

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 145TTTN18531  
Catalog No: S503  
2,1800,TEAO,145T,3/60/460  
Other Purpose



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**REGAL**<sup>®</sup>



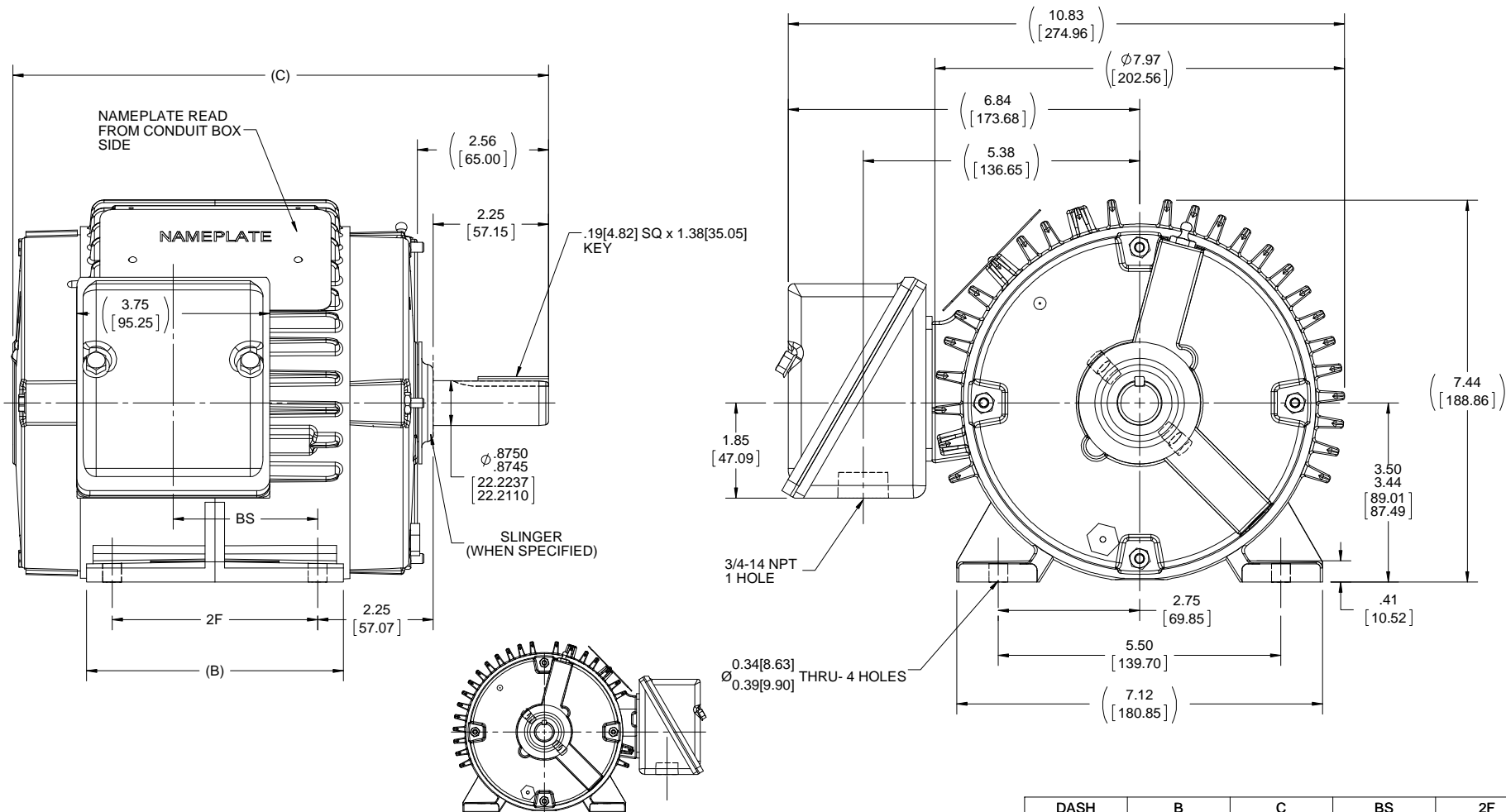
### Nameplate Specifications

Output HP	<b>2 Hp</b>	Output KW	<b>1.5 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>460 V</b>
Current	<b>2.8 A</b>	Speed	<b>1740 rpm</b>
Service Factor	<b>1</b>	Phase	<b>3</b>
Efficiency	<b>85.5 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>H</b>	Design Code	<b>B</b>
KVA Code	<b>L</b>	Frame	<b>145T</b>
Enclosure	<b>Totally Enclosed Air Over</b>	Overload Protector	<b>No</b>
Ambient Temperature	<b>100 °C</b>	Drive End Bearing Size	<b>6205</b>
Opp Drive End Bearing Size	<b>6203</b>	UL	<b>Recognized</b>
CSA	<b>Y</b>	CE	<b>Y</b>
IP Code	<b>54</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>
Mounting	<b>Rigid base</b>	Motor Orientation	<b>Horizontal</b>
Drive End Bearing	<b>Ball / Heat Stabilized</b>	Opp Drive End Bearing	<b>Ball / Heat Stabilized</b>
Frame Material	<b>Cast Iron</b>	Shaft Type	<b>T</b>
Overall Length	<b>11.43 in</b>	Frame Length	<b>6.25 in</b>
Shaft Diameter	<b>0.875 in</b>	Shaft Extension	<b>2.56 in</b>
