

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 324TSTFCD6005  
Catalog No: GT1133A  
40,3600,TEFC,324TS,3/60/575  
Totally Enclosed Fan Cooled (TEFC)



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**REGAL**<sup>®</sup>



### Nameplate Specifications

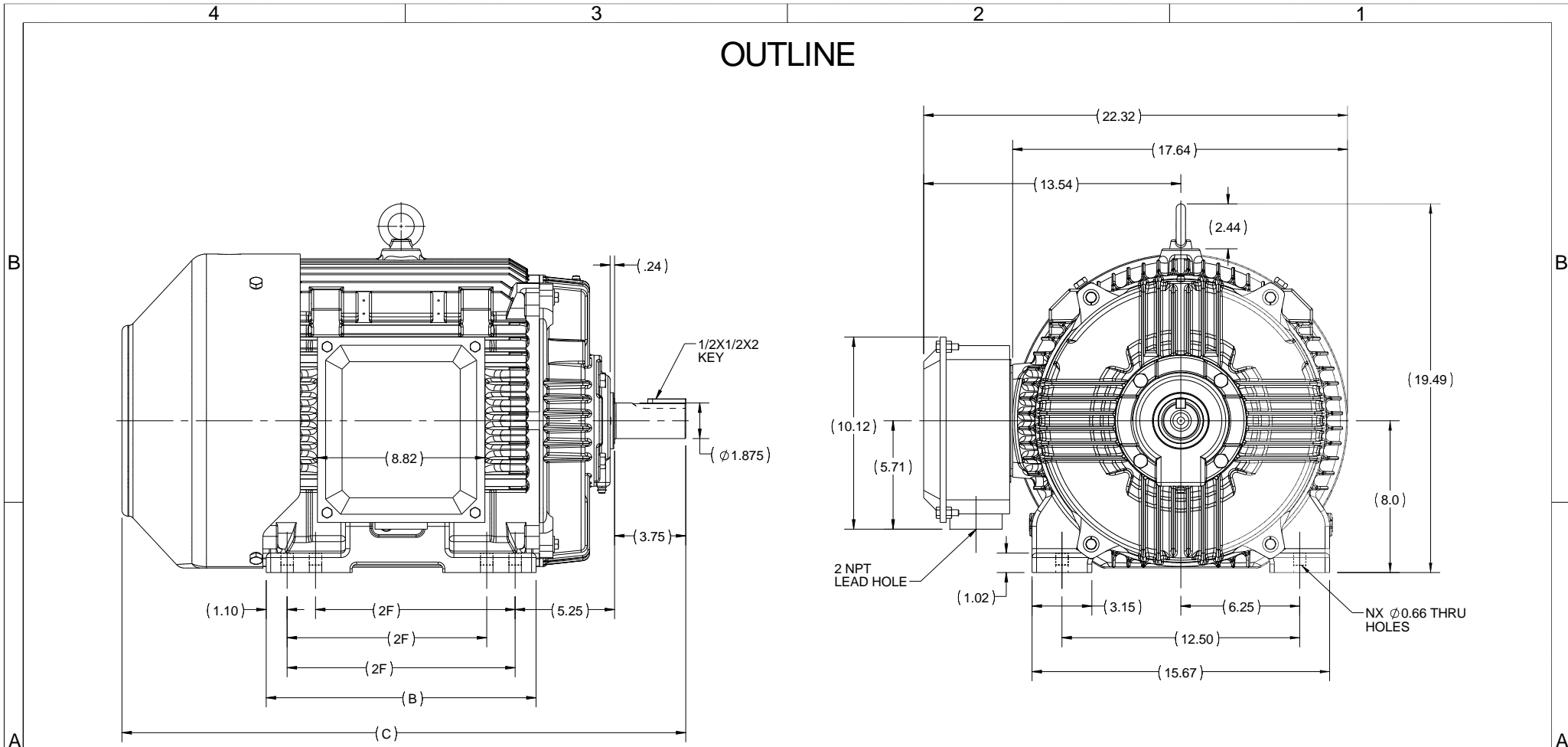
Output HP	<b>40 Hp</b>	Output KW	<b>30.0 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>575 V</b>
Current	<b>37.0 A</b>	Speed	<b>3565 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>92.4 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>F</b>	Design Code	<b>B</b>
KVA Code	<b>G</b>	Frame	<b>324TS</b>
Enclosure	<b>Totally Enclosed Fan Cooled</b>	Overload Protector	<b>No</b>
Ambient Temperature	<b>40 °C</b>	Drive End Bearing Size	<b>6312</b>
Opp Drive End Bearing Size	<b>6212</b>	UL	<b>Listed</b>
CSA	<b>Y</b>	CE	<b>Y</b>
IP Code	<b>55</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>2</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>TS</b>
Frame Length	<b>13.07 in</b>	Shaft Diameter	<b>1.875 in</b>
Shaft Extension	<b>3.75 in</b>	Assembly/Box Mounting	<b>F1/F2 Capable</b>
Outline Drawing	<b>SS312781-324TS</b>	Connection Diagram	<b>EE7300</b>

