

PRODUCT INFORMATION PACKET

Model No: 449THFCD8048

Catalog No: Y533A

Blue Max® Inverter Duty Encoder Motor, 350 HP, 3 Ph, 60 Hz, 460 V, 1800 RPM, 449T Frame, TEBC-AXIAL



Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E

Nameplate Specifications

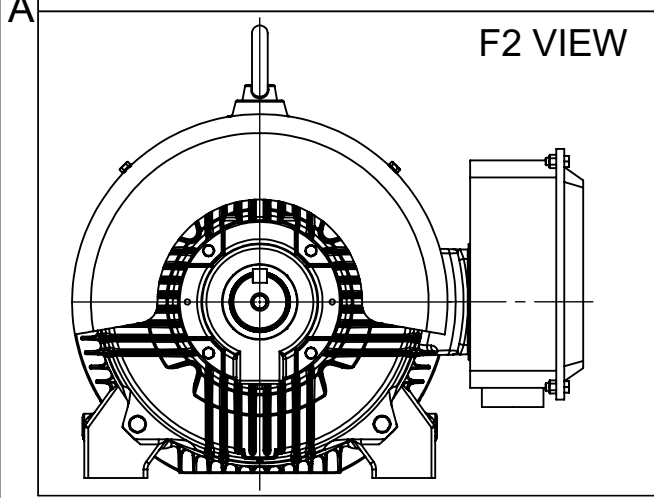
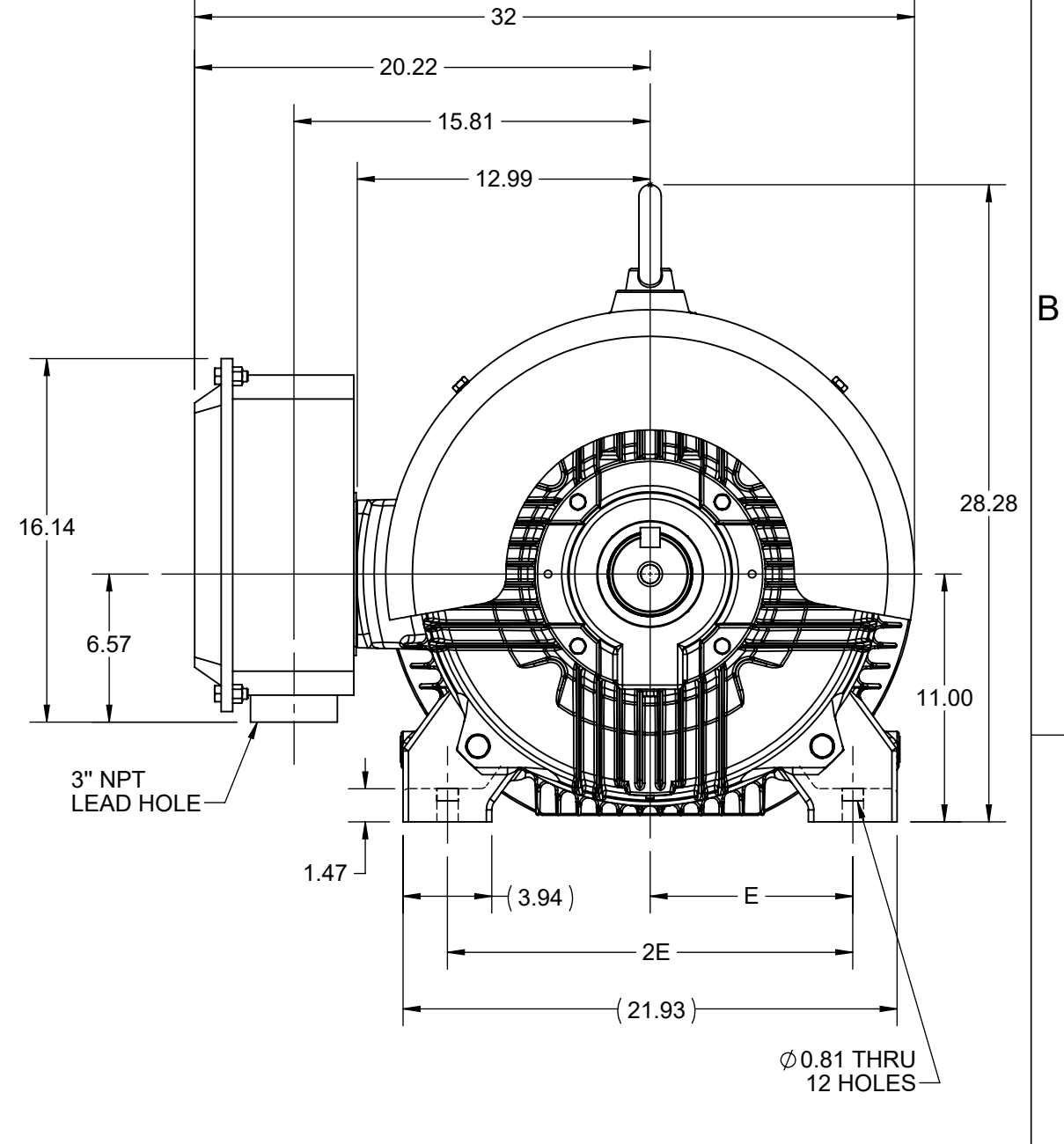
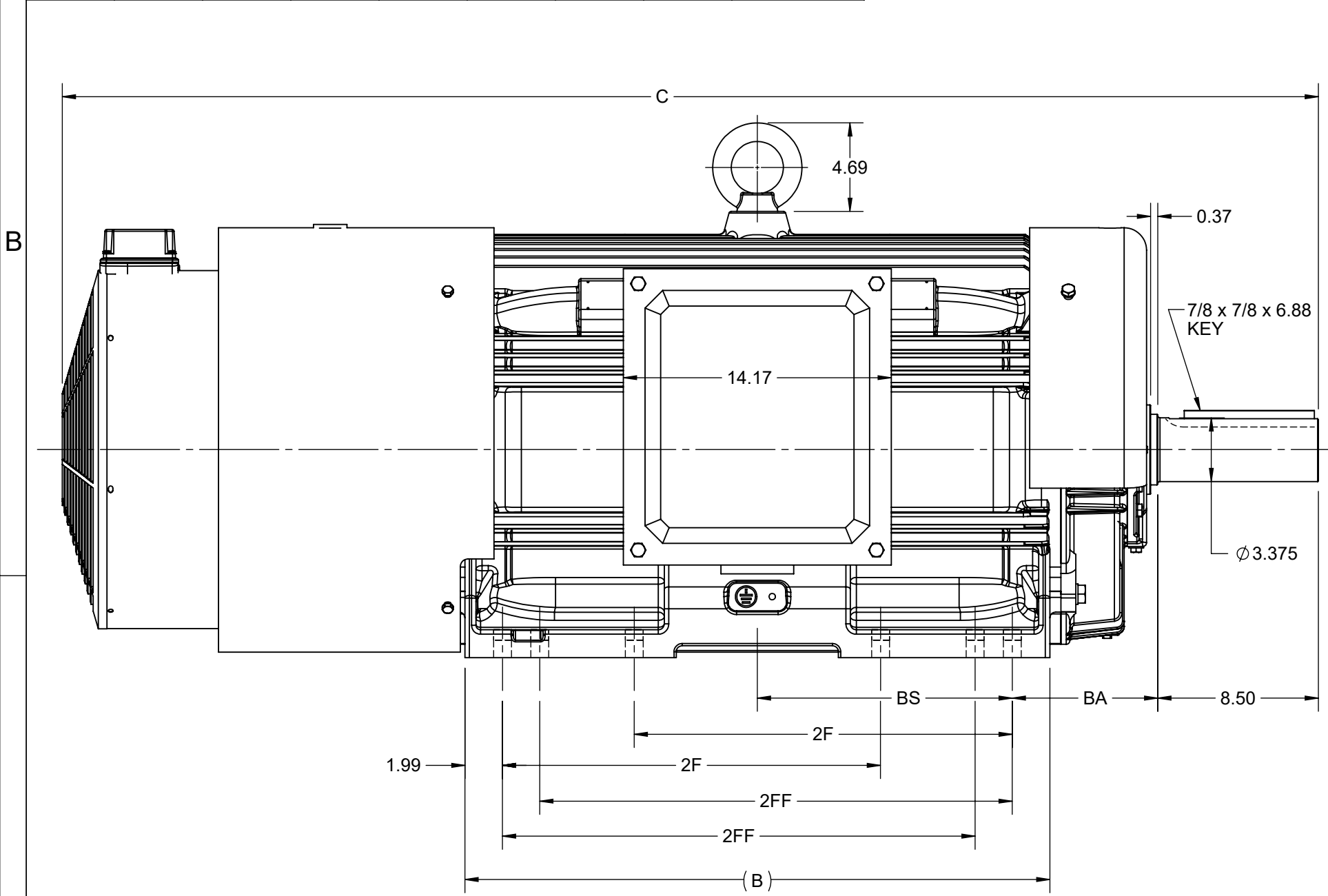
Phase	3	Output HP	350 Hp
Output KW	260.0 kW	Voltage	460 V
Speed	1785 rpm	Service Factor	1.00
Frame	449T	Enclosure	Totally Enclosed Blower cooled - Axial
Thermal Protection	Thermostat	Efficiency	95.8 %
Ambient Temperature	40 °C	Frequency	60 Hz
Current	370.0 A	Power Factor	91.5
Duty	Continuous	Insulation Class	H
Design Code	INV	KVA Code	J
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	.0118 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 ONLY	Inverter Load	CONSTANT 2000:1
Connection Drawing	EE7300T	Outline Drawing	SS621123

