

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 286TTFNA6030

Catalog No: E310

30 HP General Purpose Motor, 3 phase, 1800 RPM, 575 V, 286T Frame, TEFC
General Purpose Motors



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RegalRexnord

Nameplate Specifications

Output HP	30 Hp	Output KW	22.4 kW
Frequency	60 Hz	Voltage	575 V
Current	29.2 A	Speed	1773 rpm
Service Factor	1.15	Phase	3
Efficiency	94.1 %	Power Factor	82
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	286T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6210
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	4	Rotation	Reversible
Resistance Main	.205 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	28.16 in
Frame Length	14.25 in	Shaft Diameter	1.875 in
Shaft Extension	4.82 in	Assembly/Box Mounting	F1/F2 Capable
Outline Drawing	B-SS311111-1425	Connection Drawing	A-EE7300

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4

3

Uncontrolled Copy

2

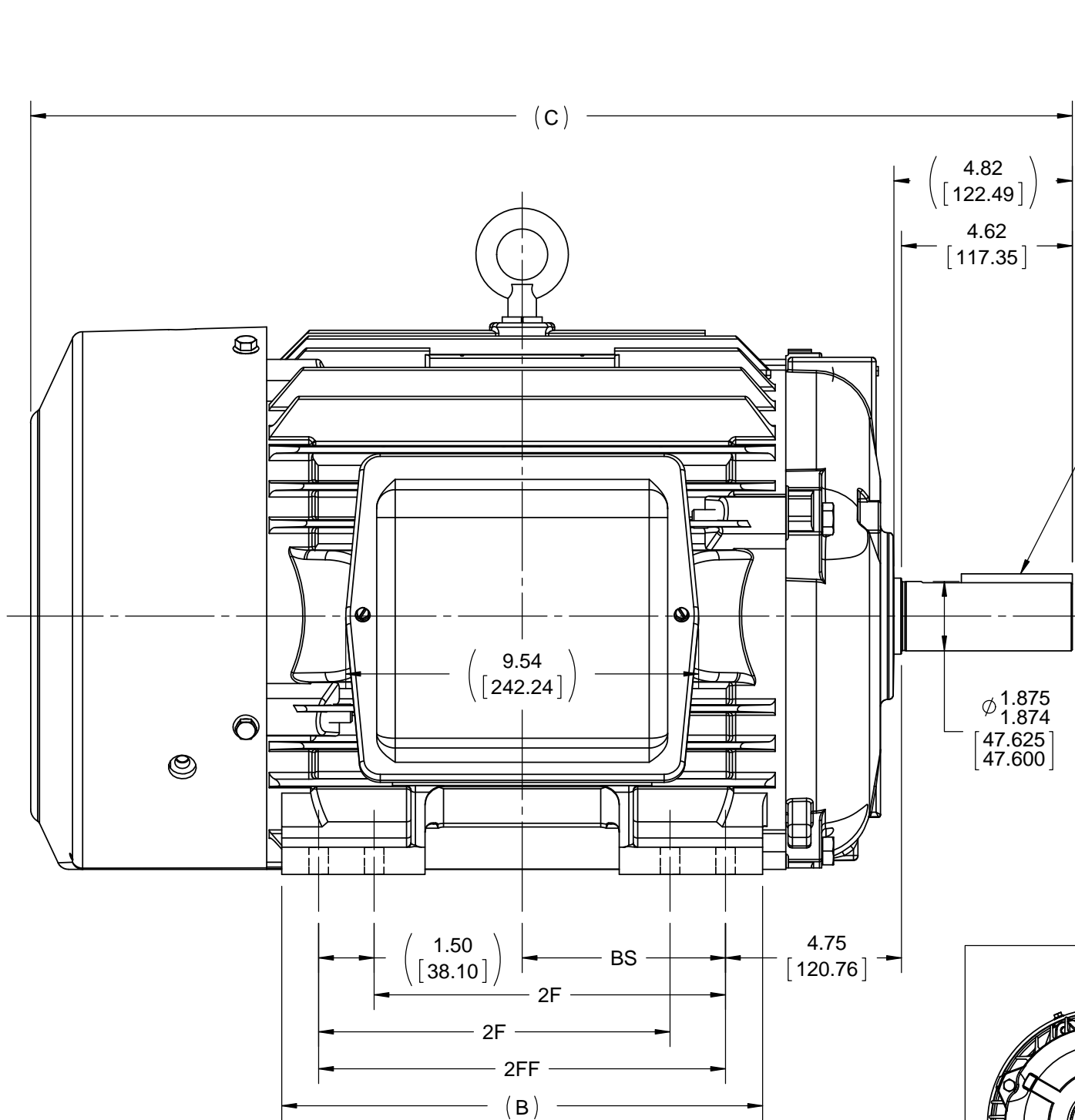
1

B

B

A

A



.500x.500x3.25
[12.700x12.700x82.55]
KEY

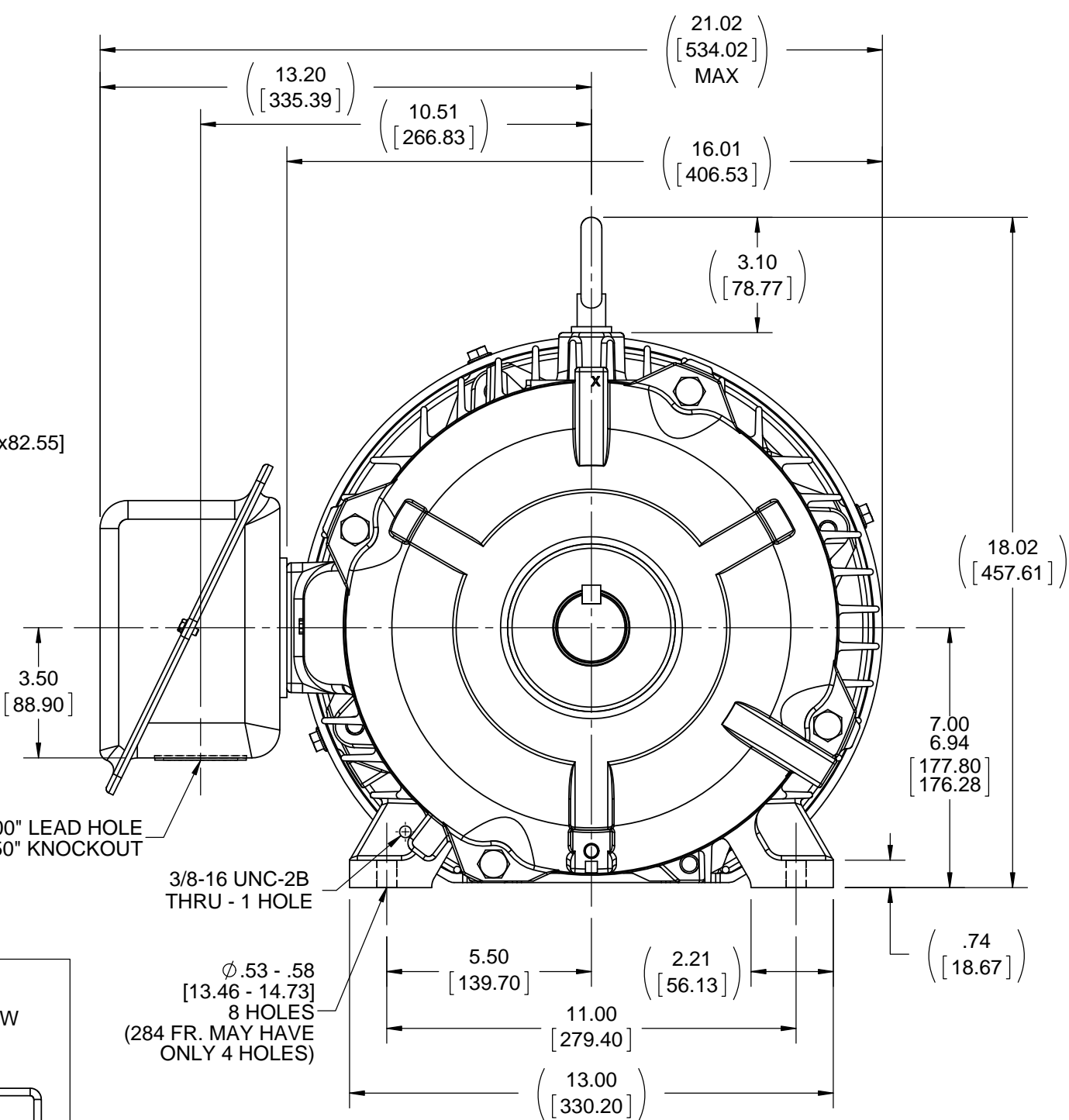
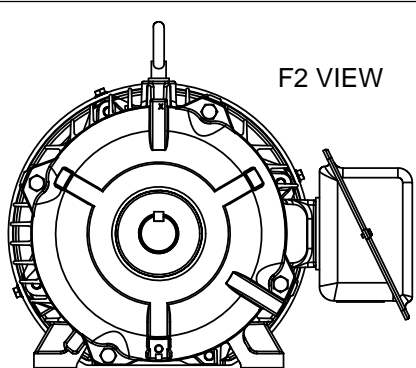
Ø 1.875
1.874
[47.625]
[47.600]

