

PRODUCT INFORMATION PACKET

marathon[®]
Motors

Model No: 324TSTGS16531
Catalog No: U078A
40,1800,EPFC,324TS,3/60/230/460
Explosion Proof



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REGAL[®]



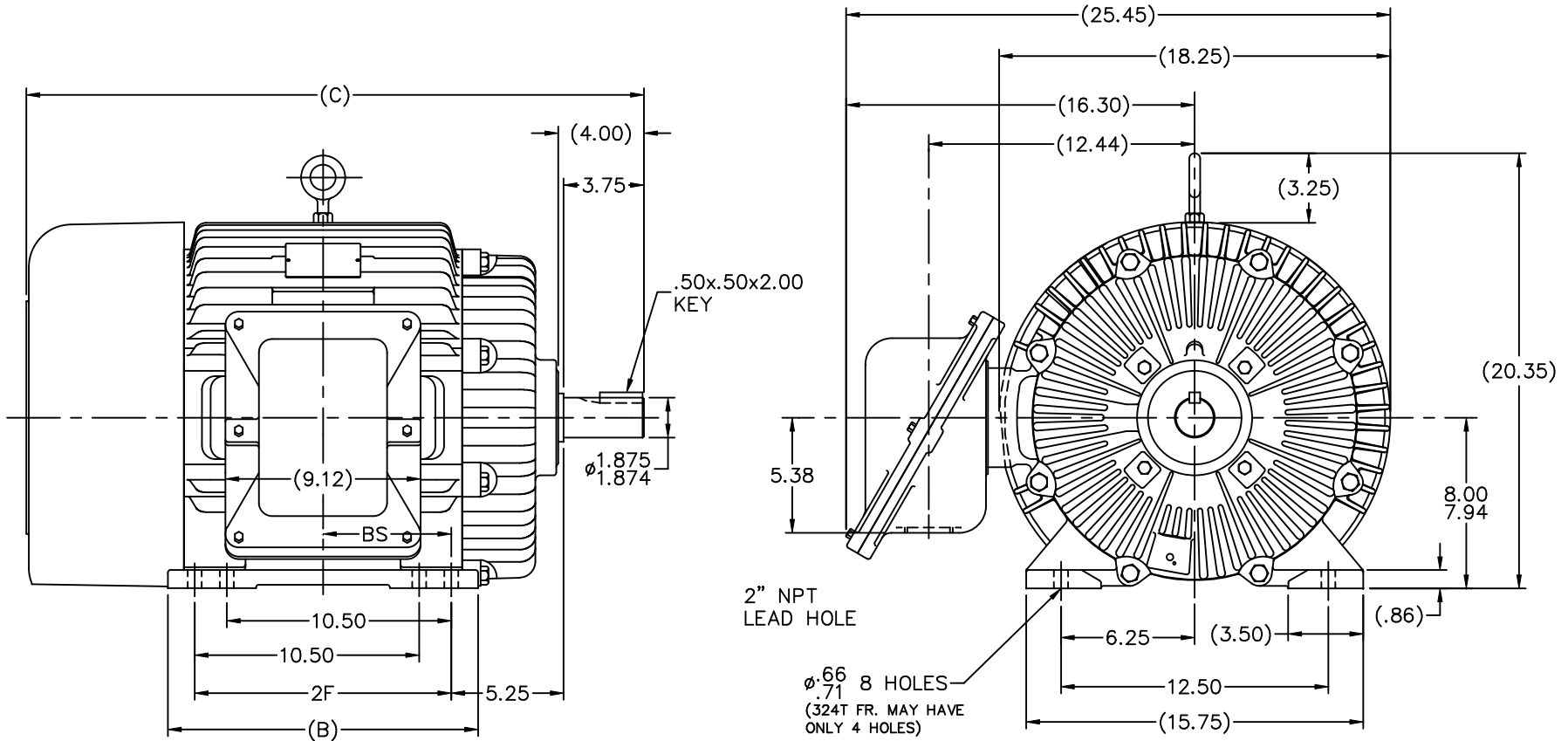
Nameplate Specifications

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	Phase	3
Efficiency	94.1 %	Duty	Continuous
Insulation Class	F	Design Code	B
KVA Code	G	Frame	324TS
Enclosure	Explosion Proof Fan cooled	Overload Protector	No
Ambient Temperature	40 °C	Drive End Bearing Size	6312
Opp Drive End Bearing Size	6311	UL	No
CSA	N	CE	N
IP Code	54		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Mounting	Rigid base	Motor Orientation	Horizontal
Drive End Bearing	Ball	Opp Drive End Bearing	Ball
Frame Material	Cast Iron	Shaft Type	TS
Overall Length	28.87 in	Frame Length	13.00 in
Shaft Diameter	1.875 in	Shaft Extension	4 in
Assembly/Box Mounting	F1 Only		
Outline Drawing	B-SS28118-1300	Connection Diagram	A-EE7308T

