

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 324TTFCD6076  
Catalog No: GT1029A  
25,1200,TEFC,324T3/60230/460  
Totally Enclosed Fan Cooled (TEFC)



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**REGAL**<sup>®</sup>



### Nameplate Specifications

Output HP	<b>25 Hp</b>	Output KW	<b>18.7 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>230/460 V</b>
Current	<b>64.0/32.0 A</b>	Speed	<b>1184 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>93 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>F</b>	Design Code	<b>B</b>
KVA Code	<b>G</b>	Frame	<b>324T</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>Wye Start Delta Run Or Inverter</b>
Poles	<b>6</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>T</b>
Overall Length	<b>29.69 in</b>	Shaft Diameter	<b>2.125 in</b>
Shaft Extension	<b>5.25 in</b>	Assembly/Box Mounting	<b>F1/F2 Capable</b>
Outline Drawing	<b>SS312782-324T</b>	Connection Diagram	<b>EE7308AA</b>

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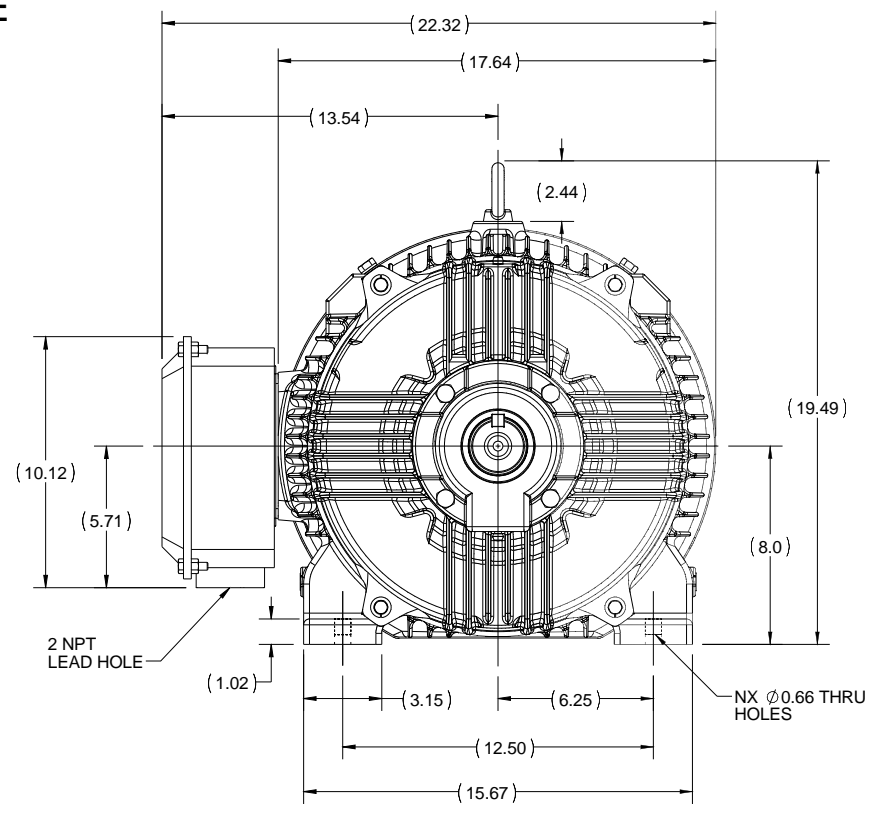
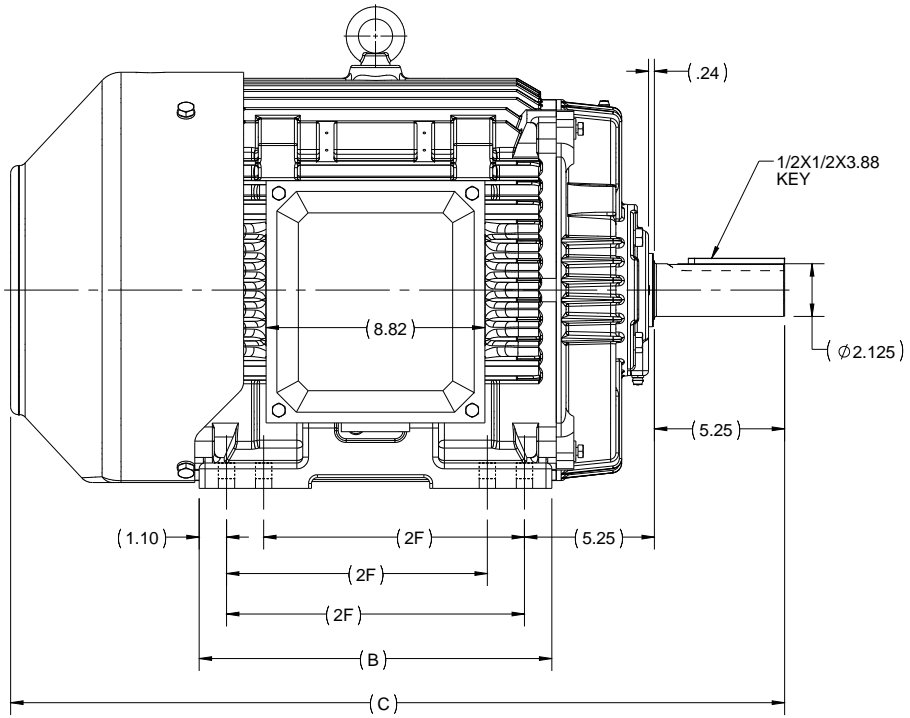
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# OUTLINE

