

# PRODUCT INFORMATION PACKET

Model No: 445TTFC6590

Catalog No: E406A

Severe Duty Motors, TEFC, 125 HP, 3 Ph, 60 Hz, 575 V, 1190 RPM, 445T Frame



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**Nameplate Specifications**

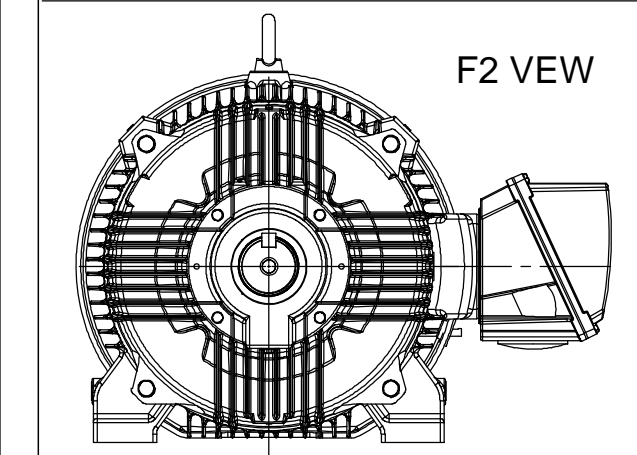
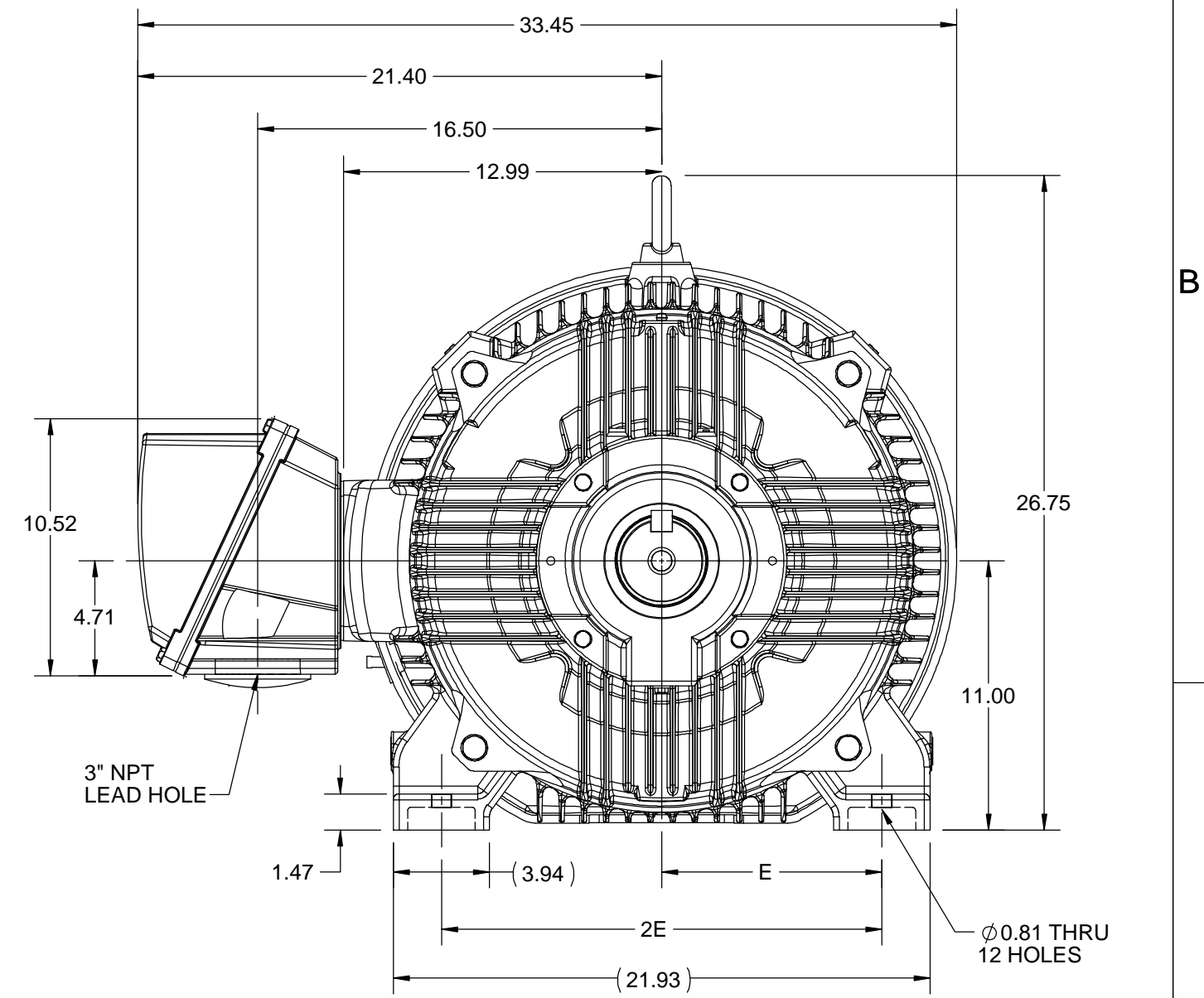
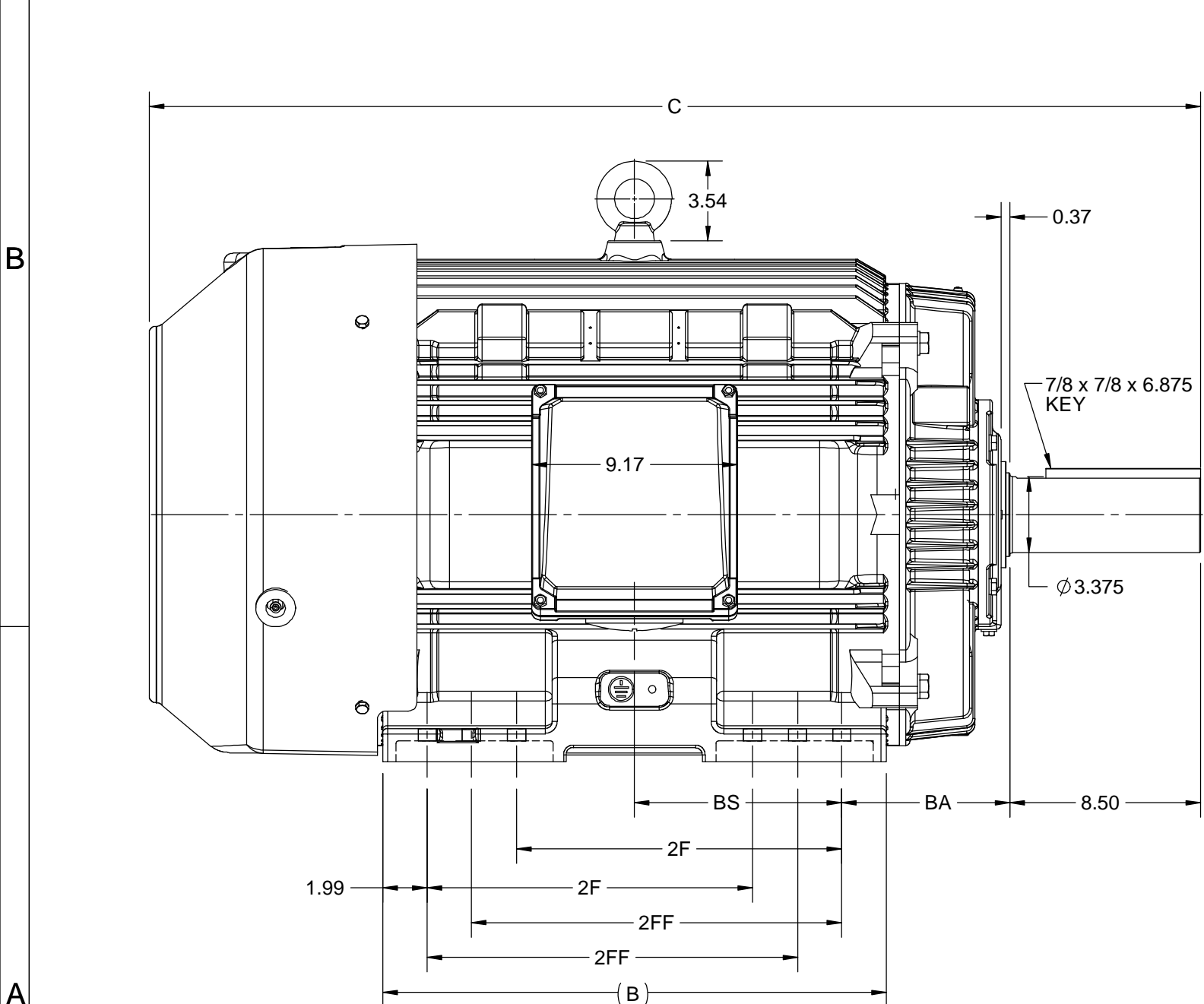
Output HP	<b>125 Hp</b>	Output KW	<b>93.0 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>575 V</b>
Current	<b>114.0 A</b>	Speed	<b>1190 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>95 %</b>	Power Factor	<b>86</b>
Duty	<b>Continuous</b>	Insulation Class	<b>H</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Frame	<b>445T</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>6319</b>	Opp Drive End Bearing Size	<b>6317</b>
UL	<b>Listed</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>55</b>
Hazardous Location	<b>DIVISION 2 T2B</b>	Number of Speeds	<b>1</b>