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:10/11/2023

4				3				
B	C	E	2E	2F	2FF	BA	BS	MOUNTING
30.94	66.30	9.00	18.00	20.00	25.00	7.50	13.48	F1 OR F2



DRAWING REVISION A	REVISION BY VR	REV DATE/© DATE 06-08-2021
ECO CR-0003919	APPROVED BY SBD	DATE 06-08-2021
ECO DESCRIPTION NEW DRAWING RELEASE COPYRIGHT (PER REVISION DATE) 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.		

PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

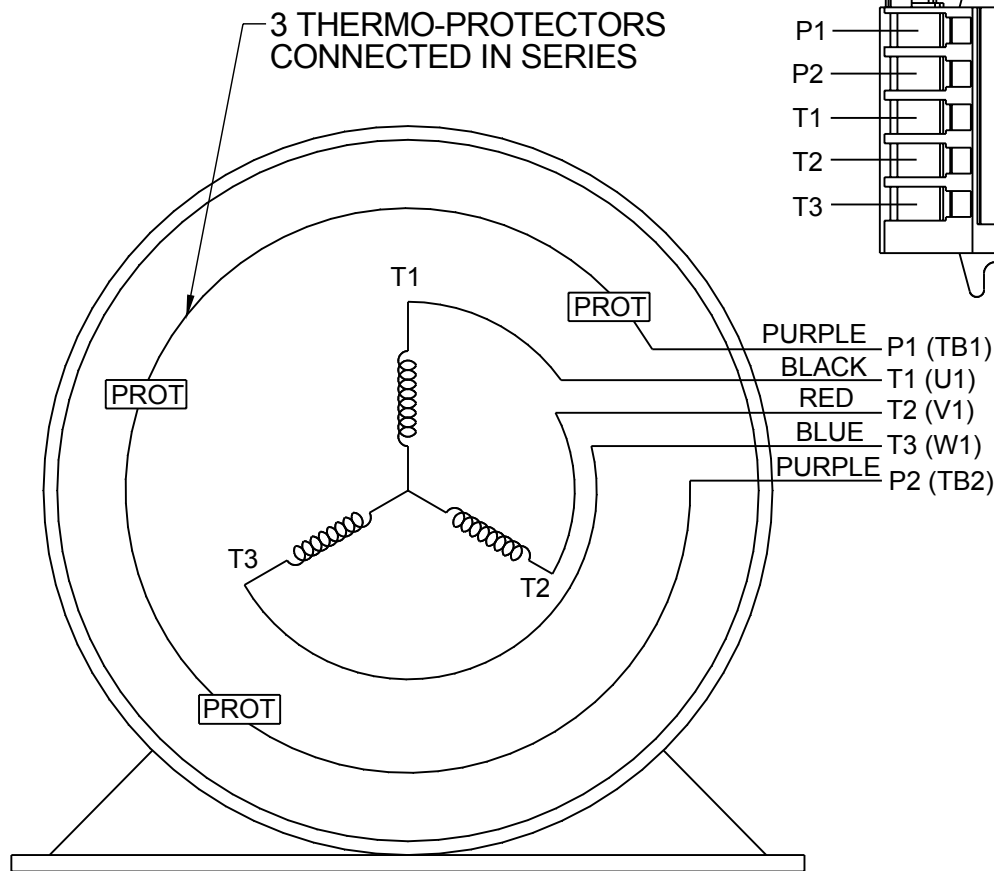
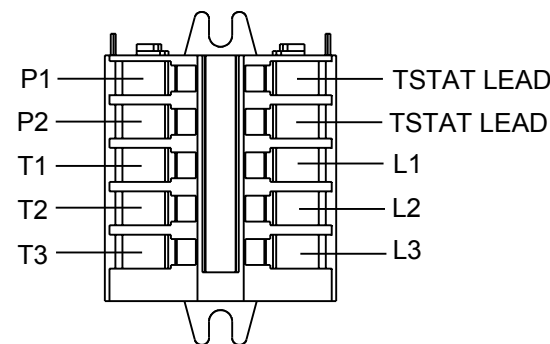
DRAWN BY VR	REGAL ® Regal Beloit America, Inc.
DATE 03-08-2021	
APPROVED BY SBD	DESCRIPTION OUTLINE
DATE 03-08-2021	447/449T FR NEMA H/O TEBC-AXIAL WITH DEEPER NDE
REFERENCE	MATERIAL PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B
	DRAWING NUMBER SS621123
	SHEET 1 OF 1

