

PRODUCT INFORMATION PACKET

Model No: 449THFS8047

Catalog No: Y532

Blue Max® Inverter Duty Encoder Motor, 300 HP, 3 Ph, 60 Hz, 460 V, 1800 RPM, 447/449T Frame,
TEBC-AXIAL



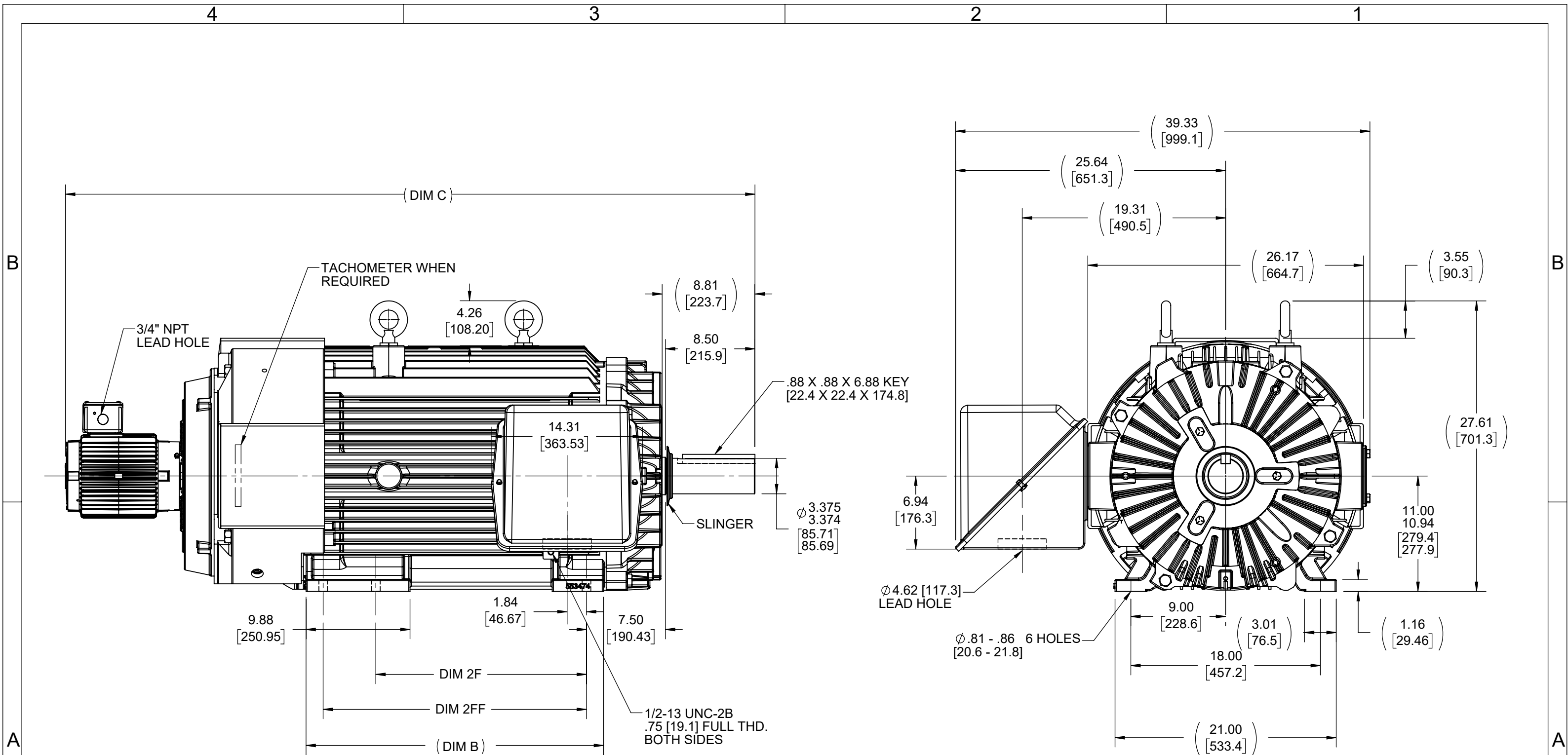
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Nameplate Specifications