**Technical Specifications**

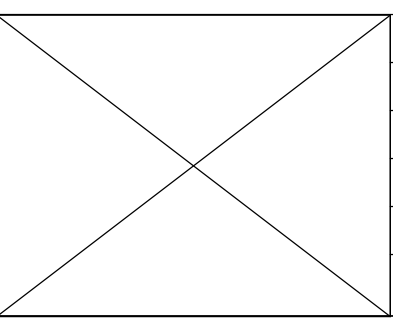
Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>6</b>	Rotation	<b>Selective Clockwise</b>
Resistance Main	<b>.0353 Ohms</b>	Mounting	<b>Rigid Base</b>
Motor Orientation	<b>Horizontal</b>	Drive End Bearing	<b>Ball</b>
Opp Drive End Bearing	<b>Ball</b>	Frame Material	<b>Cast Iron</b>
Shaft Type	<b>T</b>	Shaft Diameter	<b>3.375 in</b>
Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>	Inverter Load	<b>CONSTANT 2:1/VARIABLE 10:1</b>
Connection Drawing	<b>EE7300U</b>	Outline Drawing	<b>SS557668</b>



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4				3				
B	C	E	2E	2F	2FF	BA	BS	MOUNTING
22.44	46.83	9.00	18.00	14.50	16.50	7.50	9.24	F1 OR F2



DRAWING REVISION C	REVISION BY BISWA	DATE 15/10/2020
ECO ECO-0195135	APPROVED BY GNK	DATE 15/10/2020
DRAWING UPDATED		
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DRAWN BY BISWA	 Regal Beloit America, Inc.
DATE 24/12/2018	
APPROVED BY SBD	DESCRIPTION <b>OUTLINE</b> 444/445T FR-NEMA-SD & IEEE841
DATE 24/12/2018	MATERIAL
REFERENCE	PROCESS/FINISH
THIRD ANGLE PROJECTION 	SIZE B
	DRAWING NUMBER <b>SS557668</b>
	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"																							
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.XXX	±0.005	[±0.127]																								
.XXXX	±0.0005	[±0.0127]																								
ECO DESCRIPTION <b>UPDATED TO SOLIDWORKS</b>			APPROVED BY <b>GK</b>	DATE <b>09-30-1996</b>	MATERIAL	PROCESS/FINISH																				
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.			REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 200 $\sqrt{\text{INCH}}$ 5.1 $\sqrt{\text{mm}}$	REFERENCE	SIZE <b>A</b>	DRAWING NUMBER <b>EE7300U</b>	SHEET <b>1 OF 1</b>																			
			mm SHOWN IN [BRACKETS]	THIRD ANGLE PROJECTION																						



