

# PRODUCT INFORMATION PACKET

Model No: 449TSHFCD9001

Catalog No: W634A

Severe Duty Motors, TEFC, 350 HP, 3 Ph, 60 Hz, 460 V, 3580 RPM, 449TS Frame



Regal and are trademarks of Regal Rexnord Corporation or one of its affiliated companies.  
©2022 Regal Rexnord Corporation, All Rights Reserved. MC017097E

**Nameplate Specifications**

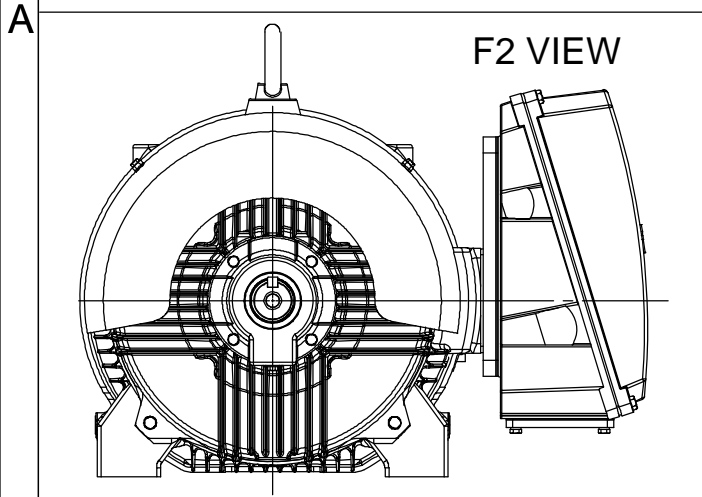
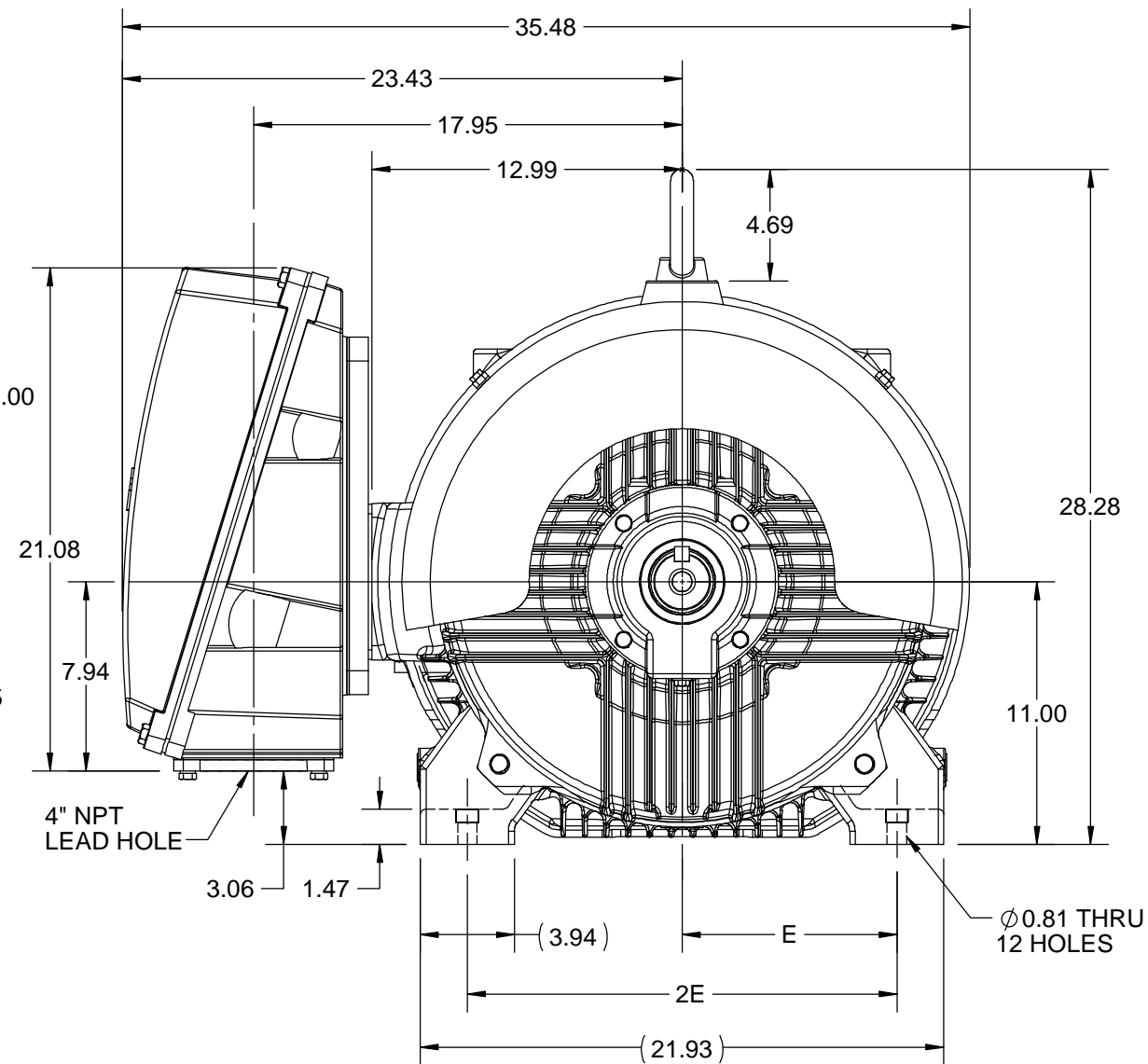
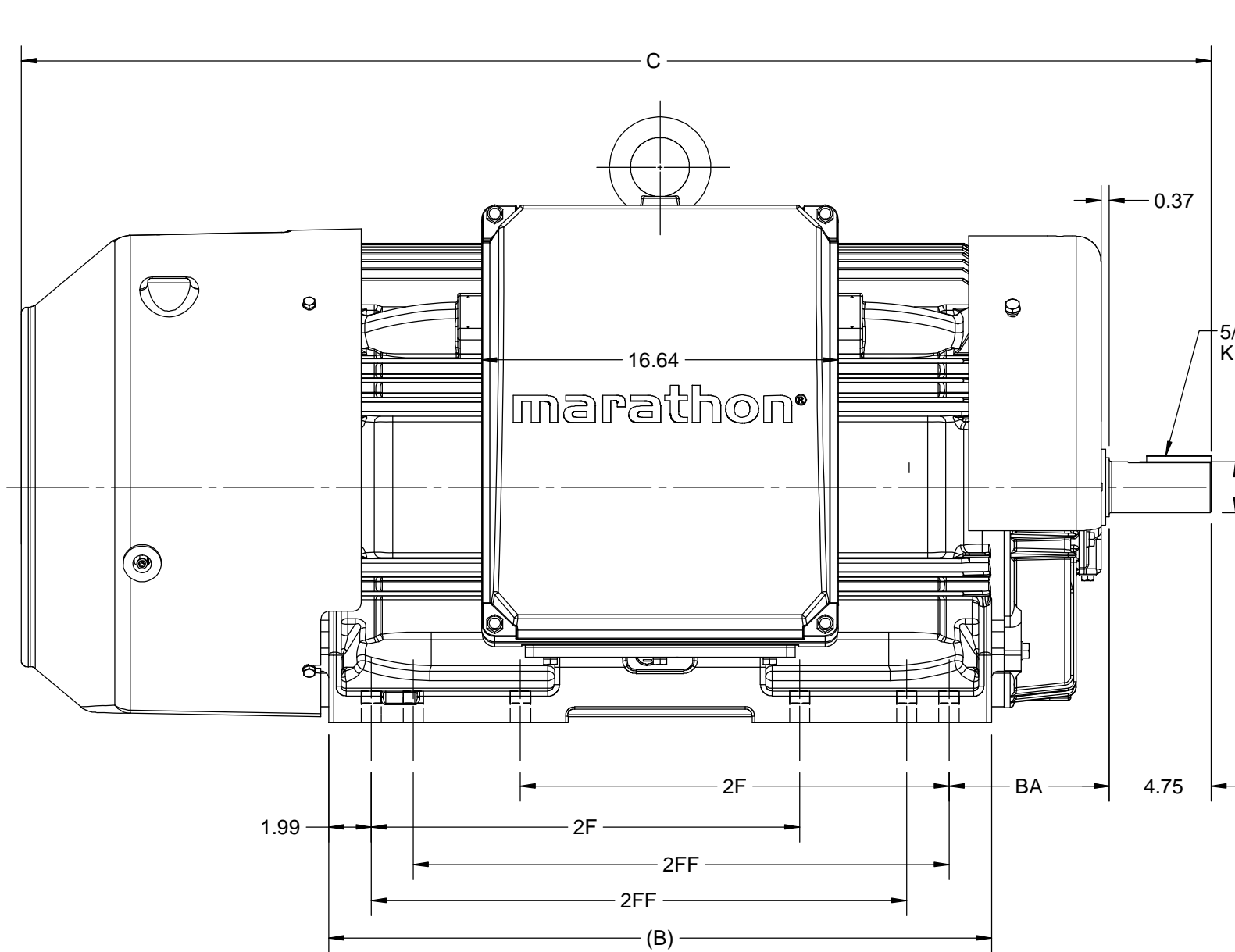
Output HP	<b>350 Hp</b>	Output KW	<b>260.0 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>460 V</b>
Current	<b>373.0 A</b>	Speed	<b>3580 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>95.8 %</b>	Power Factor	<b>91.8</b>
Duty	<b>Continuous</b>	Insulation Class	<b>H</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Frame	<b>449TS</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No Protection</b>	Ambient Temperature	<b>40 °C</b>
Drive End Bearing Size	<b>6314</b>	Opp Drive End Bearing Size	<b>6314</b>
UL	<b>Listed</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>56</b>
Hazardous Location	<b>DIVISION 2 T2B</b>	Number of Speeds	<b>1</b>

