

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 324TSTD4010

Catalog No: U512

Fire Pump Motor, 50 & 40 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 3600 & 3000 RPM, 324TS Frame,
DP



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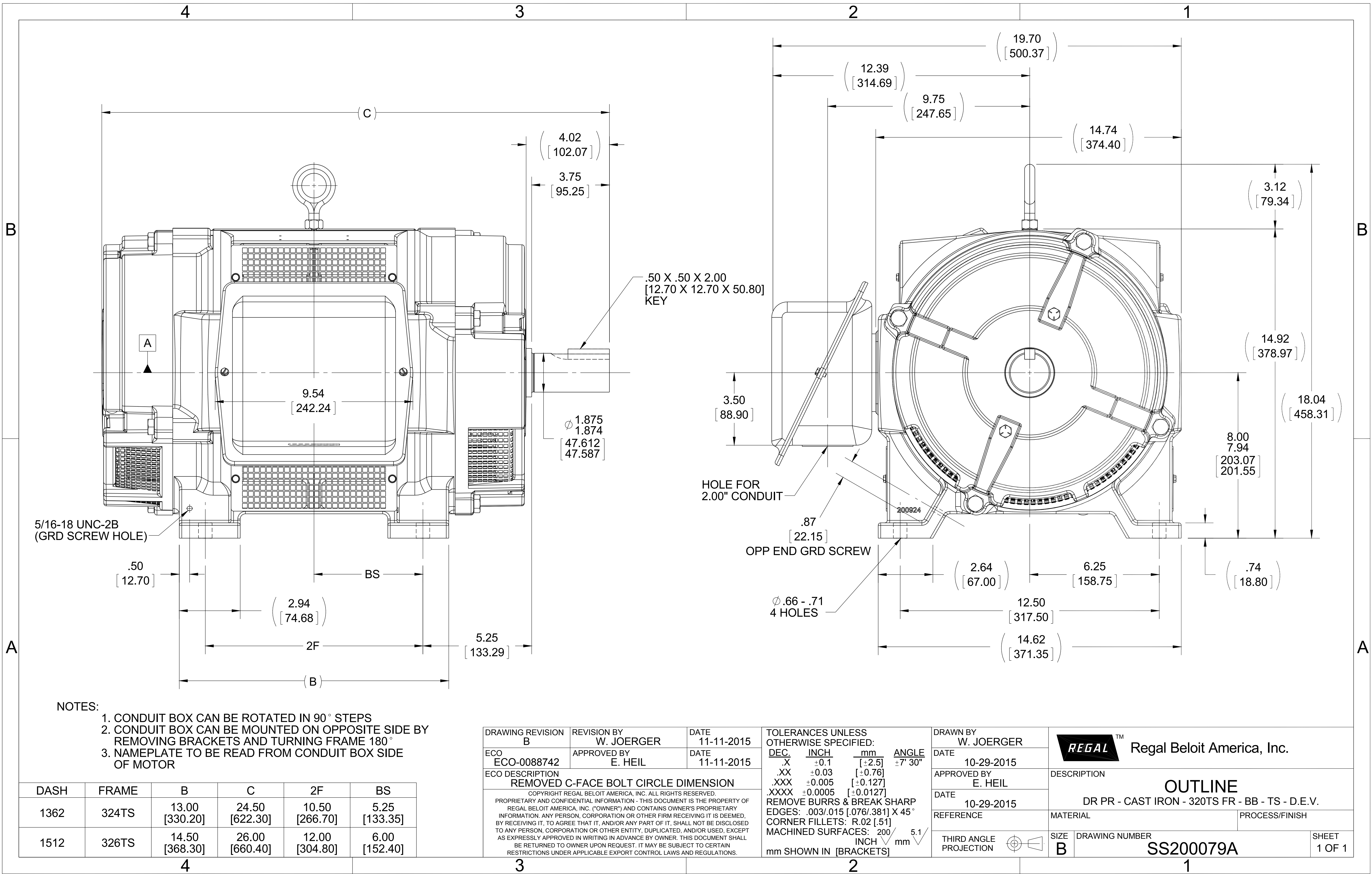
RegalRexnord

