

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 254THFNA9101  
Catalog No: W529  
5,900,TEFC,254T,3/60/460  
Severe Duty



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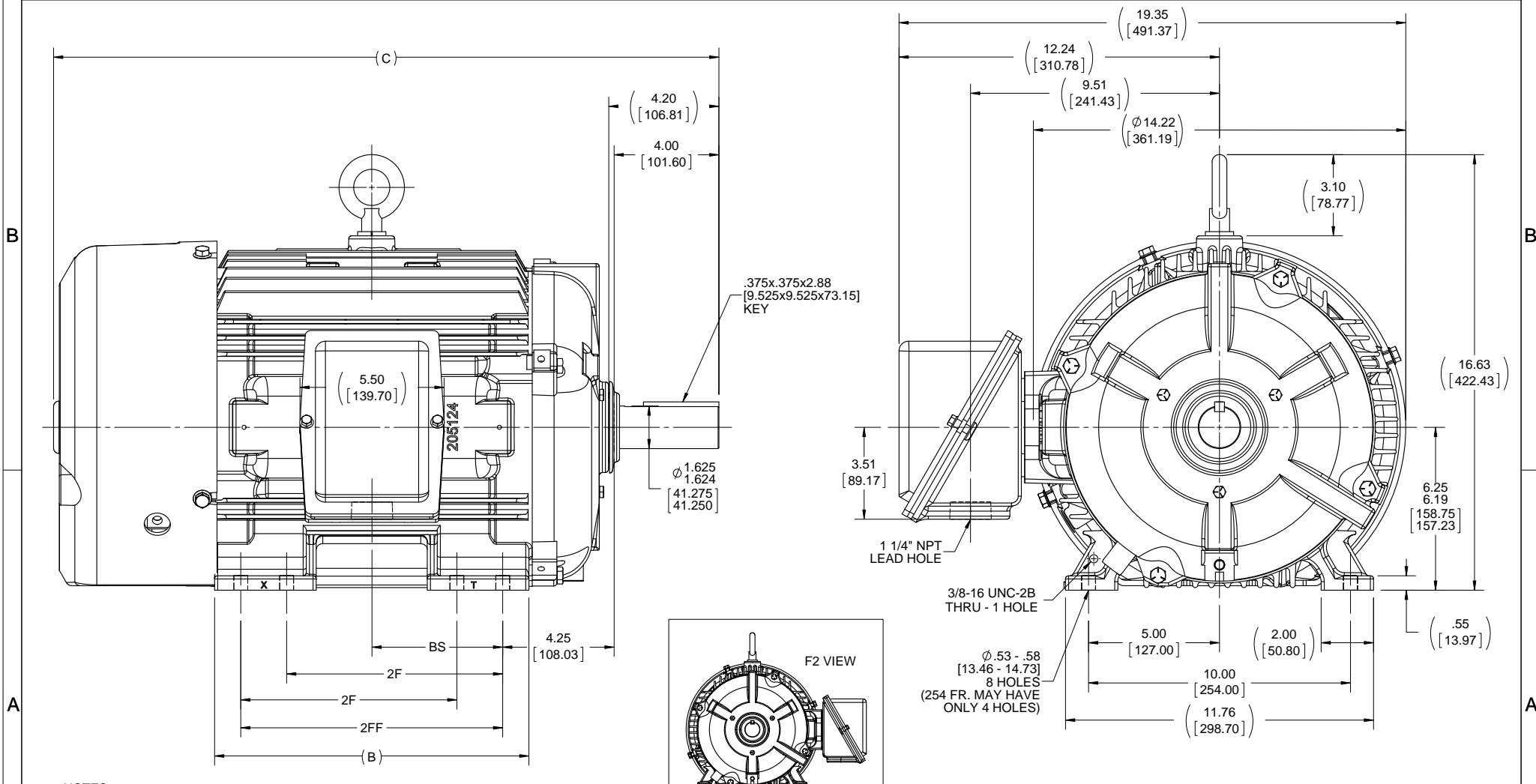
### Nameplate Specifications

