

PRODUCT INFORMATION PACKET

Model No: 445THFN19071
Catalog No: W612-P
150 HP Severe Duty Motor, 3 phase, 1800 RPM, 460 V, 445T Frame, TEFC
Severe Duty Motors



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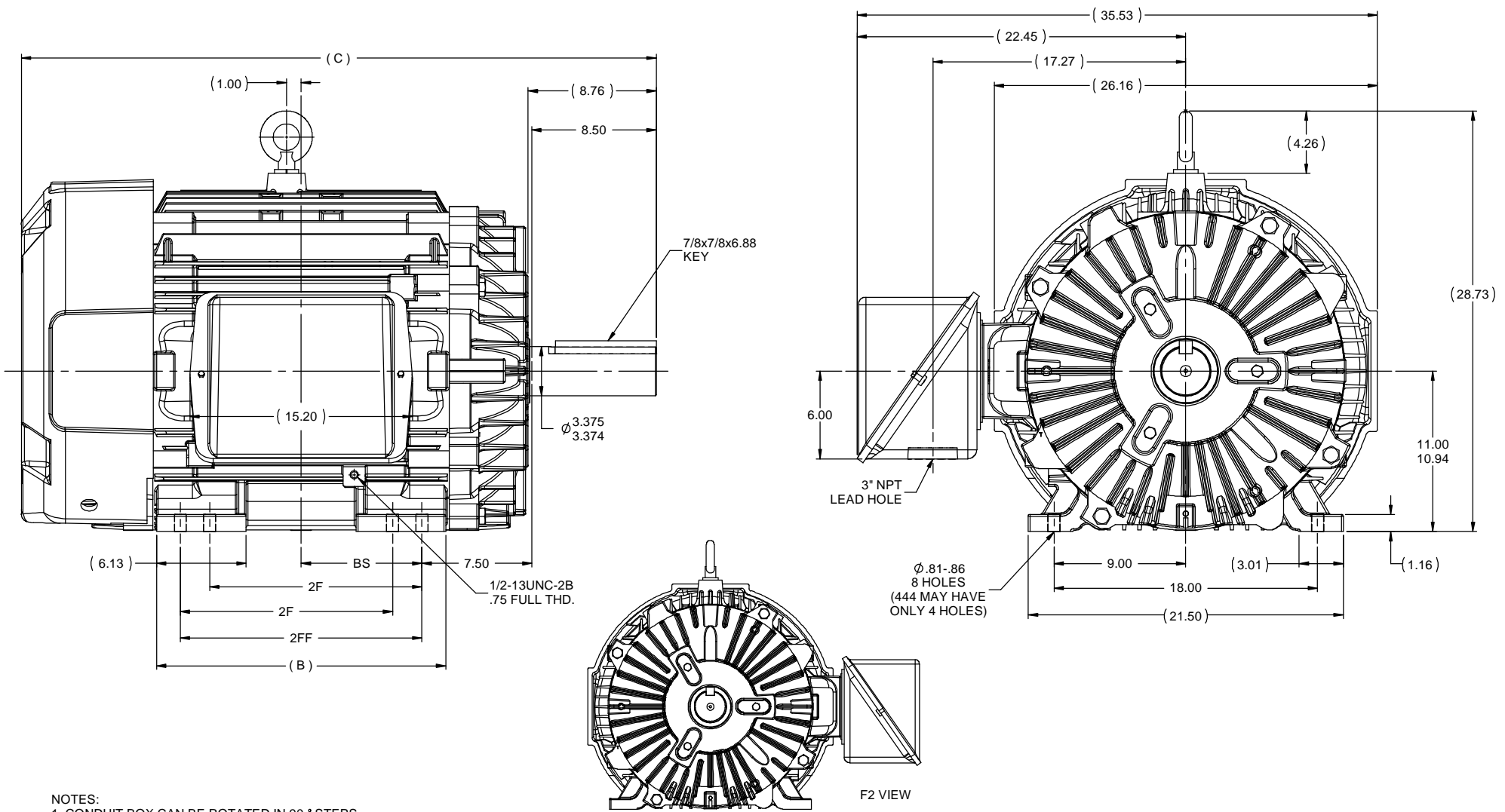
Nameplate Specifications

Output HP	150 Hp	Output KW	112.0 kW
Frequency	60 Hz	Voltage	460 V
Current	168.0 A	Speed	1785 rpm
Service Factor	1.15	Phase	3
Efficiency	95.8 %	Power Factor	87
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	56
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.0258 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	43.35 in
Frame Length	20.25 in	Shaft Diameter	3.375 in
Shaft Extension	8.76 in	Assembly/Box Mounting	F1/F2 Capable
Outline Drawing	B-SS517026-2025	Connection Drawing	A-EE7300U

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- 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. NAMPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

