

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 326THFPA8038

Catalog No: Y514

Blue Max® Inverter Duty Encoder Motor, 50 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 326TC Frame,
TEBC-AXIAL



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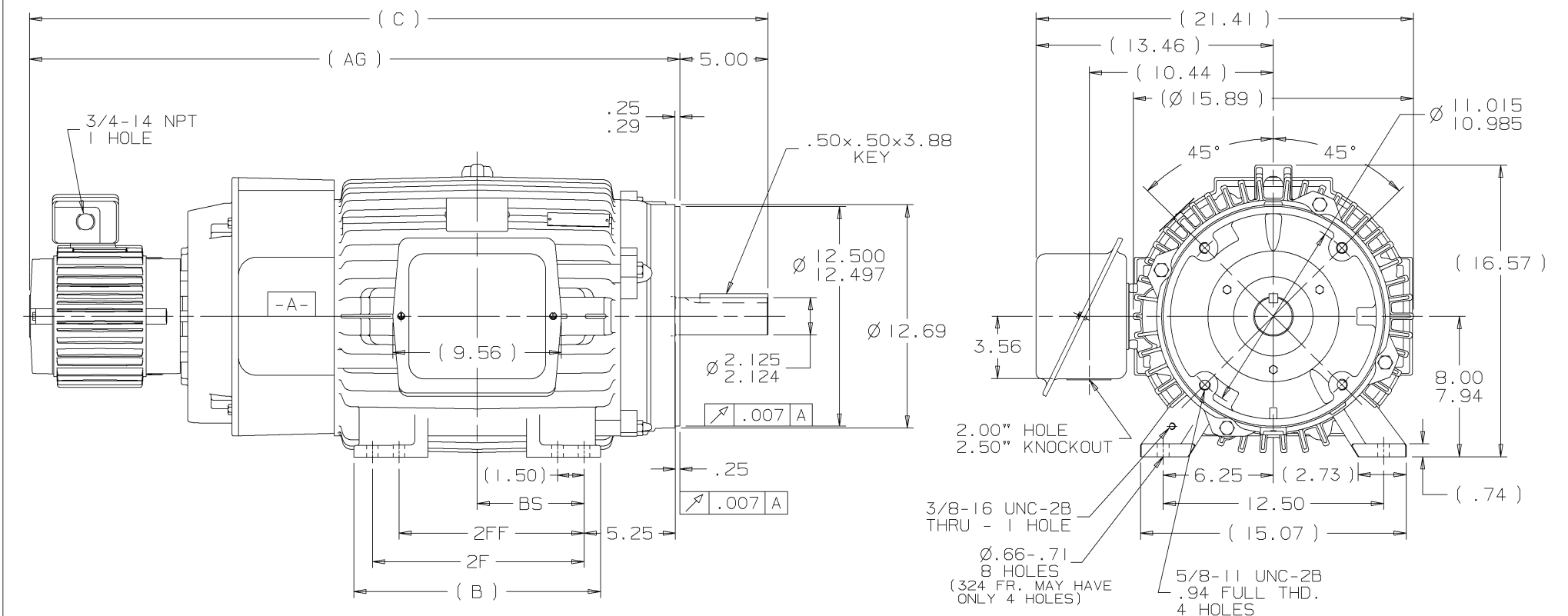
RegalRexnord

Nameplate Specifications

Phase	3	Output HP	50 Hp
Output KW	37.0 kW	Voltage	230/460 V
Speed	1765 rpm	Service Factor	1.0
Frame	326TC	Enclosure	Totally Enclosed Blower cooled - Axial
Thermal Protection	Thermostat	Efficiency	93 %
Ambient Temperature	40 °C	Frequency	60 Hz
Current	120.0/60.0 A	Power Factor	83.5
Duty	Continuous	Insulation Class	H
Design Code	INV	KVA Code	J
Drive End Bearing Size	6312	Opp Drive End Bearing Size	6311
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