Output HP	<b>5 Hp</b>	Output KW	<b>3.7 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>460 V</b>
Current	<b>7.5 A</b>	Speed	<b>875 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>88.5 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>F</b>	Design Code	<b>B</b>
KVA Code	<b>F</b>	Frame	<b>254T</b>
Enclosure	<b>Totally Enclosed Fan Cooled</b>	Overload Protector	<b>No</b>
Ambient Temperature	<b>40 °C</b>	Drive End Bearing Size	<b>6309</b>
Opp Drive End Bearing Size	<b>6210</b>	UL	<b>Recognized</b>
CSA	<b>Y</b>	CE	<b>Y</b>
IP Code	<b>56</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>8</b>	Rotation	<b>Reversible</b>
Mounting	<b>Rigid base</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>23.65 in</b>	Frame Length	<b>10.50 in</b>
Shaft Diameter	<b>1.625 in</b>	Shaft Extension	<b>4.2 in</b>
Assembly/Box Mounting	<b>F1/F2 Capable</b>		
Outline Drawing	<b>B-SS203002-1050</b>	Connection Diagram	<b>A-EE7300</b>

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NOTES:  
 1. CONDUIT BOX CAN BE ROTATED ON ITS AXIS.  
 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.

DRAWING REVISION E	REVISION BY M GERTSCHEN	DATE 11-17-2016
ECO-0112972	APPROVED BY T VUE	DATE 11-17-2016

ECO DESCRIPTION  
 UPDATED TO CURRENT STANDARDS  
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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 [.076/.381] X 45°  
 CORNER FILLETS: R.02 [.51]  
 MACHINED SURFACES: 200 5.1  
 INCH/mm  
 mm SHOWN IN [BRACKETS]

DRAWN BY TVUE	DATE 12-18-2013
APPROVED BY TBROWN	DATE 12-18-2013
REFERENCE	THIRD ANGLE PROJECTION

<b>REGAL</b> ™ Regal Beloit America, Inc.	
<b>OUTLINE</b> 250T FR. - TEFC - BB - STD.	
MATERIAL	PROCESS/FINISH
SIZE <b>B</b>	DRAWING NUMBER <b>SS203002</b>
	SHEET 1 OF 1

1050	254T	23.65 [600.71]	10.25 [260.35]	---	8.25 [209.55]	4.25 [107.95]
1225	254/256T	25.40 [645.16]	12.00 [304.80]	8.25 [209.55]	10.00 [254.00]	5.00 [127.00]
DASH	FRAME	C	B	2F	2FF	BS

**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>



Data Sheet

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



254THFNA9101

Submittal

Data @ 460 V

Motor Load Data

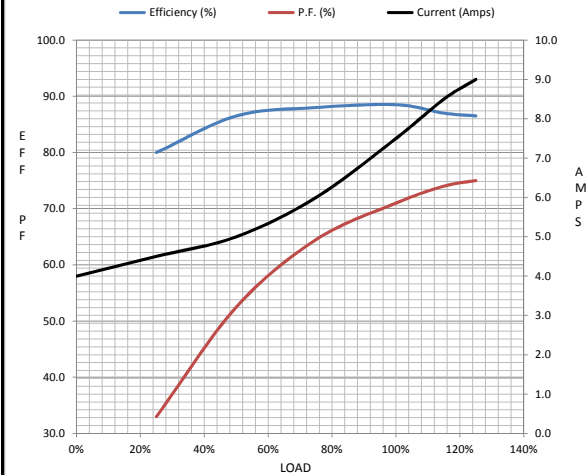
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	4.0	4.5	5.0	6.0	7.5	8.5	9.0	32.0
Torque (ft-lb)	0.00	7.5	15.0	22.5	30.0	35.0	38.0	42.0
RPM	900	895	885	880	875	870	865	0
Efficiency (%)		80.0	86.5	88.0	88.5	87.0	86.5	
P.F. (%)	6.5	33.0	52.5	64.5	71.0	74.0	75.0	36.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	450	780	875	900
Current (Amps)	32.0	29.0	20.0	7.5	4.0
Torque (ft-lb)	42.0	38.0	66.0	30.0	0.00

Information Block

HP	5.0			
Sync. RPM	900			
Frame	254			
Enclosure	TEFC			
Construction	TFN			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	40 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk²	2.50 Lb-Ft²			
Ref Wdg	K254826 NONE			
Sound Pressure @ 1M	54 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	B-SS203002-1050			
Conn. Diag	A-EE7300			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
1.3800	1.2270	4.9700	6.1340	59.0720



Speed -Torque Curve

