

# PRODUCT INFORMATION PACKET

Model No: 449TTFS16534

Catalog No: E345

Severe Duty Motors, TEFC, 300 HP, 3 Ph, 60 Hz, 575 V, 1785 RPM, 449T Frame



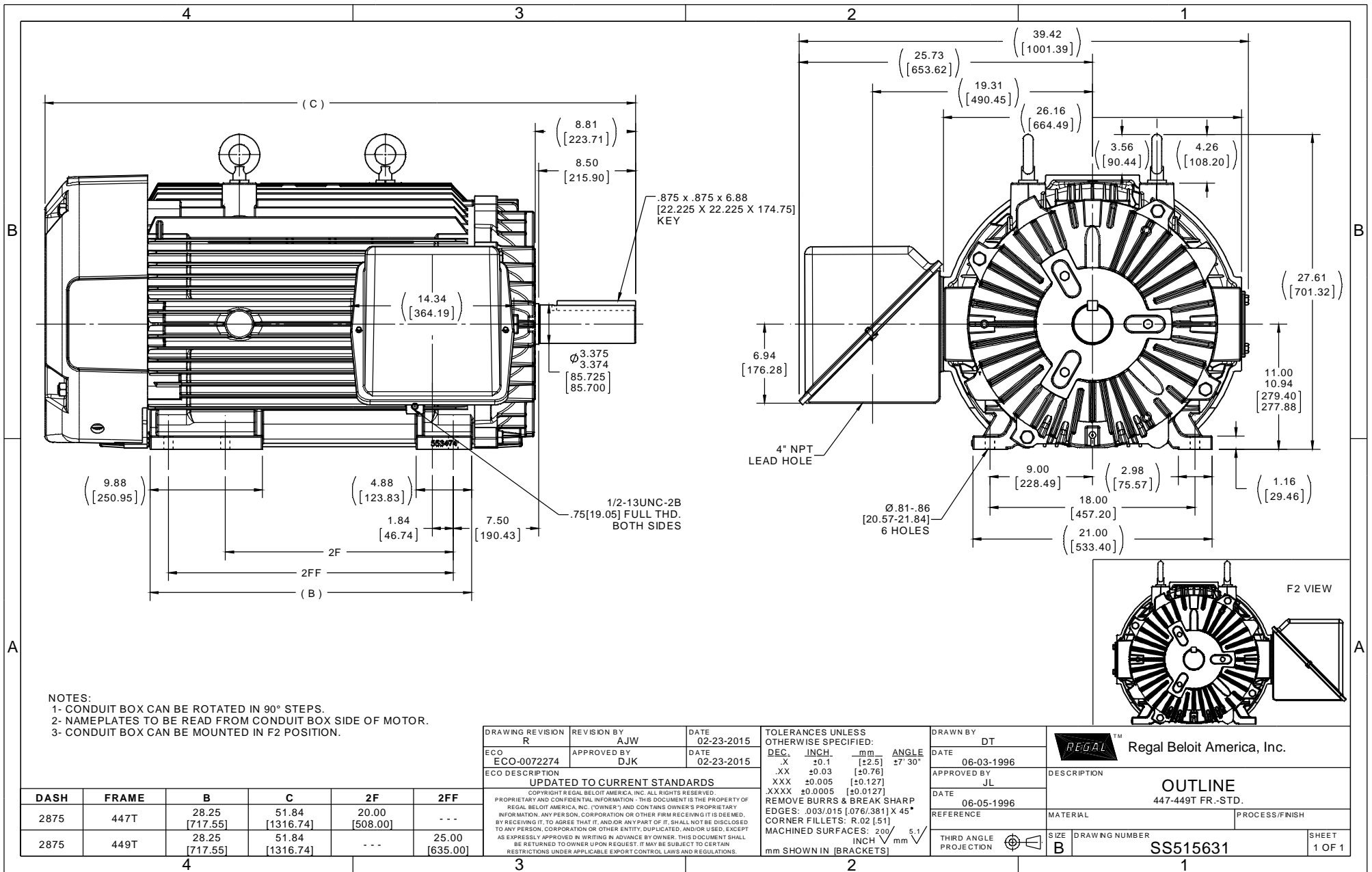
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### Nameplate Specifications

Output HP	<b>300 Hp</b>	Output KW	<b>224.0 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>575 V</b>
Current	<b>271.0 A</b>	Speed	<b>1785 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>96.5 %</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>449T</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>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>54</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>4</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.0085 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>51.84 in</b>
Frame Length	<b>28.75 in</b>	Shaft Diameter	<b>3.375 in</b>
Shaft Extension	<b>8.81 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Inverter Load	<b>CONSTANT 2:1</b>		
Connection Drawing	<b>A-EE7300U</b>	Outline Drawing	<b>B-SS515631-2875</b>



NOTES:  
 1- CONDUIT BOX CAN BE ROTATED IN 90° STEPS.  
 2- NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.  
 3- CONDUIT BOX CAN BE MOUNTED IN F2 POSITION.

