

PRODUCT INFORMATION PACKET

Model No: 445TTFN6586

Catalog No: E647

125 HP Severe Duty Motor, 3 phase, 1200 RPM, 460 V, 445T Frame, TEFC
Severe Duty Motors



Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.
©2021 Regal Rexnord Corporation, All Rights Reserved. MC017097E



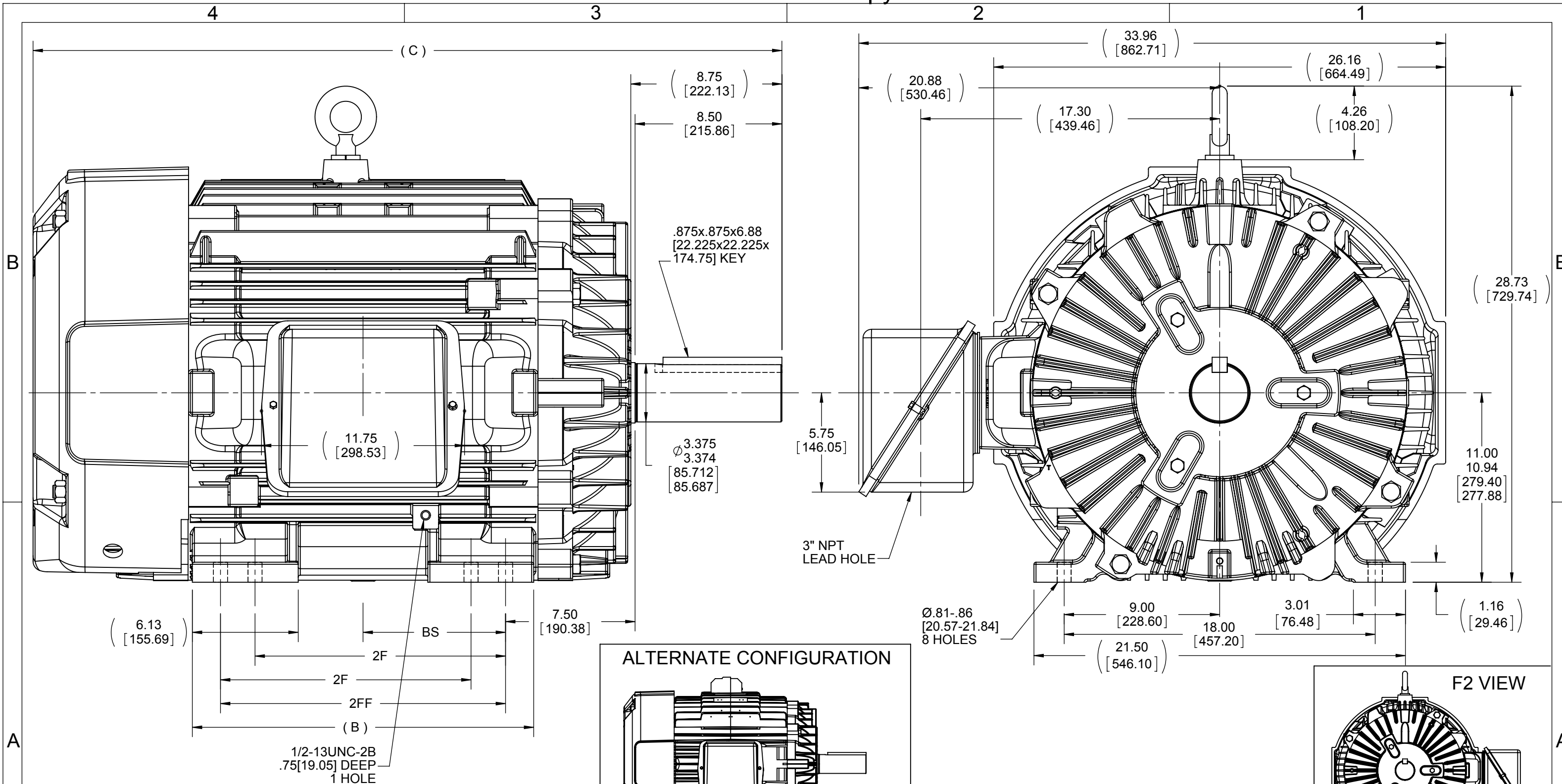
Nameplate Specifications

Output HP	125 Hp	Output KW	93.0 kW
Frequency	60 Hz	Voltage	460 V
Current	155.0 A	Speed	1185 rpm
Service Factor	1.15	Phase	3
Efficiency	95 %	Power Factor	82
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	445T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6318	Opp Drive End Bearing Size	6316
UL	Recognized	CSA	Y
CE	Y	IP Code	54
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	6	Rotation	Reversible
Resistance Main	.042 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	43.34 in
Frame Length	20.25 in	Shaft Diameter	3.375 in
Shaft Extension	8.75 in	Assembly/Box Mounting	F1/F2 Capable
Connection Drawing	A-EE7300U	Outline Drawing	B-SS513797-2025

