

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 286TTFNA6526

Catalog No: E623

30 HP Severe Duty Motor, 3 phase, 1800 RPM, 460 V, 286T Frame, TEFC  
Severe Duty Motors



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**RegalRexnord**

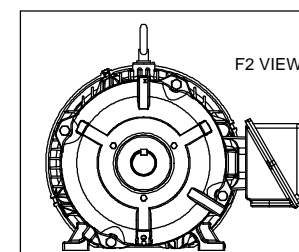
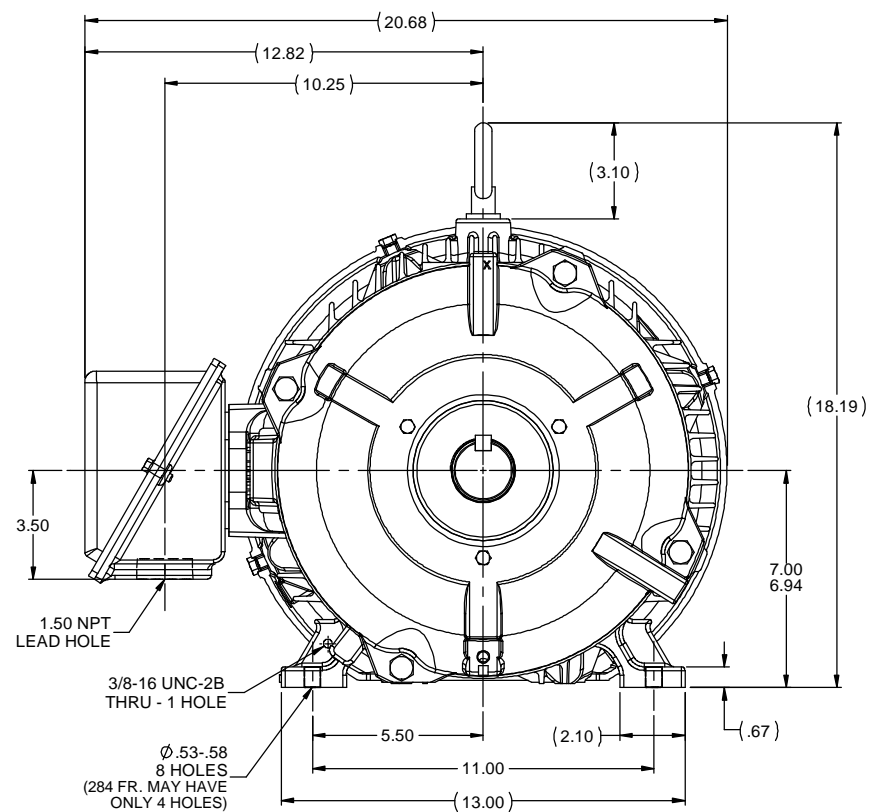
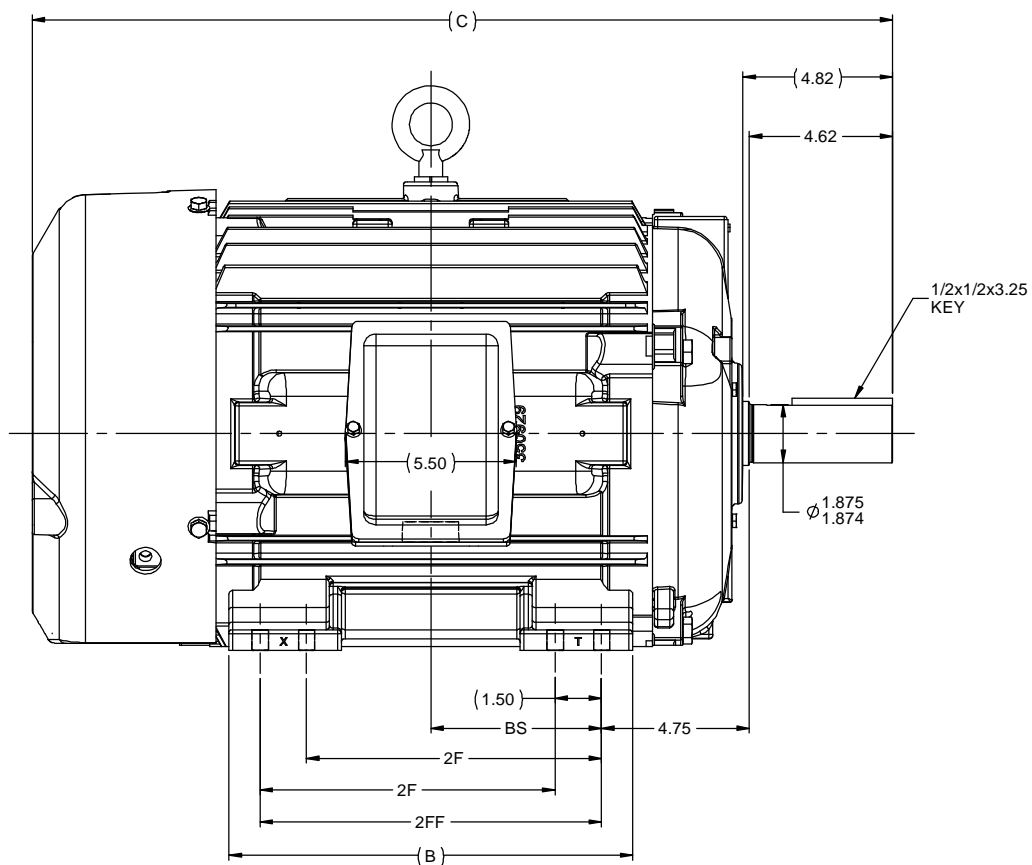
**Nameplate Specifications**

