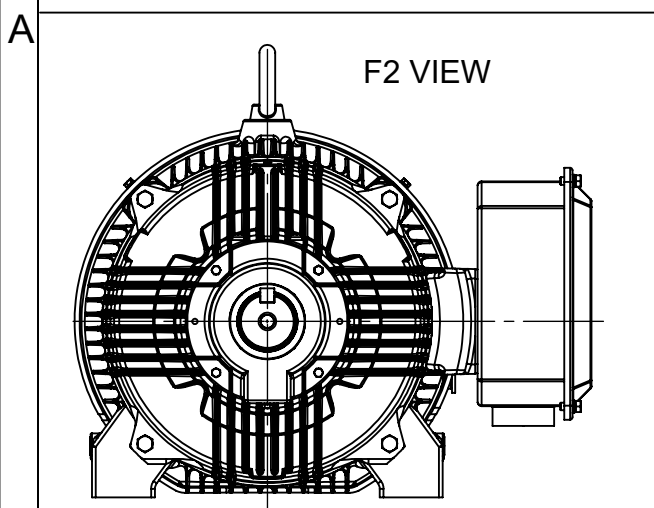
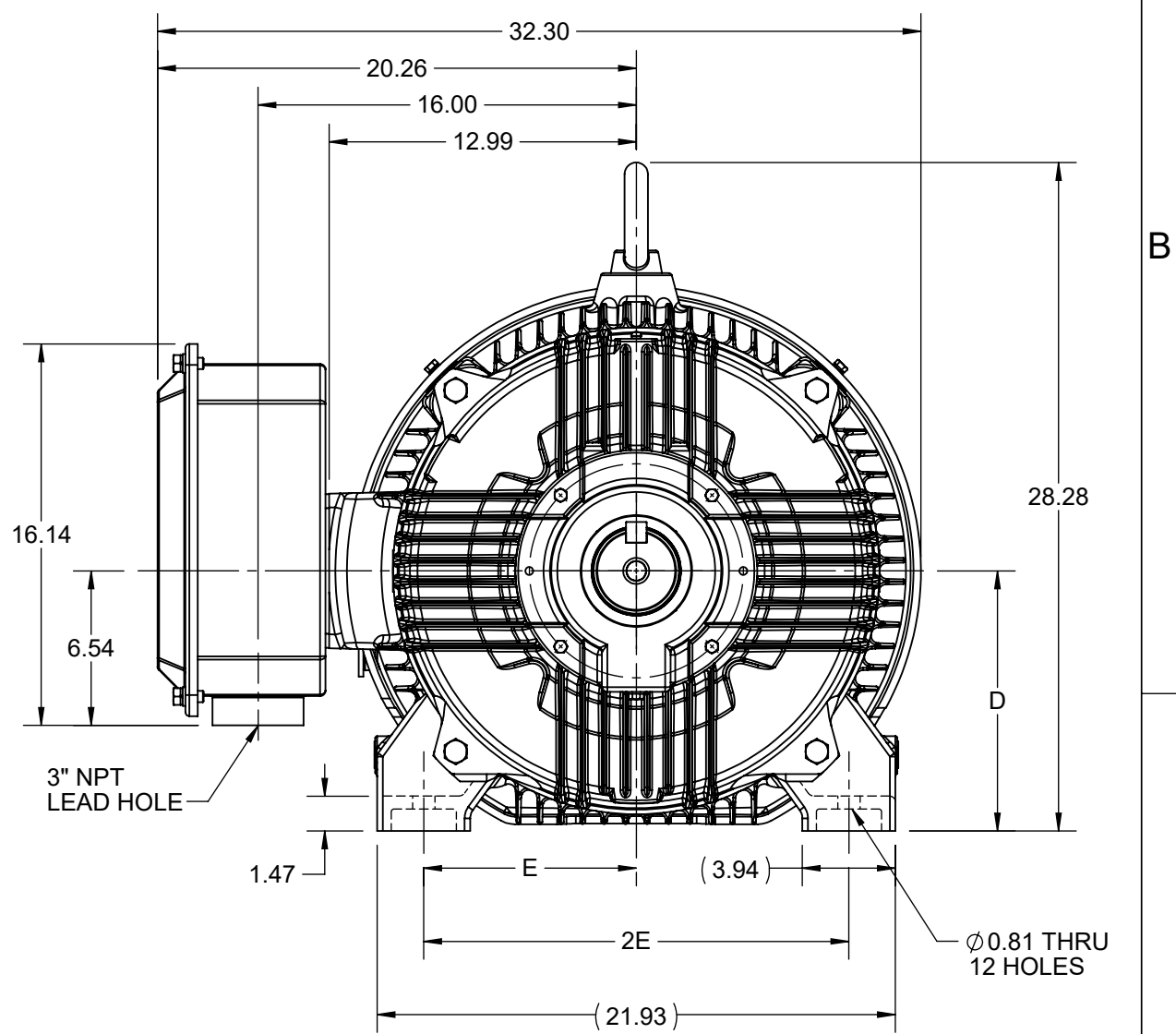
Electrical Type	Squirrel Cage Inverter Duty	Starting Method	Inverter Only
Poles	4	Rotation	Reversible
Resistance Main	.01307 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Shaft Diameter	3.375 in
Assembly/Box Mounting	F1/F2 CAPABLE	Inverter Load	CONSTANT 2000:1
Outline Drawing	SS621060	Connection Drawing	EE7300T