Output HP	300 Hp	Output KW	224.0 kW
Frequency	60 Hz	Voltage	460 V
Current	327.0 A	Speed	1785 rpm
Service Factor	1	Phase	3
Efficiency	95.4 %	Power Factor	90
Duty	Continuous	Insulation Class	H
Design Code	INV	KVA Code	H
Frame	447/449T	Enclosure	Totally Enclosed Blower cooled - Axial
Thermal Protection	Thermostat	Ambient Temperature	40 °C
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	.011 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
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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

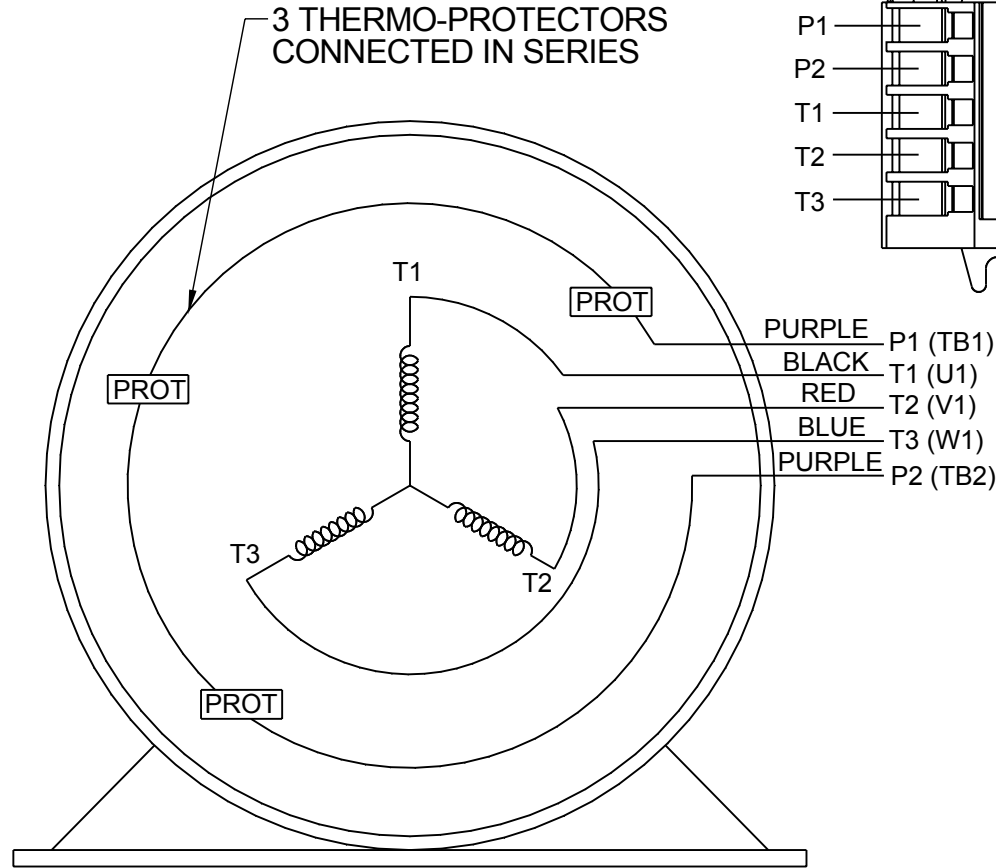
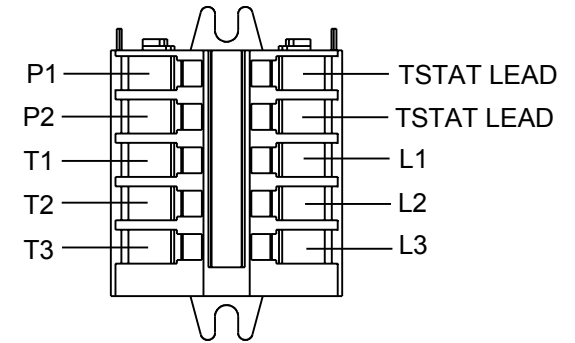
REGAL ™ Regal Beloit America, Inc.	
DESCRIPTION OUTLINE TEBC - 447/9T FR - STD	
MATERIAL	
SIZE B	DRAWING NUMBER SS555990
SHEET 1 OF 1	

