

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 324TSTFS6501

Catalog No: E609

40 HP, Severe Duty Motors, 3 phase, 3600 RPM, 460 V, 324TS Frame, TEFC
Severe Duty Motors



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RegalRexnord

Nameplate Specifications

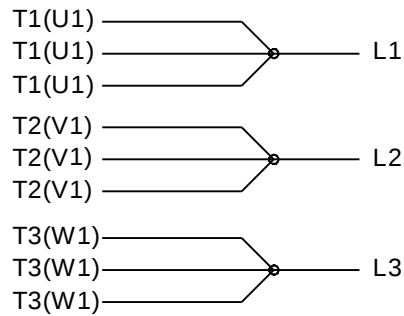
Output HP	40 Hp	Output KW	30.0 kW
Frequency	60 Hz	Voltage	460 V
Current	47.0 A	Speed	3545 rpm
Service Factor	1.15	Phase	3
Efficiency	93.6 %	Power Factor	85
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	324TS	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6312	Opp Drive End Bearing Size	6311
UL	Recognized	CSA	Y
CE	Y	IP Code	54
Number of Speeds	1		

Technical Specifications

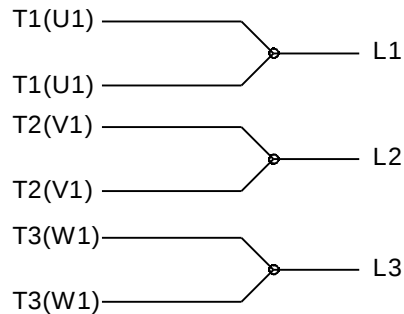
Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	2	Rotation	Reversible
Resistance Main	.122 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	TS	Overall Length	27.60 in
Frame Length	11.50 in	Shaft Diameter	1.875 in
Shaft Extension	4 in	Assembly/Box Mounting	F1/F2 Capable
Outline Drawing	B-SS28706-1150	Connection Drawing	A-EE7300U

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IF MOTOR HAS 9 LEADS

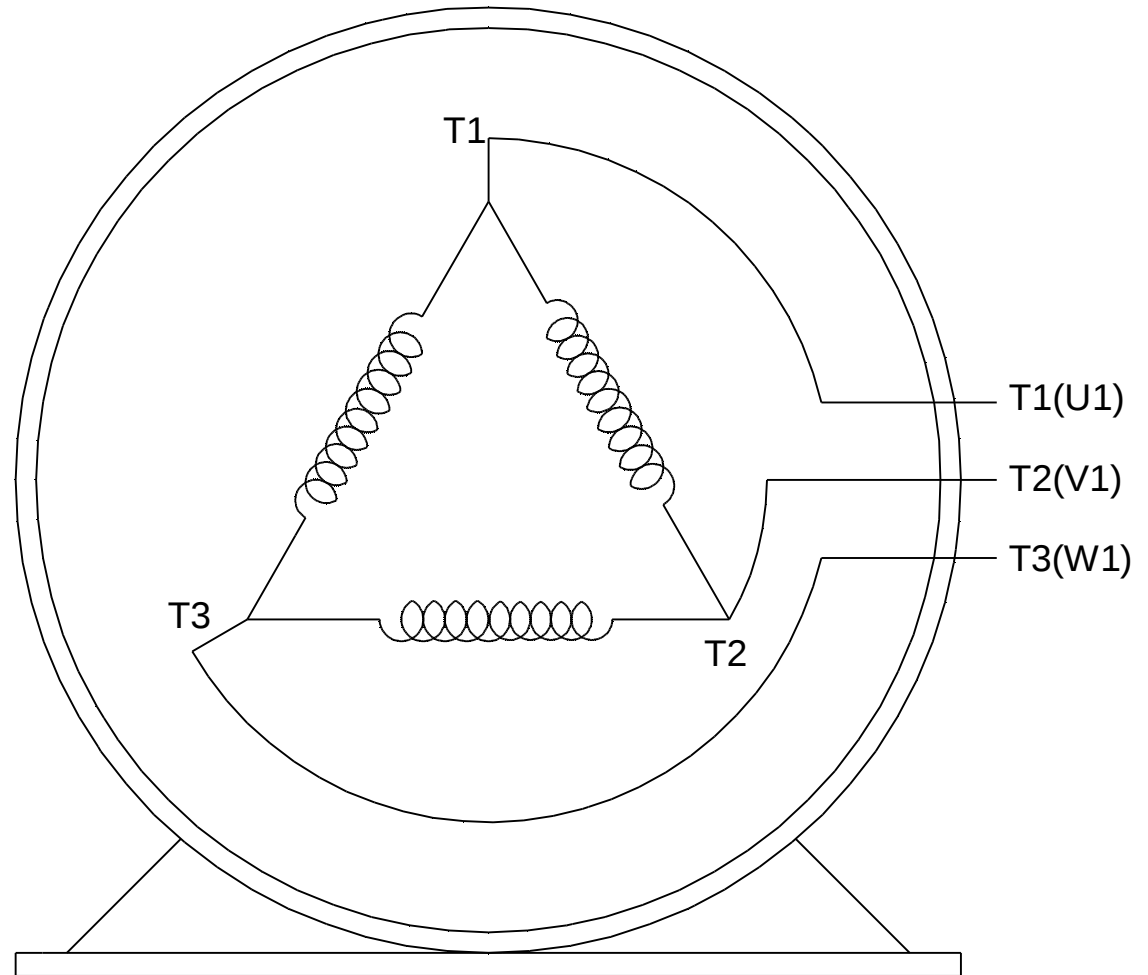
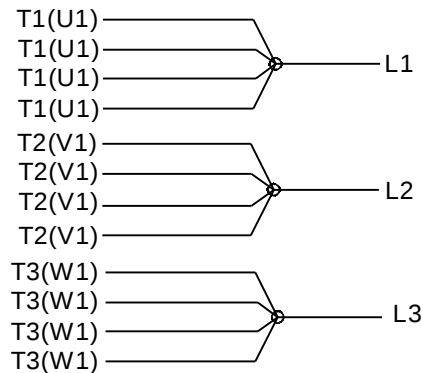