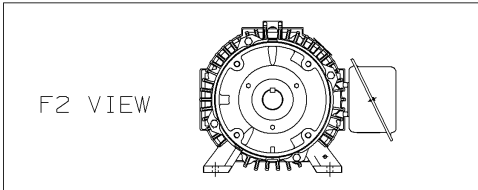
Technical Specifications

Electrical Type	Squirrel Cage Inverter Duty	Starting Method	Inverter Only
Poles	4	Rotation	Reversible
Resistance Main	.126 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	42.04 in
Frame Length	16.25 in	Shaft Diameter	2.125 in
Shaft Extension	5 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 2000:1		
Outline Drawing	B-SS311268-1625	Connection Drawing	A-EE7308T



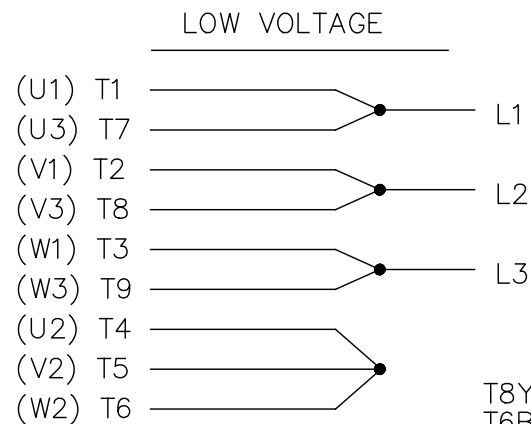
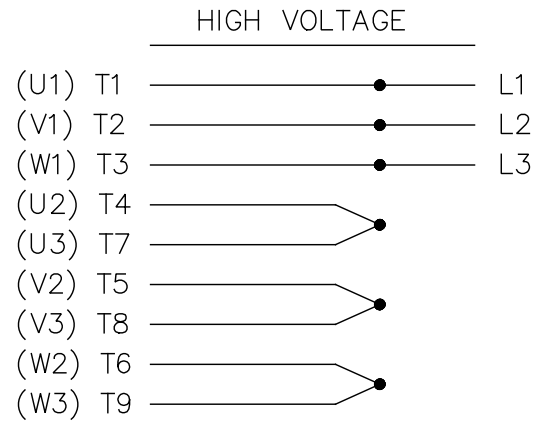
NOTES:

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. C.BOX CAN BE ROTATED IN 90° STEPS 2. C.BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180° 3. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR |  |
|---|---|

