

PRODUCT INFORMATION PACKET

Model No: 449TSHFCD9003

Catalog No: W624A

Severe Duty Motors, TEFC, 250 HP, 3 Ph, 60 Hz, 460 V, 3580 RPM, 449TS Frame



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Nameplate Specifications

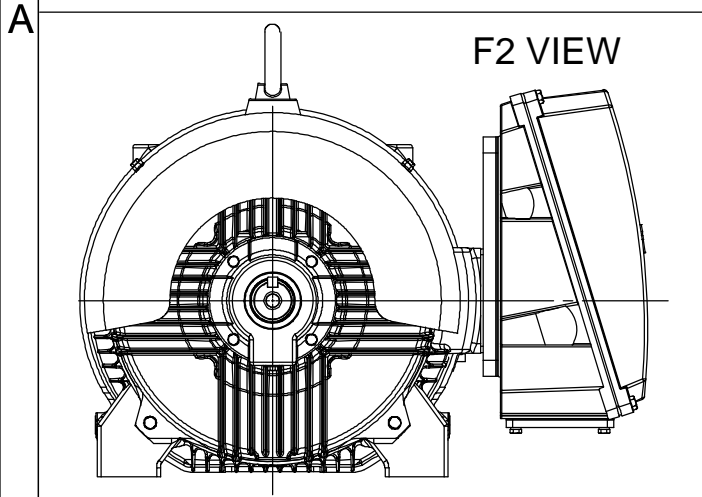
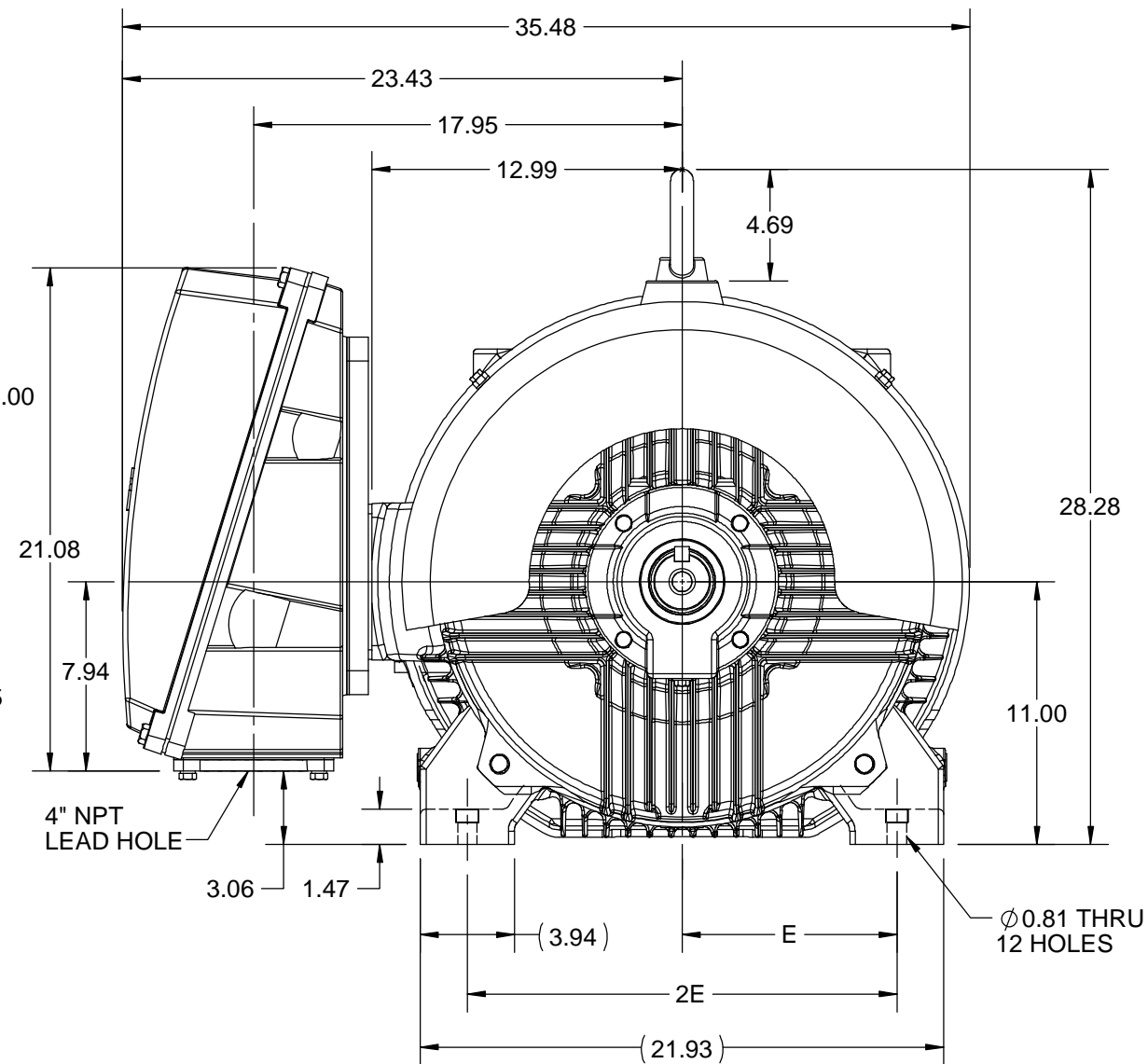
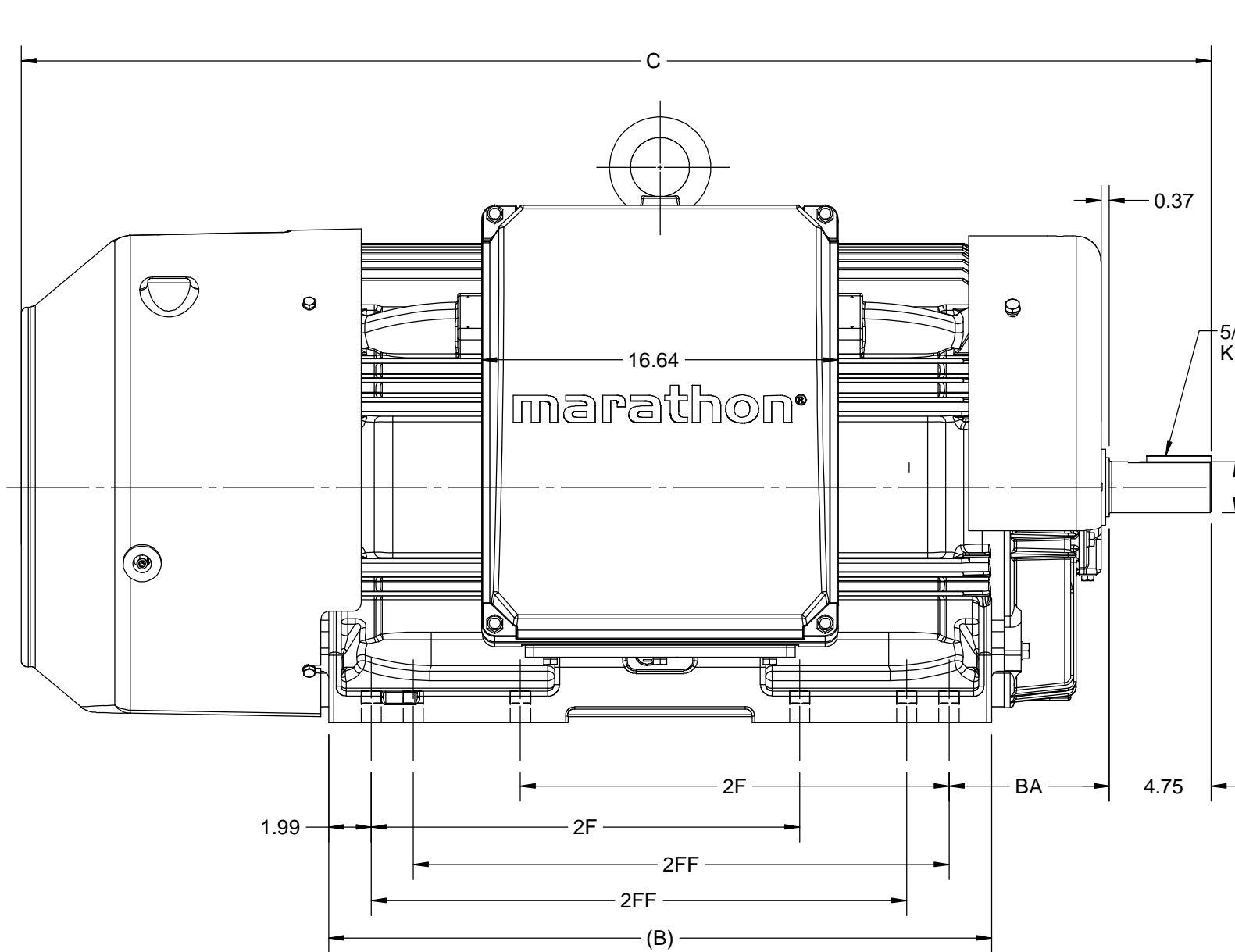
Output HP	250 Hp	Output KW	187.0 kW
Frequency	60 Hz	Voltage	460 V
Current	266.0 A	Speed	3580 rpm
Service Factor	1.15	Phase	3
Efficiency	95.8 %	Power Factor	92
Duty	Continuous	Insulation Class	H
Design Code	B	KVA Code	G
Frame	449TS	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6314	Opp Drive End Bearing Size	6314
UL	Listed	CSA	Y
CE	Y	IP Code	56
Hazardous Location	DIVISION 2 T2B	Number of Speeds	1