**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**

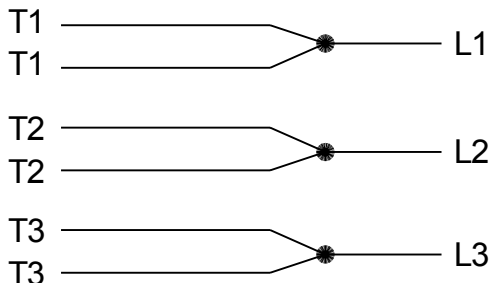
TERMINAL BLOCK WHEN SPECIFIED



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

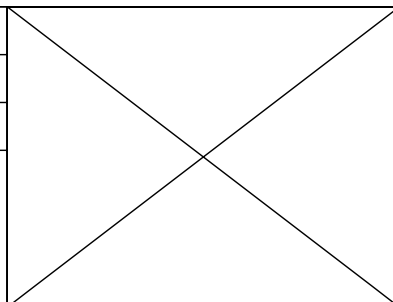
T2BM
T6AW
T6AL
T6Z
T4EG
T4BF
T8A
T6H
T6A
T4AX
T4A
T2A
T2F

**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		
<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>		



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	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: SS621123
WINDING: HA32804046 NONE 1
SPEED: _____

CUSTOMER P.O. #: _____
REFERENCE MODEL #: 449THFCD8048
CAT #: Y533A
CUSTOMER PART #: _____
MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
350	261	1800	1785	447/449T	TEBC-AXIAL	TFS	J	INF

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	460	370	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	85.0	95.4	SQ CAGE INV DUTY

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
1,028 LB-FT	3,500	2,551 LB-FT	3,295 LB-FT	65

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		129.51 LB-FT ²	375 LB-FT ²	21 SEC.	2	2898 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)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
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	0.049	0.07	2.822	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
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: _____



449THFCD8048

Submittal

Data @ 460 V

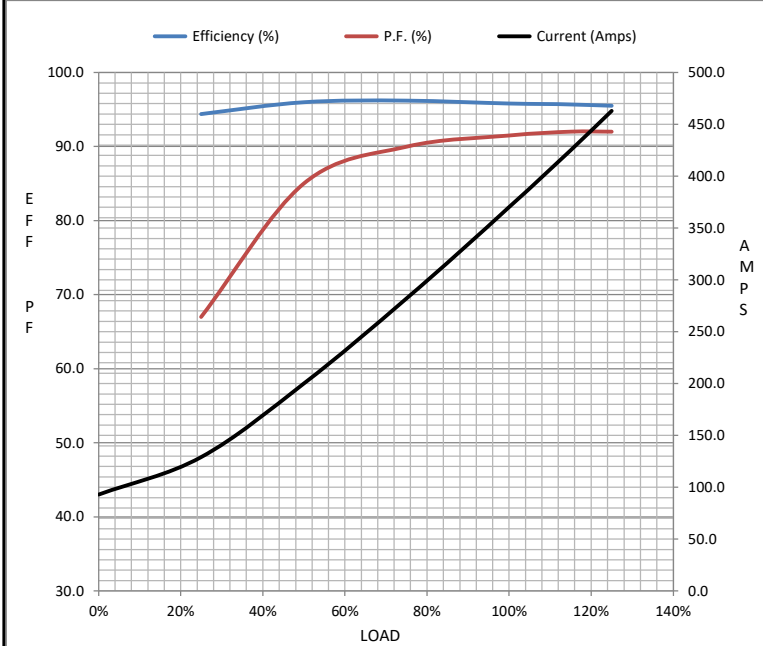
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	93.0	129	200	282	370	425	463	3,500
Torque (ft-lb)	0.00	256	512	770	1,028	1,183	1,287	2,551
RPM	1800	1795	1795	1790	1785	1,785	1785	0
Efficiency (%)		94.4	96.0	96.2	95.8	95.7	95.5	
P.F. (%)	4.5	67.0	85.0	90.0	91.5	92.0	92.0	35.0