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		4			3						
B	C	D	E	2E	2F	2FF	BA	BS	MOUNTING		
30.94	57.52	11.00	9.00	18.00	20.00	25.00	7.50	13.48	F1 OR F2		



7/8 x 7/8 x 6.875 KEY



DRAWING REVISION B	REVISION BY GOPI J	REV DATE/© DATE 18/02/2022
REQUEST NUMBER CR-0007099	APPROVED BY SBD	DATE 18/02/2022
REQUEST NUMBER DESCRIPTION VIEWS UPDATED AS PER 3D		
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PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

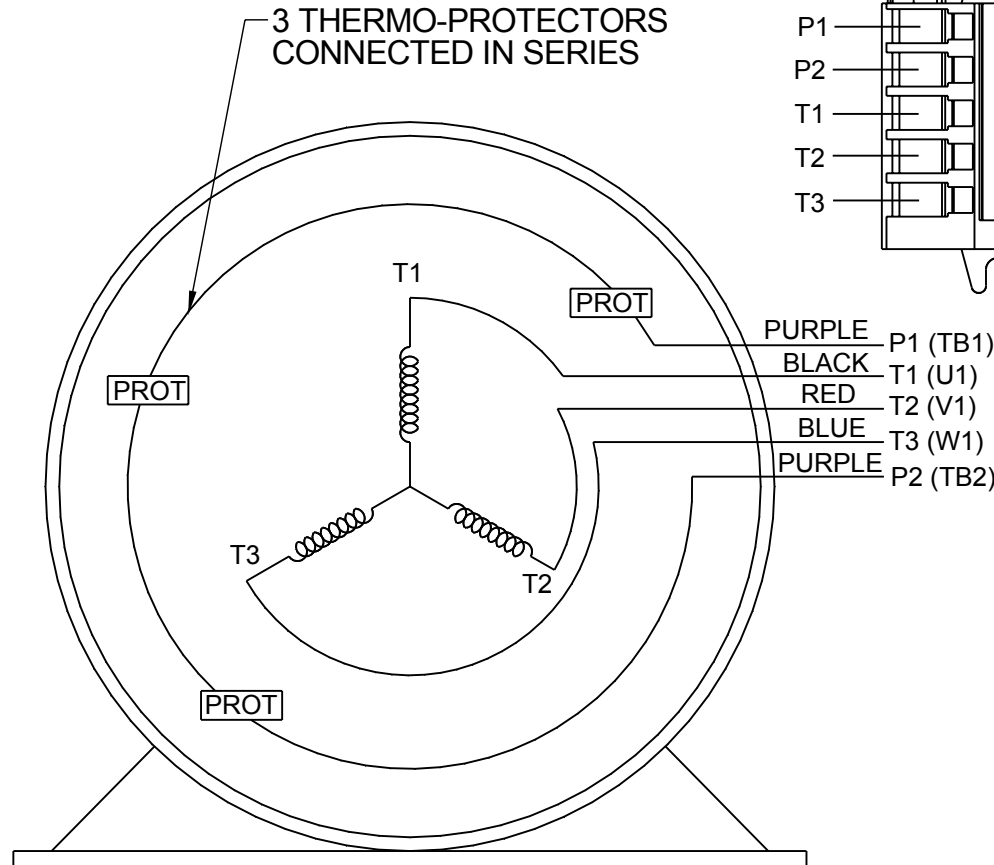
DRAWN BY VS	Regal Rexnord Regal Beloit America, Inc.	
DATE 08-09-2020	DESCRIPTION	
APPROVED BY MSH	OUTLINE	
DATE 08-09-2020	447/449T FR-NEMA-TEFC -CAST IRON - TACH. MTG.	
REFERENCE	MATERIAL	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B	DRAWING NUMBER SS621060
		SHEET 1 OF 1