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	2	Rotation	Reversible
Resistance Main	.0128 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	TS	Shaft Diameter	2.375 in
Assembly/Box Mounting	F1/F2 CAPABLE	Inverter Load	CONSTANT 2:1/VARIABLE 10:1
Connection Drawing	EE7300U	Outline Drawing	SS620974

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4				3				2	1
B	C	E	2E	2F	2FF	BA	BS	MOUNTING	
30.94	55.51	9.00	18.00	20.00	25.00	7.50	13.48	F1 OR F2	



DRAWING REVISION B	REVISION BY BISWA	REV DATE/© DATE 20/10/2020
ECO ECO-0195135	APPROVED BY GNK	DATE 20/10/2020
ECO DESCRIPTION		
DRAWING UPDATED		
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PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

DRAWN BY BISWA	Regal Beloit America, Inc.
DATE 05/03/2020	
APPROVED BY SBD	
DATE 05/03/2020	
REFERENCE	DESCRIPTION 447/449TS FR H/O-SD & IEEE841
THIRD ANGLE PROJECTION	MATERIAL
	PROCESS/FINISH
	SIZE B
	DRAWING NUMBER SS620974
	SHEET 1 OF 1

IF MOTOR HAS 9 LEADS

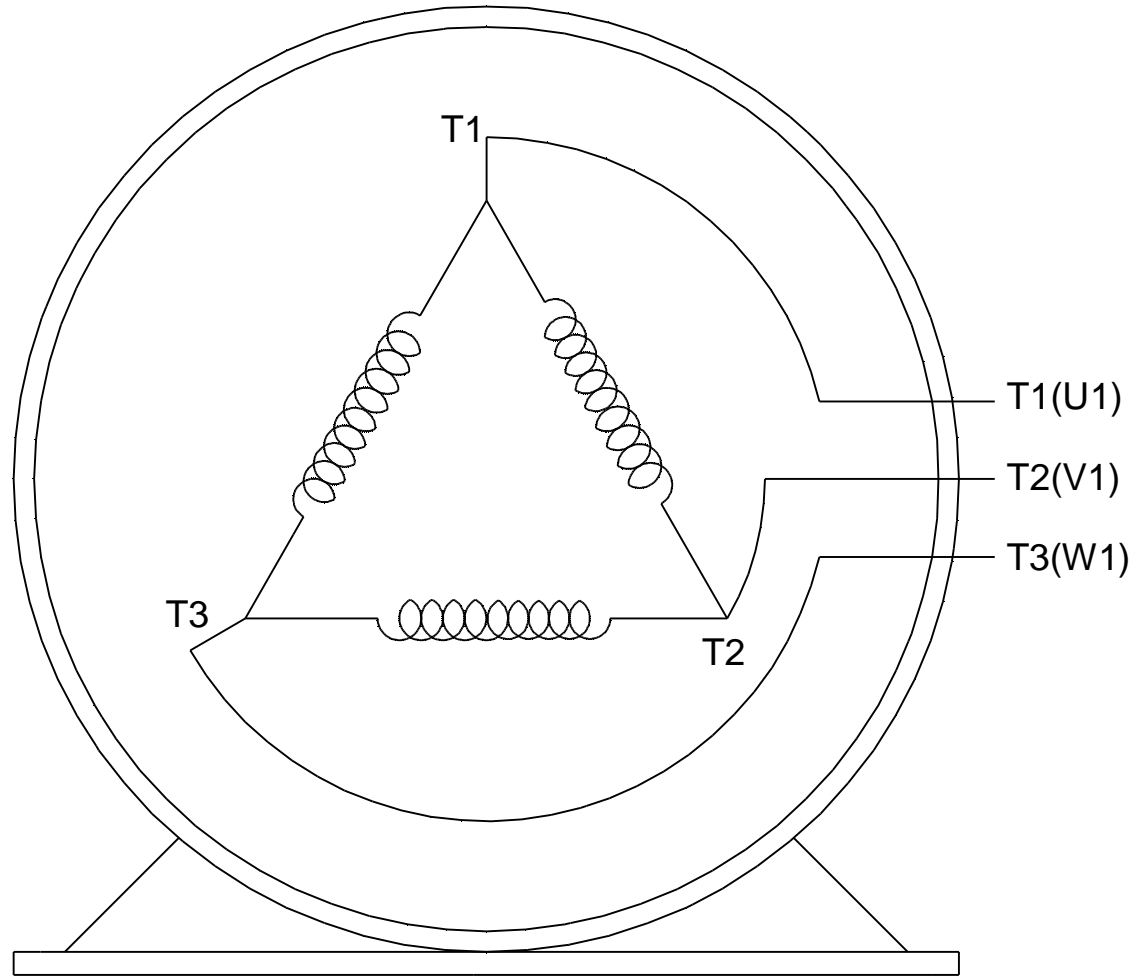
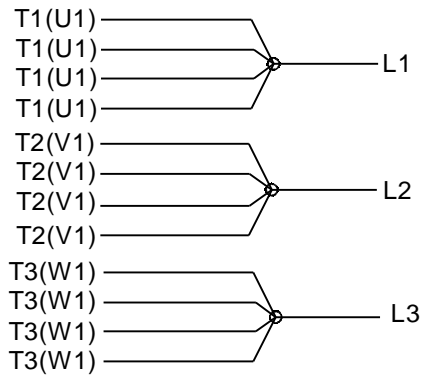