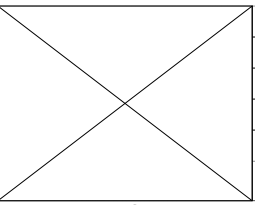
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# OUTLINE



326TS	14.21	29.69	12.0	8
324TS	12.71	28.19	10.5	4
FRAME	B	C	2F	N

DRAWING REVISION A	REVISION BY UDAY	DATE 4/7/2016
ECO ECO-0105009	APPROVED BY RAJESH	DATE 4/7/2016
ECO DESCRIPTION NEW OUTLINE RELEASE		
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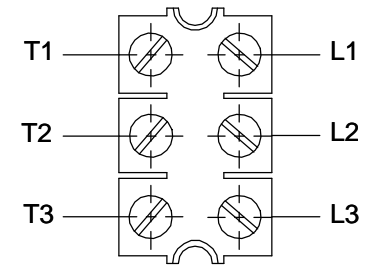


DRAWN BY NIV	 Regal Beloit America, Inc.
DATE 25/03/2016	
APPROVED BY SBD	DESCRIPTION <b>OUTLINE</b> 320TS FR-TEFC
DATE 25/03/2016	MATERIAL
REFERENCE	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B
	DRAWING NUMBER <b>SS312781</b>
	SHEET 1 OF 1

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

**TO REVERSE ROTATION:  
INTERCHANGE ANY TWO  
LINE LEAD CONNECTIONS.**

**TERMINAL BLOCK WHEN SPECIFIED**



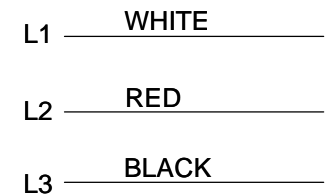
**VIEW OF TERMINAL END**

**IF MOTOR HAS  
6 LEADS**



A-9806 DECAL

**OPTIONAL CORD  
CONNECTION**



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**  
**UPDATED TO CURRENT STANDARDS**  
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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>	



P.O. BOX 8003  
WAUSAU, WI 54401-8003  
PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER P.O. #:   
 ORDER #: EE7300  
 REFERENCE MODEL #: 324TSTFCOD8005  
 CONN. DIAGRAM: SSS312781  
 CAT #: GT1133A  
 OUTLINE: HE32002008 NONE 3 CUSTOMER PART #:   
 WINDING: HE32002008 NONE 3 MOUNTING: F1/F2 CAPABLE  
 SPEED:   
 TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN	
40	30	3600	3565	324TS	TEFC	TFC	G	B	
PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	575	37	LINE OR INVERTER	CONT	F	1.15	40	3300
F.L. EFF	92.4	3/4 LD EFF	93.0	1/2 LD EFF	91.7	GTD EFF	ELECT. TYPE		
F.L. PF	88.0	3/4 LD PF	85.0	1/2 LD PF	77.5	91.7	SQ CAGE INV RATED		
F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)					
59.0 LB-FT	232	95.0 LB-FT	161%	162 LB-FT	275%	60			
@ 3 FT.	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT			
75 DBA	84 DBA	4.8 LB-FT²	25 LB-FT²	20 SEC.	2	650 LB.			