**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**

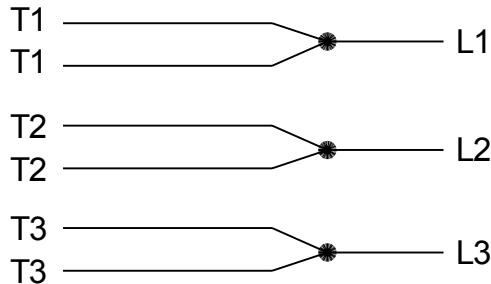
TERMINAL BLOCK WHEN SPECIFIED



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

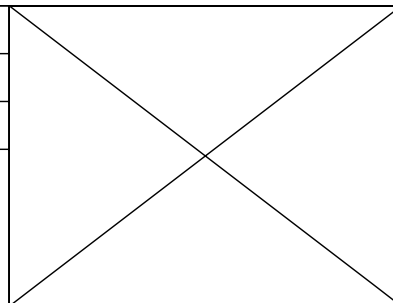
T2BM
T6AW
T6AL
T6Z
T4EG
T4BF
T8A
T6H
T6A
T4AX
T4A
T2A
T2F

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

REGAL ™ 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#: 449THFS8047 DF WINDING#: T449470 NONE 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		
300	224	1800	1785	447/449T	TEBC-AXIAL	H	INV		
PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	327	INVERTER ONLY	CONTINUOUS	H1	1.0	40	3300
FULL LOAD EFF: 95.4	3/4 LOAD EFF: 95.4	1/2 LOAD EFF: 95	GTD. EFF	ELEC. TYPE	NO LOAD AMPS				
FULL LOAD PF: 90	3/4 LOAD PF: 88	1/2 LOAD PF: 82	94.5	SQ CAGE INV DUTY	85				
F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C					
883 LB-FT	2350	1225 LB-FT 139	2475 LB-FT 280	80					
SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT			
88 dBA	98 dBA	87 LB-FT^2	- LB-FT^2	- SEC.	-	2950 LBS.			

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
0.0089018	0.0070078	0.0915749	0.0752865	3.08722
RM	ZREF	XR	TD	TD0
250.008	0.947	9.2	0.04	1.195

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAIN
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
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T
E
S
*

NONE	NONE		
NONE FT-LB	NONE V	NONE Hz	

DATE: 06/21/2017 06:39:51 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 15-06-2017
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



449THFS8047

Submittal

Data @ 460 V

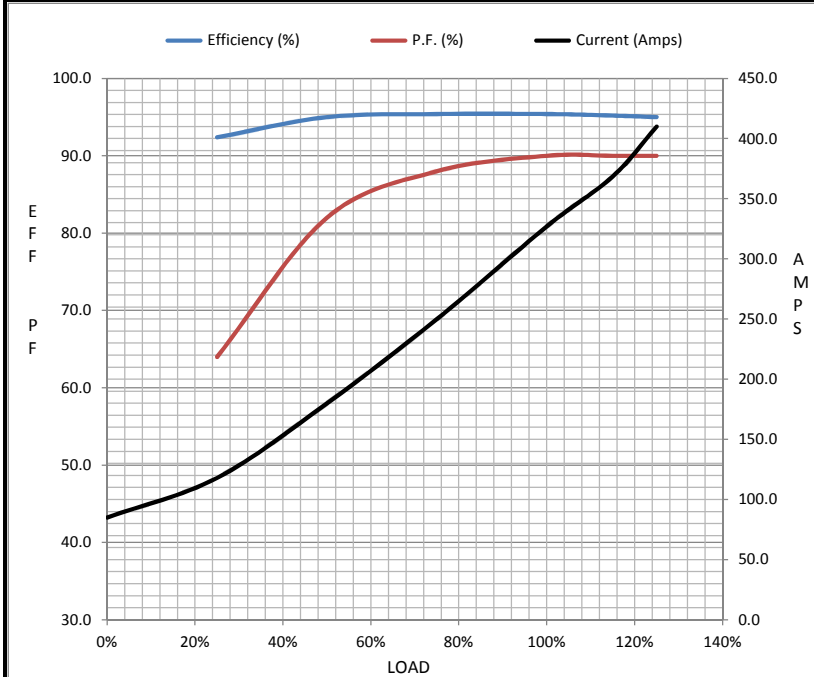
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	85.0	118	180	250	327	369	410	2,350
Torque (ft-lb)	0.00	220	440	661	883	995	1,106	1,225
RPM	1800	1796	1792	1788	1785	1,783	1780	0
Efficiency (%)		92.4	95.0	95.4	95.4	95.2	95.0	
P.F. (%)	6.0	64.0	82.0	88.0	90.0	90.0	90.0	22.0

