

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 284TTTNA16577  
Catalog No: S519  
15,1200,TEAO,284T,3/60/460  
Other Purpose



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**REGAL**<sup>®</sup>

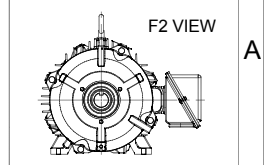
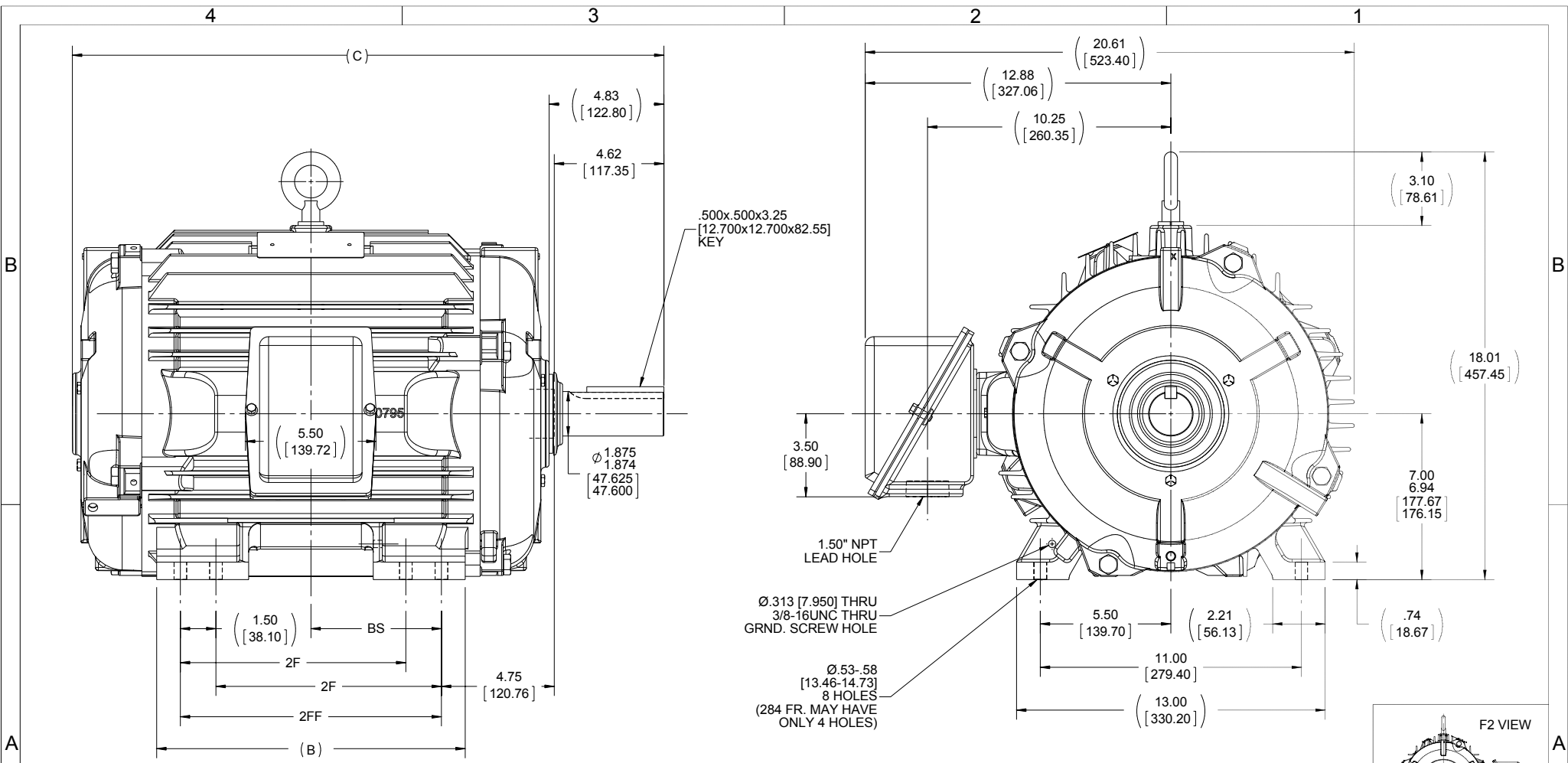
**Nameplate Specifications**

