

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 284TTFNA6030  
Catalog No: E309  
25,1800,TEFC,284T,3/60/575  
Totally Enclosed Fan Cooled (TEFC)



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**REGAL**<sup>®</sup>



### Nameplate Specifications

Output HP	<b>25 Hp</b>	Output KW	<b>18.7 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>575 V</b>
Current	<b>24.8 A</b>	Speed	<b>1774 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>93.6 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>F</b>	Design Code	<b>B</b>
KVA Code	<b>G</b>	Frame	<b>284T</b>
Enclosure	<b>Totally Enclosed Fan Cooled</b>	Overload Protector	<b>No</b>
Ambient Temperature	<b>40 °C</b>	Drive End Bearing Size	<b>6311</b>
Opp Drive End Bearing Size	<b>6210</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 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</b>	Opp Drive End Bearing	<b>Ball</b>
Frame Material	<b>Cast Iron</b>	Shaft Type	<b>T</b>
Overall Length	<b>26.66 in</b>	Frame Length	<b>12.75 in</b>
Shaft Diameter	<b>1.875 in</b>	Shaft Extension	<b>4.82 in</b>
Assembly/Box Mounting	<b>F1/F2 Capable</b>		
Outline Drawing	<b>B-SS311111-1275</b>	Connection Diagram	<b>A-EE7300</b>

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3

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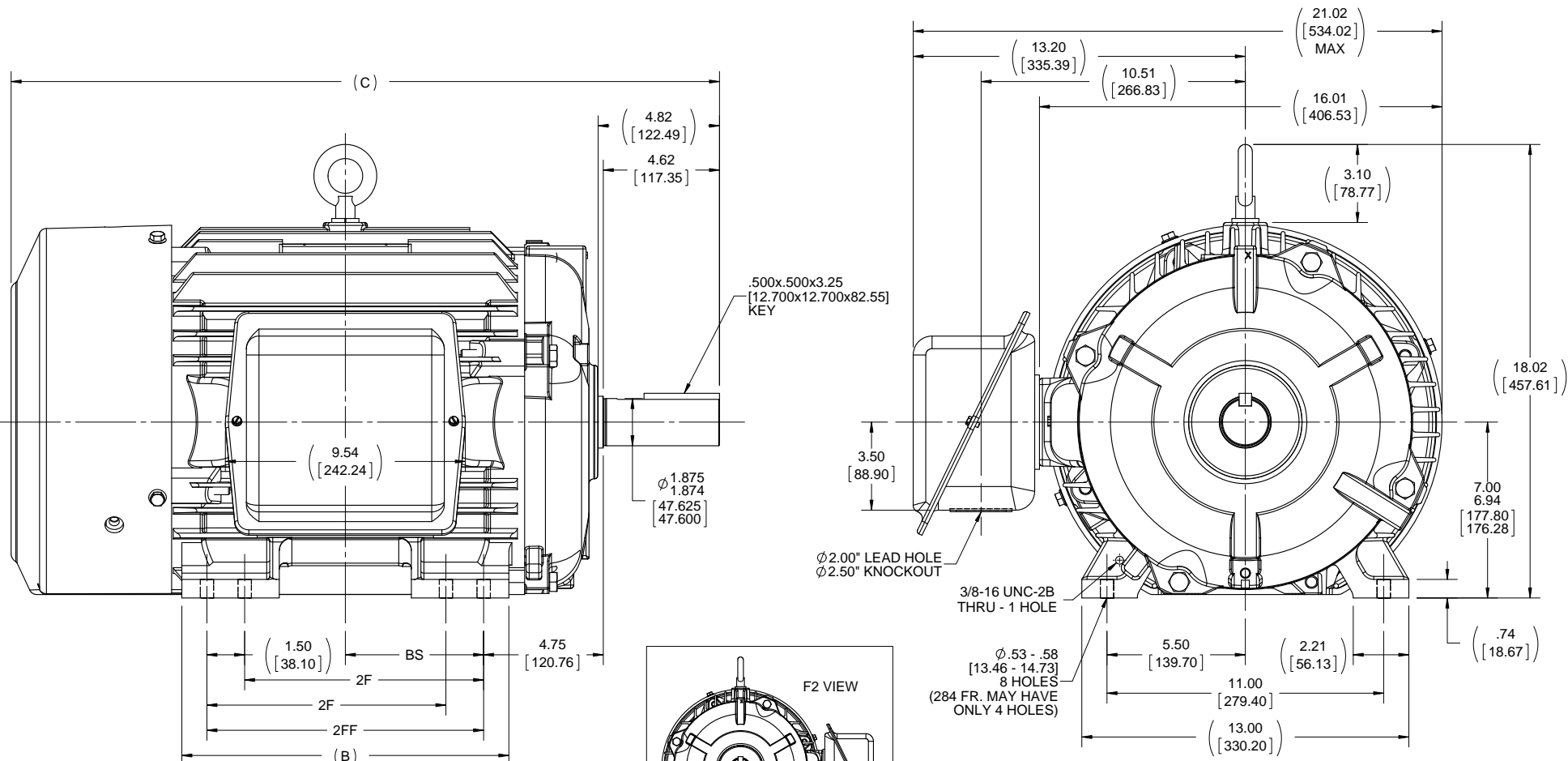
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B

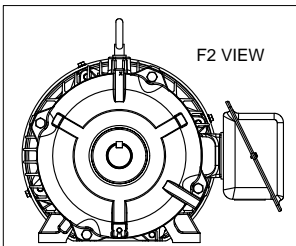
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A

A



- NOTES:  
 1. CONDUIT BOX CAN BE ROTATED CLOCKWISE UP TO 270° FROM ITS ORIGINAL POSITION.  
 2. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.  
 3. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.



