

PRODUCT INFORMATION PACKET

Model No: 449THFS8046

Catalog No: Y531

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



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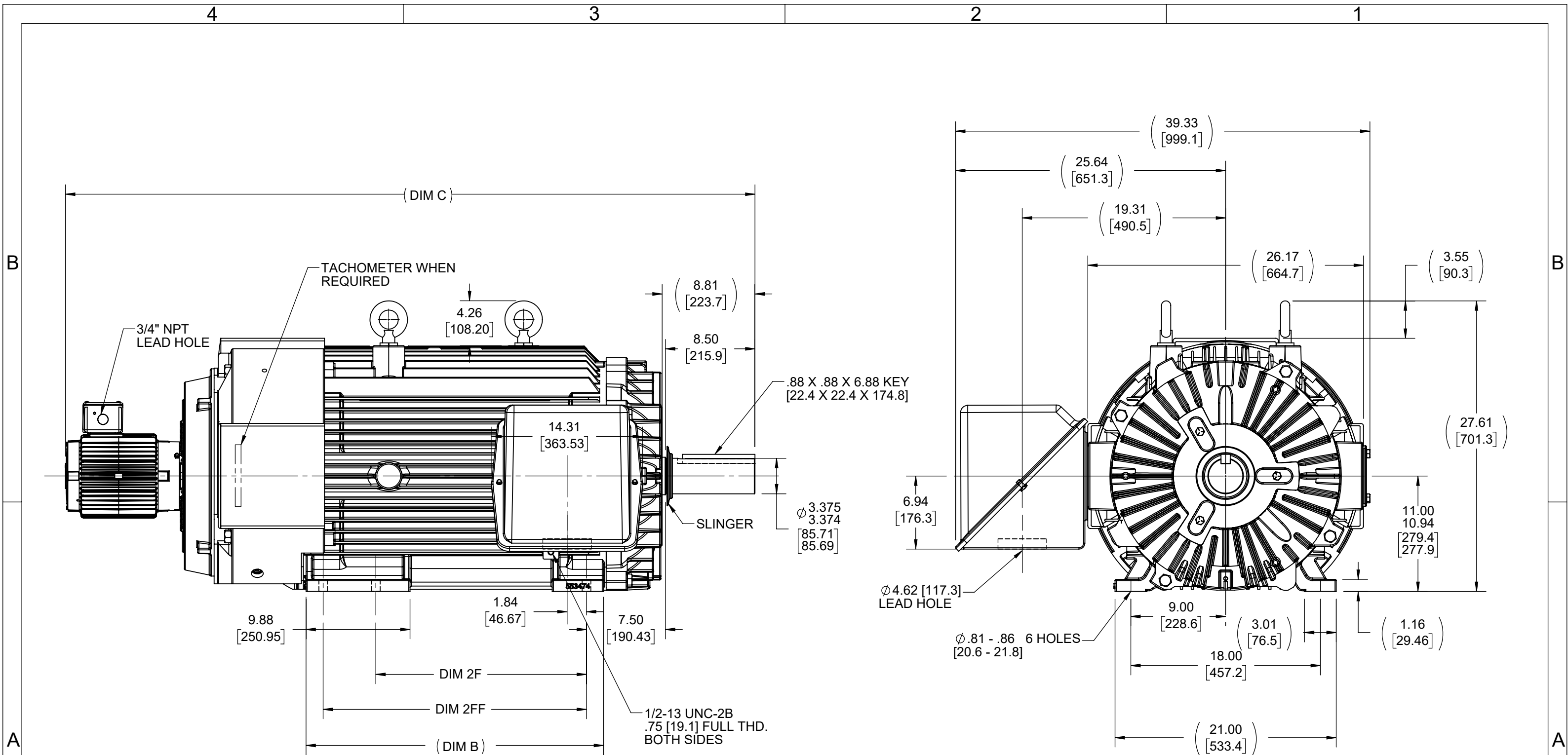
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Nameplate Specifications

Phase	3	Output HP	250 Hp
Output KW	187.0 kW	Voltage	460 V
Speed	1790 rpm	Service Factor	1
Frame	449T	Enclosure	Totally Enclosed Blower cooled - Axial
Thermal Protection	Thermostat	Efficiency	95 %
Ambient Temperature	40 °C	Frequency	60 Hz
Current	295.0 A	Power Factor	84
Duty	Continuous	Insulation Class	H
Design Code	INV	KVA Code	H
Drive End Bearing Size	6319	Opp Drive End Bearing Size	6318
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Duty	Starting Method	Inverter Only
Poles	4	Rotation	Reversible
Resistance Main	.01 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	64.34 in
Frame Length	28.75 in	Shaft Diameter	3.375 in
Shaft Extension	8.75 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 2000:1		
Outline Drawing	B-SS555990-2875	Connection Drawing	A-EE7300T



