

# PRODUCT INFORMATION PACKET

marathon®  
Motors

Model No: 324TSTFCA6003

Catalog No: GT1233

Globetrotter® General Purpose Motor, 40 & 30 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,  
3600 & 3000 RPM, 324TSC Frame, TEFC



Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E

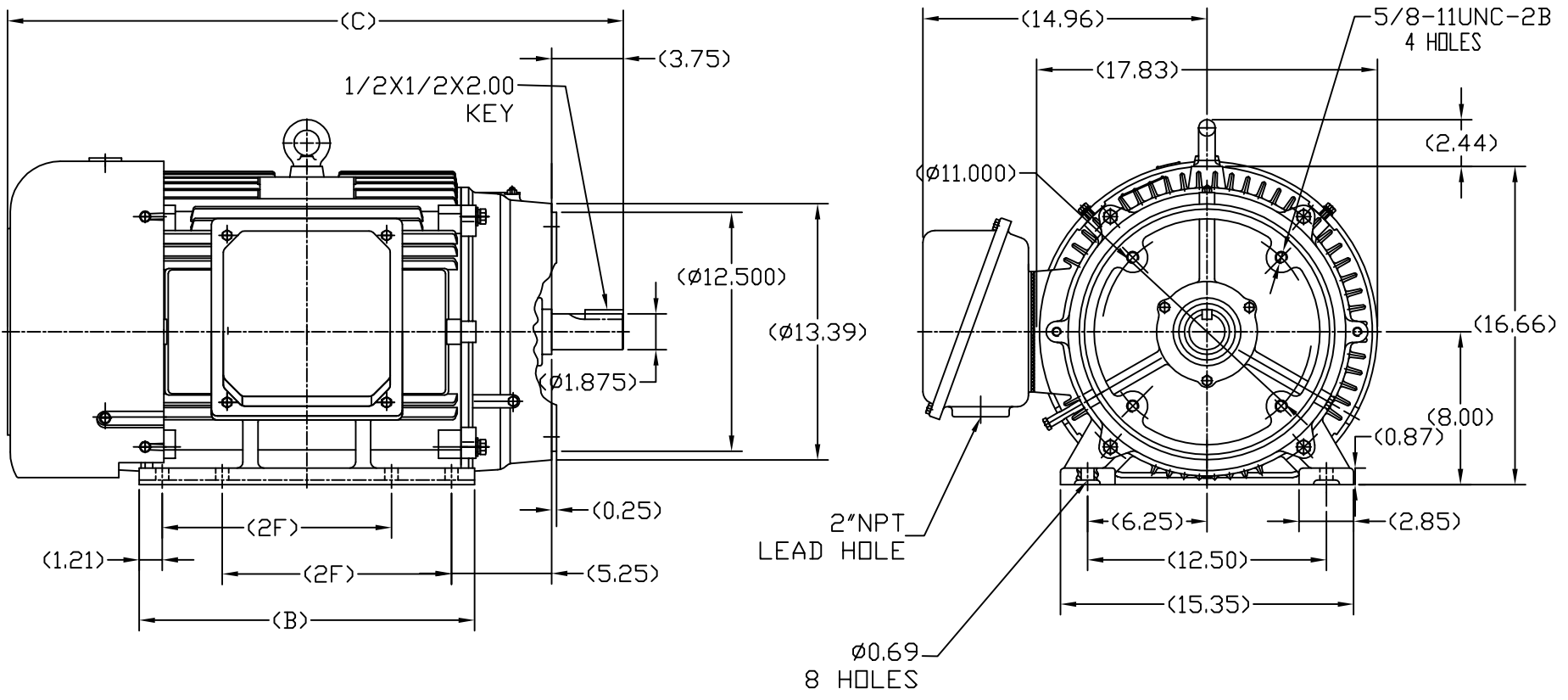
RegalRexnord

### Nameplate Specifications


Phase	<b>3</b>	Output HP	<b>40 &amp; 30 Hp</b>
Output KW	<b>30.0 &amp; 22.4 kW</b>	Voltage	<b>230/460 &amp; 190/380 V</b>
Speed	<b>3570 &amp; 2970 rpm</b>	Service Factor	<b>1.15 &amp; 1.0</b>
Frame	<b>324TSC</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No Protection</b>	Efficiency	<b>93 &amp; 93 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 &amp; 50 Hz</b>
Current	<b>90/45 &amp; 80/40 A</b>	Power Factor	<b>89.5</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Drive End Bearing Size	<b>6212</b>	Opp Drive End Bearing Size	<b>6212</b>
UL	<b>Recognized</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>43</b>
Number of Speeds	<b>1</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Induction Run</b>	Starting Method	<b>Across The Line</b>
Poles	<b>2</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.13684 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>TS</b>	Overall Length	<b>31.18 in</b>
Shaft Diameter	<b>1.875 in</b>	Shaft Extension	<b>3.75 in</b>
Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>		
Connection Drawing	<b>A-EE7308AA</b>	Outline Drawing	<b>SS620302-324TSC</b>



324TSC	31.18	16.38	10.50
326TSC	32.36	17.56	12.00
FRAME	C	B	2F

		TOLERANCES UNLESS SPECIFIED		 <b>REGAL-BELOIT CORPORATION</b>		DRAWN SY 4-21-2010	
		DEC.	INCHES			CHK HZJ 4-21-2010	
		.X	±1	TITLE		SCALE 1=7	
		.XX	±.03	324/326TSC FR-TEFC-CAST IRON		REF	
		.XXX	±.005	MAT'L.		FMF HWADA	
		.XXXX	±.0005	FINISH		PREV	
NO.	REVISION	BY & DATE	CHK	ANG	±1/2	RFP	
		THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT		CAD FILE		SS620302	SIZE B
				DIST		DRAWING NO. SS620302	
						REV.	



