

# PRODUCT INFORMATION PACKET

Model No: 445TSHFN9005

Catalog No: W616

XRI®-841 Severe Duty Motor, 200 HP, 3 Ph, 60 Hz, 460 V, 3600 RPM, 445TS Frame, TEFC



Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E

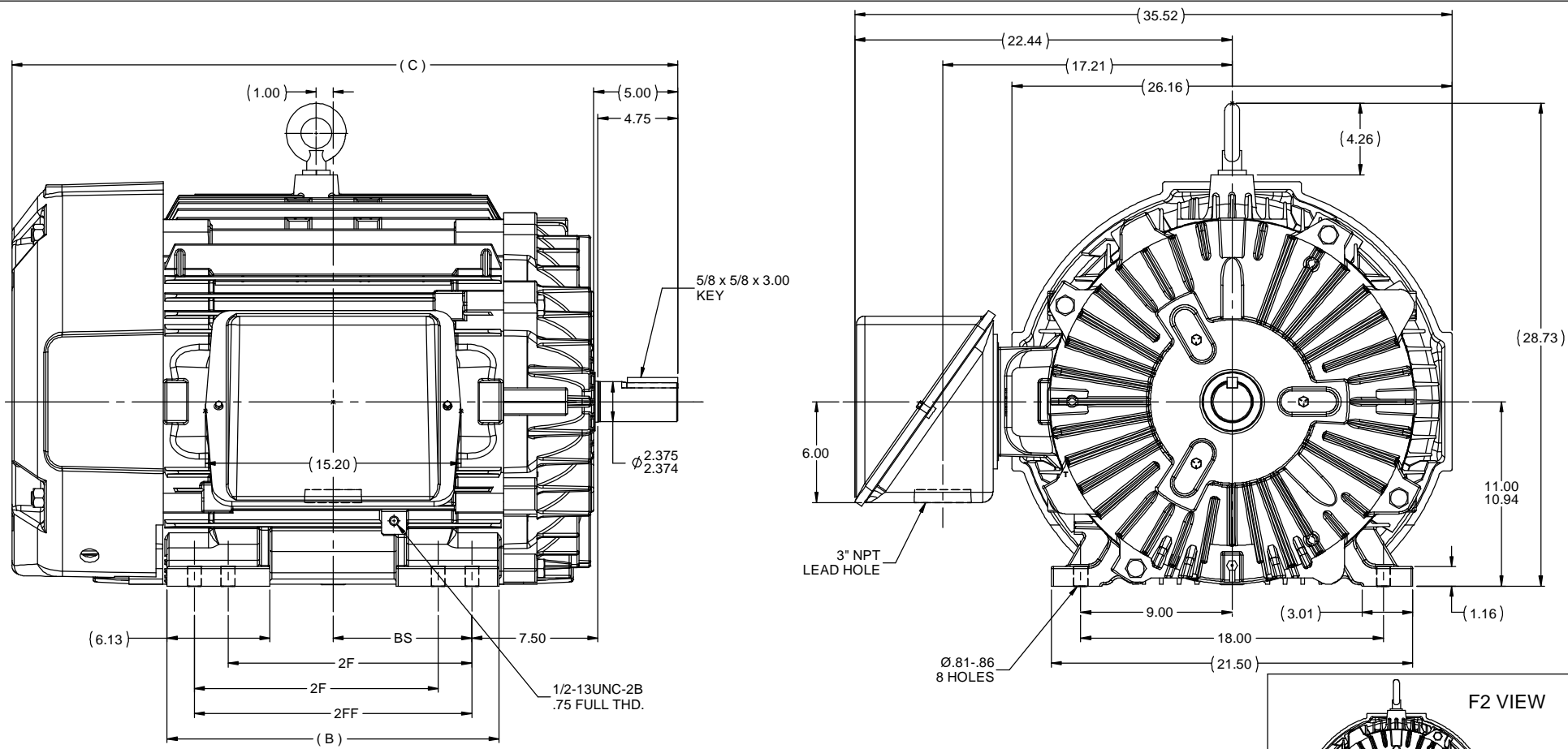
### Nameplate Specifications

Phase	<b>3</b>	Output HP	<b>200 Hp</b>
Output KW	<b>149.0 kW</b>	Voltage	<b>460 V</b>
Speed	<b>3575 rpm</b>	Service Factor	<b>1.15</b>
Frame	<b>445TS</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No Protection</b>	Efficiency	<b>95.4 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 Hz</b>
Current	<b>224.0 A</b>	Power Factor	<b>88</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Drive End Bearing Size	<b>6313</b>	Opp Drive End Bearing Size	<b>6313</b>
UL	<b>Recognized</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>56</b>
Number of Speeds	<b>1</b>	Hazardous Location	<b>DIVISION 2 T2B</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>.0125 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>	Overall Length	<b>39.60 in</b>