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

**TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS**

**NOTE FOR FACTORY USE ONLY:
TO SURGE TEST:
FOR 3 LEAD COMMON CONNECT:
CONNECT P1 TO T1 THEN P2 TO L1
FOR 6 LEAD COMMON CONNECT:
CONNECT P1 TO BOTH T1
THEN P2 TO L1**

TERMINAL BLOCK WHEN SPECIFIED

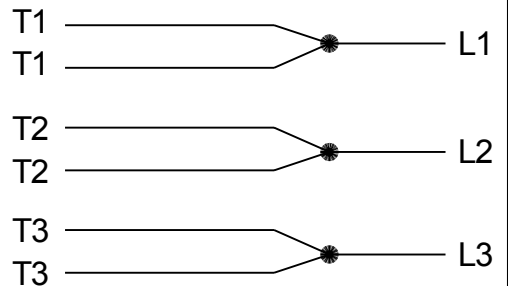


- PURPLE P1 (TB1)
- BLACK T1 (U1)
- RED T2 (V1)
- BLUE T3 (W1)
- PURPLE P2 (TB2)

- T2BM
- T6AW
- T6AL
- T6Z
- T4EG
- T4BF
- T8A
- T6H
- T6A
- T4AX
- T4A
- T2A
- T2F

VIEW OF TERMINAL END

**IF MOTOR HAS MULTIPLE
T'S PER LEAD CONNECT
TOGETHER LIKE T'S**



A-9806 DECAL

DRAWING REVISION AB	REVISION BY AJW	DATE 07-17-2015		DRAWN BY LZ	Regal Beloit America, Inc.
ECO ECO-0081632	APPROVED BY T.VUE	DATE 07-17-2015		DATE 01-04-1994	
ECO DESCRIPTION REV'D IEC MARKINGS PER IEC-60034-8				APPROVED BY GK	DESCRIPTION CONN DIAGRAM-EXTERNAL 3Ø-SINGLE VOLT-MOTOR WITH PROTECTOR
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			THIRD ANGLE PROJECTION	SIZE A	DRAWING NUMBER EE7300T



P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER:
ORDER #: _____
CONN. DIAGRAM: EE7300T
OUTLINE: SS621060
WINDING: HA32804044 NONE 1
SPEED: _____

CUSTOMER P.O. #: _____
REFERENCE MODEL #: 449THFCD8037
CAT #: Y580A
CUSTOMER PART #: _____
MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
300	224	1800	1785	447/449T	TEFC	TFN	K	INV

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	460	318	INVERTER ONLY	CONT	H	1.15	40	3300