DASH	FRAME	B	C	2F	2FF	BS
1275	284T	12.50 [317.50]	26.66 [677.16]	---	9.50 [241.30]	4.75 [120.65]
1425	284/ 286T	13.00 [330.20]	28.16 [715.26]	9.50 [241.30]	11.00 [279.40]	5.50 [139.70]

DRAWING REVISION D	REVISION BY M GERTSCHEN	DATE 12-05-2016
ECO ECO-0113979	APPROVED BY T VUE	DATE 12-05-2016
ECO DESCRIPTION ADDED F2 VIEW		

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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 [0.51] MACHINED SURFACES: 200 INCH 5.1 mm SHOWN IN [BRACKETS]

DRAWN BY CAV	DATE 01-31-2001
APPROVED BY DD	DATE 01-31-2001
REFERENCE	THIRD ANGLE PROJECTION

<b>REGAL</b> ™ Regal Beloit America, Inc.	
DESCRIPTION <b>OUTLINE</b> 280T FR. - TEFC - 12.50 LAM.	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER SS311111
	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 AB	REVISION BY JJB	DATE 06-27-2017
ECO ECO-0125361	APPROVED BY TB	DATE 06-27-2017
ECO DESCRIPTION <b>UPDATED TO CURRENT STANDARDS</b>		
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DRAWN BY DA
DATE 03-26-1993
APPROVED BY TB
DATE 03-26-1993
REFERENCE
THIRD ANGLE PROJECTION

Regal Beloit America, Inc.	
MATERIAL	PROCESS/FINISH
SIZE <b>A</b>	DRAWING NUMBER <b>EE7300</b>
SHEET <b>1 OF 1</b>	

CERTIFICATION DATA SHEET

Model#: 284TFNA6030 BA WINDING#: K2844120 NONE 5  
 CONN. DIAGRAM: A-EE7300 ASSEMBLY: F1/F2 CAPABLE  
 OUTLINE: B-SS311111-1275

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN			
25	18.7	1800	1774	284T	TEFC	G	B			
PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION	
3	60	575	24.8	ACROSS THE LINE	CONTINUOUS	F3	1.15	40	3300	
FULL LOAD EFF: 93.6		3/4 LOAD EFF: 93.6		1/2 LOAD EFF: 93		GTD. EFF		ELEC. TYPE		NO LOAD AMPS
FULL LOAD PF: 81		3/4 LOAD PF: 75		1/2 LOAD PF: 65		92.4		SQ CAGE IND RUN		10.8
F.L. TORQUE		LOCKED ROTOR AMPS		L.R. TORQUE		B.D. TORQUE		F.L. RISE°C		
74 LB-FT		144.8		140 LB-FT 189		215 LB-FT 291		60		
SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME		STARTS /HOUR		APPROX. MOTOR WGT		
65 dBA	75 dBA	4.2 LB-FT^2	175 LB-FT^2	25 SEC.		2		475 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						
BALL 6311	BALL 6210						

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

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: 06/27/2017 01:26:59 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

Data Sheet

Date: 6/19/2017

2841TFNA6030

Customer: \_\_\_\_\_  
Attention: \_\_\_\_\_

Submitted by: **FAREEDA DUDEKULA**

FAREEDA DUDEKULA



Submission  
Data @ 575 V

Load	Motor Load Data							
	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	10.8	12.4	15.6	20.0	24.8	27.6	30.0	145
Torque (ft-lb)	0.00	18.5	37.0	55.5	74.0	85.5	93.0	140
RPM	1800	1795	1785	1780	1774	1,765	1760	0
Efficiency (%)		88.5	93.0	93.6	93.6	93.6	93.0	
P.F. (%)	5.5	43.0	65.0	75.0	81.0	82.0	82.5	33.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (rpm)	0	900	1675	1774	1800
Current (Amps)	145	132	100	24.8	10.8
Torque (ft-lb)	140	130	215	74.0	0.00

Information Block

HP	25.0
Sync. RPM	1800
Frame	284
Enclosure	TEFC
Construction	TFN
Voltage	575 V
Frequency	60 HZ
Design	B
LR Code letter	G
Service Factor	1.15
Temp Rise @ FL	55 °C
Duty	CONT
Ambient	40 °C
Elevation	1,000 feet
Rotor/Shaft wkt <sup>e</sup>	4.2 Ld-Fe
Rel Wdg	K2844120 NONE
Sound Pressure @ 1M	65 dbA
VFD Rating	NONE
Outline Dwg	B-SS311111-1275
Conn. Diag	A-EE7300
Additional Specifications:	
EQUIV CKT (OHMS/ PHASE)	
R1	R2
0.2350	0.2400
X1	X2
1.3310	1.6650
Xm	Xm
	31.3500

