

# PRODUCT INFORMATION PACKET

Model No: 445THFN9036  
Catalog No: W612  
150,1800,TEFC,445T,3/60/460  
Severe Duty



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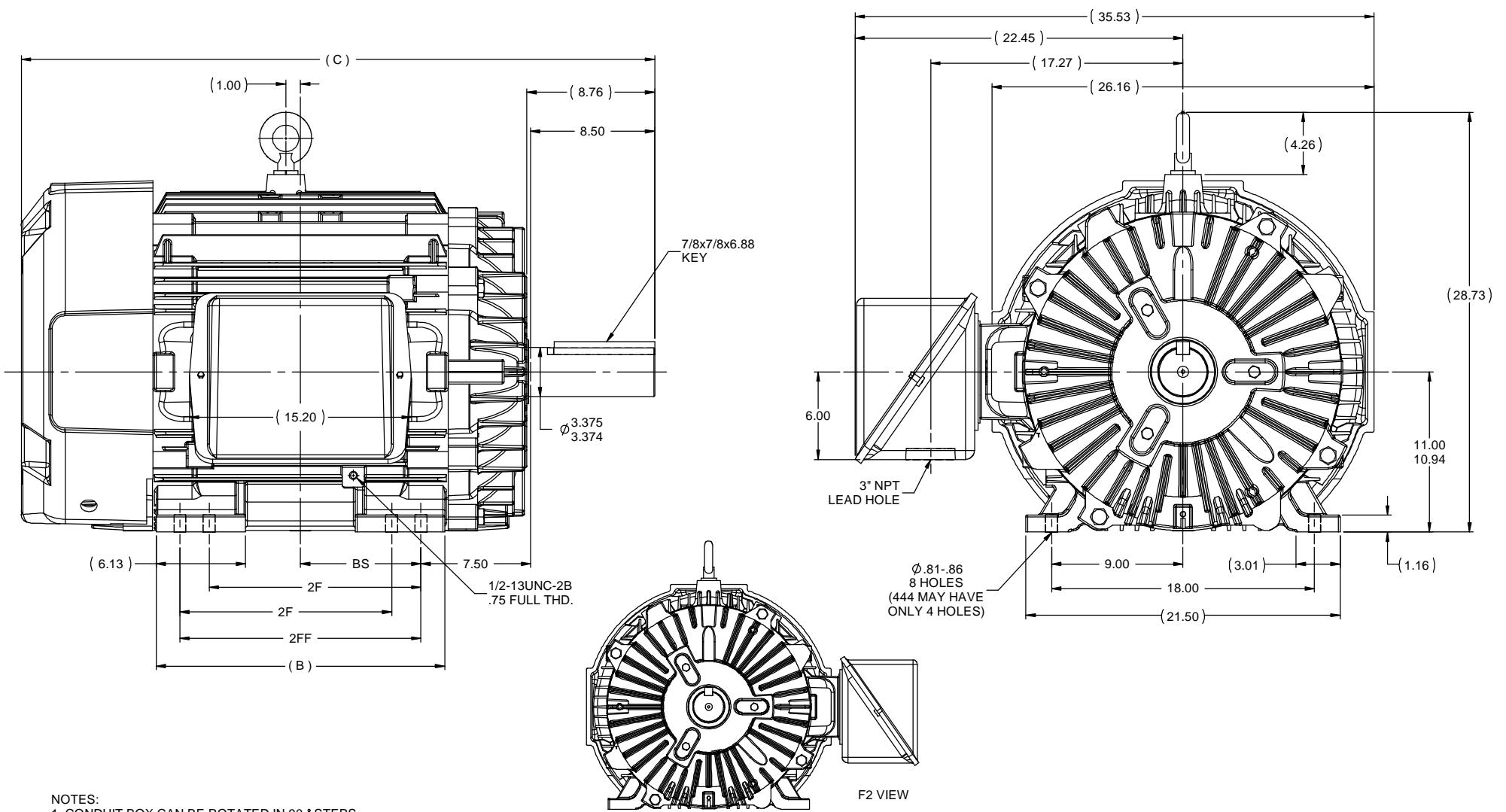
### Nameplate Specifications

Output HP	<b>150 Hp</b>	Output KW	<b>112 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>460 V</b>
Current	<b>172 A</b>	Speed	<b>1785 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>95.8 %</b>	Duty	<b>CONTINUOUS</b>
Insulation Class	<b>F</b>	Design Code	<b>B</b>
KVA Code	<b>G</b>	Frame	<b>445T</b>
Enclosure	<b>TEFC</b>	Overload Protector	<b>NOT</b>
Ambient Temperature	<b>40 °C</b>	Drive End Bearing Size	<b>6318</b>
Opp Drive End Bearing Size	<b>6316</b>	UL	<b>Recognized</b>
CSA	<b>Y</b>	CE	<b>Y</b>
IP Code	<b>56</b>		