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- NOTES:
 1. BOX CAN BE ROTATED IN 90° STEPS.
 2. BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
 3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	B	C	2F	BS
1150	324TS	13.00	27.37	10.50	5.25
1300	324TS	14.50	28.87	12.00	6.00
1300	326TS	14.50	28.87	12.00	6.00
1450	326TS	15.00	30.37	12.00	6.75

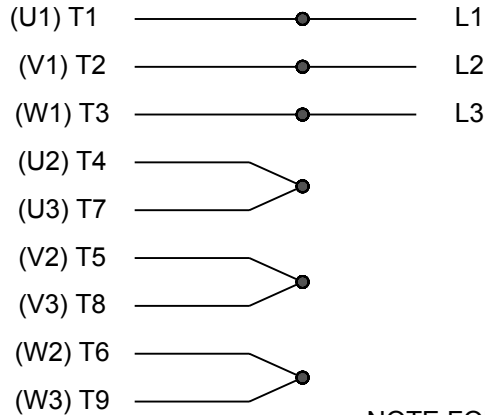
NO.		REVISION	BY & DATE	CHK	ANG	FINISH	PREV
7	REDRAWN IN AUTOCAD	TAT 07-06-2004	ML	X	±.1		
6	ADDED DASH 1300 324TS FR.	MU25460	MJD 06-07-1999	.XX	±.03	TITLE OUTLINE	
5	ADDED DUAL DRILLING	CN 26835	DRS 04-29-1999	.XXX	±.005	320TS FR. - BB - TS - EXP.PR.	
4	REDRAWN ON CADD	MRB 09-06-1995	MRB 09-06-1995	.XXXX	±.0005	MATL	
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				DIST	LB		



DRAWN MRB 09-05-1995
CHK DA 09-06-1995
APPD GK 09-06-1995
SCALE 1=5
REF
FMF
PREV

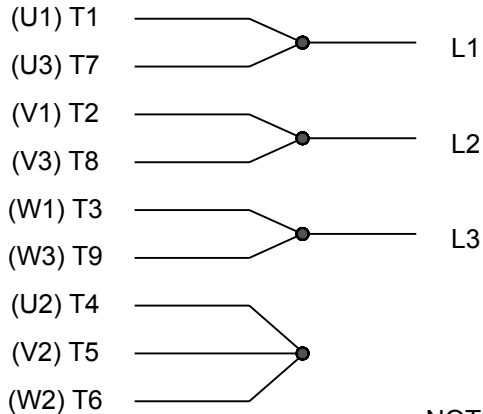
SIZE B	DRAWING NO. SS28118	PAGE OF 7	REV. 7
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HIGH VOLTAGE



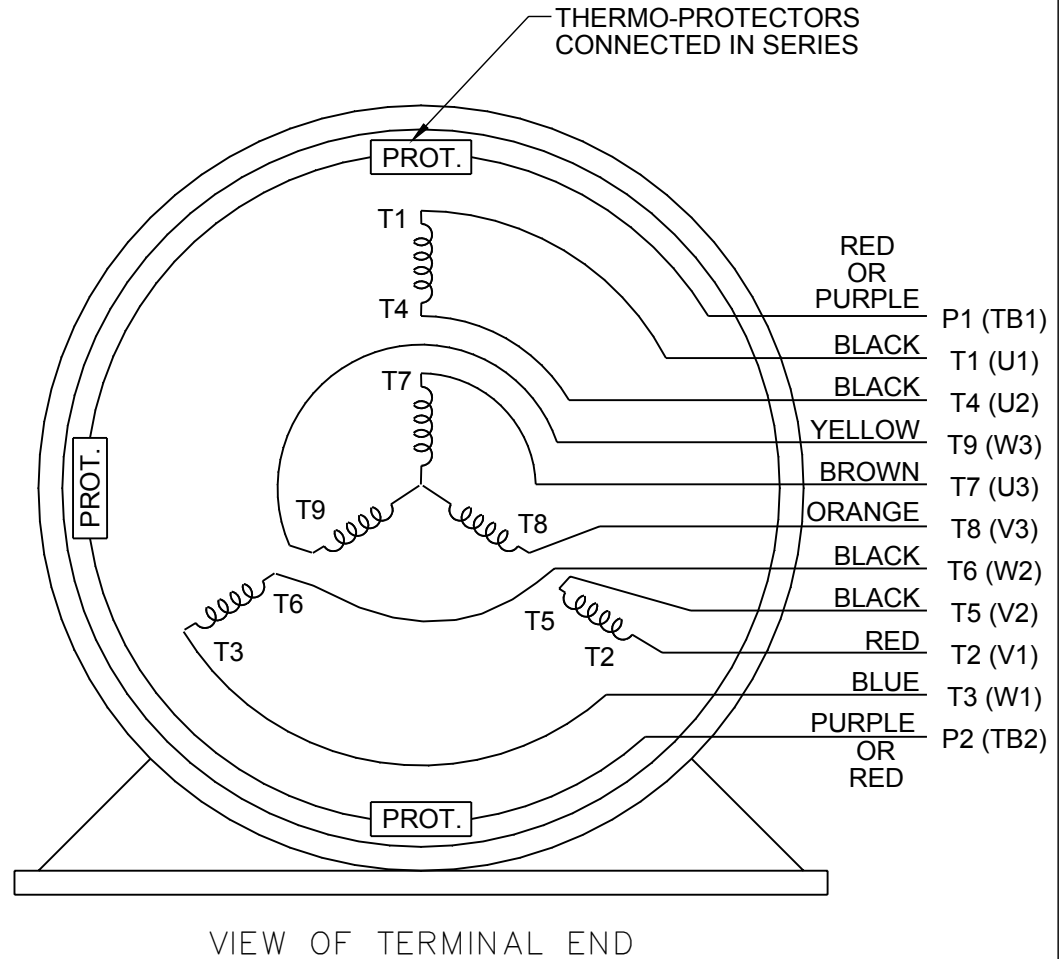
**NOTE FOR FACTORY USE ONLY:
 TO SURGE TEST FOR COMMON CONNECT:
 HIGH VOLT: CONNECT P1 TO T1
 THEN P2 TO L1
 LOW VOLT: CONNECT P1 TO T1 & T7,
 THEN P2 TO L1**