### LOW VOLTAGE



### HIGH VOLTAGE



DRAWING REVISION <b>K</b>	REVISION BY <b>AJW</b>	DATE <b>07-17-2015</b>
ECO <b>ECO-0081632</b>	APPROVED BY <b>T. VUE</b>	DATE <b>07-17-2015</b>
ECO DESCRIPTION <b>REV'D IEC MARKINGS PER IEC 60034-8</b>		
<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 <b>LZ</b>	<b>Regal Beloit America, Inc.</b>	
DATE <b>01-12-1994</b>		
APPROVED BY <b>GK</b>	<b>CONN DIAGRAM-EXTERNAL</b> <b>3Ø-2/1 DELTA-12 LEADS</b>	
DATE <b>01-14-1994</b>		
REFERENCE	MATERIAL	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE <b>A</b>	DRAWING NUMBER <b>EE7308AA</b>
		SHEET <b>1 OF 1</b>

**CERTIFICATION DATA SHEET**

**Model#:** 324TSTFCA6003 AA      **WINDING#:** CHT32420001 NONE 1  
**CONN. DIAGRAM:** A-EE7308AA      **ASSEMBLY:** F1/F2 CAPABLE  
**OUTLINE:** B-SS620302

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
40&30	30&22.4	3600	3570&2970	324TSC	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	90/45&80/40	ACROSS THE LINE	CONTINUOU S	F7	1.15/1.0	40	3300

FULL LOAD EFF: 93&93	3/4 LOAD EFF: 93	1/2 LOAD EFF: 92.4	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 89.5&89.5	3/4 LOAD PF: 88	1/2 LOAD PF: 82	91.7	SQ CAGE IND RUN	23 / 11.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
59 LB-FT	580 / 290	110 LB-FT 185	165 LB-FT 272	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
75 dBA	85 dBA	5.2 LB-FT^2	25 LB-FT^2	20 SEC.	2	700 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	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	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6212	6212						

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: 06/21/2017 03:47:03 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

Data Sheet

Date: 6/29/2017

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

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

Submitted by: FAREEDA DUDEKULA



324TSTFCA6003

Submittal

Data @ 460 V

Motor Load Data

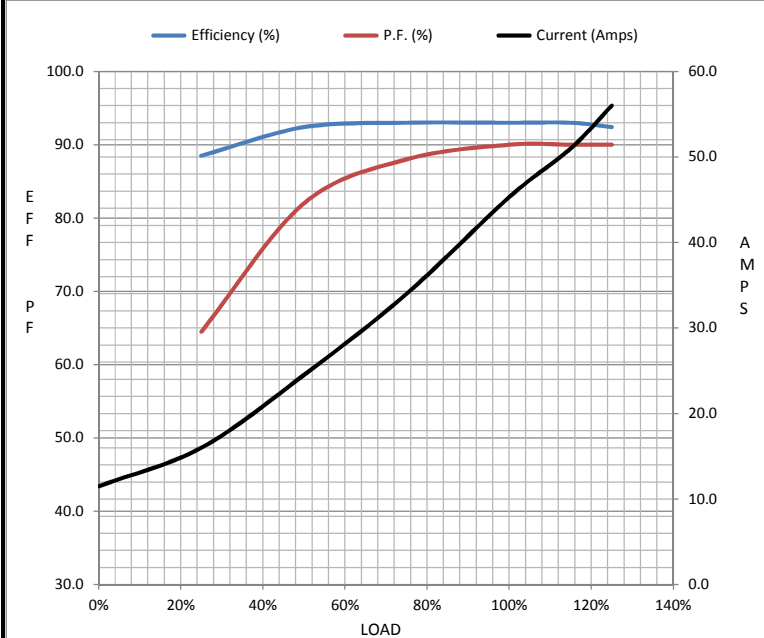
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	11.5	16.0	24.5	34.0	45.3	51.0	56.0	290
Torque (ft-lb)	0.00	14.6	29.3	44.0	59.0	68.0	74.0	110
RPM	3600	3592	3585	3575	3560	3,555	3550	0
Efficiency (%)		88.5	92.4	93.0	93.0	93.0	92.4	
P.F. (%)	9.5	64.5	82.0	88.0	90.0	90.0	90.0	34.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3425	3560	3600
Current (Amps)	290	265	180	45.3	11.5
Torque (ft-lb)	110	90.0	165	59.0	0.00

Information Block

HP	40.0			
Sync. RPM	3600			
Frame	324			
Enclosure	TEFC			
Construction	TFC			
Voltage	30/460#190/381V			
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>	5.2 Lb-Ft <sup>2</sup>			
Ref Wdg	CHT32420001 NONE			
Sound Pressure @ 1M	75 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS620302			
Conn. Diag	A-EE7308AA			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0960	0.0510	0.5110	0.6070	22.6520



Speed -Torque Curve