B

B

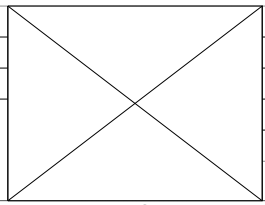



A

A

326T	14.21	31.19	12.0	8
324T	12.71	29.69	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> 320T FR-TEFC		
DATE 25/03/2016	MATERIAL		
REFERENCE	PROCESS/FINISH		
THIRD ANGLE PROJECTION	SIZE B	DRAWING NUMBER <b>SS312782</b>	SHEET 1 OF 1

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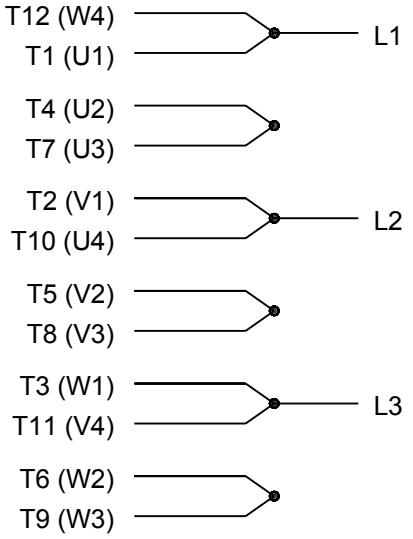
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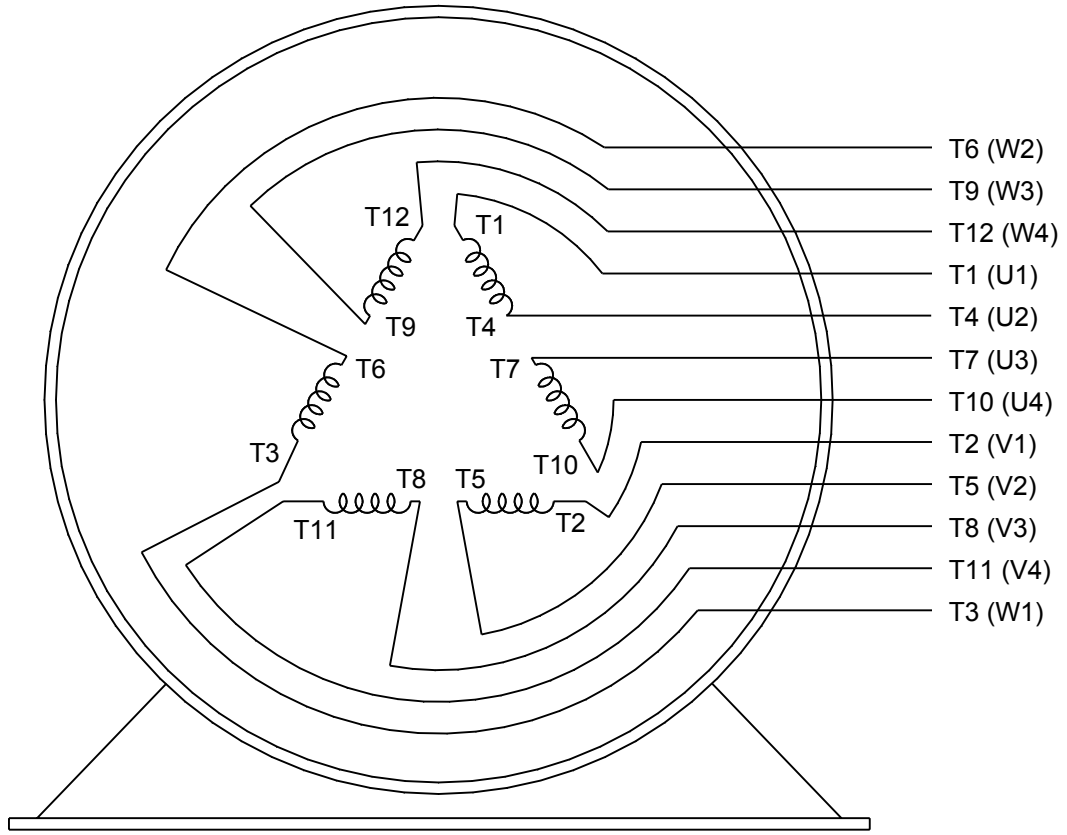
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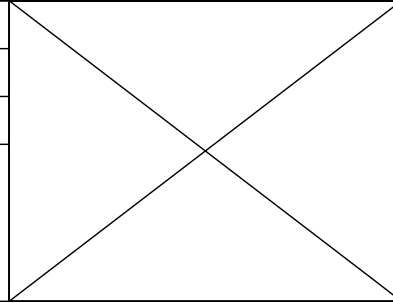
### LOW VOLTAGE