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	NO	DIVISION 2 T2B	NO	NONE	BLUE (ENAMEL)
BEARINGS	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL		
DE BALL 6312	BALL POLYREX EM 6212	T5	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON		

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	NOT	NONE	NONE	NONE	FALSE	NA
R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
0.172	0.09	0.842	0.931	27.145	0.080	ODE

INVERTER TORQUE: VARIABLE 10:1  
 INV. HP SPEED RANGE: NONE

ENCODER: NONE  
 NONE  
 NONE  
 BRAKE: NONE  
 NONE  
 NONE  
 NONE PPR

PREPARED BY: FAREEDA DUDEKULA  
 DATE: 5/3/2018

UL: NO LETTER - ME WUXI TEFC BLUEWHALE CLASS 1 DIV. 2 UL  
 HZ:

Data Sheet

Date: 5/3/2018

3241STFCDD8005

Customer:   
 Attention:   
 Submitted by: FAREEDA DUDEKULA



Submital   
 Data @ 575 V

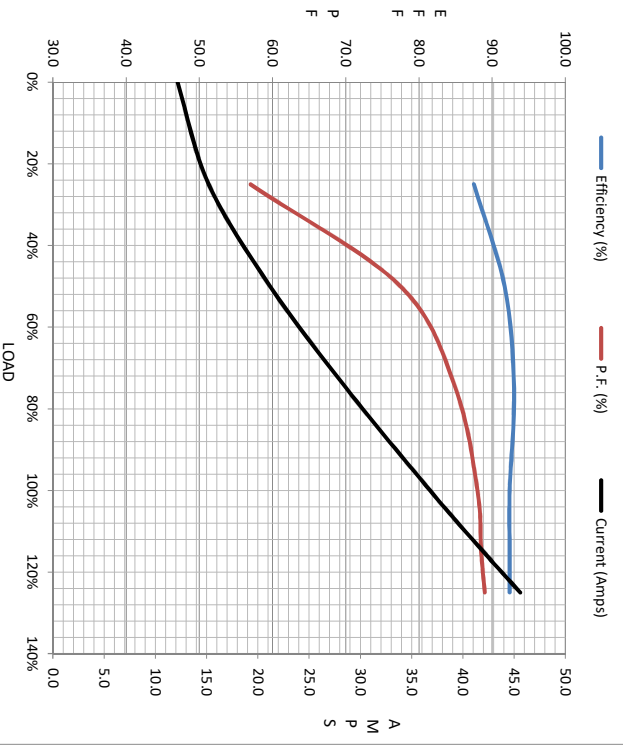
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	12.2	15.2	21.2	28.6	36.8	42.0	45.6	232
Torque (ft-lb)	0.00	14.6	29.3	44.0	59.0	68.0	74.0	95.0
RPM	3600	3592	3582	3575	3565	3560	3555	0
Efficiency (%)		87.5	91.7	93.0	92.4	92.4	92.4	
P.F. (%)	8.0	57.0	77.5	85.0	88.0	88.5	89.0	30.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3425	3565	3600
Current (Amps)	232	186	140	36.8	12.2
Torque (ft-lb)	95.0	80.0	162	59.0	0.00

Information Block

HP	40.0			
Sync. RPM	3600			
Frame	324182TFC8080			
Enclosure	TEFC			
Construction	TFC			
Voltage	575 V			
Frequency	60 Hz			
Design	A			
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>	4.8 Lb-Ft <sup>2</sup>			
Ret Wdg	HE32002008 NONE			
Sound Pressure @ 1M	75 dbA			
VFD Rating	VARIABLE 10:1			
Outline Dwg	SS312781			
Conn. Diag	EE7300			
Additional Specifications:				
0				
0				
R1	R2	X1	X2	Xm
0.1720	0.0900	0.8420	0.9310	271450



Speed - Torque Curve