F.L. EFF	95.8	3/4 LD EFF	96.2	1/2 LD EFF	96.0	GTD EFF	ELECT. TYPE
F.L. PF	91.5	3/4 LD PF	90.0	1/2 LD PF	84.5	95.4	SQ CAGE INV DUTY

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
881 LB-FT	3.021	2,164 LB-FT	246%	2,878 LB-FT 327%

SOUND PRESSURE @ 3 FT.	SOUND	POWER	ROTOR WK ²	MAX. LOAD WK ²	SAFE STALL TIME	STARTS/HOUR	APROX.	MOTOR WGT
75 dBA	84 dBA		28.861 LB-FT ²	220 LB-FT ²	28 SEC.	2	2800	LB.

***** SUPPLEMENTAL INFORMATION *****

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	ENCODER	RIGID	HORIZONTAL	NO	NONE	YES	NONE	BLUE (ENAMEL)

DE	ODE	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6319	6317						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
TSTATS (NIC)	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
0.008	0.005	0.058	0.08	3.2	0.150	ODE

NOTES	INVERTER TORQUE: CONSTANT 2000:1 INV. HP SPEED RANGE: 1.5 X BASE SPEED					
	ENCODER: NONE					
	NONE					
	NONE PPR					

PREPARED BY: _____	BRAKE: NONE
DATE: 9/27/2021	NONE NONE
	FT-LB: NA
	VOLTAGE: NONE
	HZ: _____
FORM: 3531 REV. 4 2/27/06	UL: V-INS, CONST, OVERHEAT PRT DEV UL REC

Data Sheet

Date: 9/27/2021
 Customer: _____
 Attention: _____
 Submitted by: _____



449THFCD8037

Submittal

Data @ 460 V

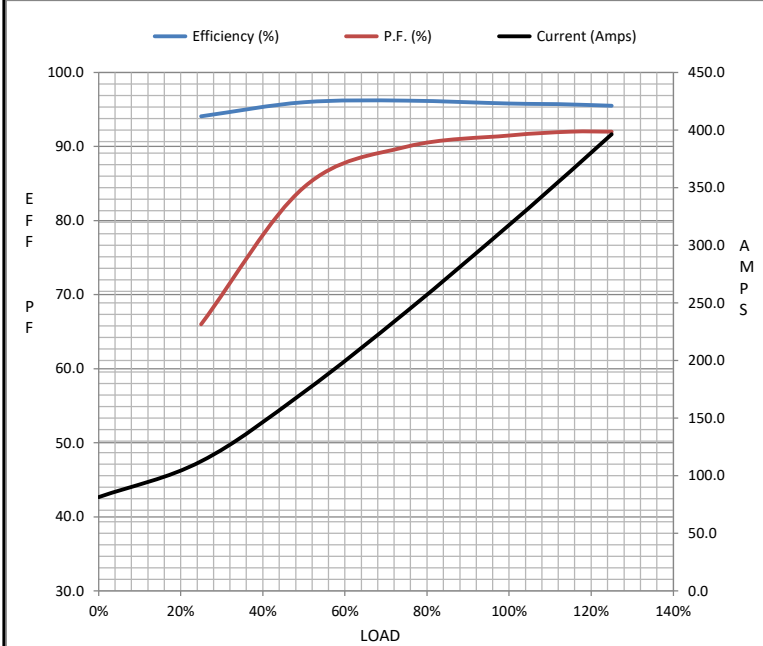
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	81.5	113	173	243	318	365	397	3,021
Torque (ft-lb)	0.00	219	439	659	881	1,013	1,103	2,164
RPM	1800	1795	1795	1792	1785	1,785	1785	0
Efficiency (%)		94.1	96.0	96.2	95.8	95.7	95.5	
P.F. (%)	4.5	66.0	84.5	90.0	91.5	92.0	92.0	33.5