### 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>		
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DRAWN BY <b>LZ</b>	<b>Regal Beloit America, Inc.</b>	
DATE <b>01-12-1994</b>		
APPROVED BY <b>GK</b>	DESCRIPTION <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#:** 324TTFCD6076 AA      **WINDING#:** HE32006005 NONE 2  
**CONN. DIAGRAM:** EE7308AA      **ASSEMBLY:** F1/F2 CAPABLE  
**OUTLINE:** SS312782

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
25&20	18.7&14.9	1200	1184&985	324T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	64/32&63/31.5	Y START D RUN OR INV	CONTINUOU S	F7	1.15/1.15	40	3300

FULL LOAD EFF: 93&92.4	3/4 LOAD EFF: 93	1/2 LOAD EFF: 92.4	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 78.5&78.5	3/4 LOAD PF: 73.5	1/2 LOAD PF: 62	92.4	SQ CAGE INV RATED	30 / 15

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
111 LB-FT	364 / 182	200 LB-FT 180	272 LB-FT 245	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
56 dBA	66 dBA	11.8 LB-FT^2	- LB-FT^2	20 SEC.	2	675 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	DIVISION 2 T2B	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6312	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

INVERTER TORQUE: VARIABLE 10:1
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

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DATE: 06/21/2017 05:05:10 AM  
 FORM 3531 REV.3 02/07/99

\*\* Subject to change without notice.

Data Sheet

Date: 15-06-2017  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



324TTFCD6076

Submittal  
 Data @ 460 V

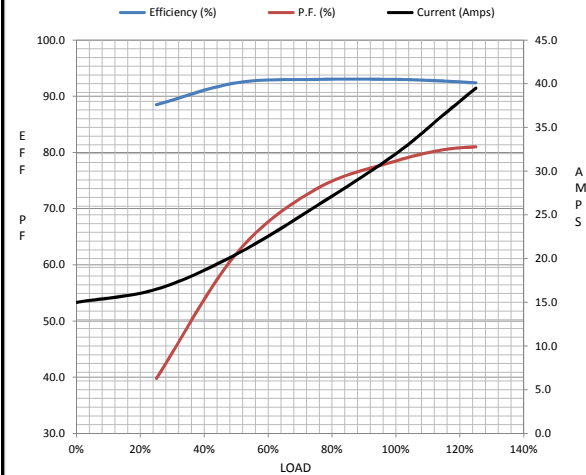
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	15.0	16.5	20.5	26.0	32.0	36.5	39.5	182
Torque (ft-lb)	0.00	27.5	55.0	82.5	111	127	139	200
RPM	1200	1196	1192	1188	1184	1,180	1180	0
Efficiency (%)		88.5	92.4	93.0	93.0	92.7	92.4	
P.F. (%)	4.5	39.8	62.0	73.5	78.5	80.5	81.0	36.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1138	1184	1200
Current (Amps)	182	145	105	32.0	15.0
Torque (ft-lb)	200	168	272	111	0.00

Information Block				
HP	25.0			
Sync. RPM	1200			
Frame	324			
Enclosure	TEFC			
Construction	TFC			
Voltage	30/460#190/38V			
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>	11.8 Lb-Ft <sup>2</sup>			
Ref Wdg	HE32006005 NONE			
Sound Pressure @ 1M	56 dBA			
VFD Rating	VARIABLE 10:1			
Outline Dwg	SS312782			
Conn. Diag	EE7308AA			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.2020	0.1230	0.7950	1.2260	17.1390



Speed -Torque Curve

