

# PRODUCT INFORMATION PACKET

Model No: 445THFN8046

Catalog No: Y519

150 HP Variable Speed Motor, 3 phase, 1800 RPM, 460 V, 445T Frame, TEBC  
2000:1 With Encoder Provision Motors





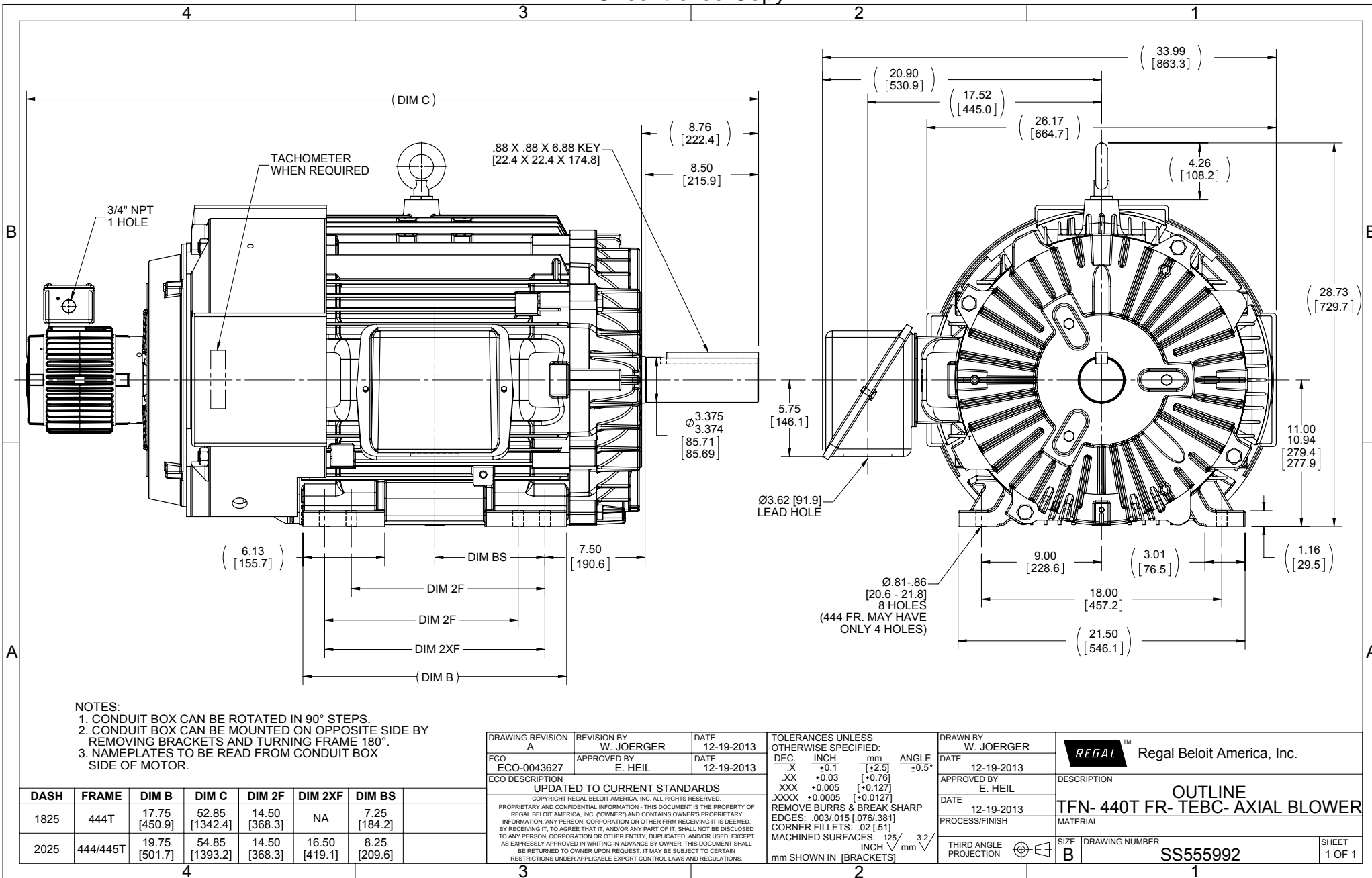
### Nameplate Specifications

Output HP	150 Hp	Output KW	112.0 kW
Frequency	60 Hz	Voltage	460 V
Current	170.0 A	Speed	1790 rpm
Service Factor	1	Phase	3
Efficiency	94.5 %	Power Factor	87.5
Duty	Continuous	Insulation Class	H
Design Code	INV	KVA Code	J
Frame	445T	Enclosure	Totally Enclosed Blower cooled - Axial
Thermal Protection	Thermostats (N/C)	Ambient Temperature	40 °C
Drive End Bearing Size	6318	Opp Drive End Bearing Size	6316
UL	Recognized	CSA	Y
CE	Y	IP Code	43

### Technical Specifications

Electrical Type	Squirrel Cage Inverter Duty	Starting Method	Inverter Only
Poles	4	Rotation	Reversible
Resistance Main	.0245 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	54.85 in
Frame Length	20.25 in	Shaft Diameter	3.375 in
Shaft Extension	8.75 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS555992-2025	Connection Drawing	A-EE7300T