Output HP	<b>30 Hp</b>	Output KW	<b>22.4 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>460 V</b>
Current	<b>36.5 A</b>	Speed	<b>1773 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>94.1 %</b>	Power Factor	<b>82</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Frame	<b>286T</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<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>54</b>
Number of Speeds	<b>1</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>
Resistance Main	<b>.205 Ohms</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>27.71 in</b>
Frame Length	<b>14.25 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-SS311057-1425</b>	Connection Drawing	<b>A-EE7300</b>

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- NOTES:
1. CONDUIT BOX CAN BE ROTATED UP TO 270 ° FROM ITS ORIGINAL POSITION.
  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.

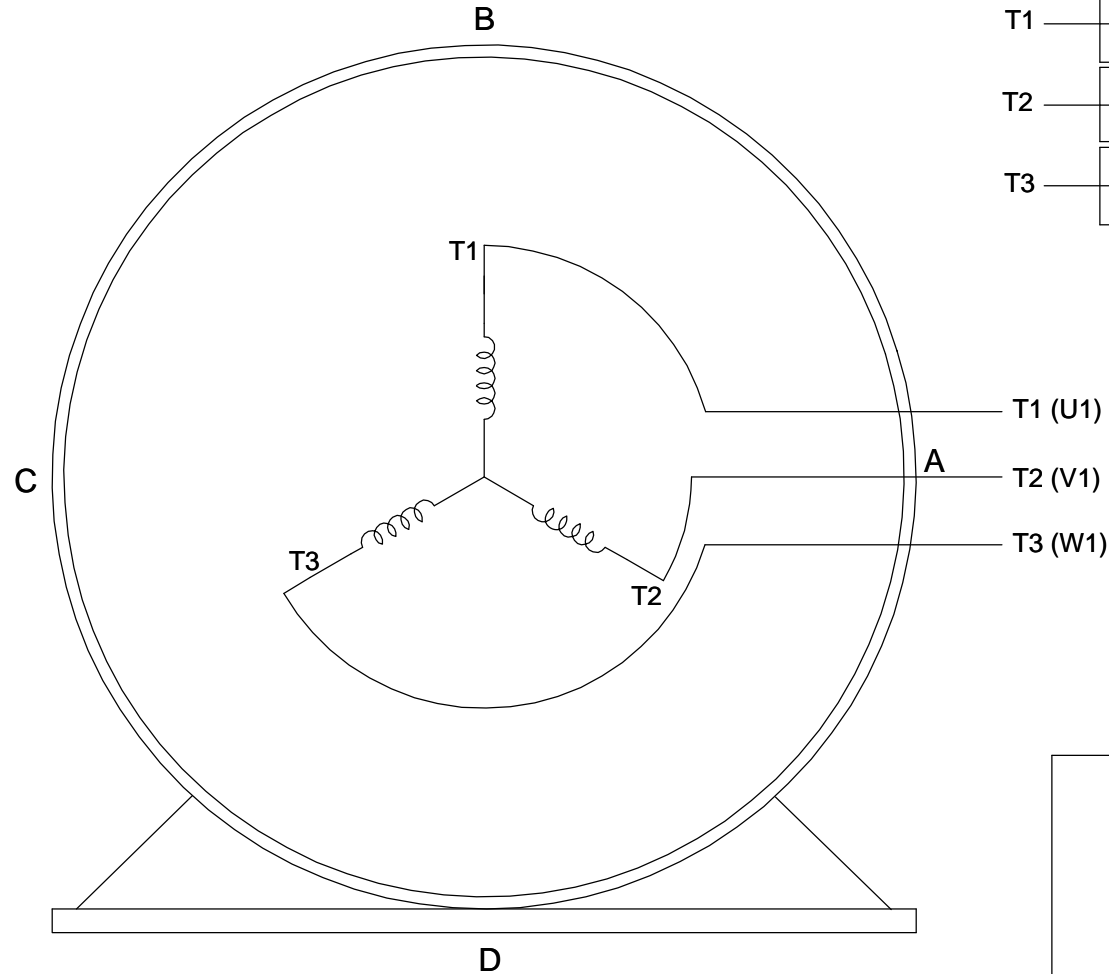
