

# PRODUCT INFORMATION PACKET

Model No: 444THFN8046  
Catalog No: Y518  
125,1800,TEBC,444T,3/60/460  
2000:1 With Encoder Provision



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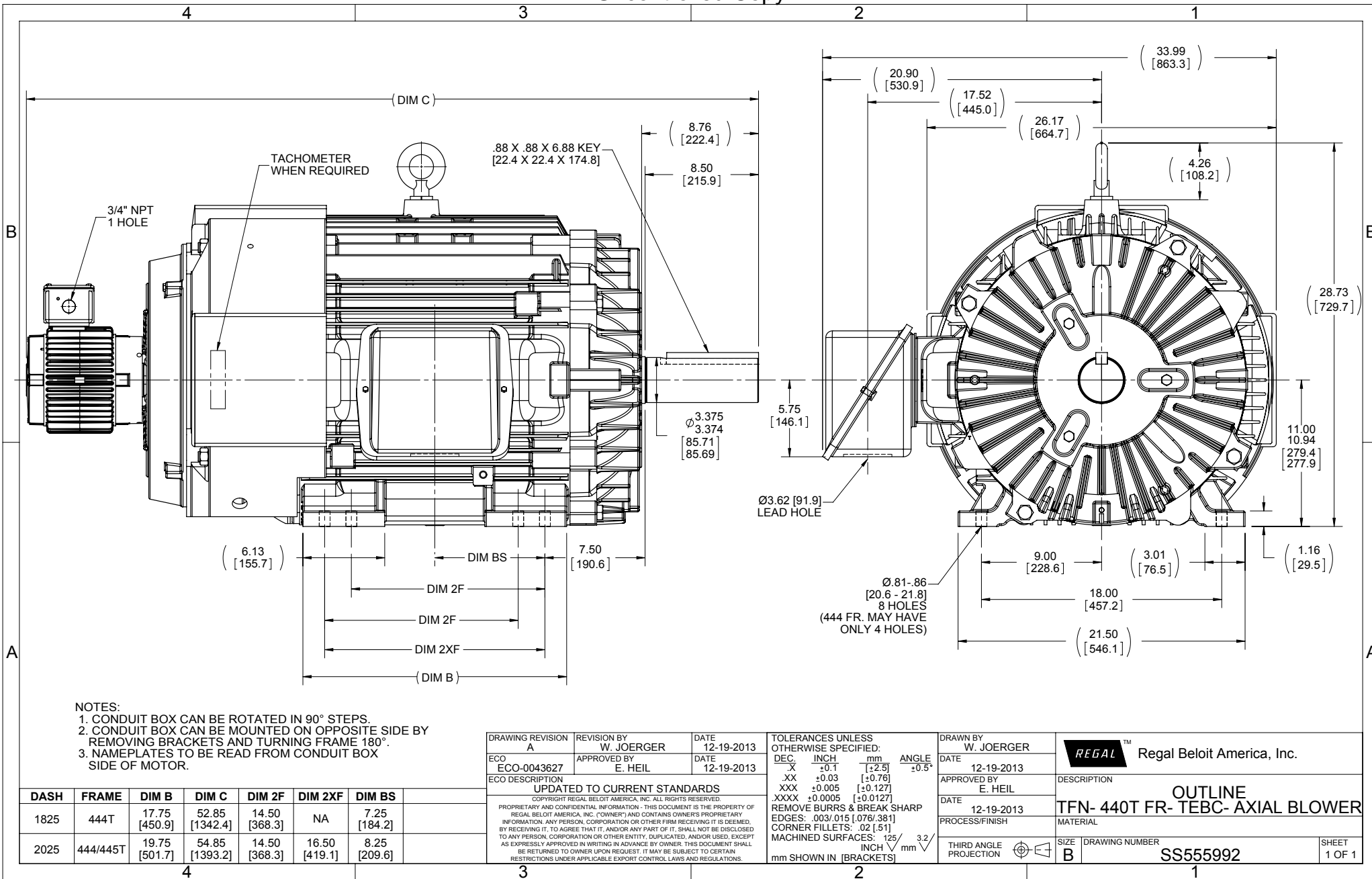
### Nameplate Specifications

Output HP	<b>125 Hp</b>	Output KW	<b>93 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>460 V</b>
Current	<b>138 A</b>	Speed	<b>1785 rpm</b>
Service Factor	<b>1</b>	Phase	<b>3</b>
Efficiency	<b>95 %</b>	Duty	<b>CONTINUOUS</b>
Insulation Class	<b>H</b>	Design Code	<b>INV</b>
KVA Code	<b>G</b>	Frame	<b>444T</b>
Enclosure	<b>TEBC-AXIAL</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>43</b>		

