

PRODUCT INFORMATION PACKET

Model No: 449THFCD8046

Catalog No: Y531A

Blue Max® Inverter Duty Encoder Motor, 250 HP, 3 Ph, 60 Hz, 460 V, 1800 RPM, 449T Frame, TEBC-AXIAL



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Nameplate Specifications

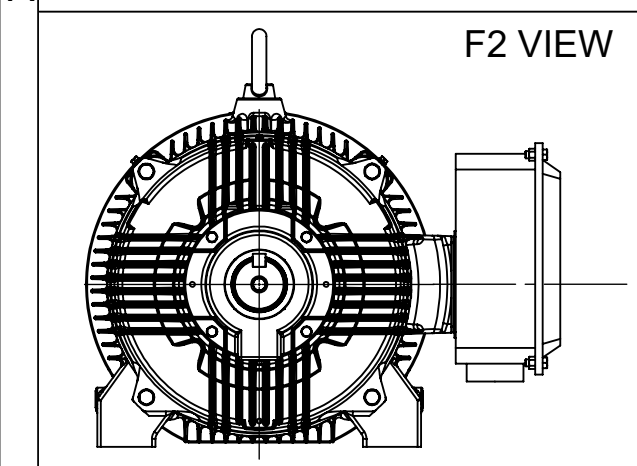
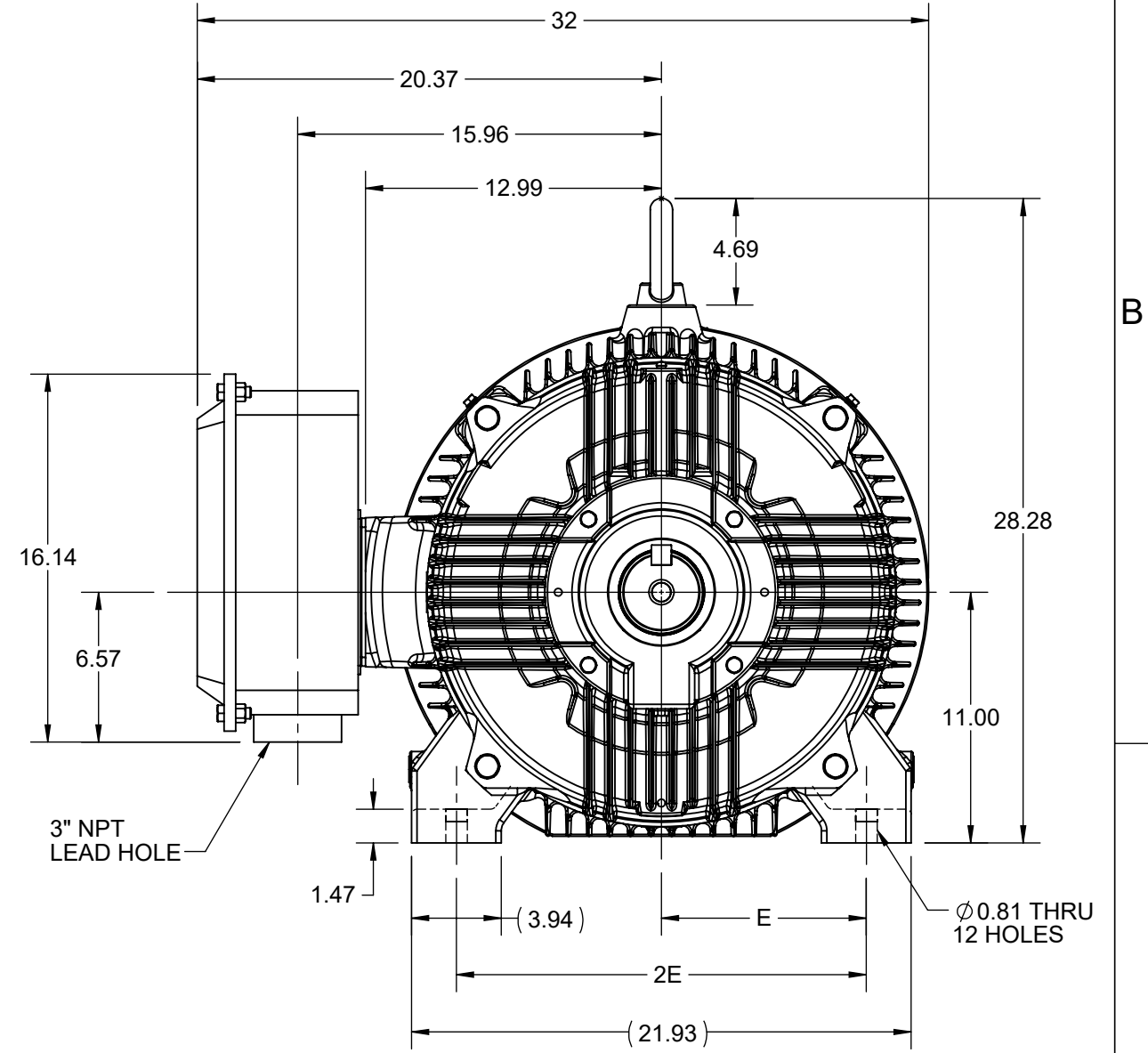
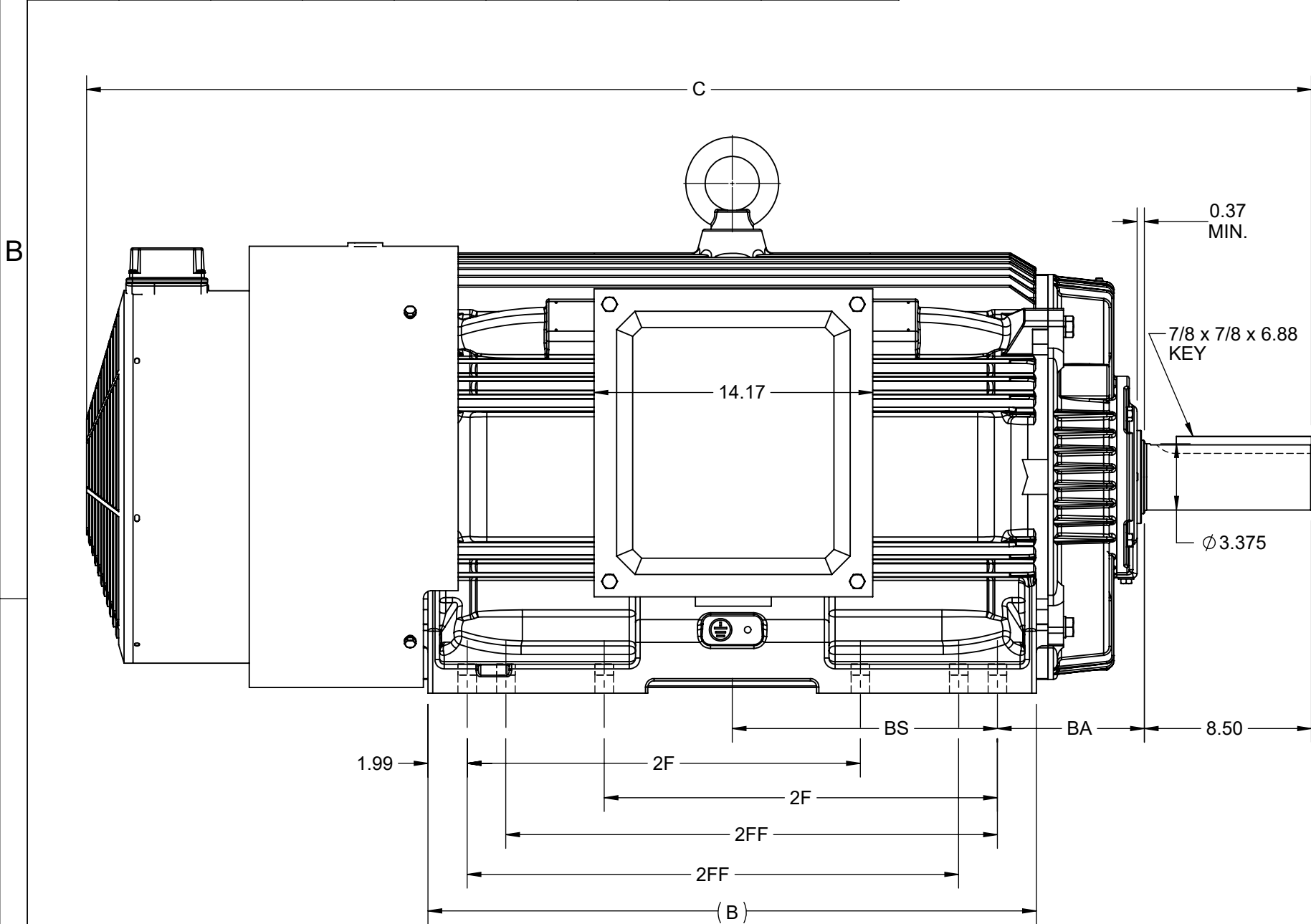
Output HP	250 Hp	Output KW	187.0 kW
Frequency	60 Hz	Voltage	460 V
Current	265.0 A	Speed	1785 rpm
Service Factor	1	Phase	3
Efficiency	95.8 %	Power Factor	92
Duty	Continuous	Insulation Class	H
Design Code	INV	KVA Code	H
Frame	449T	Enclosure	Totally Enclosed Blower cooled - Axial
Thermal Protection	Thermostat	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	.0174 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	SS621122	Connection Drawing	EE7300T