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:10/11/2021



- NOTES:
 1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
 2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
 3. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	B	C	2F	2FF	BS
1825	444T	17.75 [450.85]	41.34 [1050.04]	14.50 [368.30]	---	7.25 [184.15]
2025	444/445T	19.75 [501.65]	43.34 [1100.84]	14.50 [368.30]	16.50 [419.10]	8.25 [209.55]

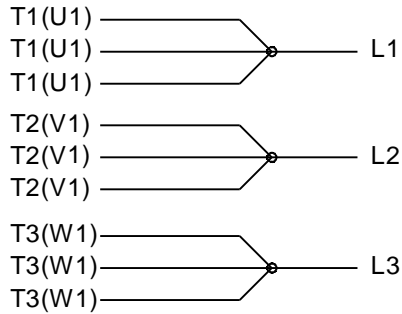
DRAWING REVISION C	REVISION BY AJW	DATE 11-13-2014
ECO ECO-0065299	APPROVED BY TDB	DATE 11-13-2014
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("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.		

TOLERANCES UNLESS OTHERWISE SPECIFIED:
 DEC. INCH mm ANGLE
 .X ±0.1 [±2.5] ±0.5°
 .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: 125 INCH 3.2 mm
 mm SHOWN IN [BRACKETS]

DRAWN BY JL	DATE 06-28-1991
APPROVED BY AAL	DATE 12-02-1991
REFERENCE	THIRD ANGLE PROJECTION

REGAL ™ Regal Beloit America, Inc.	
DESCRIPTION OUTLINE 444/445T FR.-STD.	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER SS513797
SHEET 1 OF 1	

IF MOTOR HAS 9 LEADS

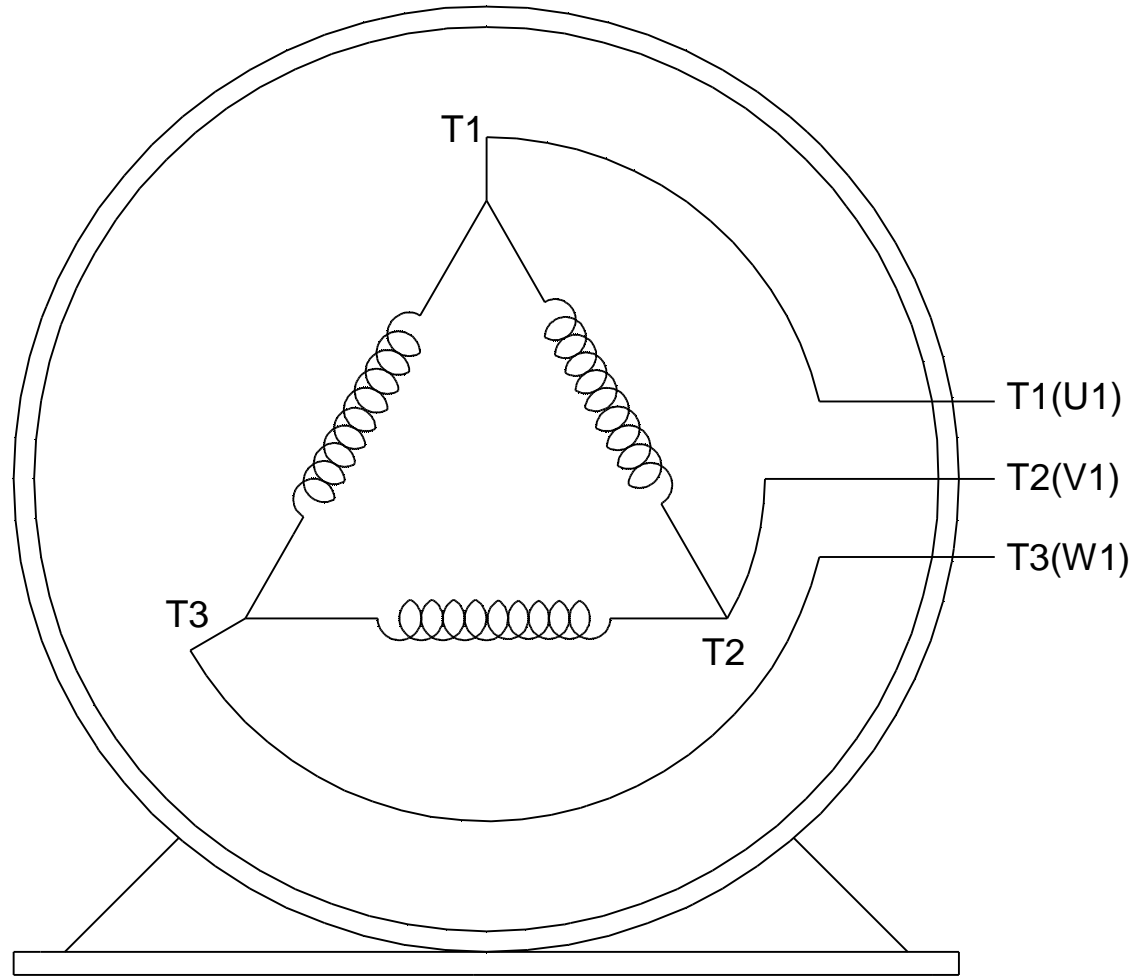


IF MOTOR HAS 6 LEADS



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>																							
.X	±0.1	[±2.5]	±7' 30"																							
.XX	±0.02	[±0.51]																								
.XXX	±0.005	[±0.127]																								
.XXXX	±0.0005	[±0.0127]																								
ECO DESCRIPTION UPDATED TO SOLIDWORKS			APPROVED BY GK	DATE 09-30-1996	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 $\sqrt{\text{mm}}$ mm SHOWN IN [BRACKETS]	REFERENCE	SIZE A	DRAWING NUMBER EE7300U	SHEET 1 OF 1																			
				THIRD ANGLE PROJECTION																						