Assembly/Box Mounting	<b>F1/F2 Capable</b>		
Outline Drawing	<b>A-100658-625</b>	Connection Diagram	<b>A-EE7300T</b>

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DASH	B	C	BS	2F
525	5.00 [127.00]	10.43 [264.92]	2.81 [71.37]	4.00 [101.60]
625	6.00 [152.4]	11.43 [29.32]	3.81 [96.77]	5.00 [127.00]

DRAWING REVISION C	REVISION BY H. ADIKE	DATE 06/25/2018	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] .XXX ±0.005 [+0.0127]
ECO ECO-0147607	APPROVED BY PST	DATE 06/25/2018	REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [076/.381] X 45° CORNER FILLETS: R.02 [51] MACHINED SURFACES: 200 INCH mm 5.1 mm SHOWN IN [BRACKETS]
ECO DESCRIPTION <b>THE GREASE ZERK ROTATED TO 1 O'CLOCK POSITION</b> <small>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>			

DRAWN BY RM	REGAL™ Regal Beloit America, Inc.	
DATE 10/27/1992	DESCRIPTION <b>OUTLINE</b> 140T FR. - BB- TS - TENV	
APPROVED BY JA	MATERIAL	PROCESS/FINISH
DATE 11/02/1992	REFERENCE 100658	SIZE B
THIRD ANGLE PROJECTION	DRAWING NUMBER 100658	SHEET 1 OF 1

NOTES:

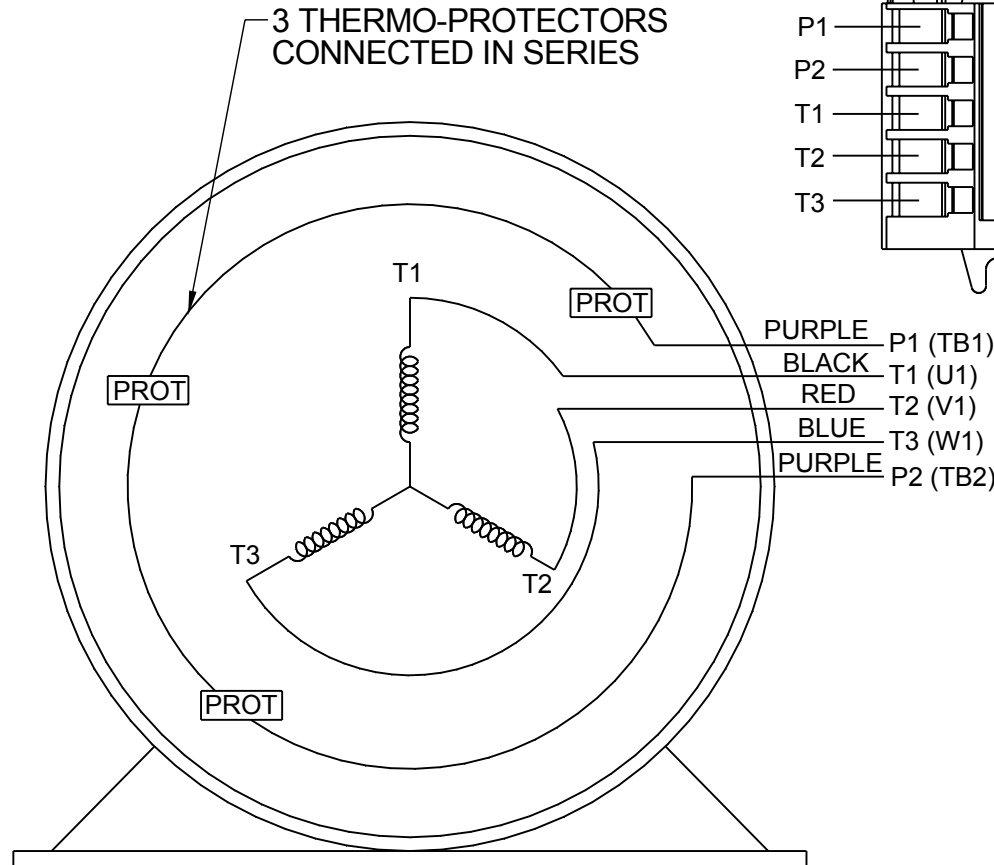
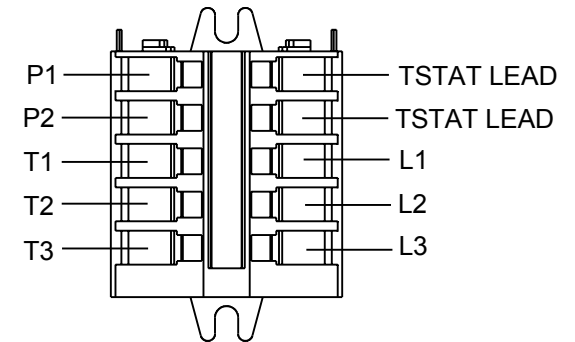
1. BOX CAN BE ROTATED IN 90° STEPS.
2. BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
3. FRONT GREASE HOLE LOCATION SHOWN WITH HIDDEN LINES.