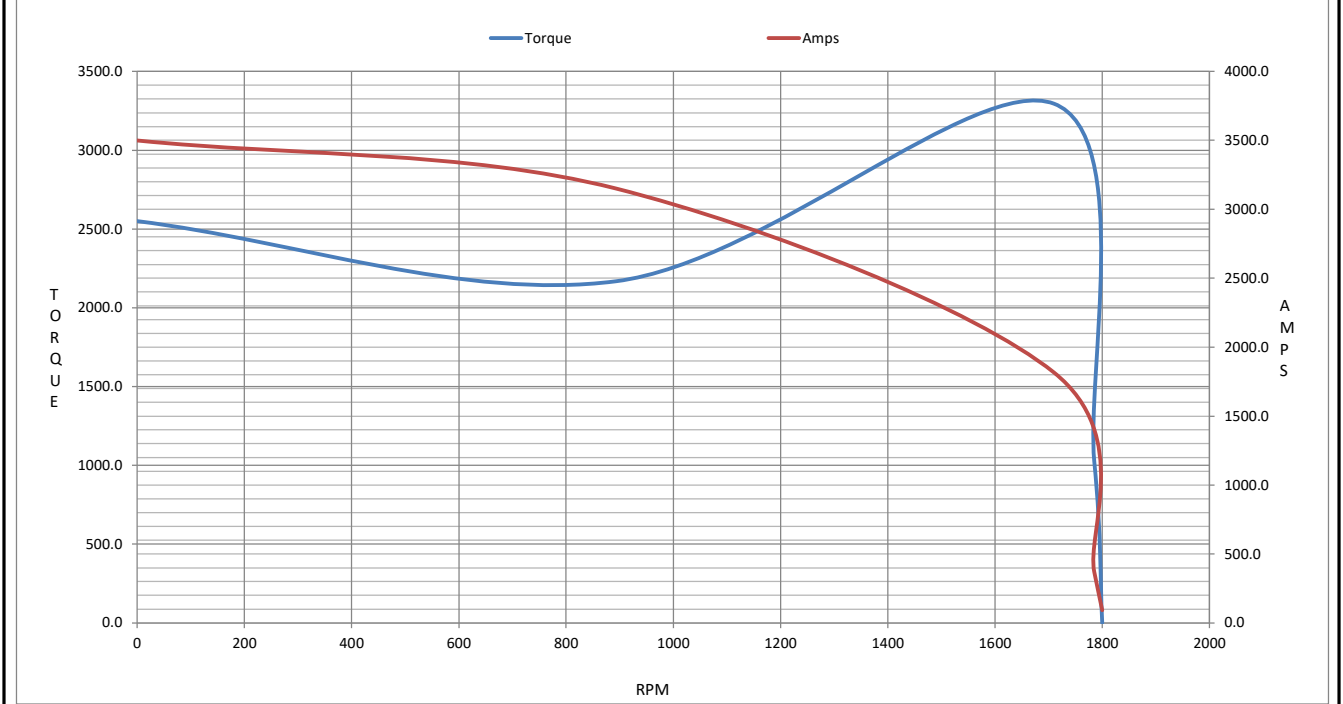
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	893	1710	1785	1800
Current (Amps)	3,500	3,150	1,816	370	93.0
Torque (ft-lb)	2,551	2,168	3,295	1,028	0.00

Information Block				
HP	350.0			
Sync. RPM	1800			
Frame	449			
Enclosure	TEBC-AXIAL			
Construction	TFS			
Voltage	460 V			
Frequency	60 Hz			
Design	INF			
LR Code letter	J			
Service Factor	1.15			
Temp Rise @ FL	65 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	3,300 feet			
Rotor/Shaft wk ²	129.51 Lb-F ²			
Ref Wdg	HA32804046 NONE			
Sound Pressure @ 1M	75 dBA			
VFD Rating	CONSTANT 2000:1			
Outline Dwg	SS621123			
Conn. Diag	EE7300T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0080	0.0050	0.0490	0.0700	2.8220



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 : 449THFCD8048

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

Catalog No : Y533A

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