IF MOTOR HAS 6 LEADS



A-9806 DECAL IF CALLED FOR

IF MOTOR HAS 12 LEADS



VIEW OF TERMINAL END

DRAWING REVISION L	REVISION BY AJW	DATE 05-04-2015	TOLERANCES UNLESS OTHERWISE SPECIFIED:	DRAWN BY DRS	Regal Beloit America, Inc.																					
ECO ECO-0077067	APPROVED BY EWH	DATE 05-05-2015	<table style="font-size: small; border-collapse: collapse;"> <tr> <td><u>DEC.</u></td> <td><u>INCH</u></td> <td><u>mm</u></td> <td><u>ANGLE</u></td> </tr> <tr> <td>.X</td> <td>±0.1</td> <td>[±2.5]</td> <td>±7° 30"</td> </tr> <tr> <td>.XX</td> <td>±0.02</td> <td>[±0.51]</td> <td></td> </tr> <tr> <td>.XXX</td> <td>±0.005</td> <td>[±0.127]</td> <td></td> </tr> <tr> <td>.XXXX</td> <td>±0.0005</td> <td>[±0.0127]</td> <td></td> </tr> </table>	<u>DEC.</u>			<u>INCH</u>	<u>mm</u>	<u>ANGLE</u>	.X	±0.1	[±2.5]	±7° 30"	.XX	±0.02	[±0.51]		.XXX	±0.005	[±0.127]		.XXXX	±0.0005	[±0.0127]		DATE 09-27-1996
<u>DEC.</u>	<u>INCH</u>	<u>mm</u>	<u>ANGLE</u>																							
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ECO DESCRIPTION UPDATED TO SOLIDWORKS <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>			APPROVED BY GK	MATERIAL PROCESS/FINISH																						
			DATE 09-30-1996			SIZE A		DRAWING NUMBER EE7300U		SHEET 1 OF 1																
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 200 $\sqrt{\text{INCH}}$ 5.1 $\sqrt{\text{mm}}$ mm SHOWN IN [BRACKETS]			REFERENCE	THIRD ANGLE PROJECTION																						
			THIRD ANGLE PROJECTION																							



DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7300U
 OUTLINE: SS620974
 WINDING: HA32802019 NONE 1

REFERENCE MODEL #: 449TSHFCD9003
 CAT #: W624A
 MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
250	187	3600	3580	447/449TS	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB(° C)	ELEV.(Ft)
3	60	460	266	LINE OR INVERTER	CONT	H	1.15	40	3300

