

# PRODUCT INFORMATION PACKET

Model No: 449THFS19091  
Catalog No: W629  
250 HP, Severe Duty Motor, 3 phase, 1200 RPM, 460 V, 449T Frame, TEFC  
Severe Duty Motors



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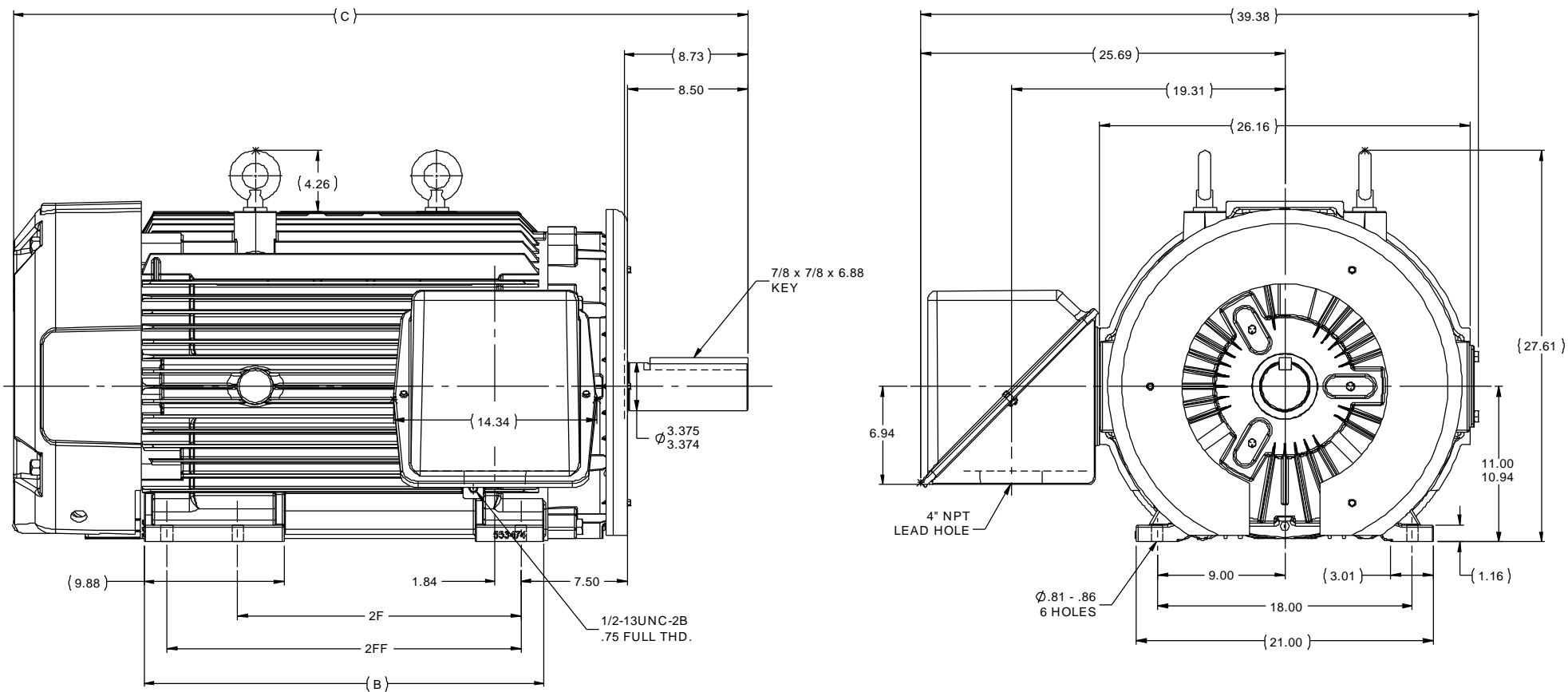
### Nameplate Specifications

Output HP	<b>250 Hp</b>	Output KW	<b>187.0 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>460 V</b>
Current	<b>300.0 A</b>	Speed	<b>1190 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>95.8 %</b>	Power Factor	<b>81</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Frame	<b>449T</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No</b>	Ambient Temperature	<b>40 °C</b>
Drive End Bearing Size	<b>NU319</b>	Opp Drive End Bearing Size	<b>6318</b>
UL	<b>Recognized</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>56</b>
Hazardous Location	<b>DIVISION 2</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>Reversible</b>
Resistance Main	<b>.012 Ohms</b>	Mounting	<b>Rigid Base</b>
Motor Orientation	<b>Horizontal</b>	Drive End Bearing	<b>Roller</b>
Opp Drive End Bearing	<b>Ball</b>	Frame Material	<b>Cast Iron</b>
Shaft Type	<b>T</b>	Overall Length	<b>51.85 in</b>
Frame Length	<b>28.75 in</b>	Shaft Diameter	<b>3.375 in</b>
Shaft Extension	<b>8.73 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Connection Drawing	<b>A-EE7300U</b>	Outline Drawing	<b>B-SS519827-2875</b>

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- NOTE:
1. C. BOX CAN BE ROTATED IN 90° STEPS.
  2. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	B	C	2F	2FF
2875	447T	28.25	51.85	20.00	---
2875	449T	28.25	51.85	---	25.00