IF MOTOR HAS 6 LEADS



A-9806 DECAL IF CALLED FOR

IF MOTOR HAS 12 LEADS



VIEW OF TERMINAL END

DRAWING REVISION L	REVISION BY AJW	DATE 05-04-2015	TOLERANCES UNLESS OTHERWISE SPECIFIED: DEC. INCH. mm ANGLE .X ±0.1 [±2.5] ±7' 30" .XX ±0.02 [±0.51] 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^{5.1} INCH mm mm SHOWN IN [BRACKETS]	DRAWN BY DRS	REGAL™ Regal Beloit America, Inc.	DESCRIPTION CONN DIAGRAM-EXTERNAL 3Ø SINDLE VOLTAGE		
ECO ECO-0077067	APPROVED BY EWH	DATE 05-05-2015		DATE 09-27-1996				
ECO DESCRIPTION UPDATED TO SOLIDWORKS				APPROVED BY GK				
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				REFERENCE	MATERIAL			
			THIRD ANGLE PROJECTION		SIZE A	DRAWING NUMBER EE7300U	SHEET 1 OF 1	

CERTIFICATION DATA SHEET

Model#: 324TSTFS6501 BT
 CONN. DIAGRAM: A-EE7300U
 OUTLINE: B-SS28706-1150

WINDING#: 324248 NONE 7
 ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
40	30	3600	3545	324TS	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	47	LINE OR INVERTER	CONTINUOUS	F3	1.15	40	3300

FULL LOAD EFF: 93.6	3/4 LOAD EFF: 93.6	1/2 LOAD EFF: 92.4	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 85	3/4 LOAD PF: 83	1/2 LOAD PF: 76	93	SQ CAGE INV RATED	14.7

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
59.5 LB-FT	275	91.5 LB-FT 154	157 LB-FT 264	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
72 dBA	82 dBA	4.9 LB-FT^2	25 LB-FT^2	15 SEC.	2	625 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
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	TS	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

* N O T E *	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					
	NONE FT-LB		NONE V		NONE Hz	

DATE: 06/21/2017 03:51:08 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 19-06-2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA



324TSTFS6501

Submittal

Data @ 460 V

Motor Load Data

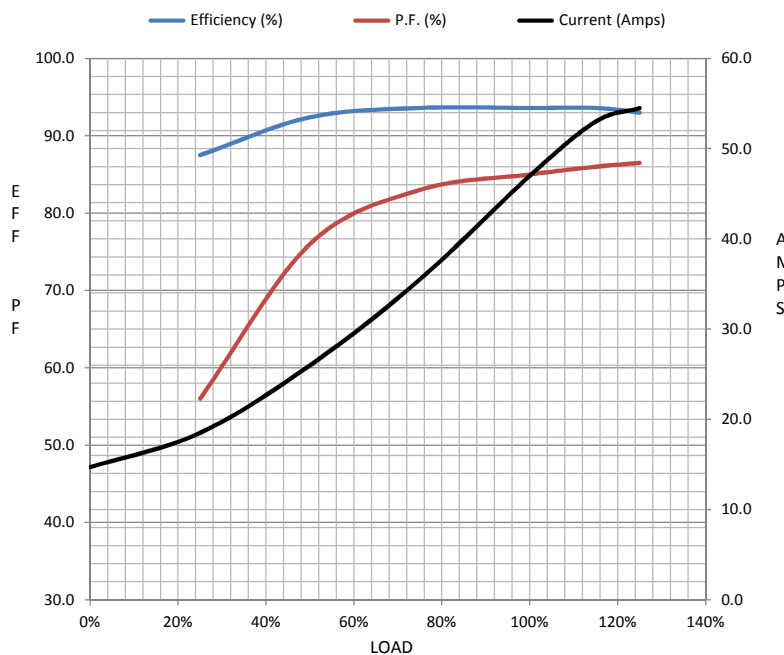
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	14.7	18.5	26.0	35.5	47.0	53.0	54.5	275	
Torque (ft-lb)	0.00	14.5	29.5	44.0	59.5	68.5	74.5	91.5	
RPM	3600	3590	3575	3560	3545	3,540	3530	0	
Efficiency (%)		87.5	92.4	93.6	93.6	93.6	93.0		
P.F. (%)	9.3	56.0	76.0	83.0	85.0	86.0	86.5	29.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3300	3545	3600
Current (Amps)	275	248	172	47.0	14.7
Torque (ft-lb)	91.5	82.0	157	59.5	0.00

Information Block

HP	40.0			
Sync. RPM	3600			
Frame	324			
Enclosure	TEFC			
Construction	TFN			
Voltage	460 V			
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 wk²	4.9 Lb-Ft²			
Ref Wdg	324248 NONE			
Sound Pressure @ 1M	72 dBA			
VFD Rating	CONSTANT 20:1			
Outline Dwg	B-SS28706-1150			
Conn. Diag	A-EE7300U			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0750	0.0720	0.6480	0.4750	18.6730



Speed -Torque Curve