### Technical Specifications

Electrical Type	<b>SQ CAGE INV RATED</b>	Starting Method	<b>LINE OR INVERTER</b>
Poles	<b>4</b>	Rotation	<b>REV</b>
Mounting	<b>RIGID</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>T</b>
Overall Length	<b>43.35 in</b>	Frame Length	<b>20.25 in</b>
Shaft Diameter	<b>3.38 in</b>	Shaft Extension	<b>8.76 in</b>
Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>		
Outline Drawing	<b>B-SS517026-2025</b>	Connection Diagram	<b>A-EE7300U</b>

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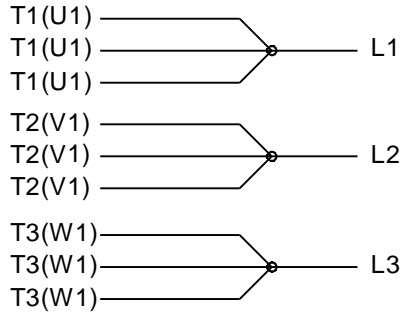


NOTES:

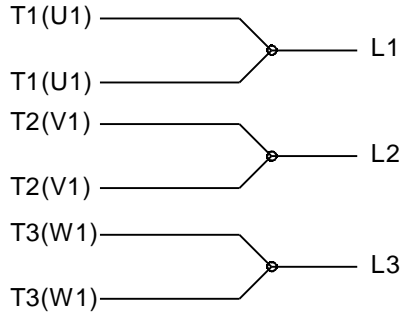
1. CONDUIT BOX CAN BE ROTATED IN 90 ° STEPS.
2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180 °
3. NAMPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

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	REV
THIRD ANGLE PROJECTION				RFP	PREV	SIZE DRAWING NO
				NETWORK FILE NAME	SS517026	OF
					SIZE	REV
					B	SS517026 9