### Technical Specifications

Electrical Type	<b>SQ CAGE INV DUTY</b>	Starting Method	<b>INVERTER ONLY</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>54.85 in</b>	Frame Length	<b>20.25 in</b>
Shaft Diameter	<b>3.38 in</b>	Shaft Extension	<b>8.75 in</b>
Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>		
Outline Drawing	<b>B-SS555992-2025</b>	Connection Diagram	<b>A-EE7300T</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. 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			
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	

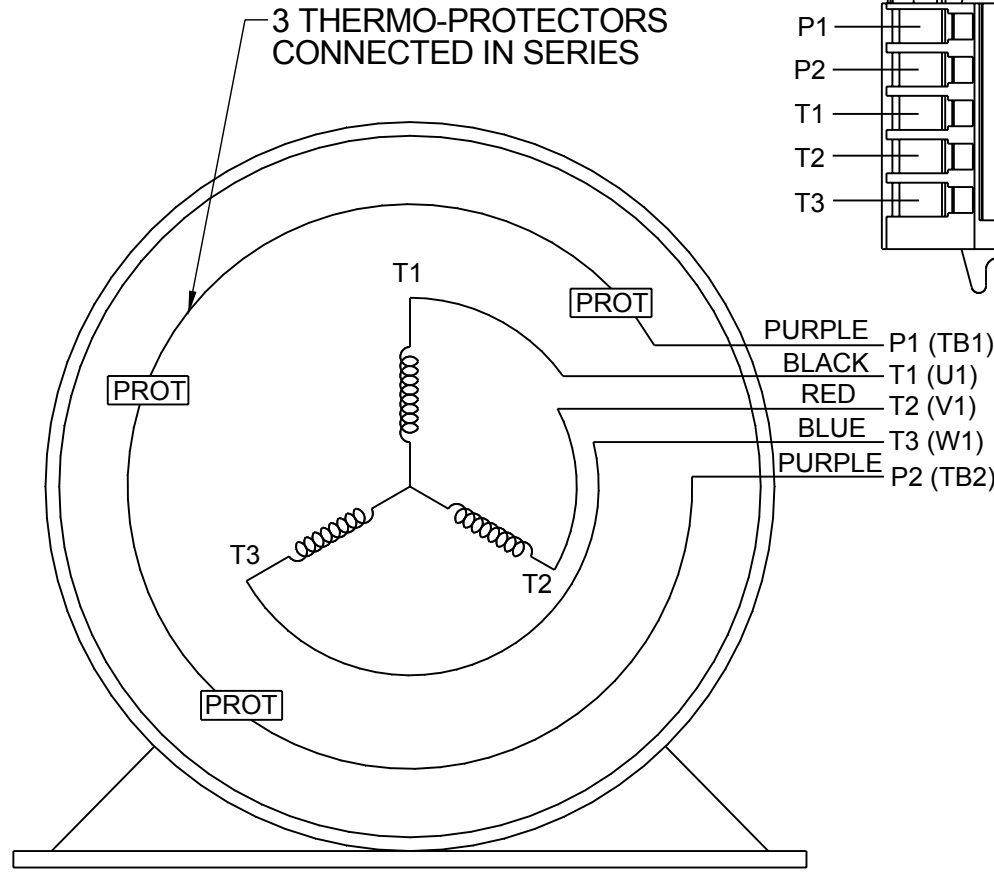
Regal Beloit America, Inc.	
DESCRIPTION <b>OUTLINE</b> TFN- 440T FR- TEBC- AXIAL BLOWER	
MATERIAL	
SIZE B	DRAWING NUMBER SS555992
SHEET 1 OF 1	

**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**

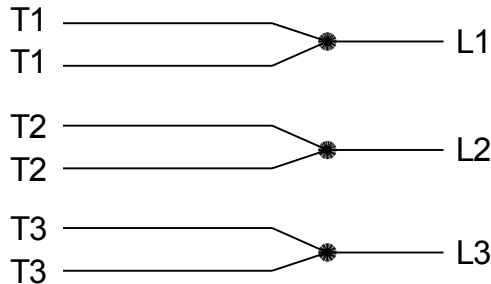
TERMINAL BLOCK WHEN SPECIFIED



PURPLE P1 (TB1)  
BLACK T1 (U1)  
RED T2 (V1)  
BLUE T3 (W1)  
PURPLE P2 (TB2)