LOW VOLTAGE



NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR MT2 PLANT

THREE PHASE DUAL VOLTAGE MOTOR



DRAWING REVISION R	REVISION BY AJW	DATE 07-17-2015		DRAWN BY SMC	Regal Beloit America, Inc.	
ECO ECO-0081632	APPROVED BY T. VUE	DATE 07-17-2015		DATE 05-13-1992		
ECO DESCRIPTION REV'D IEC NOTATIONS PER IEC 60034-8				APPROVED BY TB	DESCRIPTION CONN DIAGRAM-INTERNAL 3 PHASE - DUAL VOLTAGE MOTOR	
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			REFERENCE EE7308/EE7300	SIZE A	DRAWING NUMBER EE7308T	SHEET 1 OF 1
			THIRD ANGLE PROJECTION			

CERTIFICATION DATA SHEET

Model#: 324TSTGS16531 BN **WINDING#:** K3244127 NONE 1
CONN. DIAGRAM: A-EE7308T **ASSEMBLY:** F1 ONLY
OUTLINE: B-SS28118-1300

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
40&30	30&22.4	1800	1780&1480	324TS	EPFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	95/47.5&87/43 .5	LINE OR INVERTER	CONTINUOU S	F3	1.0/1.0	40	3300

FULL LOAD EFF: 94.1&94.1	3/4 LOAD EFF: 94.5	1/2 LOAD EFF: 94.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
			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	PREMIUM SEVERE DUTY	EXP PROOF CL I GR C&D CL II GR F&G T3B	FALSE	NONE	BLUE (EPOXY)

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
6312	6311						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 10:1
INV. HP SPEED RANGE: NONE
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 03:52:36 AM
 FORM 3531 REV.3 02/07/99
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Data Sheet

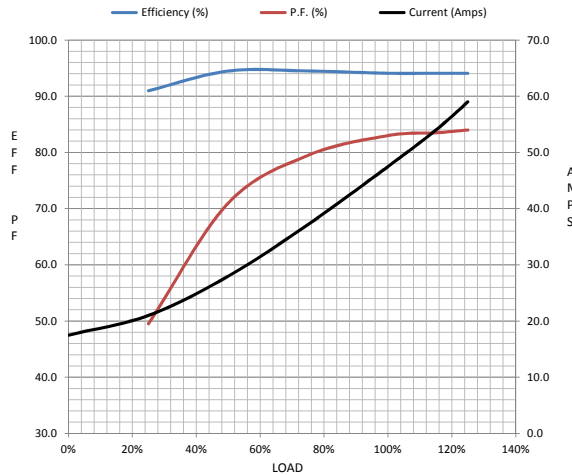
Date: 19-06-2017
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



324TSTGS16531
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						Information Block	
	LR	Pull-Up	BD	Rated	Idle		
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
						Enclosure	TEFC



Construction	TFN			
Voltage	30/460#190/38V			
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 wk ²	8.8 Lb-Ft ²			
Ref Wdg	K3244127 NONE			
Sound Pressure @ 1M	65 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	B-SS28118-1300			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0820	0.0660	0.5790	0.7980	13.5140