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4						3		
B	C	E	2E	2F	2FF	BA	BS	MOUNTING
30.94	62.30	9.00	18.00	20.00	25.00	7.50	13.48	F1 OR F2



DRAWING REVISION A	REVISION BY VR	REV DATE/© DATE 03-08-2021
ECO CR-0003840	APPROVED BY SBD	DATE 03-08-2021
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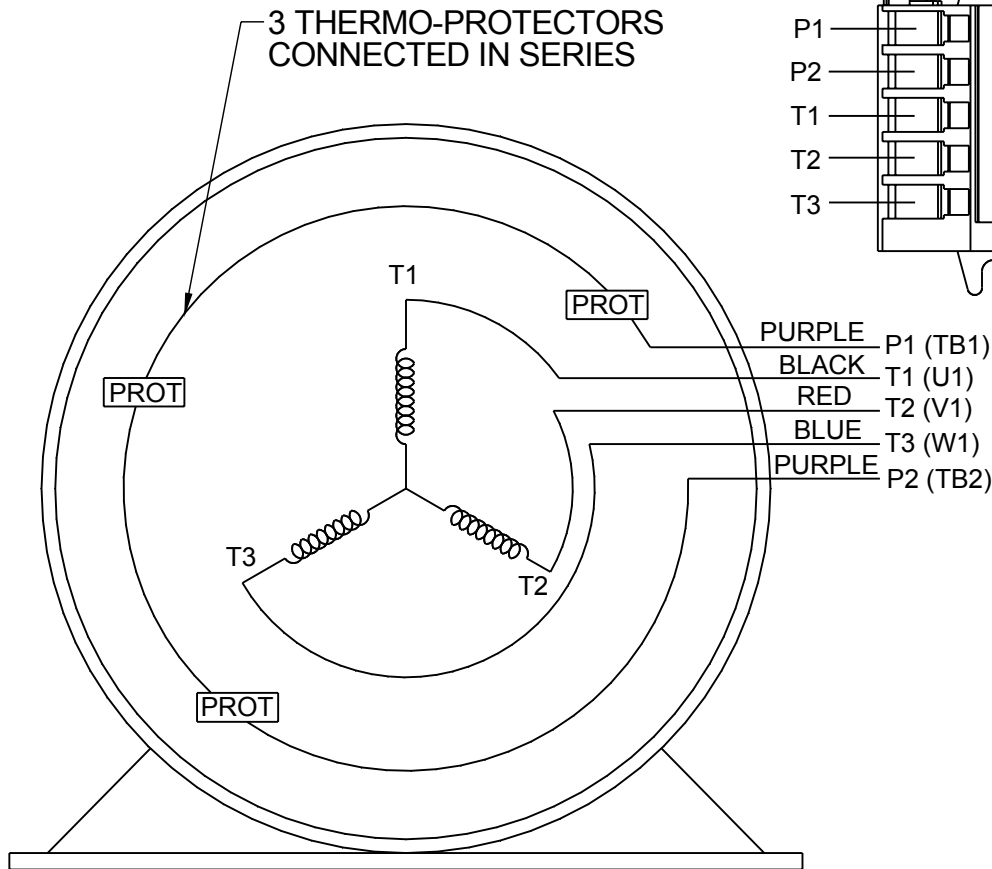
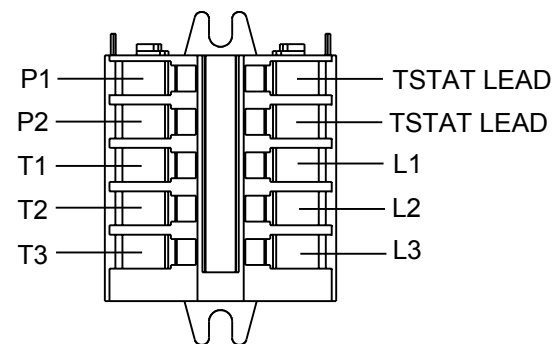
DRAWN BY VR	REGAL ® Regal Beloit America, Inc.
DATE 04-03-2021	
APPROVED BY SBD	DESCRIPTION OUTLINE 447/449T FR NEMA H/O-TEBC-AXIAL BLOWER
DATE 04-03-2021	MATERIAL
REFERENCE	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B
	DRAWING NUMBER SS621122
	SHEET 1 OF 1