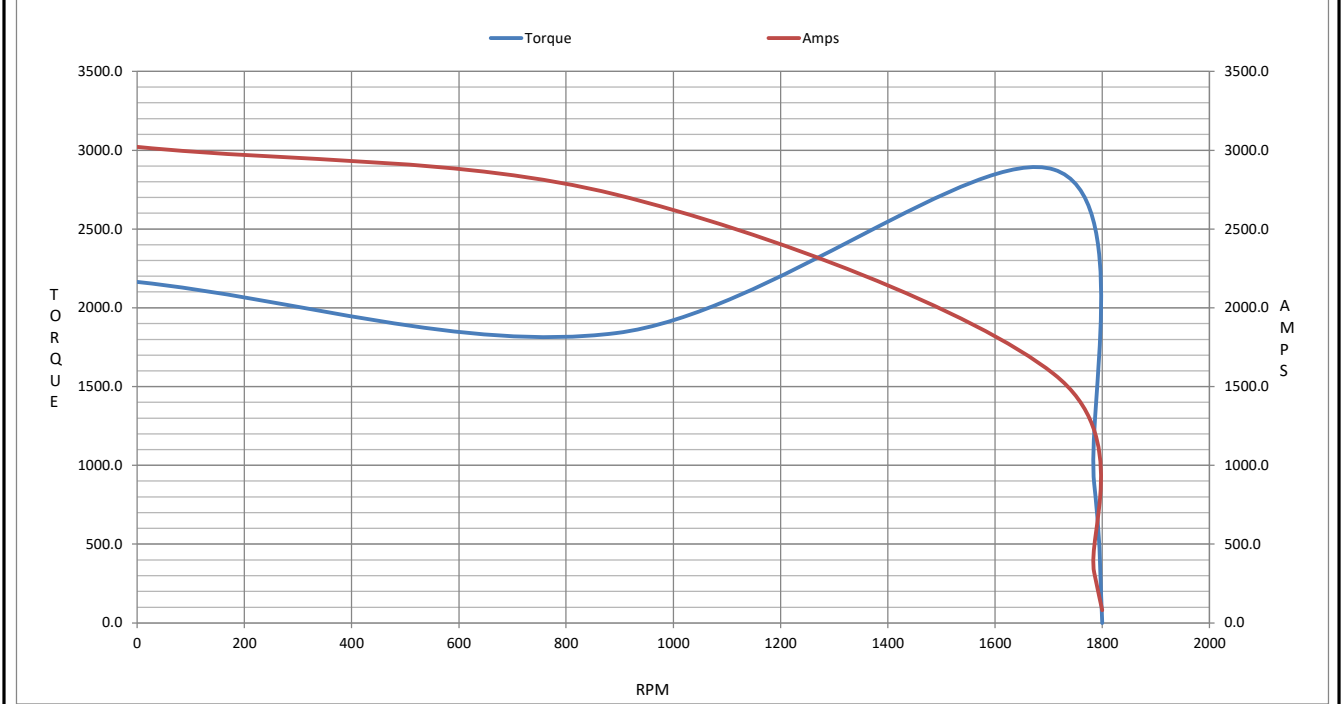
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	893	1710	1785	1800
Current (Amps)	3,021	2,719	1,580	318	81.5
Torque (ft-lb)	2,164	1,839	2,878	881	0.00

Information Block				
HP	300.0			
Sync. RPM	1800			
Frame	449			
Enclosure	TEFC			
Construction	TFN			
Voltage	460 V			
Frequency	60 Hz			
Design	INV			
LR Code letter	K			
Service Factor	1.15			
Temp Rise @ FL	65 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	3,300 feet			
Rotor/Shaft wk ²	28.861 Lb-F ²			
Ref Wdg	HA32804044 NONE			
Sound Pressure @ 1M	75 dBA			
VFD Rating	CONSTANT 2000:1			
Outline Dwg	SS621060			
Conn. Diag	EE7300T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0080	0.0050	0.0580	0.0800	3.2000



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 : 449THFCD8037

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

Catalog No : Y580A

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