Nameplate Specifications

Phase	3	Output HP	50 & 40 Hp
Output KW	37.0 & 30.0 kW	Voltage	230/460 & 190/380 V
Speed	3555 & 2960 rpm	Service Factor	1.15 & 1.15
Frame	324TS	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	92.4 & 91.7 %
Ambient Temperature	50 °C	Frequency	60 & 50 Hz
Current	117/58.5 & 113/56.5 A	Power Factor	86.5
Duty	Continuous	Insulation Class	B
Design Code	B	KVA Code	G
Drive End Bearing Size	6312	Opp Drive End Bearing Size	6311
UL	No	CSA	Y
CE	Y	IP Code	23
Number of Speeds	1		

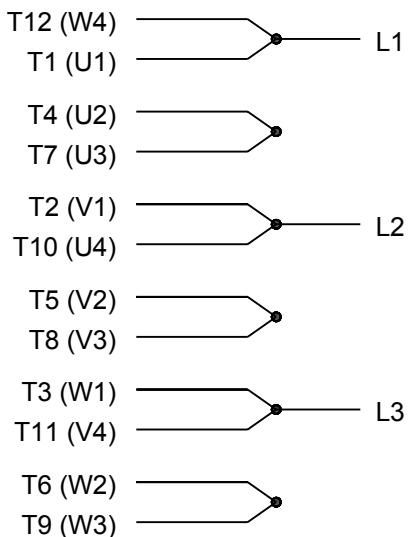
Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Wye Start Delta Run
Poles	2	Rotation	Reversible
Resistance Main	.19 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	24.50 in
Frame Length	13.62 in	Shaft Diameter	1.875 in
Shaft Extension	4.02 in	Assembly/Box Mounting	F1/F2 Capable
Outline Drawing	B-SS200079A-1362	Connection Drawing	A-EE7308AA