CERTIFICATION DATA SHEET

Model#: 445TTFN6586 DE
CONN. DIAGRAM: A-EE7300U
OUTLINE: B-SS513797-2025

WINDING#: T445693 NONE 1
ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN		
125	93	1200	1185	445T	TEFC	G	B		
PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	155	LINE OR INVERTER	CONTINUOU S	F1	1.15	40	3300
FULL LOAD EFF: 95		3/4 LOAD EFF: 95		1/2 LOAD EFF: 94.5		GTD. EFF	ELEC. TYPE	NO LOAD AMPS	
FULL LOAD PF: 82		3/4 LOAD PF: 79		1/2 LOAD PF: 71		94.5	SQ CAGE INV RATED	55	
F.L. TORQUE		LOCKED ROTOR AMPS		L.R. TORQUE		B.D. TORQUE		F.L. RISE°C	
553 LB-FT		825		775 LB-FT 140		1250 LB-FT 226		78	
SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT			
72 dBA	82 dBA	61 LB-FT^2	2250 LB-FT^2	25 SEC.	2	2050 LBS.			

***** SUPPLEMENTAL INFORMATION *****

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	DIVISION 2 T2B	FALSE	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6318	6316						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

*
N
O
T
E
S
*

INVERTER TORQUE: CONSTANT 2:1
INV. HP SPEED RANGE: 1.5 X BASE SPEED
ENCODER: NONE NONE NONE NONE NONE PPR
BRAKE: NONE NONE NONE P/N NONE NONE NONE NONE FT-LB NONE V NONE Hz

DATE: 06/21/2017 06:02:45 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 6/29/2017

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



445TTFN6586

Submittal

Data @ 460 V

Motor Load Data

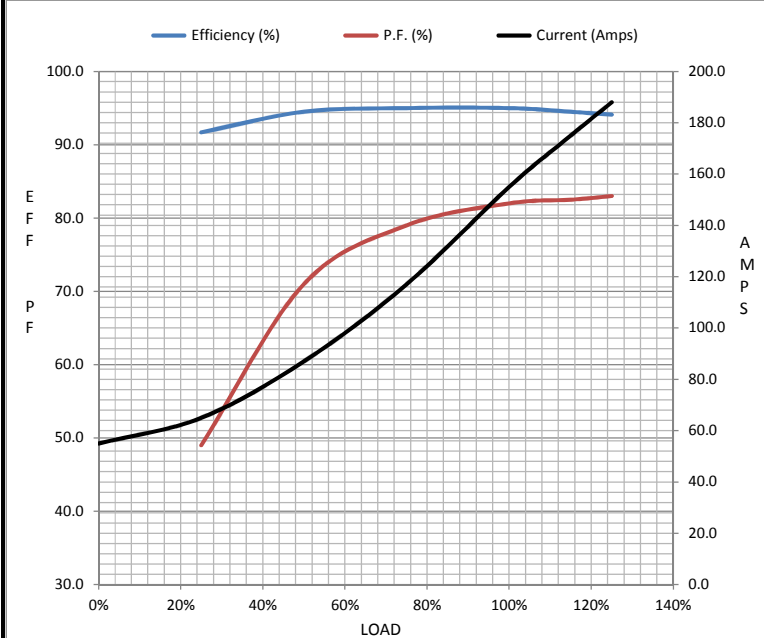
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	55.0	65.0	87.0	117	155	175	188	825
Torque (ft-lb)	0.00	137	275	414	553	637	693	775
RPM	1200	1196	1194	1190	1185	1,182	1180	0
Efficiency (%)		91.7	94.5	95.0	95.0	94.5	94.1	
P.F. (%)	4.0	49.0	71.0	79.0	82.0	82.5	83.0	30.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1150	1185	1200
Current (Amps)	825	750	500	155	55.0
Torque (ft-lb)	775	725	1,250	553	0.00

Information Block

HP	125.0			
Sync. RPM	1200			
Frame	445			
Enclosure	TEFC			
Construction	TFN			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	80 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	61.0 Lb-Ft ²			
Ref Wdg	T445693 NONE			
Sound Pressure @ 1M	72 dBA			
VFD Rating	CONSTANT 2:1			
Outline Dwg	B-SS513797-2025			
Conn. Diag	A-EE7300U			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0250	0.0180	0.2040	0.2410	3.8590



Speed -Torque Curve