NOTES:

1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
2. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	DIM C	DIM B	DIM 2F	DIM 2FF
2875	447T	65.46 [1662.7]	28.25 [717.6]	20.00 [508.0]	NA
2875	449T	65.46 [1662.7]	28.25 [717.6]	NA	25.00 [635.0]

DRAWING REVISION B	REVISION BY SAS	DATE 03/18/2021
ECO NMR-0207642	APPROVED BY RG	DATE 03/18/2021
ECO DESCRIPTION UPDATED DRAWING PER BOM		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7° 30"
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	

REMOVE BURRS & BREAK SHARP
 EDGES: .003/.015 [0.076/.381]
 CORNER FILLETS: .02 [0.51]
 MACHINED SURFACES: 200 INCH 5.1/mm
 mm SHOWN IN [BRACKETS]

DRAWN BY W. JOERGER
DATE 12-18-2013
APPROVED BY E. HEIL
DATE 12-19-2013
PROCESS/FINISH
THIRD ANGLE PROJECTION

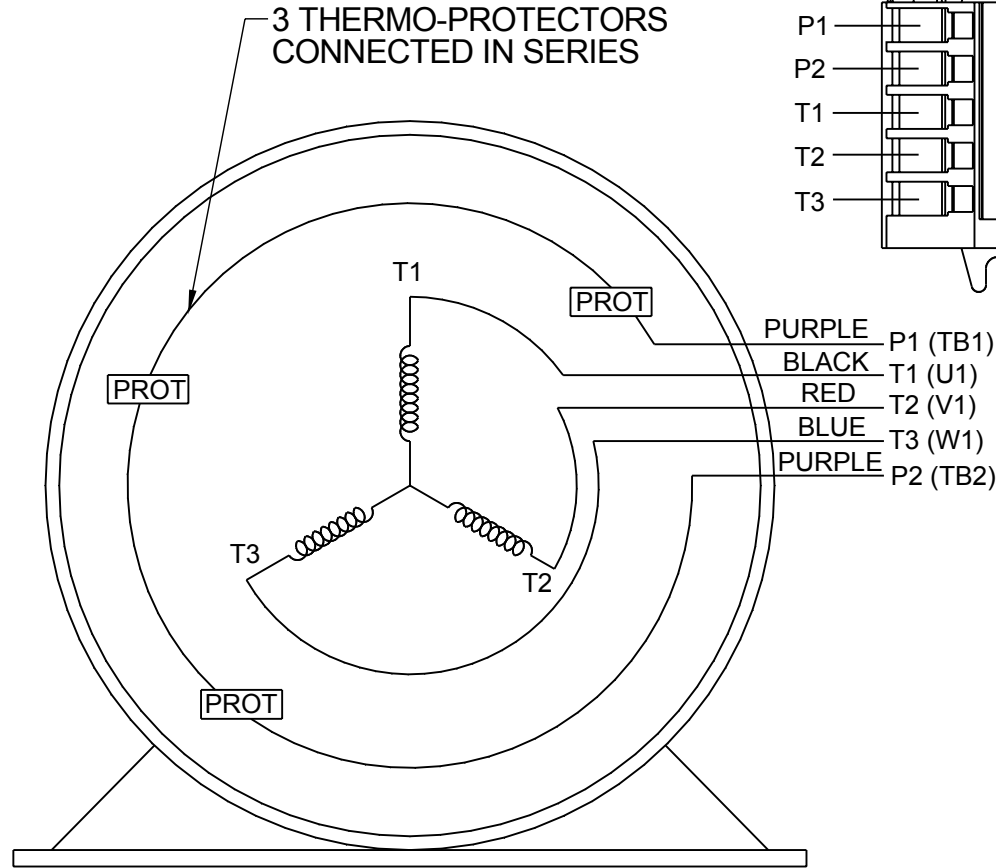
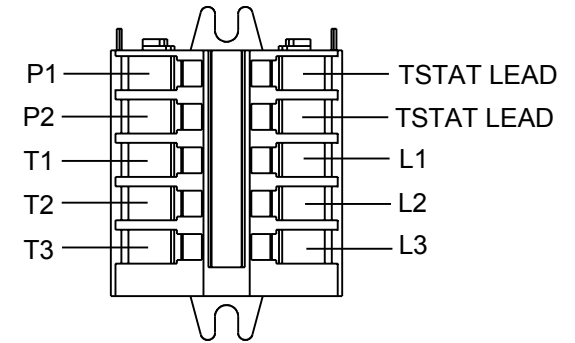
REGAL ™ Regal Beloit America, Inc.	
DESCRIPTION OUTLINE TEBC - 447/9T FR - STD	
MATERIAL	
SIZE B	DRAWING NUMBER SS555990
	SHEET 1 OF 1