Frame Length	<b>20.25 in</b>	Shaft Diameter	<b>2.375 in</b>
Shaft Extension	<b>5 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Inverter Load	<b>CONSTANT 10:1</b>		
Outline Drawing	<b>B-SS516995-2025</b>	Connection Drawing	<b>A-EE7300U</b>





- 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.

TOLERANCES UNLESS SPECIFIED		DEC		INCHES	
4	UPDATED FRAME TO CURRENT STD'S. ISAAC 09-5049	JJB	7/16/2012	EH	x ±.1
3	CHG. TO SHORT FAN GUARD PER CN 39335	RWR	2/19/2007	ML	xx ±.03
2	ADDED F2 VIEW TO MOTOR	ERH	2/24/2003	ML	xxx ±.005
1	NEW DRAWING	CAE	2/18/1999	xxxx	±.0005
NO	REVISION	BY & DATE	CHK	LANG	±1/2"
THIRD ANGLE PROJECTION		RFP 02-18-1999		PREV	
NETWORK FILE NAME		SS516995		FINISH	

DRAWN CAE 02-08-1999	
CHK ML 02-15-1999	TITLE OUTLINE - TEFC
APPR JHL 02-18-1999	444/445TS FR. - OVER SIZE C'BOX
SCALE 1:6	
REF	
FMF	
PAGE	OF

