

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 326THFS19033

Catalog No: W581

50 HP Severe Duty Motor, 3 phase, 1800 RPM, 575 V, 326T Frame, TEFC  
Severe Duty Motors



Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.  
©2021 Regal Rexnord Corporation, All Rights Reserved. MC017097E

**RegalRexnord**

**Nameplate Specifications**

Output HP	50 Hp	Output KW	37.0 kW
Frequency	60 Hz	Voltage	575 V
Current	49.0 A	Speed	1777 rpm
Service Factor	1.15	Phase	3
Efficiency	94.5 %	Power Factor	80.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Frame	326T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6312	Opp Drive End Bearing Size	6311
UL	Recognized	CSA	Y
CE	Y	IP Code	56
Number of Speeds	1		

**Technical Specifications**

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.027 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	30.37 in
Frame Length	13.00 in	Shaft Diameter	2.125 in
Shaft Extension	5.5 in	Assembly/Box Mounting	F1/F2 Capable
Connection Drawing	A-EE7300	Outline Drawing	B-SS300575-1300

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:10/12/2021

4

3

Uncontrolled Copy

2

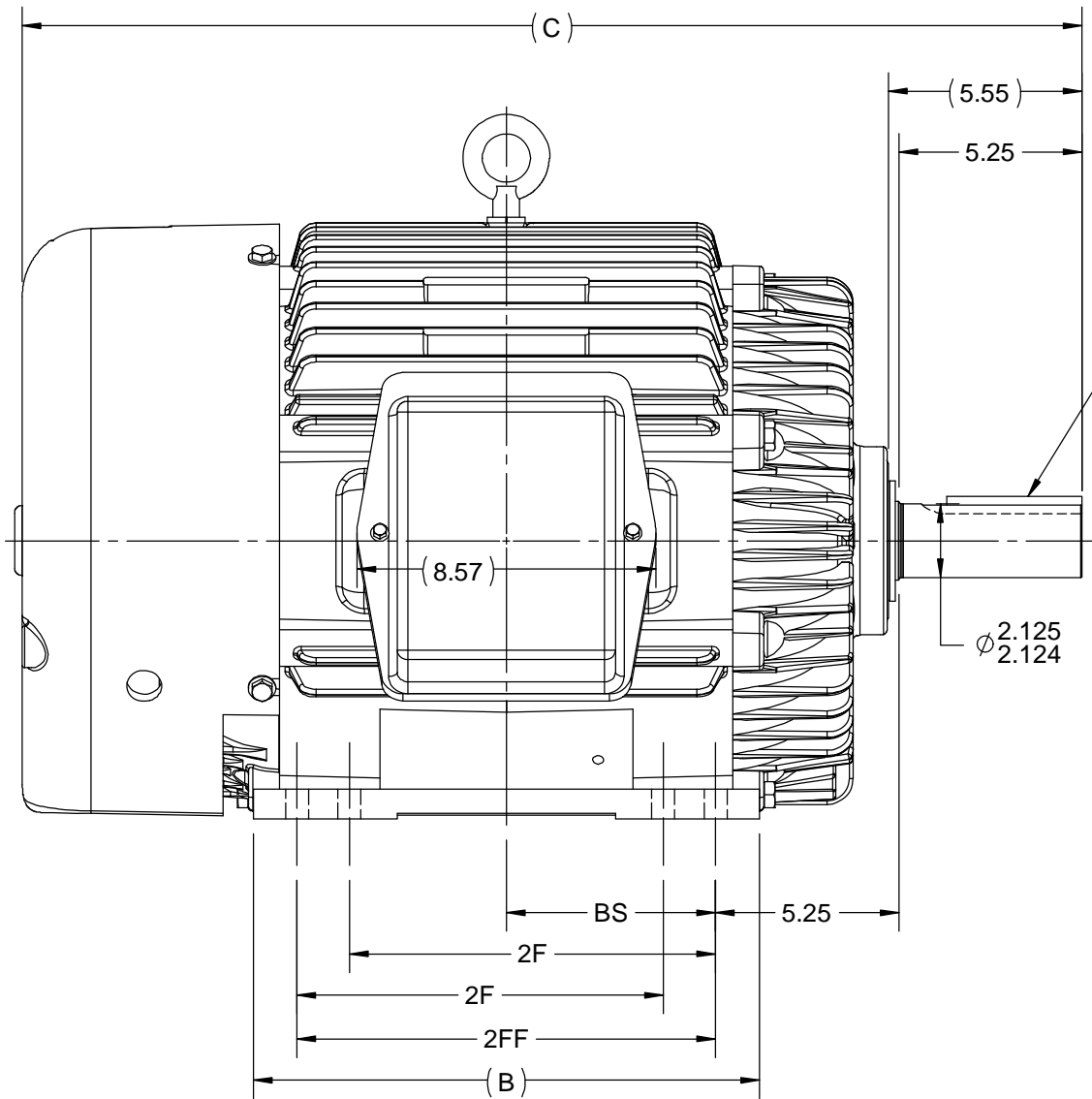
1

B

B

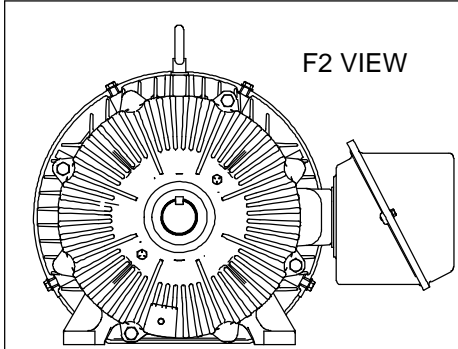
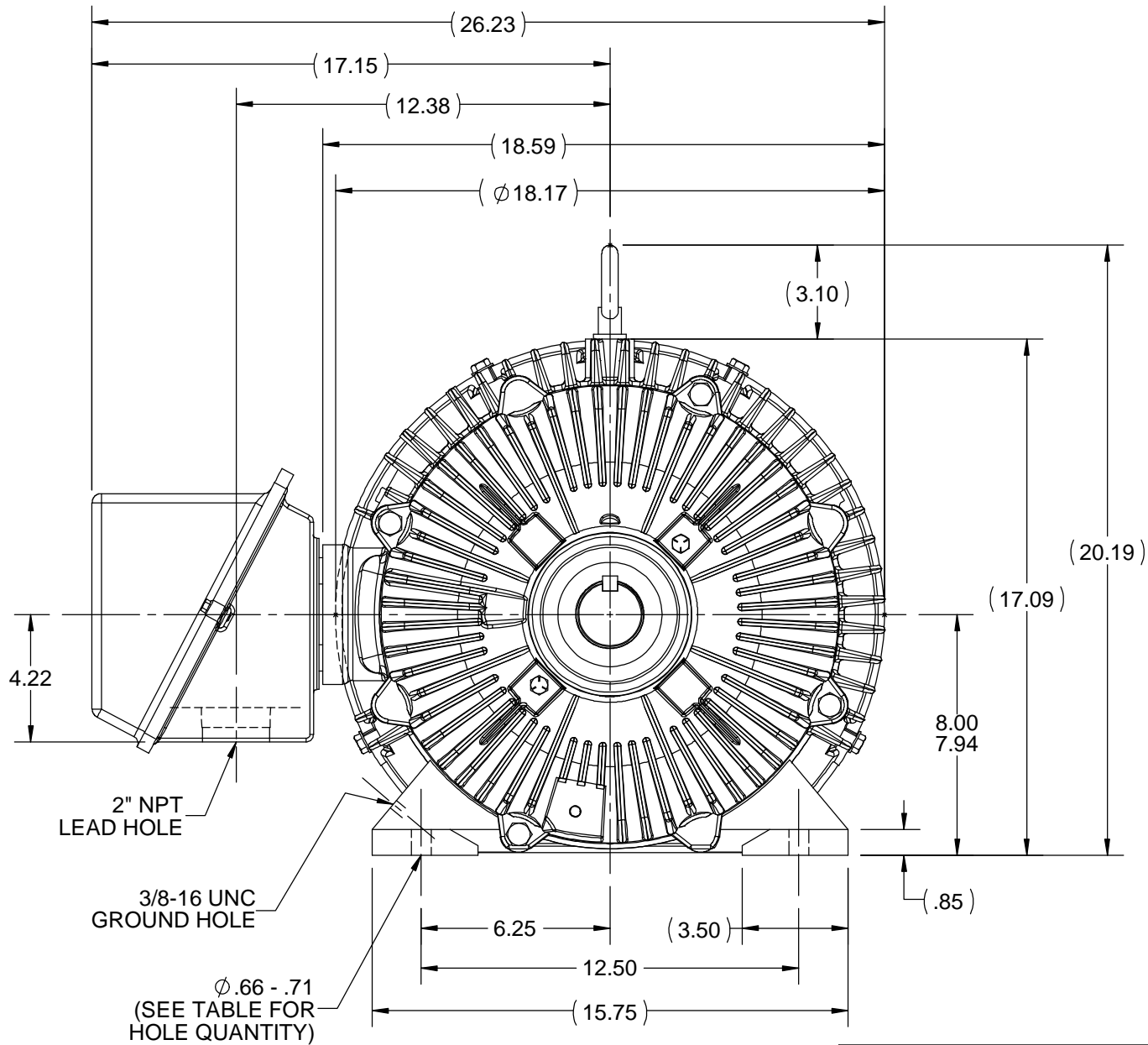
A

A



.500x.500x3.88  
KEY

Ø 2.125  
2.124



- 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	C	B	BS	2F	2FF	--	MTG HOLES
1150	324T	28.87	13.00	5.25	--	10.50		4
1300	324/6T	30.37	14.50	6.00	10.50	12.00		8
1450	326T	31.87	15.00	6.75	12.00	13.50		8

DRAWING REVISION D	REVISION BY MSG	DATE 12-05-2018
ECO ECO-0157547	APPROVED BY MSG	DATE 12-05-2018
ECO DESCRIPTION REVISED 2FF DIM FOR -1450		
COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.		