**Technical Specifications**

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>2</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.00943 Ohms</b>	Mounting	<b>Rigid Base</b>
Motor Orientation	<b>Horizontal</b>	Drive End Bearing	<b>Ball</b>
Opp Drive End Bearing	<b>Ball</b>	Frame Material	<b>Cast Iron</b>
Shaft Type	<b>TS</b>	Shaft Diameter	<b>2.375 in</b>
Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>		
Outline Drawing	<b>SS620974</b>	Connection Drawing	<b>EE7300U</b>

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:05/11/2022

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	

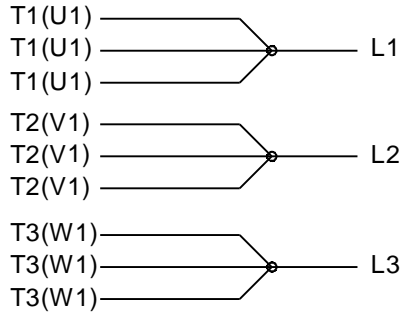


DRAWING REVISION B	REVISION BY BISWA	REV DATE/© DATE 20/10/2020
ECO ECO-0195135	APPROVED BY GNK	DATE 20/10/2020
ECO DESCRIPTION		
DRAWING UPDATED		
<small>COPYRIGHT (PER REVISION DATE) REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY 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.</small>		