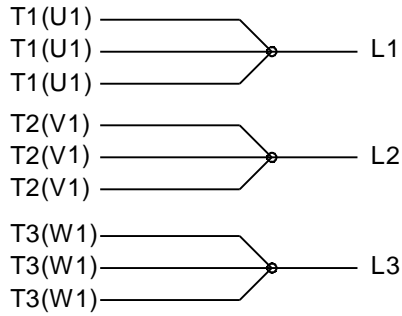
  

DASH	FRAME	B	C	2F	2FF	BS
2025	444/445TS	19.75	39.60	14.50	16.50	8.25

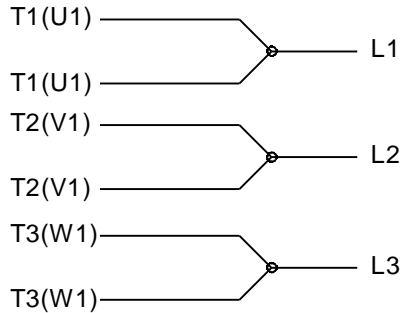
  

SIZE	DRAWING NO	REV
B	SS516995	4

**IF MOTOR HAS 9 LEADS**

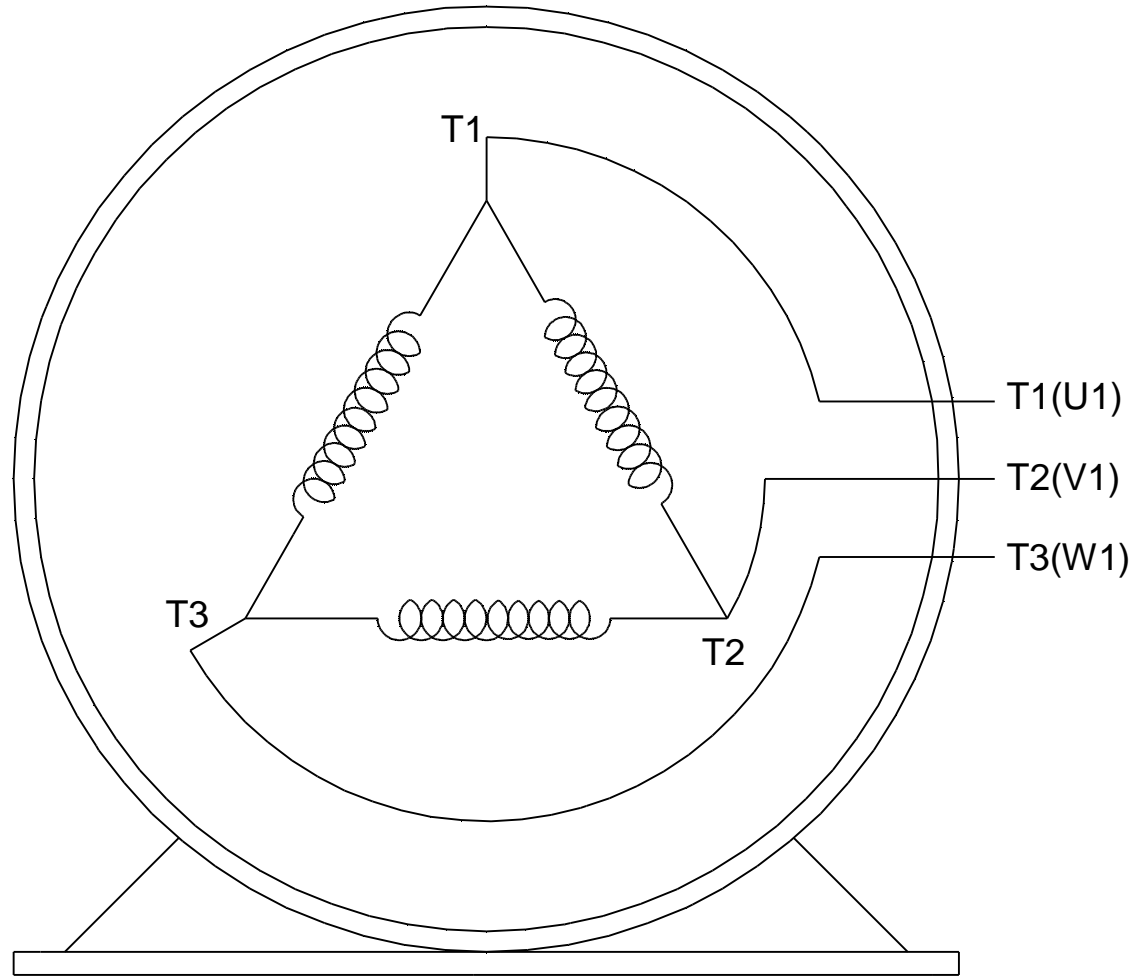
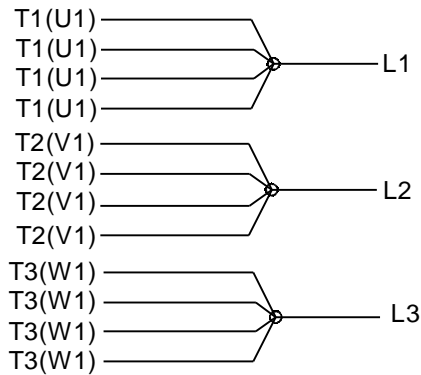


**IF MOTOR HAS 6 LEADS**



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>			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 $\sqrt{\text{mm}}$ mm SHOWN IN [BRACKETS]	REFERENCE	SIZE <b>A</b>	DRAWING NUMBER <b>EE7300U</b>	SHEET <b>1 OF 1</b>																			
				THIRD ANGLE PROJECTION																						