F.L. EFF	95.8	3/4 LD EFF	95.9	1/2 LD EFF	95.5	GTD EFF	ELECT. TYPE
F.L. PF	92.0	3/4 LD PF	91.5	1/2 LD PF	87.5	95.4	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
367 LB-FT	1,880	460 LB-FT 125%	956 LB-FT 260%	75

SOUND PRESSURE	SOUND	ROTOR WK ²	MAX. LOAD WK ²	SAFE STALL TIME	STARTS/HOUR	APROX. MOTOR WGT
85 dBA	94 dBA	48.9 LB-FT ²	150 LB-FT ²	20 SEC.	2	2471 LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	DIVISION 2 T2B	NO	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL	BALL						
6314	6314						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)
0.008	0.006	0.066	0.076	4.497	0.080

* N O T E S *	If Inverter equals NONE, contact factory for further information	
	INVERTER TORQUE: CONSTANT 2:1/VARIABLE 10:1	
	INV. HP SPEED RANGE: NONE	
	ENCODER: NONE	
	NONE PPR	

PREPARED BY: _____	BRAKE: NONE
DATE: 6/3/2020	NONE NONE
** Subject to change without notice.	FT-LB: NA
FORM: 3531 REV_4 2/27/06	VOLTAGE: NONE HZ:

Data Sheet

Date: 6/3/2020
 Customer: _____
 Attention: _____
 Submitted by: _____

449TSHFCD9003



Submittal

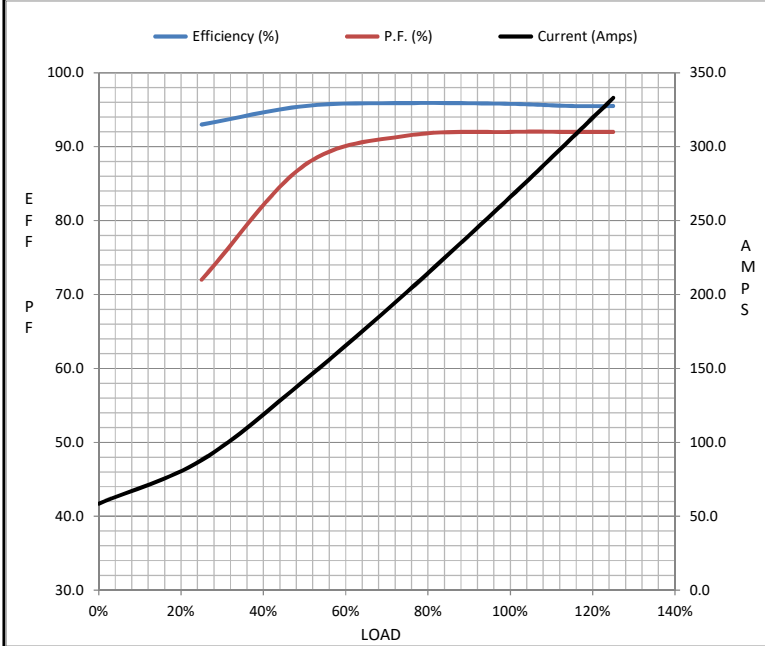
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	58.5	88.0	142	202	266	306	333	1,880
Torque (ft-lb)	0.00	91.0	183	275	367	422	459	460
RPM	3600	3595	3590	3585	3580	3,576	3574	0
Efficiency (%)		93.0	95.5	95.9	95.8	95.5	95.5	
P.F. (%)	7.0	72.0	87.5	91.5	92.0	92.0	92.0	30.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle	Information Block	
Speed (RPM)	0	1800	3470	3580	3600	HP	250.0
Current (Amps)	1,880	1,520	1,100	266	58.5	Sync. RPM	3600
Torque (ft-lb)	460	590	956	367	0.00	Frame	160L



Enclosure	TEFC			
Construction	TFC			
Voltage	460 V			
Frequency	60 Hz			
Design	N			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	75 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	3,300 feet			
Rotor/Shaft wk ²	48.9 Lb-Ft ²			
Ref Wdg	HA32802019 NONE			
Sound Pressure @ 1M	85 dBA			
VFD Rating	CONSTANT 2:1/VARIABLE 10:1			
Outline Dwg	037898-912			
Conn. Diag	EE7300U			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0080	0.0060	0.0660	0.0760	4.4970

Speed - Torque Curve