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
SIZE B	PROCESS/FINISH
DRAWING NUMBER SS620974	SHEET 1 OF 1

**IF MOTOR HAS 9 LEADS**

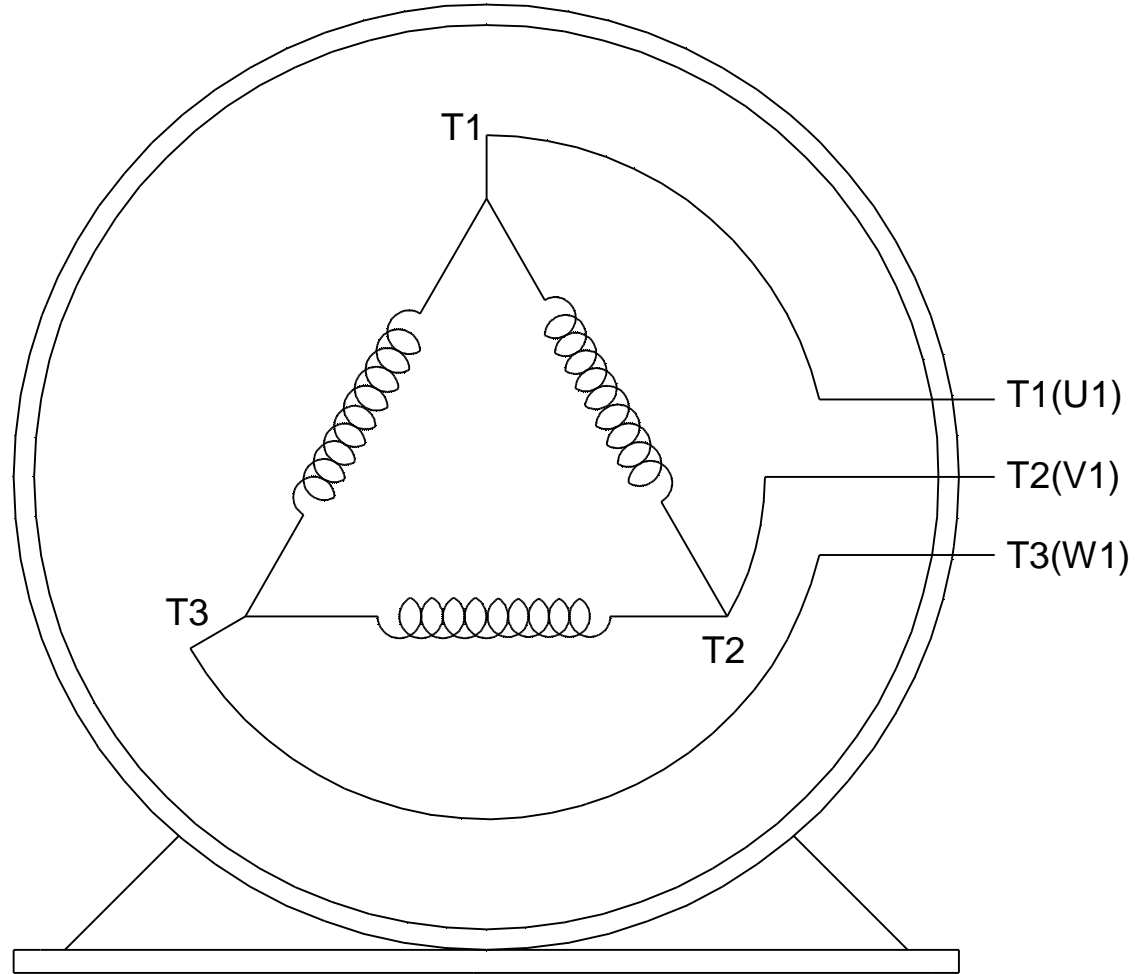


**IF MOTOR HAS 6 LEADS**



A-9806 DECAL IF CALLED FOR

**IF MOTOR HAS 12 LEADS**



**VIEW OF TERMINAL END**

DRAWING REVISION <b>L</b>	REVISION BY <b>AJW</b>	DATE <b>05-04-2015</b>	TOLERANCES UNLESS OTHERWISE SPECIFIED:	DRAWN BY <b>DRS</b>	<b>Regal Beloit America, Inc.</b>																					
ECO <b>ECO-0077067</b>	APPROVED BY <b>EWH</b>	DATE <b>05-05-2015</b>	<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 <b>09-27-1996</b>
<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]																								
ECO DESCRIPTION <b>UPDATED TO SOLIDWORKS</b> <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 <b>GK</b>	DATE <b>09-30-1996</b>	MATERIAL	PROCESS/FINISH																				
			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	SIZE <b>A</b>	DRAWING NUMBER <b>EE7300U</b>	SHEET <b>1 OF 1</b>																



DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7300U  
 OUTLINE: SS620974  
 WINDING: HA32802022 NONE 1

REFERENCE MODEL #: 449TSHFCD9001  
 CAT #: W634A  
 MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
350	261	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	373	LINE OR INVERTER	CONT	H	1.15	40	3300

F.L. EFF	95.8	3/4 LD EFF	96.0	1/2 LD EFF	95.9	GTD EFF	ELECT. TYPE
F.L. PF	91.8	3/4 LD PF	90.7	1/2 LD PF	87.4	95.4	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
514 LB-FT	2,700	1,010 LB-FT 196%	1,319 LB-FT 257%	80

SOUND PRESSURE	SOUND	ROTOR WK <sup>2</sup>	MAX. LOAD WK <sup>2</sup>	SAFE STALL TIME	STARTS/HOUR	APROX. MOTOR WGT
80 dBA	89 dBA	53.6 LB-FT <sup>2</sup>	180 LB-FT <sup>2</sup>	15 SEC.	2	2635 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)
0.006	0.004	0.049	0.087	3.248	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: \_\_\_\_\_

449TSHFCD9001



Submittal

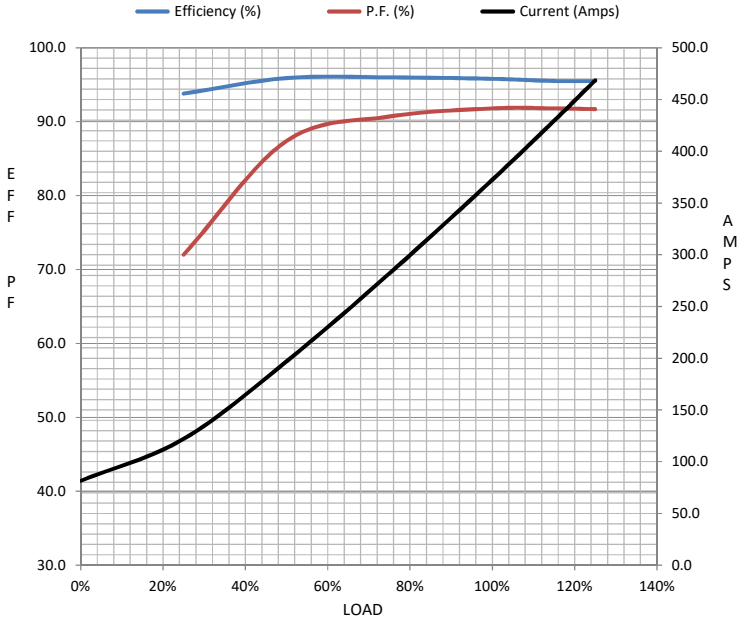
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	81.5	122	197	282	373	430	469	2,700	
Torque (ft-lb)	0.00	128	256	384	514	591	643	1,010	
RPM	3600	3595	3590	3585	3580	3,576	3574	0	
Efficiency (%)		93.8	95.9	96.0	95.8	95.5	95.5		
P.F. (%)	6.1	72.0	87.4	90.7	91.8	91.8	91.7	31.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle	Information Block				
Speed (RPM)	0	1800	3470	3580	3600	HP	350.0			
Current (Amps)	2,700	2,125	1,474	373	81.5	Sync. RPM	3600			
Torque (ft-lb)	1,010	800	1,319	514	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	80 °C			
						Duty	CONT			
						Ambient	40 °C			
						Elevation	3,300 feet			
						Rotor/Shaft wk <sup>2</sup>	53.6 Lb-Ft <sup>2</sup>			
						Ref Wdg	HA32802022 NONE			
						Sound Pressure @ 1M	80 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
						0.0060	0.0040	0.0490	0.0870	3.2480



HP	350.0			
Sync. RPM	3600			
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	80 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	3,300 feet			
Rotor/Shaft wk <sup>2</sup>	53.6 Lb-Ft <sup>2</sup>			
Ref Wdg	HA32802022 NONE			
Sound Pressure @ 1M	80 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
0.0060	0.0040	0.0490	0.0870	3.2480

Speed - Torque Curve