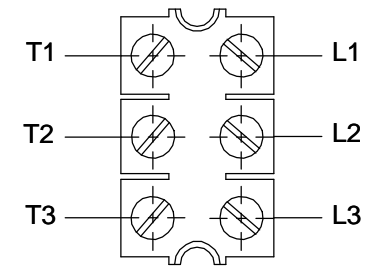
				TOLERANCES UNLESS SPECIFIED		marathon <sup>®</sup> electric	DRAWN CAV 10-18-2000		
				DEC	INCHES		CHK	ML	10-18-2000
4	UPDATED TO NEW FRAME DESIGN	MU106205	MSG 08-22-2012	MSG	x	±.1	TITLE OUTLINE - TEFC - TGN 280T FR. - BB - STD - 12.50 LAM.		
3	REDRAWN IN AUTOCAD - NO CHANGE		TAT 06-29-2004	ML	xx	±.03			
2	ADDED NOTE 3	MU35810	DAH 02-06-2001	ML	xxx	±.005	SCALE 1:4		
1	NEW DRAWING	MU34031	MSG 08-23-2012	ML	xxxx	±.0005	REF		
NO	REVISION	BY & DATE	CHK	ANG	±1/2°	FINISH	FMF MU34031		
THIRD ANGLE PROJECTION							PAGE OF		
RFP 10-18-2000							SIZE B		
NETWORK FILE NAME SS311057							DRAWING NO SS311057		
							REV 4		

1275	284T	26.21	12.50	9.50	---	4.75
1425	284/286T	27.71	13.00	9.50	11.00	5.50
DASH	FRAME	C	B	2F	2FF	BS

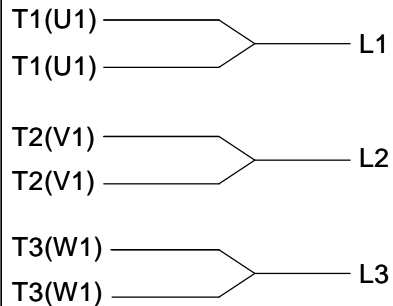
# THREE PHASE - SINGLE VOLTAGE MOTOR - CONDUIT BOX @ 'A'

TO REVERSE ROTATION:  
INTERCHANGE ANY TWO  
LINE LEAD CONNECTIONS.