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 INCH 5.1/mm			
mm SHOWN IN [BRACKETS]			

DRAWN BY MH
DATE 01-23-1998
APPROVED BY DD
DATE 01-26-1998
REFERENCE
THIRD ANGLE PROJECTION

<div><div>REGAL<sup>TM</sup></div><div>Regal Beloit America, Inc.</div></div>		
DESCRIPTION		
OUTLINE 300T FR. - TEFC		
MATERIAL		PROCESS/FINISH
SIZE B	DRAWING NUMBER SS300575	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		
<small>COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED.          PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF          REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY          INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED,          BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED          TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT          AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL          BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN          RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.</small>		

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
-----------	--------------------------	-----------------

## CERTIFICATION DATA SHEET

**Model#:** 326THFS19033 BR  
**CONN. DIAGRAM:** A-EE7300  
**OUTLINE:** B-SS300575-1300

**WINDING#:** K3264196 NONE 5  
**ASSEMBLY:** F1/F2 CAPABLE

## TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
50	37	1800	1777	326T	TEFC	F	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	575	49	LINE OR INVERTER	CONTINUOUS	F3	1.15	40	3300

FULL LOAD EFF: 94.5	3/4 LOAD EFF: 94.5	1/2 LOAD EFF: 94.1	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 80.5	3/4 LOAD PF: 76	1/2 LOAD PF: 65.5	94.1	SQ CAGE INV RATED	20.6

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
148 LB-FT	289.6	275 LB-FT 186	360 LB-FT 243	75

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
65 dBA	75 dBA	9.7 LB-FT^2	325 LB-FT^2	25 SEC.	2	775 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAIN
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						
6312	6311	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 2:1
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

\*  
N  
O  
T  
E  
S  
\*

DATE: 06/21/2017 05:51:54 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

## Data Sheet

Date: 6/19/2017

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

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

Submitted by: FAREEDA DUDEKULA



326THFS19033

Submittal

Data @ 575 V

## Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	20.6	23.7	30.4	39.2	49.2	56.0	60.8	290	
Torque (ft-lb)	0.00	36.6	73.5	111	148	170	185	275	
RPM	1800	1795	1788	1783	1777	1,773	1770	0	
Efficiency (%)		91.0	94.1	94.5	94.5	94.1	93.6		
P.F. (%)	3.0	43.0	65.5	76.0	80.5	82.0	82.5	32.0	

## Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle																													
Speed (RPM)	0	900	1695	1777	1800																													
Current (Amps)	290	264	168	49.2	20.6																													
Torque (ft-lb)	275	234	360	148	0.00																													
<div><div>— Efficiency (%)</div><div>— P.F. (%)</div><div>— Current (Amps)</div><table border="1"><caption>Graph Data Points (Estimated)</caption><thead><tr><th>Load (%)</th><th>Efficiency (%)</th><th>P.F. (%)</th><th>Current (Amps)</th></tr></thead><tbody><tr><td>25</td><td>91</td><td>12</td><td>20.6</td></tr><tr><td>50</td><td>93</td><td>35</td><td>35.0</td></tr><tr><td>75</td><td>94</td><td>45</td><td>45.0</td></tr><tr><td>100</td><td>94</td><td>50</td><td>50.0</td></tr><tr><td>125</td><td>93</td><td>52</td><td>60.5</td></tr></tbody></table></div>						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)	25	91	12	20.6	50	93	35	35.0	75	94	45	45.0	100	94	50	50.0	125	93	52	60.5	Information Block				
						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)																									
						25	91	12	20.6																									
						50	93	35	35.0																									
						75	94	45	45.0																									
						100	94	50	50.0																									
						125	93	52	60.5																									
						HP		50.0																										
						Sync. RPM		1800																										
						Frame		326																										
						Enclosure		TEFC																										
						Construction		TFN																										
						Voltage		575 V																										
						Frequency		60 Hz																										
						Design		B																										
						LR Code letter		G																										
						Service Factor		1.15																										
Temp Rise @ FL		75 °C																																
Duty		CONT																																
Ambient		40 °C																																
Elevation		1,000 feet																																
Rotor/Shaft wk²		9.7 Lb-Ft²																																
Ref Wdg		K3264196 NONE																																
Sound Pressure @ 1M		65 dBA																																
VFD Rating		CONSTANT 2:1																																
Outline Dwg		B-SS300575-1300																																
Conn. Diag		A-EE7300																																
Additional Specifications:																																		
0																																		
0																																		
EQUIV CKT (OHMS / PHASE)																																		
R1		R2		X1		X2		Xm																										
0.0310		0.0230		0.1780		0.2400		4.0160																										

## Speed -Torque Curve