Output HP	<b>15 Hp</b>	Output KW	<b>11.2 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>460 V</b>
Current	<b>20.5 A</b>	Speed	<b>1175 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>91.7 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>H</b>	Design Code	<b>B</b>
KVA Code	<b>G</b>	Frame	<b>284T</b>
Enclosure	<b>Totally Enclosed Air Over</b>	Overload Protector	<b>No</b>
Ambient Temperature	<b>90 °C</b>	Drive End Bearing Size	<b>6311</b>
Opp Drive End Bearing Size	<b>6210</b>	UL	<b>No</b>
CSA	<b>Y</b>	CE	<b>N</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>6</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>23.42 in</b>	Frame Length	<b>12.75 in</b>
Shaft Diameter	<b>1.875 in</b>	Shaft Extension	<b>4.83 in</b>
Assembly/Box Mounting	<b>F1/F2 Capable</b>		
Outline Drawing	<b>B-SS311239-1275</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. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	B	C	BS	2F	2FF
1275	284T	12.50 [317.50]	23.42 [594.87]	4.75 [120.65]	---	9.50 [241.30]
1425	284/286T	13.00 [330.20]	24.92 [632.97]	5.50 [139.70]	9.50 [241.30]	11.00 [279.40]

DRAWING REVISION E	REVISION BY W. JOERGER	DATE 07-01-2015
ECO ECO-0080734	APPROVED BY E. HEIL	DATE 07-01-2015
ECO DESCRIPTION REMOVED COVER PLATE AND SEAL FROM O.D.E.		

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TOLERANCES UNLESS OTHERWISE SPECIFIED:		
DEC.	INCH	mm
.X	±0.1	[±2.5]
.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: 200 5.1		
mm SHOWN IN [BRACKETS]		

DRAWN BY NJS
DATE 10-03-2001
APPROVED BY BW
DATE 10-05-2001
REFERENCE
THIRD ANGLE PROJECTION

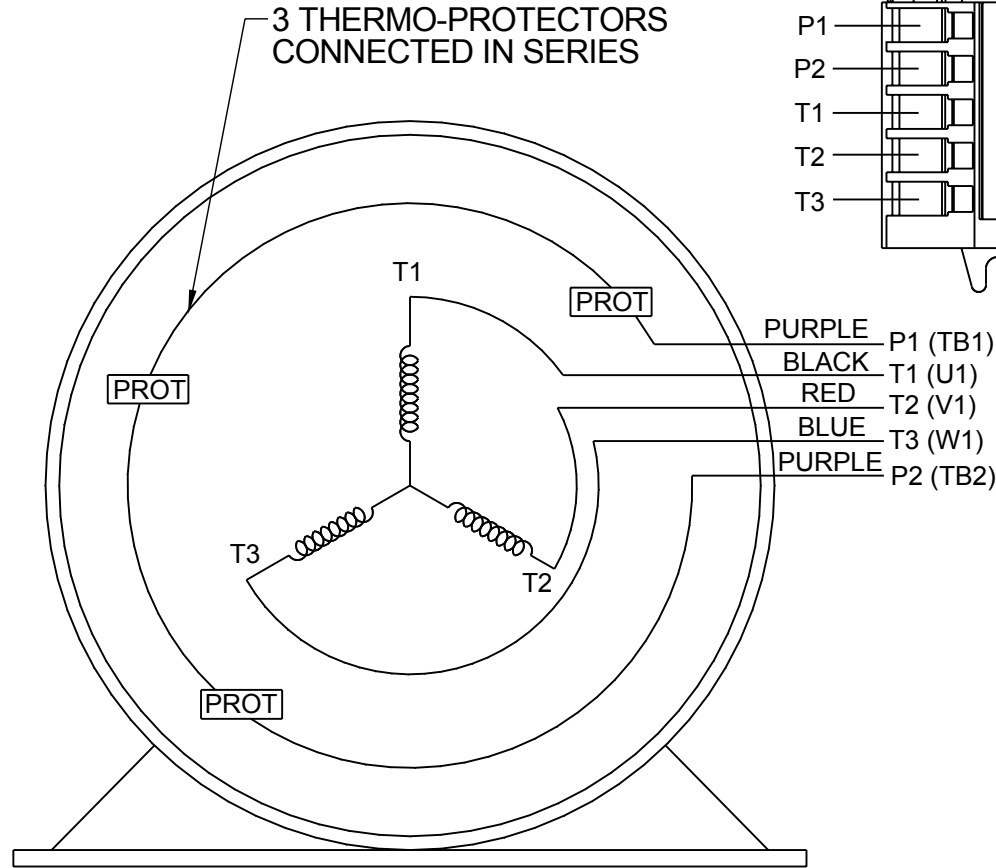
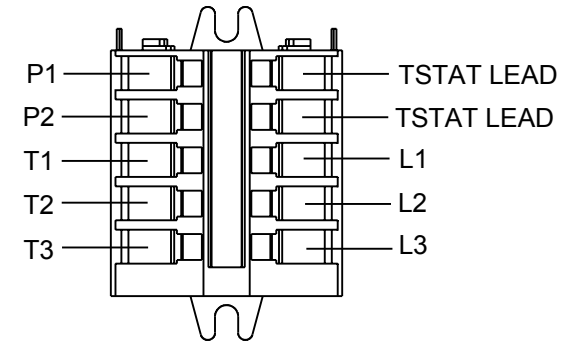
Regal Beloit America, Inc.	
DESCRIPTION <b>OUTLINE</b> 280T FR. - TEAO / TENV - BB - STD - 12.50" LAM	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER SS311239
	SHEET 1 OF 1