## TERMINAL BLOCK WHEN SPECIFIED



### IF MOTOR HAS 6 LEADS



A-9806 DECAL

### OPTIONAL CORD CONNECTION



## VIEW OF TERMINAL END

DRAWING REVISION AB	REVISION BY JJB	DATE 06-27-2017
ECO ECO-0125361	APPROVED BY TB	DATE 06-27-2017
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS		
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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.

DESCRIPTION  
**CONNECTION DIAGRAM**  
EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR

MATERIAL PROCESS/FINISH

SIZE A	DRAWING NUMBER EE7300	SHEET 1 OF 1
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## CERTIFICATION DATA SHEET

Model#: 286TTFNA6526 AB  
 CONN. DIAGRAM: A-EE7300  
 OUTLINE: B-SS311057-1425

WINDING#: K2864159 NONE 7  
 ASSEMBLY: F1/F2 CAPABLE

## TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
30	22.4	1800	1773	286T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	36.5	LINE OR INVERTER	CONTINUOUS	F3	1.15	40	3300

FULL LOAD EFF: 94.1	3/4 LOAD EFF: 94.1	1/2 LOAD EFF: 93.6	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 82	3/4 LOAD PF: 77	1/2 LOAD PF: 67.5	93.6	SQ CAGE INV RATED	15

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
89 LB-FT	217	165 LB-FT 185	245 LB-FT 275	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	4.6 LB-FT^2	225 LB-FT^2	25 SEC.	2	540 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	DIVISION 2 T2B	FALSE	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL						
6311	6210	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

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: CONSTANT 20:1			
INV. HP SPEED RANGE: 1.5 X BASE SPEED			
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 09:53:15 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

## Data Sheet

Date: 6/16/2017

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

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

Submitted by: EARL BABBITTS



286TTFNA6526

Submittal

Data @ 460 V

## Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	15.0	17.5	22.5	29.0	36.5	40.0	45.5	217	
Torque (ft-lb)	0.00	22.0	44.0	66.5	89.0	100	112	165	
RPM	1800	1795	1785	1780	1773	1,770	1765	0	
Efficiency (%)		89.5	93.6	94.1	94.1	94.1	93.6		
P.F. (%)	6.0	45.0	67.5	77.0	82.0	82.5	83.0	34.0	

## Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle					
Speed (RPM)	0	900	1650	1773	1800					
Current (Amps)	217	200	130	36.5	15.0					
Torque (ft-lb)	165	155	245	89.0	0.00					
<div><div>— Efficiency (%) — P.F. (%) — Current (Amps)</div><div>EFFICIENCY (%)</div><div>POWER FACTOR (%)</div><div>CURRENT (AMPS)</div><div>LOAD</div></div>						Information Block				
						HP		30.0		
						Sync. RPM		1800		
						Frame		286		
						Enclosure		TEFC		
						Construction		TFN		
						Voltage		460 V		
						Frequency		60 Hz		
						Design		B		
						LR Code letter		G		
						Service Factor		1.15		
						Temp Rise @ FL		60 ° C		
						Duty		CONT		
						Ambient		40 ° C		
						Elevation		1,000 feet		
						Rotor/Shaft wk <sup>2</sup>		4.6 Lb-Ft <sup>2</sup>		
						Ref Wdg		K2864159 NONE		
Sound Pressure @ 1M		65 dBA								
VFD Rating		CONSTANT 20:1								
Outline Dwg		B-SS311057-1425								
Conn. Diag		A-EE7300								
Additional Specifications:										
0										
0										
EQUIV CKT (OHMS / PHASE)										
R1		R2		X1		X2		Xm		
0.1250		0.1360		0.7240		0.9370		17.7850		

## Speed -Torque Curve