9	UPDATED MOUNTING HOLE NOTE	HV 08-07-2012	EH	TOLERANCES UNLESS SPECIFIED		DRAWN DRS 2/24/1999	
8	UPDATED FRAME TO CURRENT STD'S. ISAAC 09-5049	JJB 01-17-2012	DEC	INCHES		CHK ML 2/25/1999	
7	ADDED F2 VIEW	MSG 04-21-2010	MSG	x ±.1	APPR JL 2/25/1999	SCALE 5:32	
6	REVISED FRAME AND DASH TABLE ISAAC09-5049	TJW 04-01-2010	EH	xx ±.02	TITLE OUTLINE	REF	
5	UPDATED DRAWING	RJW 04-18-2007	ML	xxx ±.005	444/445T FR. - TEFC - STD	FMF	
4	CHG TO SHORT FAN GUARD DESIGN PER CN39335	RWR 02-17-2007	ML	xxxx ±.0005	MATL	PAGE OF	
NO	REVISION	BY & DATE	CHK	LANG ±7'30"	FINISH	PREV	
THIRD ANGLE PROJECTION				RFP	NETWORK FILE NAME	SS517026	
DASH		FRAME	B	C	BS	2F	2FF
1825	444T	17.75	41.35	7.25	14.50	---	
2025	444/445T	19.75	43.35	8.25	14.50	16.50	
SIZE					DRAWING NO		REV
B					SS517026		9

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
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.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#: 445THFN19071 AA **WINDING#:** T4454170 NONE 1
CONN. DIAGRAM: A-EE7300U **ASSEMBLY:** F1/F2 CAPABLE
OUTLINE: B-SS517026-2025

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
150	112	1800	1785	445T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	168	LINE OR INVERTER	CONTINUOUS	F1	1.15	40	3300

FULL LOAD EFF: 95.8	3/4 LOAD EFF: 95.8	1/2 LOAD EFF: 95.4	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 87	3/4 LOAD PF: 85	1/2 LOAD PF: 78	95.4	SQ CAGE INV RATED	50

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
441 LB-FT	1085	765 LB-FT 173	1150 LB-FT 261	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
75 dBA	85 dBA	59 LB-FT^2	- LB-FT^2	25 SEC.	-	2350 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	NONE	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

INVERTER TORQUE: CONSTANT 10:1
INV. HP SPEED RANGE: NONE
ENCODER: NONE
NONE NONE
NONE NONE PPR
BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
NONE FT-LB NONE V NONE Hz

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DATE: 06/21/2017 04:44:11 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 6/19/2017

445THFN19071

Customer: _____



Attention: _____

Submittal

Submitted by: FAREEDA DUDEKULA

Data @ 460 V

Motor Load Data

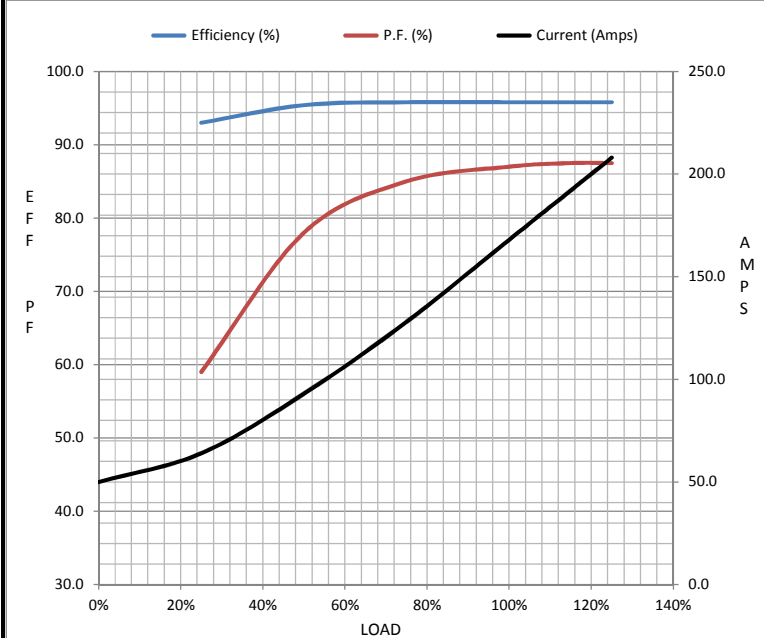
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	50.0	64.0	93.0	128	168	192	208	1,085
Torque (ft-lb)	0.00	110	220	330	441	508	552	765
RPM	1800	1796	1792	1790	1785	1,783	1782	0
Efficiency (%)		93.0	95.4	95.8	95.8	95.8	95.8	
P.F. (%)	4.5	59.0	78.0	85.0	87.0	87.5	87.5	27.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1725	1785	1800
Current (Amps)	1,085	900	650	168	50.0
Torque (ft-lb)	765	675	1,150	441	0.00

Information Block

HP	150.0			
Sync. RPM	1800			
Frame	445			
Enclosure	TEFC			
Construction	TFN			
Voltage	460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	60 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	59.0 Lb-Ft ²			
Ref Wdg	T4454170 NONE			
Sound Pressure @ 1M	75 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	B-SS517026-2025			
Conn. Diag	A-EE7300U			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0200	0.0120	0.1610	0.1740	5.1880



Speed - Torque Curve