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

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

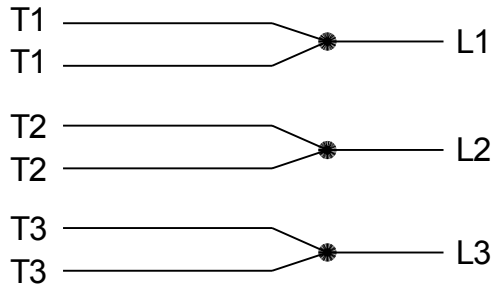
**NOTE FOR FACTORY USE ONLY:
TO SURGE TEST:
FOR 3 LEAD COMMON CONNECT:
CONNECT P1 TO T1 THEN P2 TO L1
FOR 6 LEAD COMMON CONNECT:
CONNECT P1 TO BOTH T1
THEN P2 TO L1**

TERMINAL BLOCK WHEN SPECIFIED



VIEW OF TERMINAL END

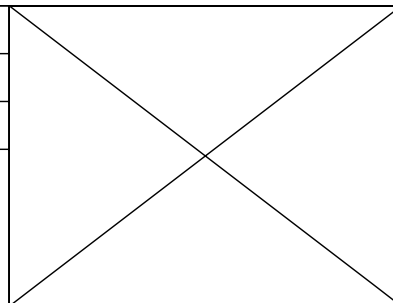
**IF MOTOR HAS MULTIPLE
T'S PER LEAD CONNECT
TOGETHER LIKE T'S**



A-9806 DECAL

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

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
DATE 01-04-1994
APPROVED BY GK
DATE 01-20-1994
REFERENCE
THIRD ANGLE PROJECTION

Regal Beloit America, Inc.	
DESCRIPTION CONN DIAGRAM-EXTERNAL 3Ø-SINGLE VOLT-MOTOR WITH PROTECTOR	
MATERIAL	PROCESS/FINISH
SIZE A	DRAWING NUMBER EE7300T
SHEET 1 OF 1	

CERTIFICATION DATA SHEET

Model#: 449THFS8046 BF **WINDING#:** T449438 R3 1
CONN. DIAGRAM: A-EE7300T **ASSEMBLY:** F1/F2 CAPABLE
OUTLINE: B-SS555990-2875

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN		
250	187	1800	1790	447/449T	TEBC-AXIAL	H	INV		
PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	295	INVERTER ONLY	CONTINUOUS	H1	1.0	40	3300
FULL LOAD EFF: 95		3/4 LOAD EFF: 94.5	1/2 LOAD EFF: 93	GTD. EFF		ELEC. TYPE		NO LOAD AMPS	
FULL LOAD PF: 84		3/4 LOAD PF: 81	1/2 LOAD PF: 73	94.1		SQ CAGE INV DUTY		103	
F.L. TORQUE		LOCKED ROTOR AMPS		L.R. TORQUE		B.D. TORQUE		F.L. RISE°C	
734 LB-FT		2075		1475 LB-FT 201		2065 LB-FT 281		65	
SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT			
88 dBA	98 dBA	83 LB-FT^2	- LB-FT^2	- SEC.	-	2850 LBS.			

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
0.008208	0.00627	0.082992	0.107844	2.565
RM	ZREF	XR	TD	TD0
124.26	1.14	9.9	0.042	1.06

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	ENCODER	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL	BALL						
6319	6318						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs	NONE	FALSE	NONE VOLTS
TSTATS (N/C)	NOT	NONE	NONE			

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 2000:1 INV. HP SPEED RANGE: 1.5 X BASE SPEED
ENCODER: PROVISIONS ONLY NONE NONE NONE NONE PPR
BRAKE: NONE NONE NONE P/N NONE

*
N
O
T
E
S
*

NONE	NONE		
NONE FT-LB	NONE V	NONE Hz	

DATE: 06/21/2017 06:39:08 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 6/29/2017