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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. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	DIM B	DIM C	DIM 2F	DIM 2XF	DIM BS
1825	444T	17.75 [450.9]	52.85 [1342.4]	14.50 [368.3]	NA	7.25 [184.2]
2025	444/445T	19.75 [501.7]	54.85 [1393.2]	14.50 [368.3]	16.50 [419.1]	8.25 [209.6]

DRAWING REVISION A	REVISION BY W. JOERGER	DATE 12-19-2013
ECO ECO-0043627	APPROVED BY E. HEIL	DATE 12-19-2013
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±0.5°
.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] CORNER FILLETS: .02 [51] MACHINED SURFACES: 125/3.2 INCH/mm 3.2  
 mm SHOWN IN [BRACKETS]

DRAWN BY W. JOERGER	DATE 12-19-2013
APPROVED BY E. HEIL	DATE 12-19-2013
PROCESS/FINISH	
THIRD ANGLE PROJECTION	

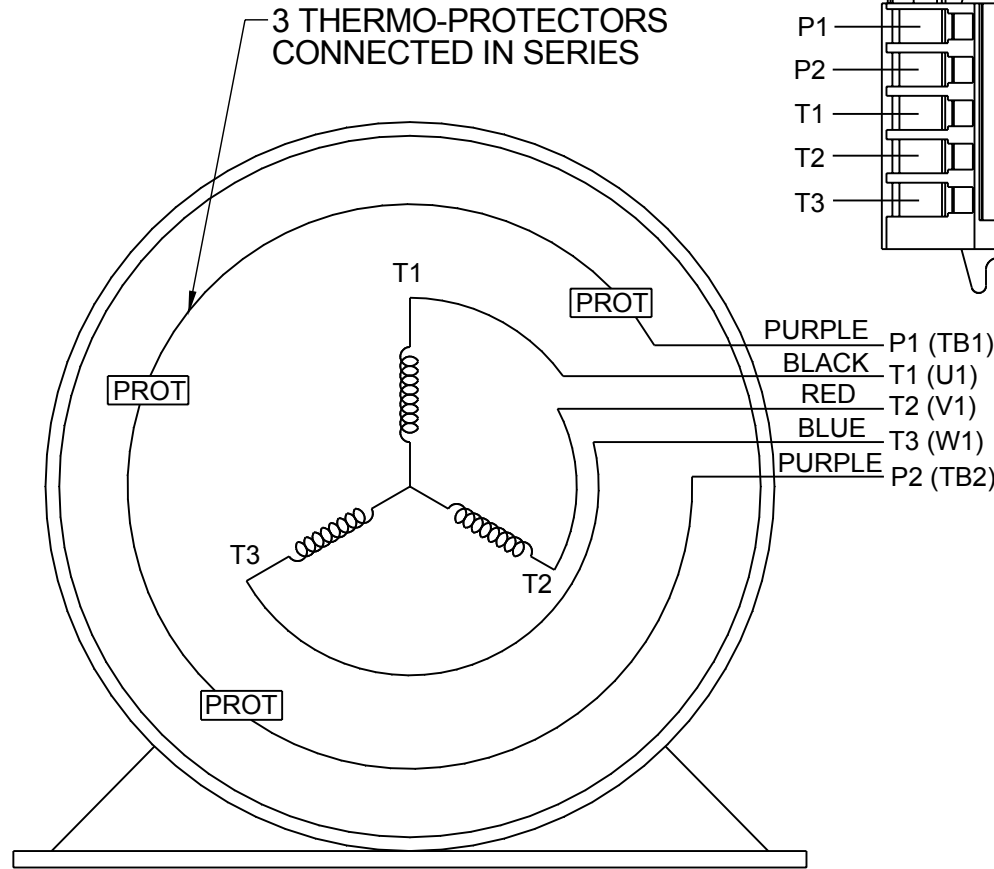
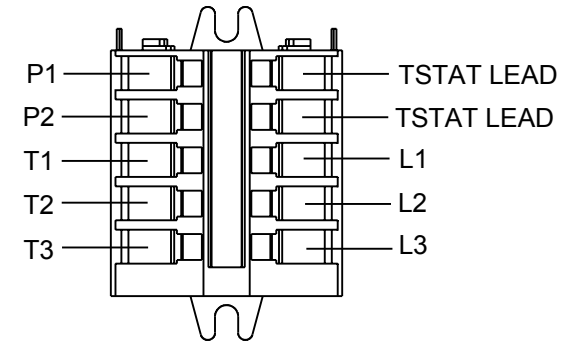
Regal Beloit America, Inc.	
DESCRIPTION <b>OUTLINE</b> TFN- 440T FR- TEBC- AXIAL BLOWER	
MATERIAL	
SIZE B	DRAWING NUMBER SS555992
SHEET 1 OF 1	