### IF MOTOR HAS 9 LEADS

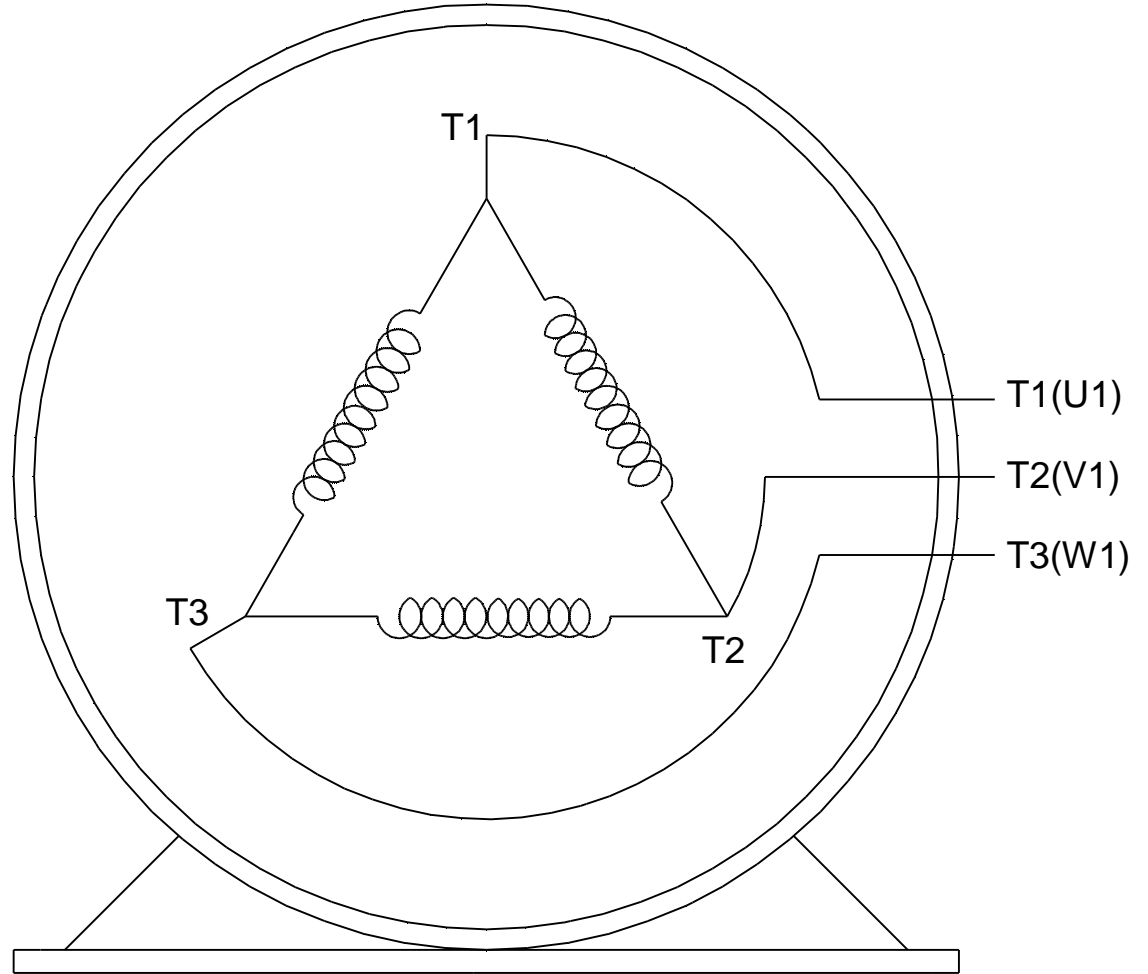


### IF MOTOR HAS 6 LEADS



A-9806 DECAL IF CALLED FOR

### IF MOTOR HAS 12 LEADS



## VIEW OF TERMINAL END

DRAWING REVISION <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>																							
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<b>ECO DESCRIPTION</b> <b>UPDATED TO SOLIDWORKS</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>			APPROVED BY <b>GK</b>	DATE <b>09-30-1996</b>	MATERIAL	PROCESS/FINISH																				
			<small>REMOVE BURRS &amp; BREAK SHARP EDGES: .003/.015 [.076/.381] X 45° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 200 INCH 5.1 mm SHOWN IN [BRACKETS]</small>			REFERENCE	THIRD ANGLE PROJECTION	SIZE <b>A</b>	DRAWING NUMBER <b>EE7300U</b>	SHEET <b>1 OF 1</b>																

**CERTIFICATION DATA SHEET**

**Model#:** 445THFN9036 AG      **WINDING#:** T4454127 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	172	LINE OR INVERTER	CONTINUOUS	F1	1.15	40	3300

FULL LOAD EFF: 95.8	3/4 LOAD EFF: 96.2	1/2 LOAD EFF: 95.4	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 85	3/4 LOAD PF: 82	1/2 LOAD PF: 74	95.4	SQ CAGE INV RATED	60

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
441 LB-FT	1085	800 LB-FT 181	1150 LB-FT 261	70

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
75 dBA	85 dBA	47 LB-FT^2	1000 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

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 04:48:22 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

Data Sheet

445TFHN9036



Submittal  
Data @ 460 V

Date: 6/19/2017

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

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

Submitted by: FAREEDA DUDEKULA

Motor Load Data

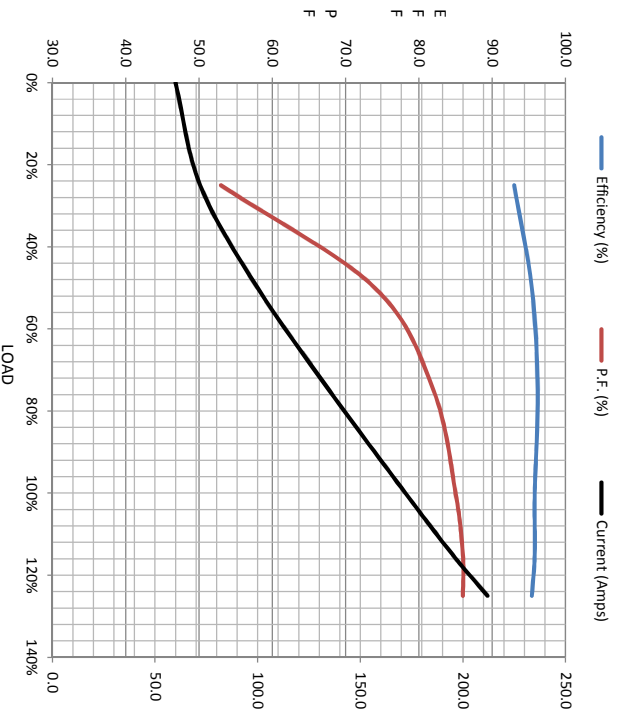
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	60.0	72.0	100	135	172	195	212	1,085
Torque (ft-lb)	0.00	110	220	330	441	508	553	800
RPM	1800	1796	1792	1790	1785	1,782	1780	0
Efficiency (%)		93.0	95.4	96.2	95.8	95.8	95.4	
P.F. (%)	4.5	53.0	74.0	82.0	85.0	86.0	86.0	28.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (rpm)	0	900	1725	1785	1800
Current (Amps)	1,085	950	600	172	60.0
Torque (ft-lb)	800	775	1,150	441	0.00

Information Block

HP	150.0
Sync. RPM	1800
Frame	445
Enclosure	TEFC
Construction	TEN
Voltage	460 V
Frequency	60 HZ
Design	A
LR Code letter	G
Service Factor	1.15
Temp Rise @ FL	70 °C
Duty	CONT
Ambient	40 °C
Elevation	1,000 feet
Rotor/Shaft wkt	47.0 Lb-Fe
Rel Wdg	T44541Z7 NONE
Sound Pressure @ 1M	75 dBA
VFD Rating	CONSTANT 10:1
Outline Dwg	B-SS517028-2025
Conn. Diag	A-EE7300U
Additional Specifications:	
EQUIV CKT (OHMS / PHASE)	
R1	R2
0.0210	0.0120
X1	X2
0.1580	0.1590
Xm	Xm
	4.4090



Speed - Torque Curve