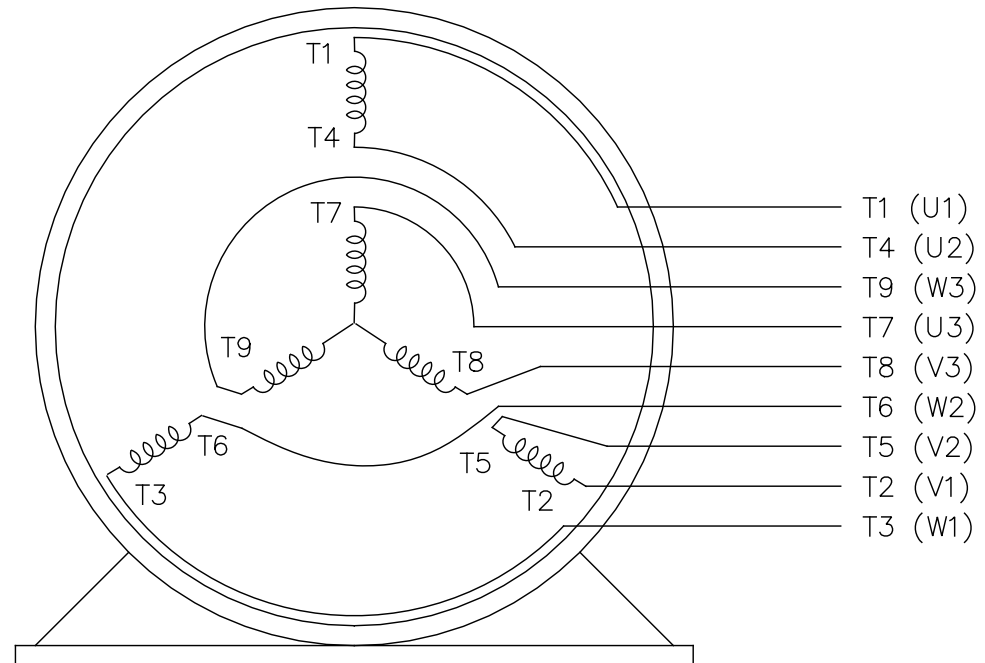


DASH	FRAME	B	C	2F	2FF	BS	AG					.XXX ±.005	320 FR. - BB - STD - 12.50 LAM - C'FACE	REF			
								I	NEW DRAWING	CN 35134	NJS 05-20-2002	TB .XXX ±.0005	✓ SURFACE ROUGHNESS UNLESS SPECIFIED	MAT'L.	FMF		
1475	324T	14.00	40.41	10.50		5.25	35.41	NO.	REVISION		BY DATE	CHK ANG ± 7'30"		FINISH	PREV		
1625	326T	14.00	41.91	12.00	10.50	6.00	36.91	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				PURCHASED		CAD FILE SS311268LE	SIZE B	DRAWING NO. SS311268LE	REV. 1
												DIST WA - LB - WC - LM - BR - BY					

				TOLERANCES UNLESS SPECIFIED		 ELECTRIC MOTORS GEARMOTORS AND DRIVES		DRAWN NJS 05-16-2002	
				DEC.	TOLERANCE			CHK ML 05-20-2002	
				.X	± .1			APPD TB 05-20-2002	
				.XX	± .03	TITLE OUTLINE - TEFC 320 FR. - BB - STD - 12.50 LAM - C'FACE		SCALE	
				.XXX	± .005			REF	
I	NEW DRAWING	CN 35134	NJS 05-20-2002	TB	.XXXX	± .0005	MAT'L.		
NO.	REVISION		BY	DATE	CHK	ANG	☒ SURFACE ROUGHNESS UNLESS SPECIFIED	☐ FINISH	
THIS DRAWING IN DESIGN AND DETAIL, IS OUR PROPERTY AND MUST NOT BE USE EXCEPT IN CONNECTION WITH OUR WORK. ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED. THIS IS AND ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT					PURCHASED		CAD FILE S5311268LE	SIZE B	
					DIST XX - LB - XX - XX - XX		DRAWING NO. S5311268LE		
							REV. I		



THREE PHASE DUAL VOLTAGE MOTOR



VIEW OF TERMINAL END

REF.
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G
T6BZ, T2B, T6BL, T4AV, T6B, T4B

OPTIONAL CORD CONNECTION

L1 _____ WHITE _____
L2 _____ RED _____
L3 _____ BLACK _____

DRAWING REVISION	REVISION BY	DATE	TOLERANCES UNLESS OTHERWISE SPECIFIED	DRAWN BY:			
ECO	APPROVED BY	DATE	DEC. mm INCH ANGLE .X ±2.5 [±0.1] ±0.5° .XX ±0.51 [±0.02] .XXX ±0.127 [±0.005] .XXXX ±0.0127 [±0.0005]	AS DATE: 02/20/2017			
ECO DESCRIPTION NEW DRAWING			REMOVE BURRS & BREAK SHARP EDGES .08/.38 [.003/.015] X 45° CORNER FILLETS R.51 [.02] MACHINED SURFACES INCH 125 mm 3.2	APPROVED BY: ST DATE: 02/20/2017	DESCRIPTION CONNECTION DIAGRA 3 PHASE - UAL VOLTAGE		
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			INCH SHOWN IN [BRACKETS]	THIRD ANGLE PROJECTION	SIZE DWG NO A EE7308TP		SHEET 1