DATA VOLTS: 575

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7300U  
 REFERENCE MODEL #: 445TTFC6590  
 OUTLINE: SS557668-445T  
 CAT #: E406A  
 WINDING: HE32806006 NONE 4  
 MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN	
125	93	1200	1190	445T	TEFC	TFC	G	B	
PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV. (Ft)
3	60	575	114	LINE OR INVERTER	CONT	H	1.15	40	3300
F.L. EFF	95.0	3/4 LD EFF	95.0	1/2 LD EFF	94.5	GTD EFF	94.5	ELECT. TYPE	
F.L. PF	86.0	3/4 LD PF	83.5	1/2 LD PF	76.5	94.5	SQ CAGE INV RATED		
F.L. TORQUE	LR AMPS	L.R. TORQUE		B.D. TORQUE		F.L. RISE (° C)			
552 LB-FT	726	992 LB-FT	180%	1,410 LB-FT	255%	55			
SOUND PRESSURE	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX.			
68 dBA	77 dBA	108 LB-FT²	1400 LB-FT²	25 SEC.	2	1961	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	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON		
6319	6317								
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)	FLOAT			
0.0515625	0.0375	0.4125	0.6859375	14.1875	0.080	ODE			
* 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 NONE NONE PPR								
PREPARED BY: _____					BRAKE: NONE				
DATE: 5/13/2020					NONE				
					FT-LB: NA				
					VOLTAGE: NONE				
					HZ:				

FORM: 3531 REV\_4 2/27/06  
 \*\* Subject to change without notice.

Data Sheet

Date: 5/6/2020  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: \_\_\_\_\_



445TTFCD6590

Submittal

Data @ 575 V

Motor Load Data

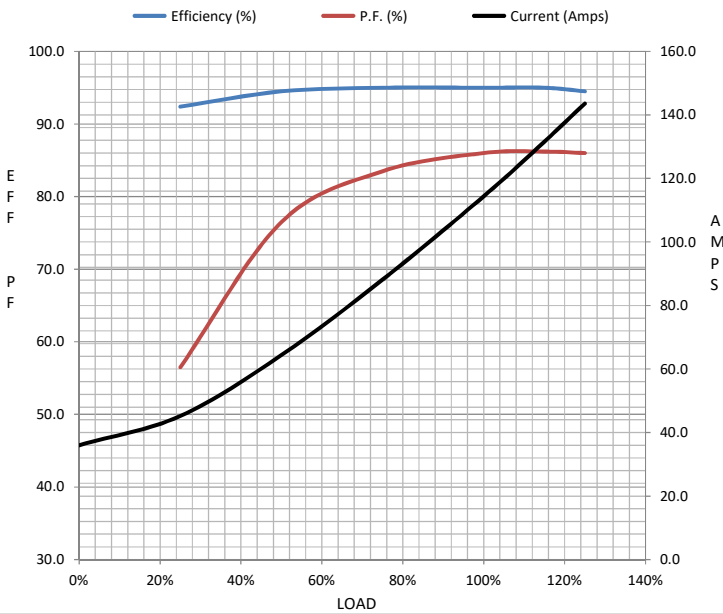
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	36.0	45.2	64.4	88.2	114	132	144	726
Torque (ft-lb)	0.00	137	274	413	552	636	693	992
RPM	1200	1198	1195	1192	1190	1,190	1188	0
Efficiency (%)		92.4	94.5	95.0	95.0	95.0	94.5	
P.F. (%)	5.5	56.5	76.5	83.5	86.0	86.2	86.0	32.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1158	1190	1200
Current (Amps)	726	580	392	114	36.0
Torque (ft-lb)	992	832	1,410	552	0.00

Information Block

HP	125.0			
Sync. RPM	1200			
Frame	445			
Enclosure	TEFC			
Construction	TFC			
Voltage	575 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	55 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	3,300 feet			
Rotor/Shaft wk <sup>2</sup>	108 Lb-Ft <sup>2</sup>			
Ref Wdg	HE32806006 NONE			
Sound Pressure @ 1M	68 dBA			
VFD Rating	CONSTANT 2:1/VARIABLE 10:1			
Outline Dwg	SS557668-445T			
Conn. Diag	EE7300U			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0330	0.0240	0.2640	0.4390	9.0800



Speed -Torque Curve