**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**

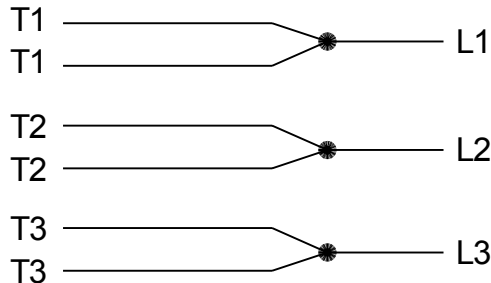
TERMINAL BLOCK WHEN SPECIFIED



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

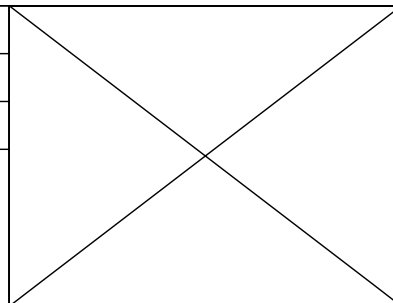
T2BM  
T6AW  
T6AL  
T6Z  
T4EG  
T4BF  
T8A  
T6H  
T6A  
T4AX  
T4A  
T2A  
T2F

**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



Data Sheet

Date: 6/16/2017

056134F5342

Customer:   
 Attention:



Submittal  
Data @ ##### V

Submitted by: EARL BABBITTS

Motor Load Data

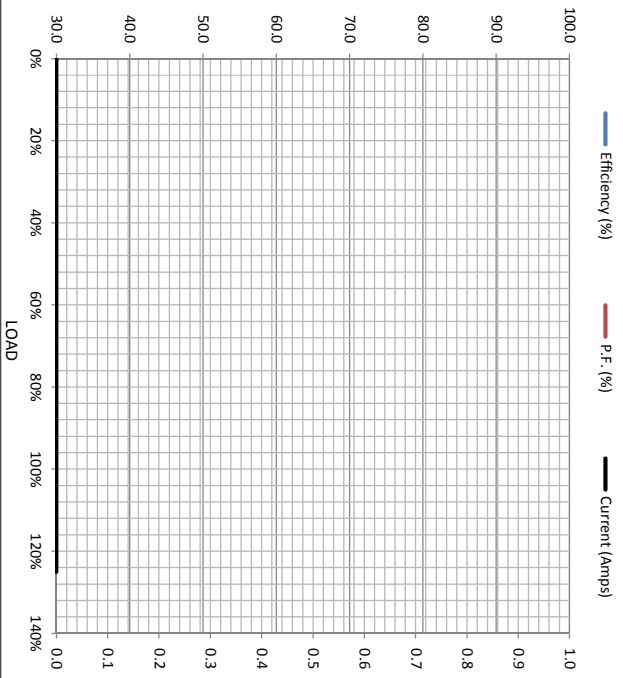
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Torque (ft-lb)	0.00	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
RPM	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	0
P.F. (%)	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle	#VALUE!
Speed (rpm)	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Current (Amps)	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Torque (ft-lb)	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	0.00

#VALUE!  
Information Block

HP	#VALUE!
Sync. RPM	#VALUE!
Frame	#VALUE!
Enclosure	#VALUE!
Construction	#VALUE!
Voltage	#VALUE! V
Frequency	#VALUE! HZ
Design	#VALUE!
LR Code letter	#VALUE!
Service Factor	#VALUE!
Temp Rise @ FL	#VALUE! °C
Duty	#VALUE!
Ambient	40 °C
Elevation	1,000 feet
Rotor/Shaft wkt	#VALUE! Lb-Ft
Ret Wdg	#VALUE!
Sound Pressure @ 1M	#VALUE! dbA
VFD Rating	#VALUE!
Outline Dwg	#VALUE!
Conn. Diag	#VALUE!
Additional Specifications:	#VALUE!
0	
0	
EQUIV CKT (OHMS / PHASE)	
R1	R2
X1	X2
Xm	Xm



Speed -Torque Curve

