

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 324TTFS16066

Catalog No: E209-P

40 HP, General Purpose Motors, 3 phase, 1800 RPM, 230/460 V, 324T Frame, TEFC
General Purpose Motors



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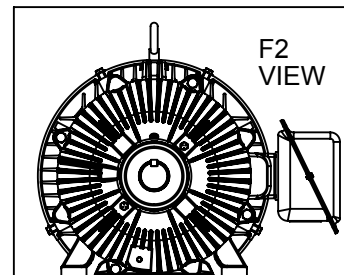
RegalRexnord


Nameplate Specifications

Output HP	40 Hp	Output KW	30.0 kW
Frequency	60 Hz	Voltage	230/460 V
Current	95.0/47.5 A	Speed	1780 rpm
Service Factor	1.15	Phase	3
Efficiency	94.1 %	Power Factor	83
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	324T	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	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.135 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	30.38 in
Frame Length	13.00 in	Shaft Diameter	2.125 in
Shaft Extension	5.49 in	Assembly/Box Mounting	F1/F2 Capable
Connection Drawing	A-EE7308	Outline Drawing	B-SS28289-1300



- | | | | |
|--|---|-----------------------------------|-------------------------------|
|  Regal TM | | Regal Beloit America, Inc. | |
| DESCRIPTION | | | |
| <p style="text-align: center;">OUTLINE</p> <p style="text-align: center;">320T FR. - TEFC - CAST IRON - STEEL C'BOX</p> | | | |
| MATERIAL | | PROCESS/FINISH | |
| SIZE
B | DRAWING NUMBER
SS28289 | | SHEET
1 OF 1 |

1150	324T	28.88 [733.48]	13.75 [349.25]	---	10.50 [266.70]	5.25 [133.35]
1300	324/326T	30.38 [771.58]	13.75 [349.25]	10.50 [266.70]	12.00 [304.80]	6.00 [152.40]
1450	326T	31.88 [809.68]	15.00 [381.00]	12.00 [304.80]	---	6.75 [171.45]
DASH	FRAME	C	B	2F	2FF	BS



NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED		DRAWN RM	11/20/1990
					DEC.	INCHES		
5	CHG TO REGAL LOGO	SL 09/10/2015	AB				CHK	ML 11/21/1990
4	REVISED IEC NOTATIONS	MSG 11/15/2011	CMN	.X	±.1		APPD	SAS 04/24/2003
3	ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194	MSG 5/10/2010	MJS	.XX	±.02		SCALE	1=1
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS	.XXX	±.005		REF	
1	REDRAWN	RM 11/20/1990		.XXXX	±.0005		FINISH	PREV
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					RFP	CAD FILE ee7308	SIZE A	DRAWING NO. EE7308
					DIST WP			OF 5



Regal Beloit America, Inc.

TITLE CONNECTION DIAGRAM
3Ø – DUAL VOLTAGE MOTOR

CERTIFICATION DATA SHEET

Model#: 324TTFS16066 AN
CONN. DIAGRAM: A-EE7308
OUTLINE: B-SS28289-1300

WINDING#: K3244127 NONE 1
ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
40	30	1800	1780	324T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	95/47.5	LINE OR INVERTER	CONTINUOUS	F3	1.15	40	3300

FULL LOAD EFF: 94.1	3/4 LOAD EFF: 94.5	1/2 LOAD EFF: 94.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 83	3/4 LOAD PF: 79.5	1/2 LOAD PF: 71	93.6	SQ CAGE INV RATED	35 / 17.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
118 LB-FT	580 / 290	218 LB-FT 185	305 LB-FT 258	65

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
65 dBA	75 dBA	8.8 LB-FT^2	275 LB-FT^2	25 SEC.	2	700 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						
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 20:1		
INV. HP SPEED RANGE: 1.5 X BASE SPEED		
ENCODER: NONE		
NONE NONE		
NONE NONE PPR		
BRAKE: NONE NONE		
NONE P/N NONE		
NONE NONE		
- FT-LB	NONE V	NONE Hz

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DATE: 06/21/2017 05:06:27 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



324TTFS16066

Submittal

Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	17.5	21.0	28.0	37.2	47.5	54.0	59.0	290	
Torque (ft-lb)	0.00	29.5	58.5	88.5	118	136	148	218	
RPM	1800	1795	1790	1785	1780	1,775	1772	0	
Efficiency (%)		91.0	94.5	94.5	94.1	94.1	94.1		
P.F. (%)	4.5	49.5	71.0	79.5	83.0	83.5	84.0	34.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle	Information Block																												
Speed (RPM)	0	900	1685	1780	1800	HP	40.0																											
Current (Amps)	290	255	165	47.5	17.5	Sync. RPM	1800																											
Torque (ft-lb)	218	190	305	118	0.00	Frame	324																											
<div><div>— Efficiency (%) — P.F. (%) — Current (Amps)</div><table><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>48</td><td>18</td></tr><tr><td>50</td><td>94</td><td>75</td><td>28</td></tr><tr><td>75</td><td>94.5</td><td>81</td><td>38</td></tr><tr><td>100</td><td>94.5</td><td>83.5</td><td>48</td></tr><tr><td>125</td><td>94.5</td><td>84</td><td>58</td></tr></tbody></table></div>						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)	25	91	48	18	50	94	75	28	75	94.5	81	38	100	94.5	83.5	48	125	94.5	84	58	Enclosure	TEFC			
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						Construction	TFN																											
						Voltage	230/460 V																											
						Frequency	60 Hz																											
						Design	B																											
						LR Code letter	G																											
						Service Factor	1.15																											
						Temp Rise @ FL	65 °C																											
						Duty	CONT																											
						Ambient	40 °C																											
						Elevation	1,000 feet																											
Rotor/Shaft wk²	8.8 Lb-Ft²																																	
Ref Wdg	K3244127 NONE																																	
Sound Pressure @ 1M	65 dBA																																	
VFD Rating	CONSTANT 20:1																																	
Outline Dwg	B-SS28289-1300																																	
Conn. Diag	A-EE7308																																	
Additional Specifications:																																		
0																																		
0																																		
EQUIV CKT (OHMS / PHASE)																																		
R1	R2	X1	X2	Xm																														
0.0820	0.0660	0.5790	0.7980	13.5140																														

Speed -Torque Curve