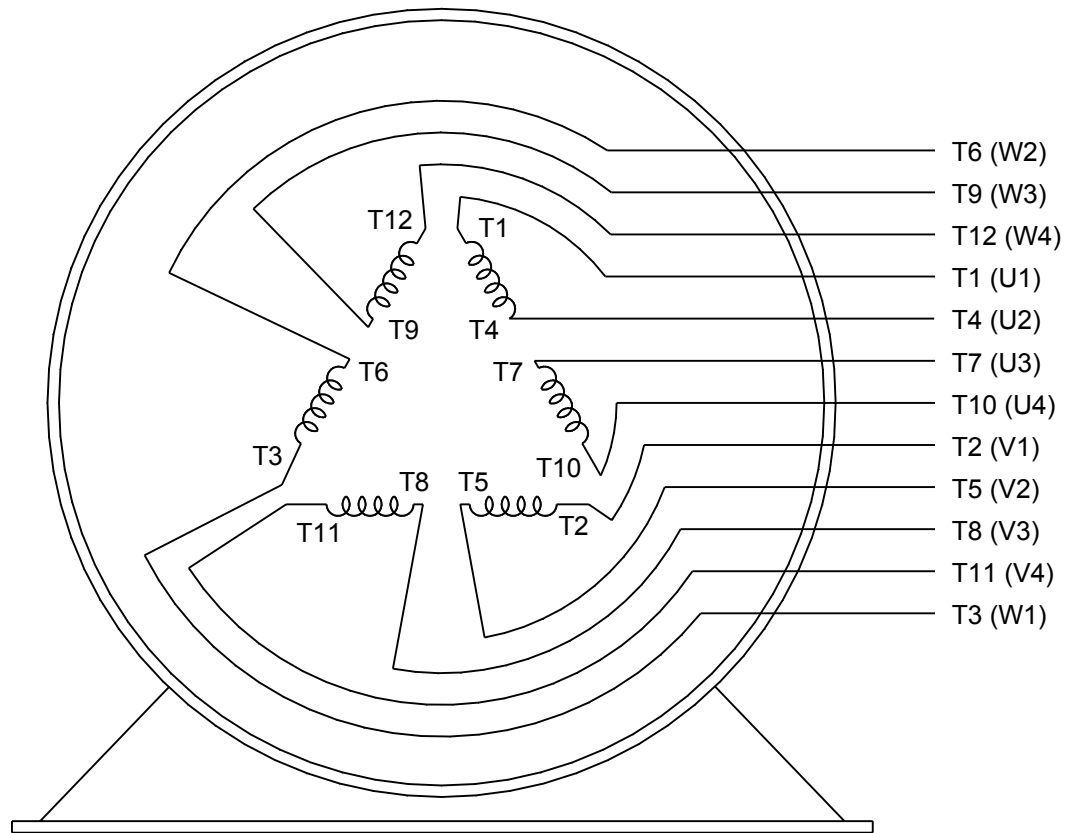




LOW VOLTAGE



HIGH VOLTAGE



VIEW OF TERMINAL END

DRAWING REVISION K	REVISION BY AJW	DATE 07-17-2015
ECO ECO-0081632	APPROVED BY T. VUE	DATE 07-17-2015
ECO DESCRIPTION REV'D IEC MARKINGS PER IEC 60034-8		
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DRAWN BY LZ	
DATE 01-12-1994	
APPROVED BY GK	
DATE 01-14-1994	
REFERENCE	
THIRD ANGLE PROJECTION	

Regal Beloit America, Inc.		
DESCRIPTION CONN DIAGRAM-EXTERNAL 3Ø-2/1 DELTA-12 LEADS		
MATERIAL	PROCESS/FINISH	
SIZE A	DRAWING NUMBER EE7308AA	SHEET 1 OF 1

CERTIFICATION DATA SHEET

Model#: 324TSTDP4010 AD
 CONN. DIAGRAM: A-EE7308AA
 OUTLINE: B-SS200079A-1362

WINDING#: K286294 NONE 11
 ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
50&40	37&30	3600	3555&2960	324TS	DP	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	117/58.5&113/ 56.5	WYE START DELTA RUN	CONTINUOU S	B3	1.15/1.15	50	3300

FULL LOAD EFF: 92.4&91.7	3/4 LOAD EFF: 92.4	1/2 LOAD EFF: 91.7	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 86.5&87	3/4 LOAD PF: 84	1/2 LOAD PF: 77	91	SQ CAGE IND RUN	35 / 17.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
74 LB-FT	700 / 350	100 LB-FT 135	190 LB-FT 257	35

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
82 dBA	92 dBA	2.7 LB-FT^2	34 LB-FT^2	15 SEC.	2	375 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	RODENT	RED (ENAMEL)

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

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

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DATE: 06/21/2017 03:43:56 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