DRAWING REVISION R	REVISION BY AJW	DATE 02-23-2015
ECO ECO-0072274	APPROVED BY DJK	DATE 02-23-2015
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TOLERANCES UNLESS OTHERWISE SPECIFIED:			
DEC.	INCH.	mm	ANGLE
.X	±0.1	[±2.5]	27° 30'
.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] X 45°			
CORNER FILLETS: R.02 [.51]			
MACHINED SURFACES: 200 / INCH 5.1 / mm			
mm SHOWN IN [BRACKETS]			

DRAWN BY DT
DATE 06-03-1996
APPROVED BY JL
DATE 06-05-1996
REFERENCE
THIRD ANGLE PROJECTION

Regal Beloit America, Inc.	
DESCRIPTION <b>OUTLINE</b> 447-449T FR.-STD.	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER SS515631
	SHEET 1 OF 1

DASH	FRAME	B	C	2F	2FF
2875	447T	28.25 [717.55]	51.84 [1316.74]	20.00 [508.00]	---
2875	449T	28.25 [717.55]	51.84 [1316.74]	---	25.00 [635.00]

**IF MOTOR HAS 9 LEADS**

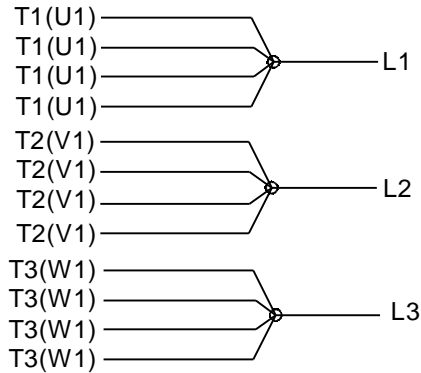


**IF MOTOR HAS 6 LEADS**



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>
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.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#:** 449TTFS16534 AB      **WINDING#:** T449445 NONE 7  
**CONN. DIAGRAM:** A-EE7300U      **ASSEMBLY:** F1/F2 CAPABLE  
**OUTLINE:** B-SS515631-2875

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
300	224	1800	1785	447/449T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	575	271	LINE OR INVERTER	CONTINUOUS	H1	1.15	40	3300

FULL LOAD EFF: 96.5	3/4 LOAD EFF: 96.5	1/2 LOAD EFF: 95.4	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 86	3/4 LOAD PF: 84.5	1/2 LOAD PF: 78	96.2	SQ CAGE INV RATED	78.4

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
883 LB-FT	1760	1775 LB-FT 201	2100 LB-FT 238	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	93 LB-FT^2	2500 LB-FT^2	25 SEC.	1	3000 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						
ROLLER	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
NU319	6318						

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  
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S  
\*

INVERTER TORQUE: CONSTANT 2:1 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 07:09:26 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



449TTFS16534

Submittal

Data @ 575 V

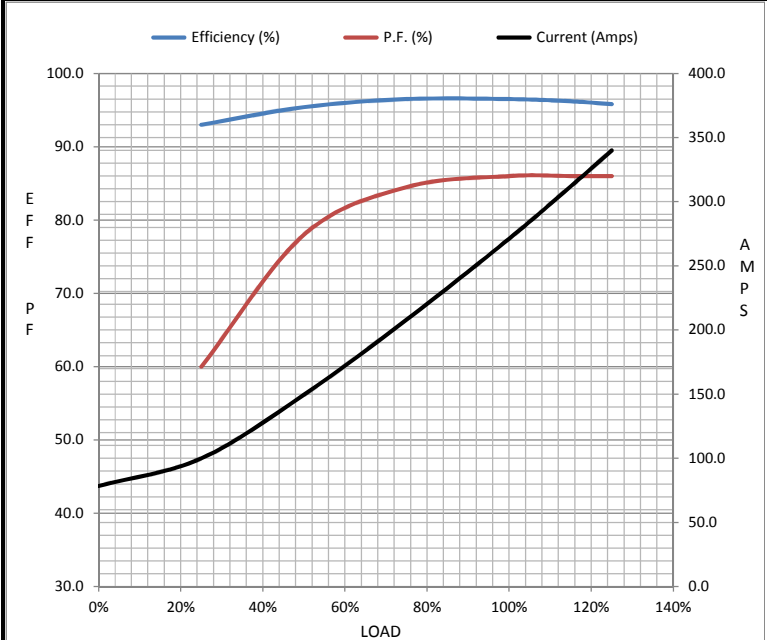
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	78.4	100	150	208	271	312	340	1,760
Torque (ft-lb)	0.00	219	439	660	883	1,015	1,105	1,775
RPM	1800	1796	1792	1788	1785	1,782	1778	0
Efficiency (%)		93.0	95.4	96.5	96.5	96.2	95.8	
P.F. (%)	4.5	60.0	78.0	84.5	86.0	86.0	86.0	31.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1725	1785	1800
Current (Amps)	1,760	1,640	920	271	78.4
Torque (ft-lb)	1,775	1,650	2,100	883	0.00

Information Block				
HP	300.0			
Sync. RPM	1800			
Frame	449			
Enclosure	TEFC			
Construction	TFN			
Voltage	575 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>	93.0 Lb-Ft <sup>2</sup>			
Ref Wdg	T449445 NONE			
Sound Pressure @ 1M	80 dBA			
VFD Rating	CONSTANT 2:1			
Outline Dwg	B-SS515631-2875			
Conn. Diag	A-EE7300U			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0090	0.0090	0.1180	0.1770	4.0940



Speed - Torque Curve