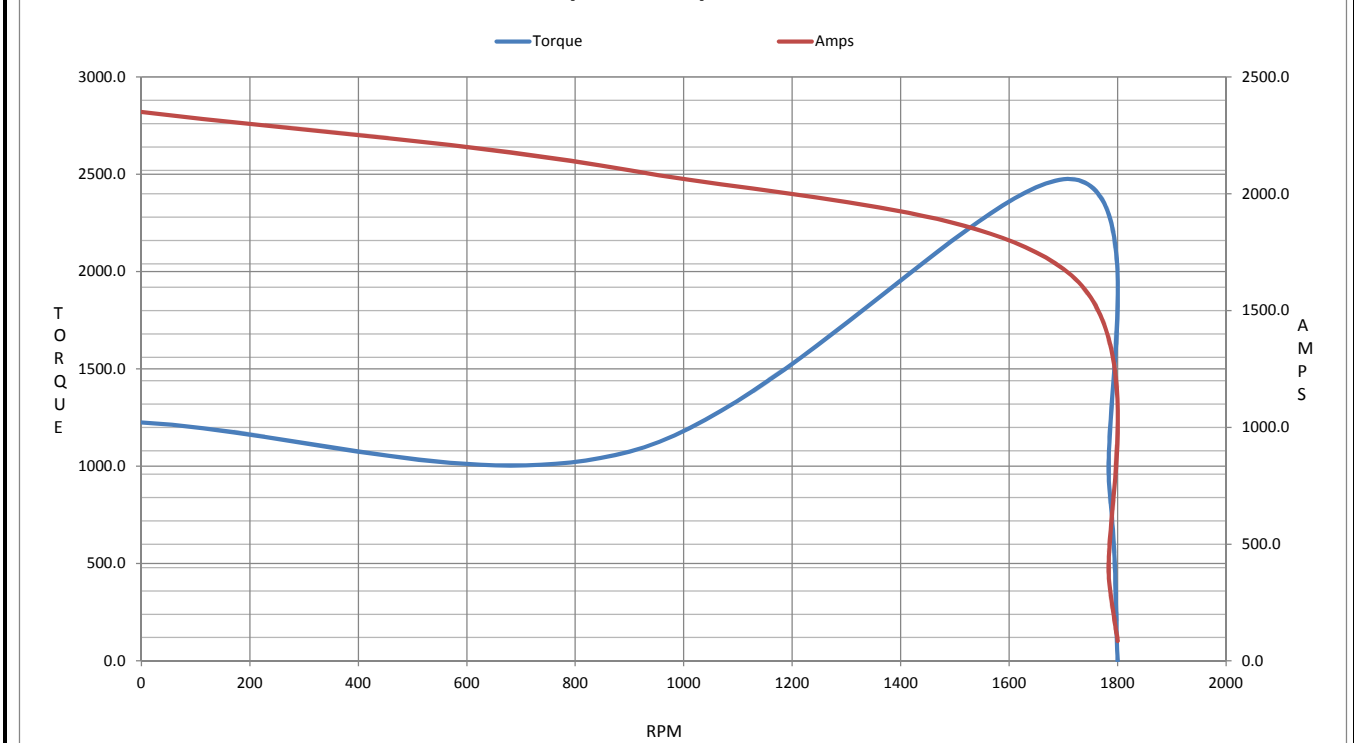
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1715	1785	1800
Current (Amps)	2,350	2,100	1,650	327	85.0
Torque (ft-lb)	1,225	1,075	2,475	883	0.00

Information Block				
HP	300.0			
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	80 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	87.0 Lb-Ft ²			
Ref Wdg	T449470 NONE			
Sound Pressure @ 1M	88 dBA			
VFD Rating	CONSTANT 2000:1			
Outline Dwg	B-SS555990-2875			
Conn. Diag	A-EE7300T			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0090	0.0070	0.0920	0.0750	3.0870



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 : 449THFS8047

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

Catalog No : Y532

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