**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**

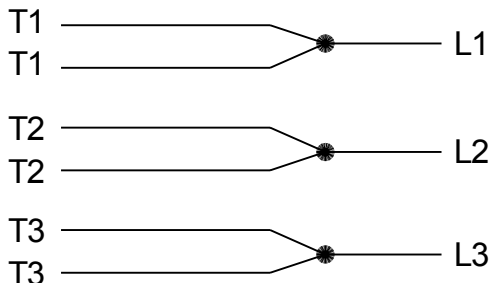
TERMINAL BLOCK WHEN SPECIFIED



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

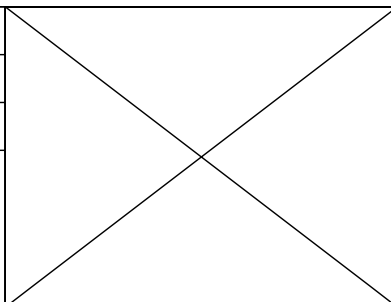
T2BM
T6AW
T6AL
T6Z
T4EG
T4BF
T8A
T6H
T6A
T4AX
T4A
T2A
T2F

**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
ECO ECO-0081632	APPROVED BY T.VUE	DATE 07-17-2015
ECO DESCRIPTION REV'D IEC MARKINGS PER IEC-60034-8		
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DRAWN BY LZ	Regal Beloit America, Inc.	
DATE 01-04-1994		
APPROVED BY GK	DESCRIPTION CONN DIAGRAM-EXTERNAL 3Ø-SINGLE VOLT-MOTOR WITH PROTECTOR	
DATE 01-20-1994	MATERIAL	
REFERENCE	PROCESS/FINISH	
THIRD ANGLE PROJECTION	SIZE A	DRAWING NUMBER EE7300T
		SHEET 1 OF 1



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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER:
 ORDER #:
 CONN. DIAGRAM: EE7300T
 OUTLINE: SS621122
 WINDING: HA32804043 NONE 2
 SPEED:

CUSTOMER P.O. #: _____
 REFERENCE MODEL #: 449THFCD8046
 CAT #: Y531A
 CUSTOMER PART #: _____
 MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
250	187	1800	1785	447/449T	TEBC-AXIAL	TFN	H	INV

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	460	265	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	92.0	3/4 LD PF	90.5	1/2 LD PF	86.0	95.4	SQ CAGE INV DUTY

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
735 LB-FT	2,195	1,492 LB-FT	203%	2,498 LB-FT 340%

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		101.39 LB-FT ²	285 LB-FT ²	32 SEC.	2	2523 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	NO	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
0.012	0.007	0.079	0.104	4.23	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: 11/17/2021	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: 11/17/2021
 Customer: _____
 Attention: _____
 Submitted by: _____



449THFCD8046

Submittal

Data @ **460** V

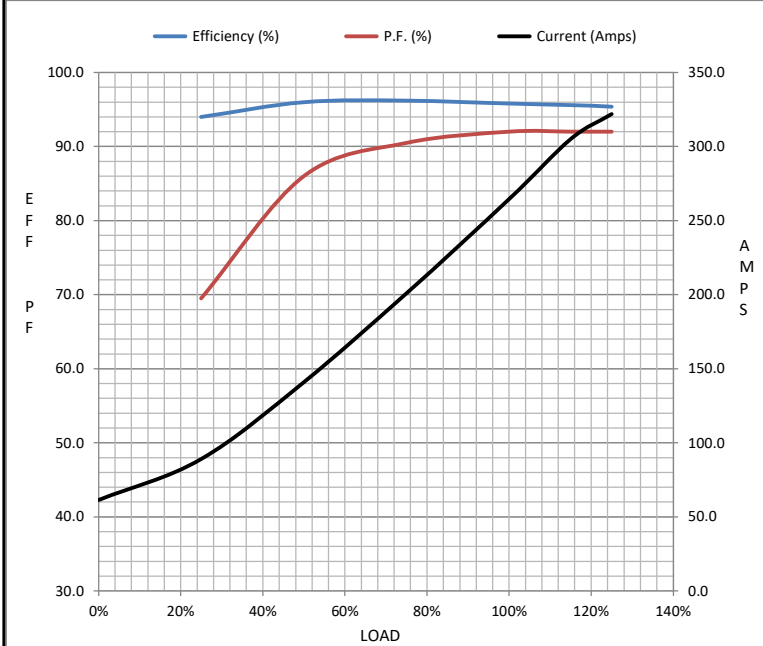
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	61.5	89.0	141	201	265	305	322	2,195
Torque (ft-lb)	0.00	183	366	550	735	845	920	1,492
RPM	1800	1795	1792	1790	1785	1,785	1782	0
Efficiency (%)		94.0	96.0	96.2	95.8	95.6	95.4	
P.F. (%)	5.0	69.5	86.0	90.5	92.0	92.0	92.0	33.0