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

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



**A-9806 DECAL**

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	<b>Regal Beloit America, Inc.</b>	
DATE 01-04-1994		
APPROVED BY GK	DESCRIPTION <b>CONN DIAGRAM-EXTERNAL</b> 3Ø-SINGLE VOLT-MOTOR WITH PROTECTOR	
DATE 01-20-1994	MATERIAL	
REFERENCE	PROCESS/FINISH	
THIRD ANGLE PROJECTION	SIZE <b>A</b>	DRAWING NUMBER <b>EE7300T</b>
		SHEET 1 OF 1

CERTIFICATION DATA SHEET

Model#: 444THFN8046 EH WINDING#: T4444113 NONE 1  
 CONN. DIAGRAM: A-EE7300T ASSEMBLY: F1/F2 CAPABLE  
 OUTLINE: B-SS555992-2025

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN		
125	93	1800	1785	444T	TEBC-AXIAL	G	INV		
PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	138	INVERTER ONLY	CONTINUOUS	H1	1.0	40	3300
FULL LOAD EFF: 95	3/4 LOAD EFF: 95.4	1/2 LOAD EFF: 95	GTD. EFF	ELEC. TYPE	NO LOAD AMPS				
FULL LOAD PF: 88.5	3/4 LOAD PF: 86.5	1/2 LOAD PF: 80.5	94.1	SQ CAGE INV DUTY	38				
F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C					
368 LB-FT	900	325 LB-FT 88	925 LB-FT 251	75					
SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT			
88 dBA	98 dBA	43.5 LB-FT^2	- LB-FT^2	- SEC.	-	1950 LBS.			

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
0.030645	0.014074	0.25424	0.162305	6.89626
RM	ZREF	XR	TD	TD0
338.23	2.27	7.2	0.055	1.33

\*\*\* SUPPLEMENTAL INFORMATION \*\*\*

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	ENCODER	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

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			
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 2000:1 INV. HP SPEED RANGE: 1.5 X BASE SPEED
ENCODER: PROVISIONS ONLY NONE NONE NONE NONE PPR
BRAKE: NONE NONE NONE P/N NONE

\*  
N  
O  
T  
E  
S  
\*

NONE	NONE		
NONE FT-LB	NONE V	NONE Hz	

DATE: 06/21/2017 03:32:44 AM  
FORM 3531 REV.3 02/07/99  
\*\* Subject to change without notice.

Data Sheet

Date: 20-06-2017  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



444THFN8046

Submittal

Data @ 460 V

Motor Load Data

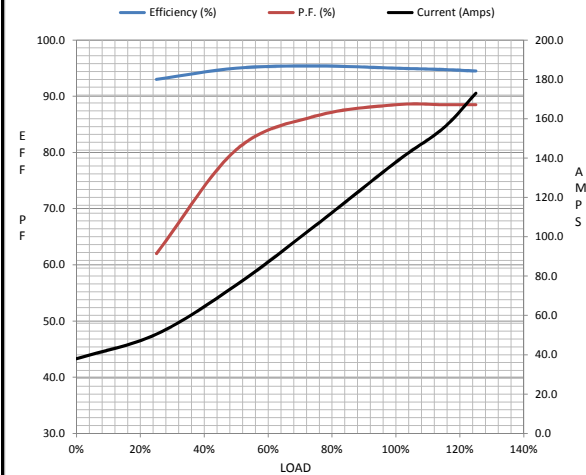
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	38.0	50.5	75.5	106	138	156	173	900
Torque (ft-lb)	0.00	91.5	183	275	368	414	460	325
RPM	1800	1795	1792	1790	1785	1,784	1782	0
Efficiency (%)		93.0	95.0	95.4	95.0	94.8	94.5	
P.F. (%)	5.0	62.0	80.5	86.5	88.5	88.5	88.5	20.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1725	1785	1800
Current (Amps)	900	825	525	138	38.0
Torque (ft-lb)	325	275	925	368	0.00

Information Block

HP	125.0			
Sync. RPM	1800			
Frame	444			
Enclosure	TEBC			
Construction	TBN			
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>	43.5 Lb-Ft <sup>2</sup>			
Ref Wdg	T4444113 NONE			
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
0.0310	0.0140	0.2540	0.1620	6.8960



Speed -Torque Curve

