

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 445TTFN16108  
Catalog No: L440A  
125,900,TEFC,445T,3/60/460  
Totally Enclosed Fan Cooled (TEFC)



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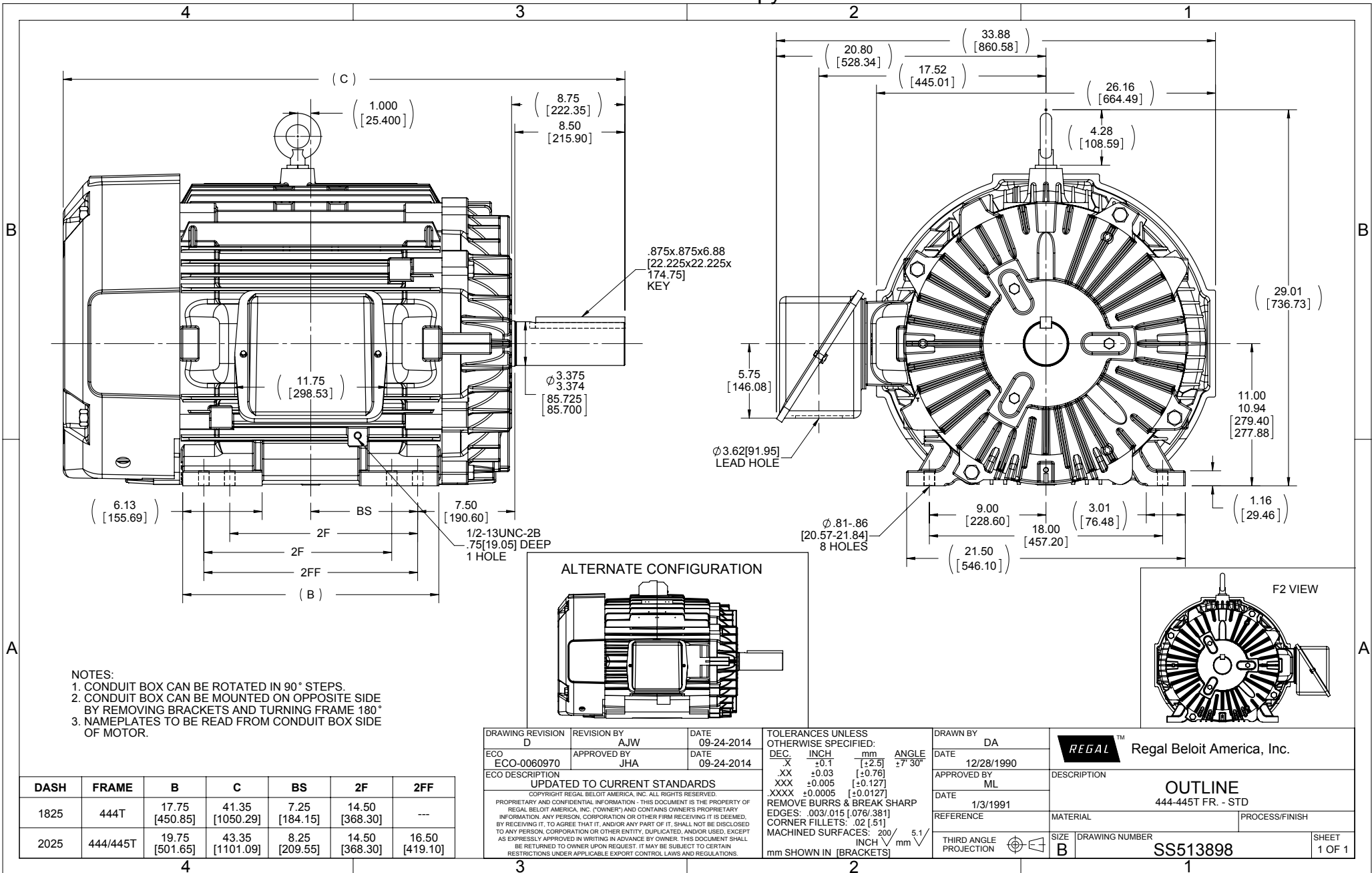
### Nameplate Specifications

Output HP	<b>125 Hp</b>	Output KW	<b>93.0 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>460 V</b>
Current	<b>172.0 A</b>	Speed	<b>890 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>94.5 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>H</b>	Design Code	<b>B</b>
KVA Code	<b>G</b>	Frame	<b>445T</b>
Enclosure	<b>Totally Enclosed Fan Cooled</b>	Overload Protector	<b>No</b>
Ambient Temperature	<b>40 °C</b>	Drive End Bearing Size	<b>NU318</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>Squirrel Cage Induction Run</b>	Starting Method	<b>Across The Line</b>
Poles	<b>8</b>	Rotation	<b>Reversible</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>43.35 in</b>	Frame Length	<b>20.25 in</b>
Shaft Diameter	<b>3.375 in</b>	Shaft Extension	<b>8.75 in</b>
Assembly/Box Mounting	<b>F1/F2 Capable</b>		
Outline Drawing	<b>B-SS513898-2025</b>	Connection Diagram	<b>A-EE7300</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	B	C	BS	2F	2FF
1825	444T	17.75 [450.85]	41.35 [1050.29]	7.25 [184.15]	14.50 [368.30]	---
2025	444/445T	19.75 [501.65]	43.35 [1101.09]	8.25 [209.55]	14.50 [368.30]	16.50 [419.10]