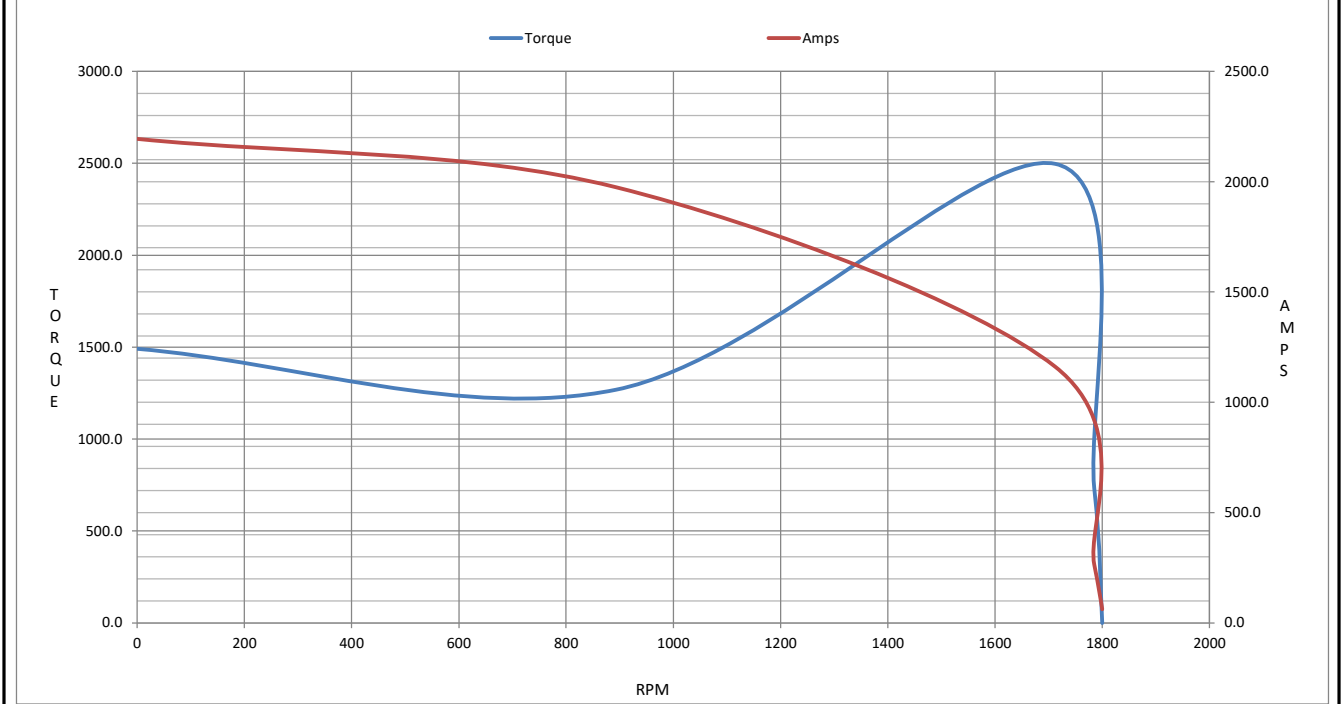
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	893	1712	1785	1800
Current (Amps)	2,195	1,976	1,161	265	61.5
Torque (ft-lb)	1,492	1,268	2,498	735	0.00

Information Block				
HP	250.0			
Sync. RPM	1800			
Frame	449			
Enclosure	TEBC-AXIAL			
Construction	TFN			
Voltage	460 V			
Frequency	60 Hz			
Design	INV			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	62 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	3,300 feet			
Rotor/Shaft wk ²	101.39 Lb-F ²			
Ref Wdg	HA32804043 NONE			
Sound Pressure @ 1M	75 dBA			
VFD Rating	CONSTANT 2000:1			
Outline Dwg	SS621122			
Conn. Diag	EE7300T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0120	0.0070	0.0790	0.1040	4.2300



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 : 449THFCD8046

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

Catalog No : Y531A

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