CERTIFICATION DATA SHEET

Model#: 445TSHFN9005 CF WINDING#: T445280 NONE 1  
 CONN. DIAGRAM: A-EE7300U ASSEMBLY: F1/F2 CAPABLE  
 OUTLINE: B-SS516995-2025

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
200	149	3600	3575	445TS	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	224	LINE OR INVERTER	CONTINUOUS	F1	1.15	40	3300

FULL LOAD EFF: 95.4	3/4 LOAD EFF: 95	1/2 LOAD EFF: 94.1	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 88	3/4 LOAD PF: 85.5	1/2 LOAD PF: 78.5	95	SQ CAGE INV RATED	69.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
294 LB-FT	1450	475 LB-FT 162	900 LB-FT 306	75

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
80 dBA	90 dBA	33.5 LB-FT^2	160 LB-FT^2	15 SEC.	2	2300 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	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6313	6313						

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 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	

DATE: 06/21/2017 05:07:57 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

Data Sheet

Date: 6/20/2017

Customer: \_\_\_\_\_

Attention: \_\_\_\_\_

Submitted by: FAREEDA DUDEKULA



445TSHFN9005

Submittal

Data @ 460 V

Motor Load Data

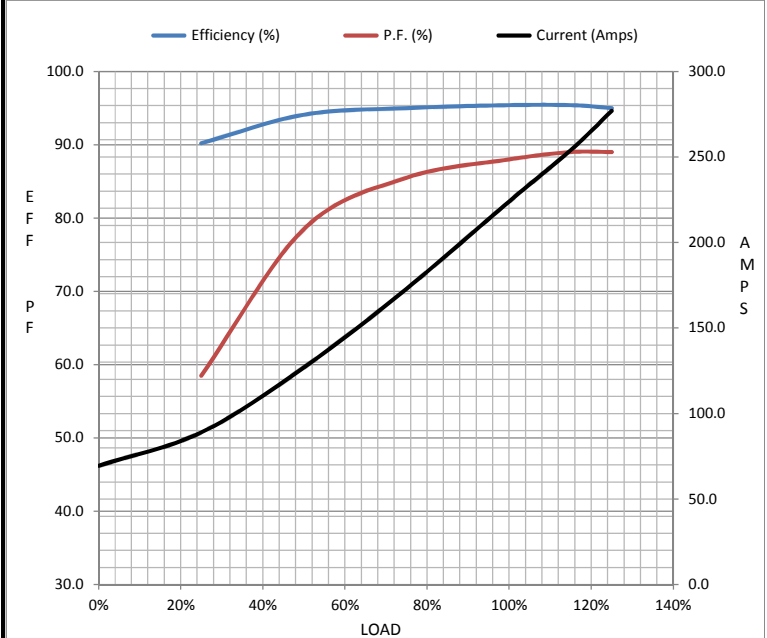
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	69.5	89.0	127	173	224	254	277	1,450
Torque (ft-lb)	0.00	73.0	147	220	294	338	368	500
RPM	3600	3595	3590	3580	3575	3,570	3565	0
Efficiency (%)		90.2	94.1	95.0	95.4	95.4	95.0	
P.F. (%)	6.8	58.5	78.5	85.5	88.0	89.0	89.0	25.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3430	3575	3600
Current (Amps)	1,450	1,210	950	224	69.5
Torque (ft-lb)	500	415	870	294	0.00

Information Block

HP	200.0			
Sync. RPM	3600			
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	75 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	33.5 Lb-Ft <sup>2</sup>			
Ref Wdg	T445280 NONE			
Sound Pressure @ 1M	80 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	B-SS516995-2025			
Conn. Diag	A-EE7300U			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0100	0.0090	0.1210	0.0920	3.8340



Speed - Torque Curve