324TSTD4010

Submittal

Data @ 460 V

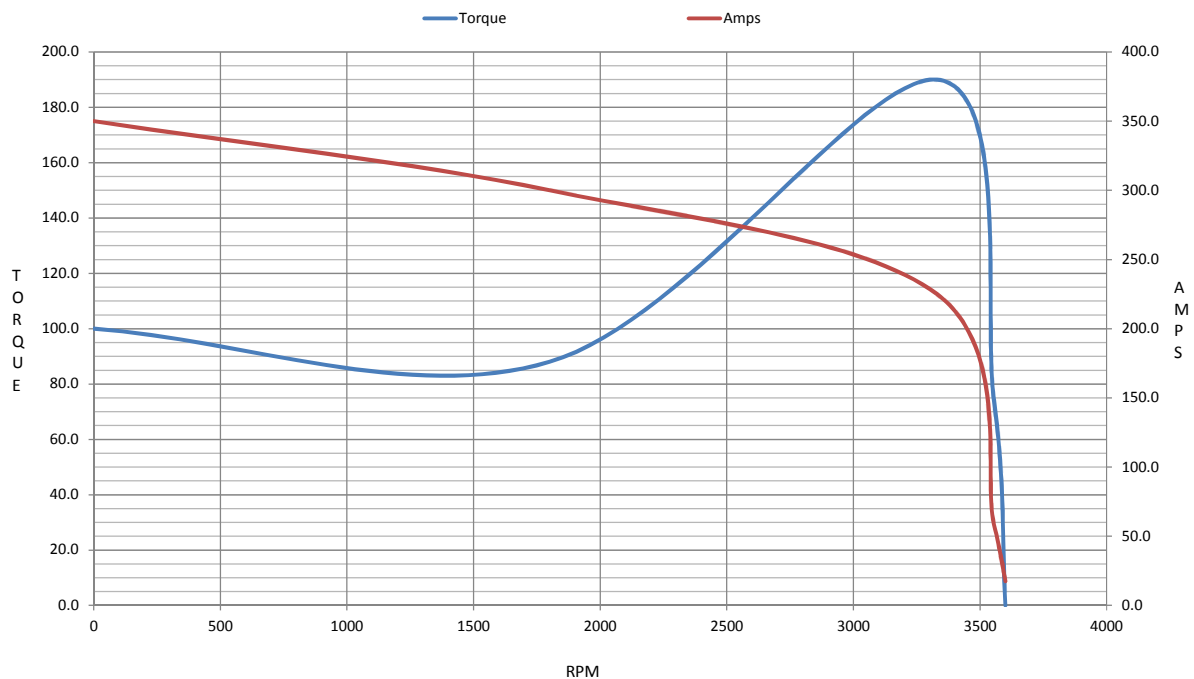
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	17.5	23.0	33.0	45.0	58.5	65.0	71.0	350	
Torque (ft-lb)	0.00	18.5	36.5	55.5	74.0	85.5	93.0	100	
RPM	3600	3590	3575	3565	3555	3,540	3535	0	
Efficiency (%)		89.5	91.7	92.4	92.4	92.4	91.7		
P.F. (%)	6.5	57.0	77.0	84.0	86.5	87.5	87.5	33.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle					
Speed (RPM)	0	1800	3330	3555	3600					
Current (Amps)	350	300	225	58.5	17.5					
Torque (ft-lb)	100	88.0	190	74.0	0.00					
— Efficiency (%) — P.F. (%) — Current (Amps) EFFICIENCY (%) P.F. (%) CURRENT (AMPS) LOAD						Information Block				
						HP		50.0		
						Sync. RPM		3600		
						Frame		324		
						Enclosure		DP		
						Construction		TDP		
						Voltage		230/460#190/381 V		
						Frequency		60 Hz		
						Design		B		
						LR Code letter		G		
						Service Factor		1.15		
						Temp Rise @ FL		35 ° C		
						Duty		CONT		
						Ambient		40 ° C		
						Elevation		1,000 feet		
						Rotor/Shaft wk²		2.70 Lb-Ft²		
						Ref Wdg		K286294 NONE		
Sound Pressure @ 1M		82 dBA								
VFD Rating		NONE								
Outline Dwg		B-SS200079A-1362								
Conn. Diag		A-EE7308AA								
Additional Specifications:										
0										
0										
EQUIV CKT (OHMS / PHASE)										
R1		R2		X1		X2		Xm		
0.1080		0.0660		0.5150		0.3840		15.7900		

Speed -Torque Curve



EC Declaration of Conformity

The undersigned representing
the manufacturer:

Regal Beloit America
100 East Randolph St.
Wausau, WI 54401

and the authorized representative
established within the Community:

Marathon Electric UK
6F Thistleton Road Ind. Estate
Market Overton
Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : 324TSTD4010

(Model No. may contain prefix and/or suffix characters)

Catalog No : U512

Rework No : N/A

Directives :

Low Voltage Directive 2014/35/EU

Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010)

EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

Authorized Representative:



Michael A. Logsdon
Vice President, Technology

Authorized Representative in the Community:



Julian Clark
Marketing Engineer

Created on 09/01/2022

CE 22