NO		REVISION	BY & DATE	CHK	LANG	TOLERANCES UNLESS SPECIFIED	FINISH	PREV	SIZE	DRAWING NO	PAGE	OF	REV
5	UPDATED	MU110616	HV 10-30-2012	MH	DEC	INCHES							
4	UPDATED DRAWING		RJW 04-19-2007		X	±.1							
3	REVISED FAN GUARD	CN39335	RJW 11-06-2006		XX	±.03							
2	2F WAS 22.00, BS WAS 1.78	CN36705	HLB 06-16-2003	JHL	XXX	±.005							
1	NEW DRAWING	CN36705	HLB 05-30-2003	JHL	XXXX	±.0005							
							TITLE	OUTLINE - TEFC - NPT LEAD HOLE		DRAWN		HLB 05-27-2003	
								447/9T FR. - FLAT BRACKETS - W/ BAFFLE		CHK		JHL 05-30-2003	
								MATL		APPR		JES 05-30-2003	
								FINISH		SCALE		1:7	
								RFP		REF		B-SS516690	
								NETWORK FILE NAME		SS519827		FMF	
								PREV		PAGE		OF	
								THIRD ANGLE PROJECTION		SIZE		B	
								DRAWING NO		SS519827		REV	
								5					



**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>																						
<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>			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	MATERIAL	PROCESS/FINISH																				
			mm SHOWN IN [BRACKETS]	THIRD ANGLE PROJECTION	SIZE <b>A</b>	DRAWING NUMBER <b>EE7300U</b>	SHEET <b>1 OF 1</b>																			



P.O. BOX 8003  
WAUSAU, WI 54401-8003  
PH. 715-675-3311

DATA VOLTS: 460

**CERTIFICATION DATA SHEET**

CUSTOMER: \_\_\_\_\_ CUSTOMER P.O. #: \_\_\_\_\_  
 ORDER #: \_\_\_\_\_ REFERENCE MODEL #: 449THFS19091  
 CONN. DIAGRAM: A-EE7300U CAT #: W629  
 OUTLINE: B-SS519827-2875 CUSTOMER PART #: \_\_\_\_\_  
 WINDING: T449626 NONE 8 MOUNTING: F1/F2 CAPABLE  
 SPEED: \_\_\_\_\_

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
250	187	1200	1190	447/449T	TEFC	TFN	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	460	300	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	95.8	3/4 LD EFF	96.0	1/2 LD EFF	95.4	GTD EFF	95.4	ELECT. TYPE	SQ CAGE INV RATED
F.L. PF	81.0	3/4 LD PF	79.0	1/2 LD PF	70.0				

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
1,103 LB-FT	1,825	1,825 LB-FT 165%	2,825 LB-FT 256%	65

@ 3 FT.	POWER	ROTOR WK <sup>2</sup>	MAX. LOAD WK <sup>2</sup>	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
75 dBA	84 dBA	138 LB-FT <sup>2</sup>	3600 LB-FT <sup>2</sup>	25 SEC.	2	3250 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	UM SEVERE	DIVISION 2	NO	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
ROLLER	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
NU319	6318						

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
0.008	0.008	0.096	0.129	2.177	0.080	NONE

* N O T E S *	INVERTER TORQUE: CONSTANT 10:1 INV. HP SPEED RANGE: NONE	
	ENCODER: NONE NONE NONE	
	BRAKE: NONE NONE NONE	
	FT-LB: NA VOLTAGE: NONE HZ:	
	UL: V-INS, CONST UL REC	

PREPARED BY: FAREEDA DUDEKULA  
 DATE: 8/29/2018

Data Sheet

449THFS19091

Date: 12/14/2018  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



Submittal

Data @ 460 V

Motor Load Data

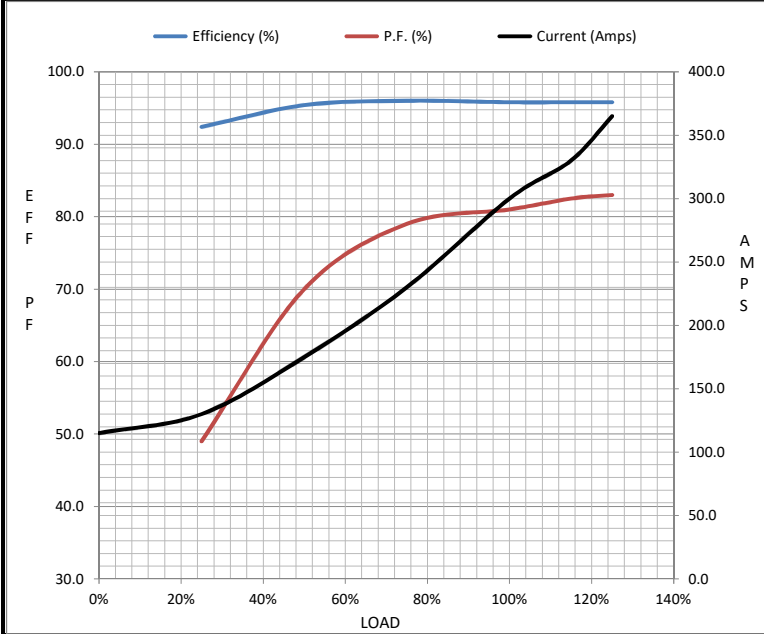
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	115	130	175	230	300	330	365	1,825
Torque (ft-lb)	0.00	275	550	825	1,103	1,245	1,385	1,825
RPM	1200	1196	1194	1192	1190	1,188	1186	0
Efficiency (%)		92.4	95.4	96.0	95.8	95.8	95.8	
P.F. (%)	3.5	49.0	70.0	79.0	81.0	82.5	83.0	23.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1150	1190	1200
Current (Amps)	1,825	1,700	1,125	300	115
Torque (ft-lb)	1,825	1,700	2,825	1,103	0.00

Information Block

HP	250.0			
Sync. RPM	1200			
Frame	449			
Enclosure	TEFC			
Construction	TFS			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	65 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	138 Lb-Ft <sup>2</sup>			
Ref Wdg	T449626 NONE			
Sound Pressure @ 1M	75 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	B-SS519827-2875			
Conn. Diag	A-EE7300U			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0080	0.0080	0.0960	0.1290	2.1770



Speed - Torque Curve