Ø 2.00" LEAD HOLE
Ø 2.50" KNOCKOUT

3/8-16 UNC-2B
THRU - 1 HOLE

Ø .53 - .58
[13.46 - 14.73]
8 HOLES
(284 FR. MAY HAVE
ONLY 4 HOLES)

F2 VIEW




- 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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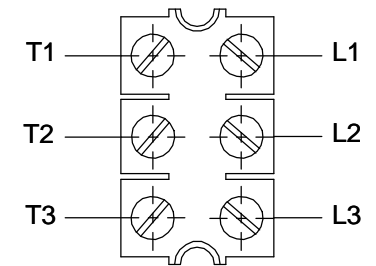
TOLERANCES UNLESS OTHERWISE SPECIFIED:			
DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7° 30"
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] CORNER FILLETS: .02 [0.51] MACHINED SURFACES: 200 INCH 5.1 mm			
mm SHOWN IN [BRACKETS]			

DRAWN BY CAV	 Regal Beloit America, Inc.		
DATE 01-31-2001			
APPROVED BY DD	DESCRIPTION OUTLINE		
DATE 01-31-2001	280T FR. - TEFC - 12.50 LAM.		
REFERENCE	MATERIAL	PROCESS/FINISH	
THIRD ANGLE PROJECTION	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



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#: 286TTFNA6030 BA
 CONN. DIAGRAM: A-EE7300
 OUTLINE: B-SS311111-1425

WINDING#: K2864159 NONE 5
 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	575	29.2	ACROSS THE LINE	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 IND RUN	12

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
89 LB-FT	173.6	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	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

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

* N O T E S *	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

DATE: 06/27/2017 04:02:33 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 6/20/2017

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



286TTFNA6030

Submittal

Data @ 575 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	12.0	14.0	18.0	23.2	29.2	32.0	36.4	174	
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	Information Block				
Speed (RPM)	0	900	1650	1773	1800	HP	30.0			
Current (Amps)	174	160	104	29.2	12.0	Sync. RPM	1800			
Torque (ft-lb)	165	155	245	89.0	0.00	Frame	286			
<div><div>— Efficiency (%) — P.F. (%) — Current (Amps)</div><div>EFFICIENCY (%) P.F. (%) CURRENT (AMPS)</div></div>						Enclosure	TEFC			
						Construction	TFN			
						Voltage	575	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 wk²	4.6	Lb-Ft²		
						Ref Wdg	K2864159	NONE		
						Sound Pressure @ 1M	65	dBA		
						VFD Rating	NONE			
						Outline Dwg	B-SS311111-1425			
						Conn. Diag	A-EE7300			
Additional Specifications:										
0										
0										
EQUIV CKT (OHMS / PHASE)										
R1	R2	X1	X2	Xm						
0.1950	0.2130	1.1310	1.4650	27.7890						

Speed -Torque Curve