CERTIFICATION DATA SHEET

Model#: 326THFPA8038 AB
CONN. DIAGRAM: A-EE7308T
OUTLINE: B-SS311268-1625

WINDING#: K2864187 NONE 3
ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
50	37	1800	1765	326TC	TEBC-AXIAL	J	INV

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	120/60	INVERTER ONLY	CONTINUOUS	H4	1.0	40	3300

FULL LOAD EFF: 93	3/4 LOAD EFF: 93.6	1/2 LOAD EFF: 93	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 83.5	3/4 LOAD PF: 78.5	1/2 LOAD PF: 68	91.7	SQ CAGE INV DUTY	50 / 25

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
149 LB-FT	880 / 440	270 LB-FT 181	525 LB-FT 352	65

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
75 dBA	85 dBA	5.4 LB-FT^2	- LB-FT^2	- SEC.	-	686 LBS.

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
0.087472	0.092016	0.436792	0.35784	9.66168

RM	ZREF	XR	TD	TD0
948.56	5.68	5.3	0.0143	0.288

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	ENCODER	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			
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 2000:1 INV. HP SPEED RANGE: 1.5 X BASE SPEED
ENCODER: PROVISIONS ONLY NONE NONE NONE NONE PPR
BRAKE: NONE NONE NONE P/N NONE

*
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*

NONE	NONE	
NONE FT-LB	NONE V	NONE Hz

DATE: 06/21/2017 05:50:41 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



326THFA8038

Submittal

Data @ 460 V

Motor Load Data

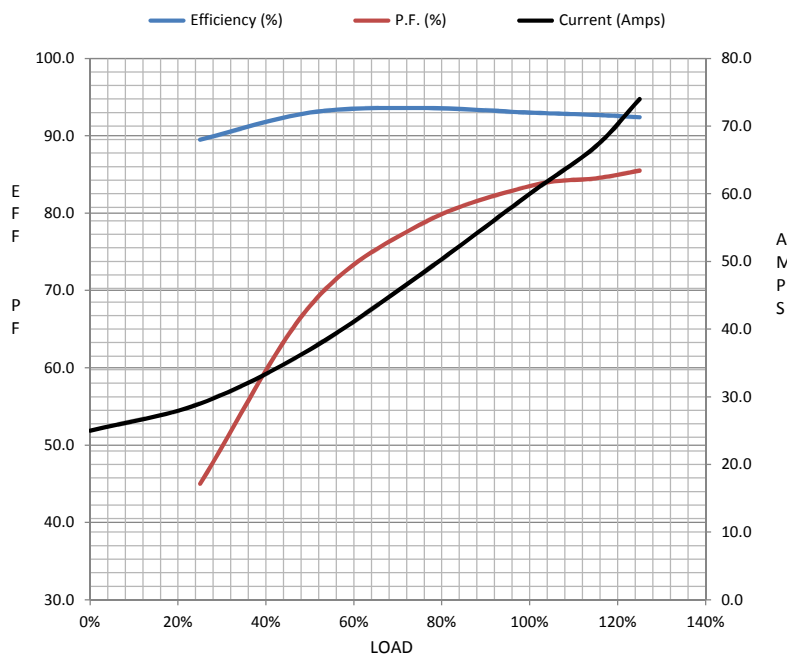
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	25.0	29.0	37.0	48.0	60.0	67.0	74.0	440	
Torque (ft-lb)	0.00	36.5	74.0	111	149	168	187	270	
RPM	1800	1790	1785	1775	1765	1,759	1750	0	
Efficiency (%)		89.5	93.0	93.6	93.0	92.7	92.4		
P.F. (%)	0.0	45.0	68.0	78.5	83.5	84.5	85.5	33.0	