**THREE PHASE - SINGLE VOLTAGE  
MOTOR - CONDUIT BOX @ 'A'**

**TO REVERSE ROTATION:  
INTERCHANGE ANY TWO LINE  
LEAD CONNECTIONS**

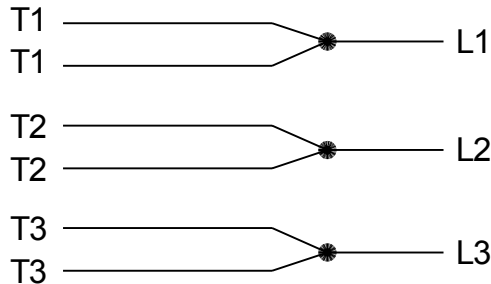
**NOTE FOR FACTORY USE ONLY:  
TO SURGE TEST:  
FOR 3 LEAD COMMON CONNECT:  
CONNECT P1 TO T1 THEN P2 TO L1  
FOR 6 LEAD COMMON CONNECT:  
CONNECT P1 TO BOTH T1  
THEN P2 TO L1**

TERMINAL BLOCK WHEN SPECIFIED



**VIEW OF TERMINAL END**

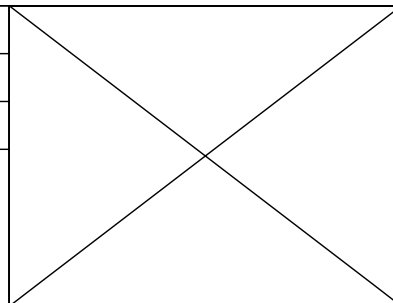
**IF MOTOR HAS MULTIPLE  
T'S PER LEAD CONNECT  
TOGETHER LIKE T'S**



**A-9806 DECAL**

- T2BM
- T6AW
- T6AL
- T6Z
- T4EG
- T4BF
- T8A
- T6H
- T6A
- T4AX
- T4A
- T2A
- T2F

DRAWING REVISION AB	REVISION BY AJW	DATE 07-17-2015
ECO ECO-0081632	APPROVED BY T.VUE	DATE 07-17-2015
ECO DESCRIPTION REV'D IEC MARKINGS PER IEC-60034-8		
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DRAWN BY LZ
DATE 01-04-1994
APPROVED BY GK
DATE 01-20-1994
REFERENCE
THIRD ANGLE PROJECTION

<b>Regal Beloit America, Inc.</b>	
<b>DESCRIPTION</b> <b>CONN DIAGRAM-EXTERNAL</b> <b>3Ø-SINGLE VOLT-MOTOR WITH PROTECTOR</b>	
MATERIAL	PROCESS/FINISH
SIZE <b>A</b>	DRAWING NUMBER <b>EE7300T</b>
SHEET <b>1 OF 1</b>	



NONE	NONE		
NONE FT-LB	NONE V	NONE Hz	

DATE: 06/21/2017 04:46:31 AM  
FORM 3531 REV.3 02/07/99  
\*\* Subject to change without notice.

Data Sheet

Date: 29-06-2017  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



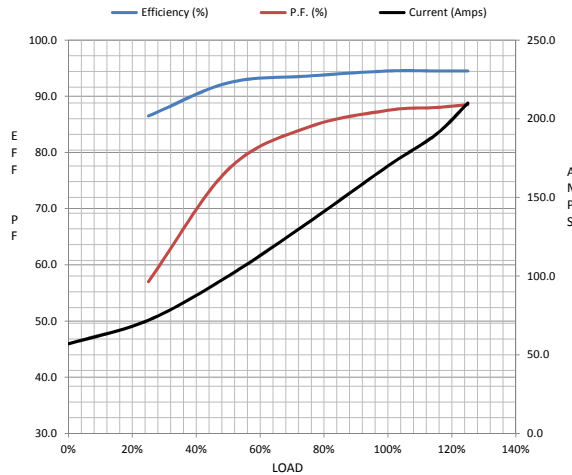
445THFN8046

Submittal

Data @ 460 V

Motor Load Data									
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	57.0	72.0	100	134	170	190	210	1,500	
Torque (ft-lb)	0.00	110	220	330	440	495	550	700	
RPM	1800	1798	1795	1792	1790	1,788	1786	0	
Efficiency (%)		86.5	92.4	93.6	94.5	94.5	94.5		
P.F. (%)	10.0	57.0	77.0	84.5	87.5	88.0	88.5	24.0	

Motor Speed Data						Information Block	
	LR	Pull-Up	BD	Rated	Idle		
Speed (RPM)	0	900	1700	1790	1800	HP	150.0
Current (Amps)	1,500	1,400	900	170	57.0	Sync. RPM	1800
Torque (ft-lb)	700	675	1,475	440	0.00	Frame	445



Enclosure	TEBC			
Construction	TBN			
Voltage	460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	J			
Service Factor	1.15			
Temp Rise @ FL	60 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk²	55.0 Lb-FT²			
Ref Wdg	T4454118 R4			
Sound Pressure @ 1M	88 dBA			
VFD Rating	CONSTANT 2000:1			
Outline Dwg	B-SS55992-2025			
Conn. Diag	A-EE7300T			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0160	0.0090	0.1540	0.1120	4.4230