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



449THFS8046

Submittal

Data @ 460 V

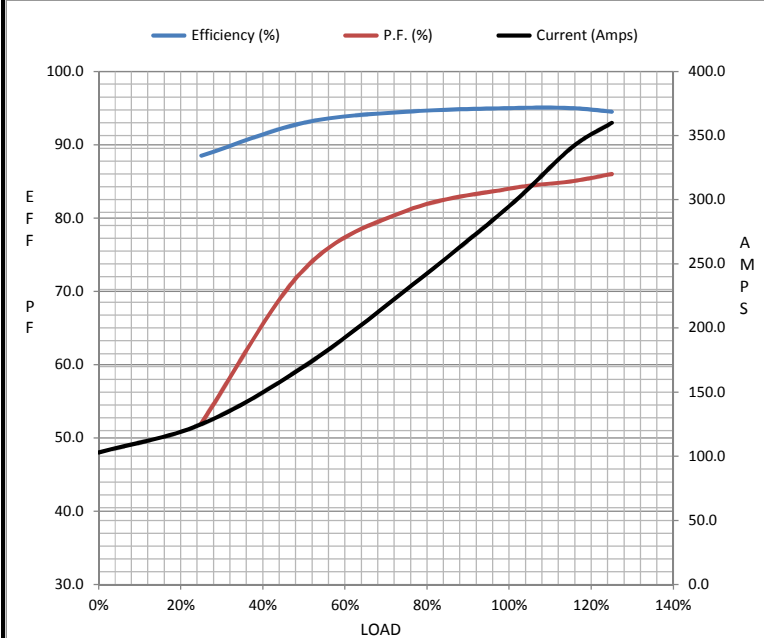
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	103	125	170	230	295	340	360	2,075
Torque (ft-lb)	0.00	183	366	550	734	845	920	1,475
RPM	1800	1796	1794	1792	1790	1,788	1785	0
Efficiency (%)		88.5	93.0	94.5	95.0	95.0	94.5	
P.F. (%)	8.0	52.0	73.0	81.0	84.0	85.0	86.0	28.0

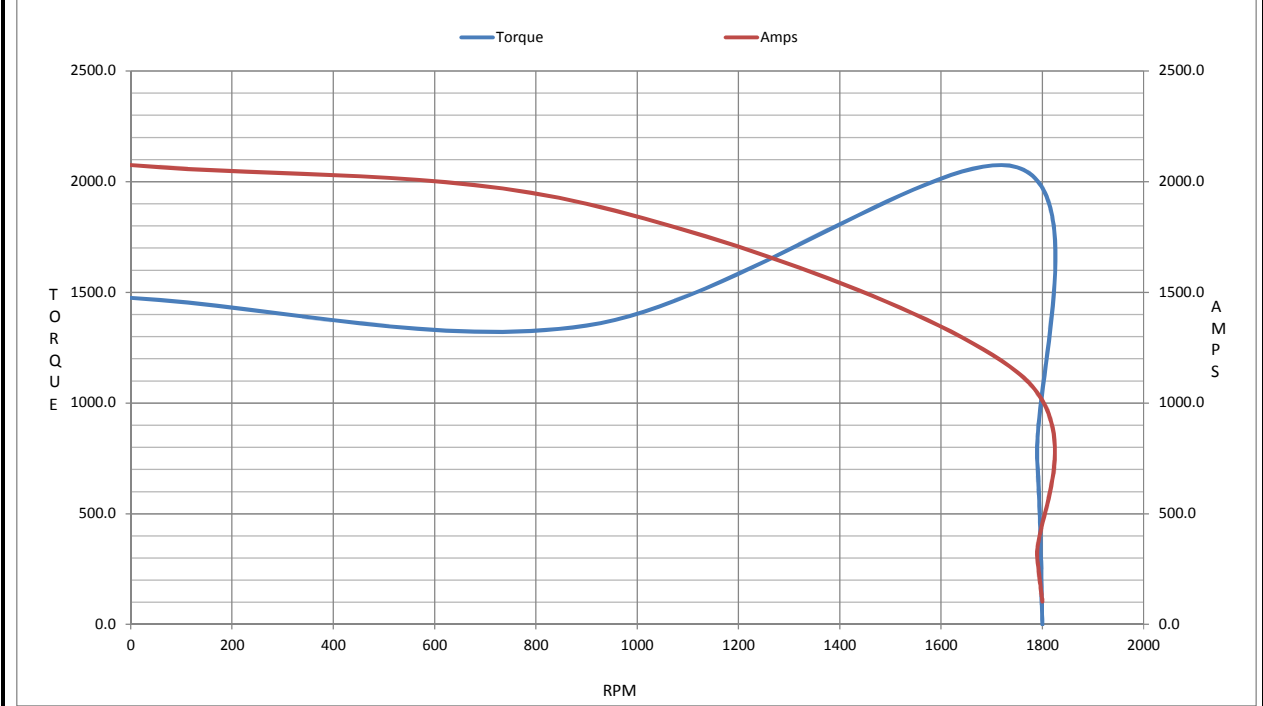
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1750	1790	1800
Current (Amps)	2,075	1,900	1,140	295	103
Torque (ft-lb)	1,475	1,350	2,065	734	0.00

Information Block				
HP	250.0			
Sync. RPM	1800			
Frame	449			
Enclosure	TEBC			
Construction	TBN			
Voltage	460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	65 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	83.0 Lb-Ft ²			
Ref Wdg	T449438 R3			
Sound Pressure @ 1M	88 dBA			
VFD Rating	CONSTANT 2000:1			
Outline Dwg	B-SS555990-2875			
Conn. Diag	A-EE7300T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0080	0.0060	0.0830	0.1080	2.5650



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 : 449THFS8046

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

Catalog No : Y531

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