DRAWING REVISION D	REVISION BY AJW	DATE 09-24-2014
ECO ECO-0060970	APPROVED BY JHA	DATE 09-24-2014
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TOLERANCES UNLESS OTHERWISE SPECIFIED:			
DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7° 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] CORNER FILLETS: .02 [51] MACHINED SURFACES: 200 INCH 5.1 mm SHOWN IN [BRACKETS]			

DRAWN BY DA	DATE 12/28/1990
APPROVED BY ML	DATE 1/3/1991
REFERENCE	
THIRD ANGLE PROJECTION	

<b>REGAL</b> ™ Regal Beloit America, Inc.	
DESCRIPTION	OUTLINE 444-445T FR. - STD
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER SS513898
	SHEET 1 OF 1

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

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

**TERMINAL BLOCK WHEN SPECIFIED**



**VIEW OF TERMINAL END**

**IF MOTOR HAS  
6 LEADS**



A-9806 DECAL

**OPTIONAL CORD  
CONNECTION**

- L1 WHITE
- L2 RED
- L3 BLACK

DRAWING REVISION <b>AB</b>	REVISION BY <b>JJB</b>	DATE <b>06-27-2017</b>
ECO <b>ECO-0125361</b>	APPROVED BY <b>TB</b>	DATE <b>06-27-2017</b>
ECO DESCRIPTION <b>UPDATED TO CURRENT STANDARDS</b>		
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DRAWN BY <b>DA</b>
DATE <b>03-26-1993</b>
APPROVED BY <b>TB</b>
DATE <b>03-26-1993</b>
REFERENCE
THIRD ANGLE PROJECTION

<b>Regal Beloit America, Inc.</b>		
		DESCRIPTION <b>CONNECTION DIAGRAM</b> EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR
MATERIAL	PROCESS/FINISH	
SIZE <b>A</b>	DRAWING NUMBER <b>EE7300</b>	SHEET <b>1 OF 1</b>

**CERTIFICATION DATA SHEET**

**Model#:** 445TTFN16108 AA      **WINDING#:** T445834 NONE 6  
**CONN. DIAGRAM:** A-EE7300      **ASSEMBLY:** F1/F2 CAPABLE  
**OUTLINE:** B-SS513898-2025

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
125&100	93&75	900	890&740	445T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	460#380	172&168	ACROSS THE LINE	CONTINUOUS	H1	1.15/1.15	40	3300

FULL LOAD EFF: 94.5&94.5	3/4 LOAD EFF: 94.5	1/2 LOAD EFF: 93.6	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 72&72	3/4 LOAD PF: 67	1/2 LOAD PF: 56.5	94.1	SQ CAGE IND RUN	80.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
738 LB-FT	907	890 LB-FT 121	1650 LB-FT 224	70

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
72 dBA	82 dBA	91 LB-FT^2	- LB-FT^2	20 SEC.	-	2550 LBS.

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

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

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
ROLLER	BALL						
NU318	6316						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs	NONE	FALSE	NONE VOLTS
NONE	NOT	NONE	NONE			

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: NONE
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 05:52:11 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

Data Sheet

44STFEN16108



Date: 6/19/2017  
 Customer:   
 Attention:   
 Submitted by: FAREEDA DUDEKULA

44STFEN16108  
 Submittal  
 Data @ 460 V

Load	Motor Load Data							
	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	80.5	88.5	110	138	172	191	210	907
Torque (ft-lb)	0.00	184	367	552	738	830	924	890
RPM	900	897	895	892	890	888	885	0
Efficiency (%)		90.2	93.6	94.5	94.5	94.5	94.1	
P.F. (%)	4.0	36.5	56.5	67.0	72.0	73.0	74.0	22.5

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (rpm)	0	450	850	890	900
Current (Amps)	907	825	524	172	80.5
Torque (ft-lb)	890	850	1,850	738	0.00

Information Block

HP	125.0
Sync. RPM	900
Frame	445
Enclosure	TEFC
Construction	TEN
Voltage	460#380 V
Frequency	60 Hz
Design	B
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	91.0 Lb-Fe
Rel Wdg	T445834 NONE
Sound Pressure @ 1M	72 dBA
VFD Rating	NONE
Outline Dwg	B-SS513898-2025
Conn. Diag	A-EE7300
Additional Specifications:	
0	
0	

EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0190	0.0170	0.2150	0.2840	3.0870