Motor Speed Data

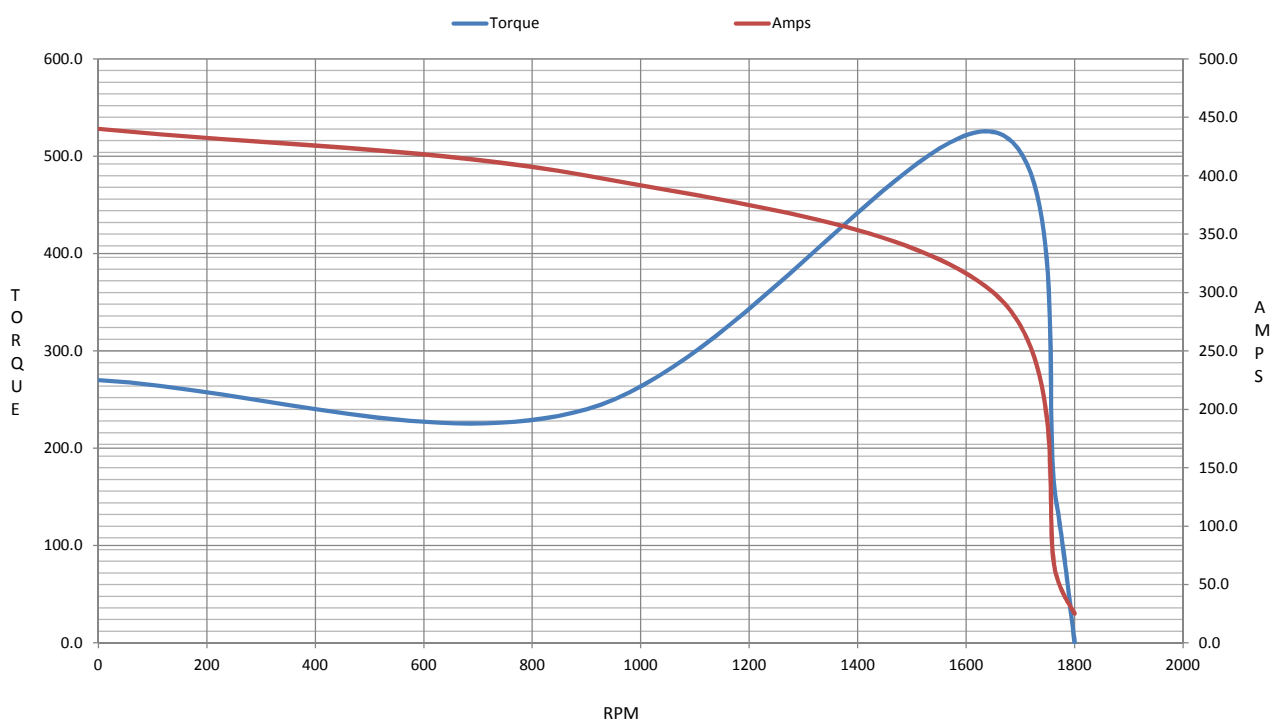
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1650	1765	1800
Current (Amps)	440	400	300	60.0	25.0
Torque (ft-lb)	270	240	525	149	0.00

Information Block

HP	50.0			
Sync. RPM	1800			
Frame	326			
Enclosure	TEBC			
Construction	TBP			
Voltage	230/460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	J			
Service Factor	1.15			
Temp Rise @ FL	65 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	5.4 Lb-Ft ²			
Ref Wdg	K2864187 NONE			
Sound Pressure @ 1M	75 dBA			
VFD Rating	CONSTANT 2000:1			
Outline Dwg	B-SS311268-1625			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0870	0.0920	0.4370	0.3580	9.6620



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 : 326THFPA8038

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

Catalog No : Y514

Rework No : N/A

Directives :

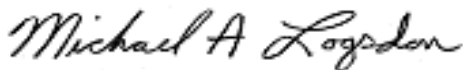
Low Voltage Directive 2014/35/EU

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