**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

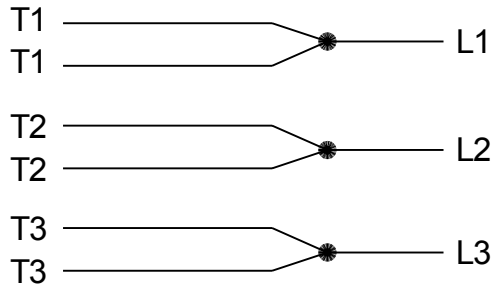


**VIEW OF TERMINAL END**

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

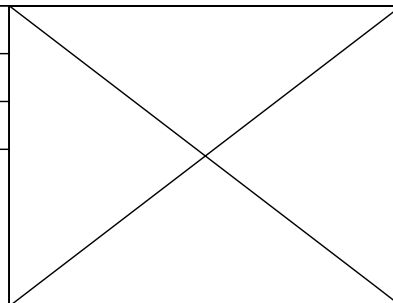
- T2BM
- T6AW
- T6AL
- T6Z
- T4EG
- T4BF
- T8A
- T6H
- T6A
- T4AX
- T4A
- T2A
- T2F

**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: 19-06-2017  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



284TTTNA16577

Submittal

Data @ 460 V

Motor Load Data

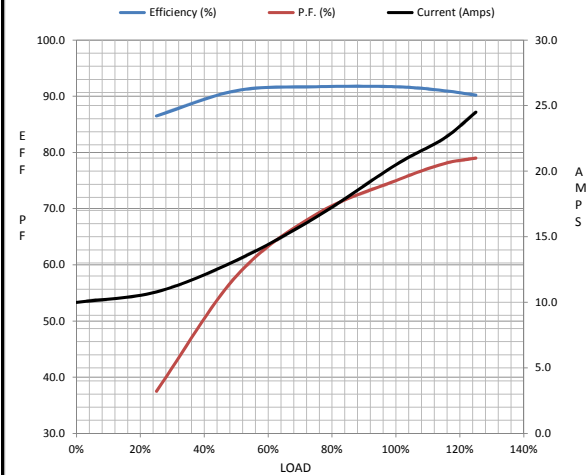
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	10.0	10.8	13.2	16.5	20.5	22.5	24.5	116
Torque (ft-lb)	0.00	16.5	33.0	50.0	67.0	77.5	84.5	120
RPM	1200	1195	1188	1182	1175	1,172	1168	0
Efficiency (%)		86.5	91.0	91.7	91.7	91.0	90.2	
P.F. (%)	4.5	37.5	58.0	69.0	75.0	78.0	79.0	35.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1075	1175	1200
Current (Amps)	116	105	70.0	20.5	10.0
Torque (ft-lb)	120	105	170	67.0	0.00

Information Block

HP	15.0			
Sync. RPM	1200			
Frame	284			
Enclosure	TEAO			
Construction	TTN			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	0 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	4.1 Lb-Ft <sup>2</sup>			
Ref Wdg	284674 NONE			
Sound Pressure @ 1M	999 dBA			
VFD Rating	VARIABLE 20:1			
Outline Dwg	B-SS311239-1275			
Conn. Diag	A-EE7300T			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.3570	0.2910	1.6100	1.7770	26.0630



Speed -Torque Curve

