

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: TCA5P53AE211GAA009

Catalog No: R329B

Cast Iron Motor, 7.50 & 5.50 HP, 3 Ph, 60 & 50 Hz, 230/460 & 200/400 V, 1200 & 1000 RPM,
132M Frame, TEFC



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RegalRexnord

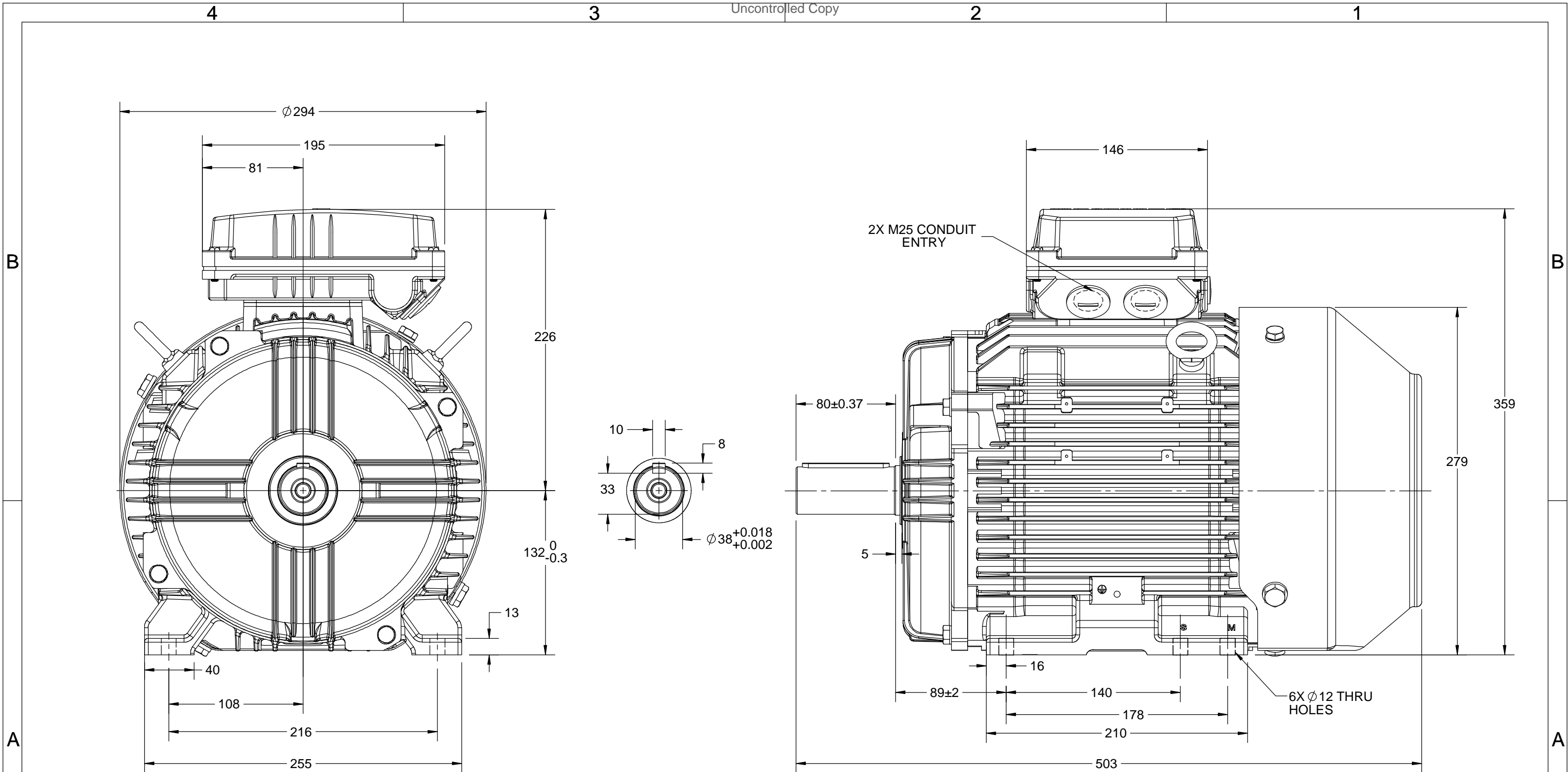


Nameplate Specifications

Phase	3	Output HP	7.50 & 5.50 Hp
Output KW	5.5 & 4.0 kW	Voltage	230/460 & 200/400 V
Speed	1180 & 985 rpm	Service Factor	1.15 & 1.15
Frame	132M	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	91 & 86.8 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	20.8/10.4 & 19/9.5 A	Power Factor	73
Duty	Continuous	Insulation Class	F
Design Code	N (IEC)	KVA Code	K
Drive End Bearing Size	6308	Opp Drive End Bearing Size	6208
UL	Recognized	CSA	N
CE	Y	IP Code	55
Number of Speeds	1	Efficiency Class	IE3

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	6	Rotation	Reversible
Resistance Main	1.19 Ohms	Mounting	B3
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	IEC	Overall Length	19.80 in
Frame Length	9.45 in	Shaft Diameter	1.496 in
Shaft Extension	3.15 in	Assembly/Box Mounting	F3
Inverter Load	CONSTANT 2:1/VARIABLE 10:1		
Outline Drawing	SS810120	Connection Drawing	8442000715



DRAWING REVISION A	REVISION BY NIV	DATE 04/12/2018
ECO ECO-0157171	APPROVED BY JAY	DATE 04/12/2018
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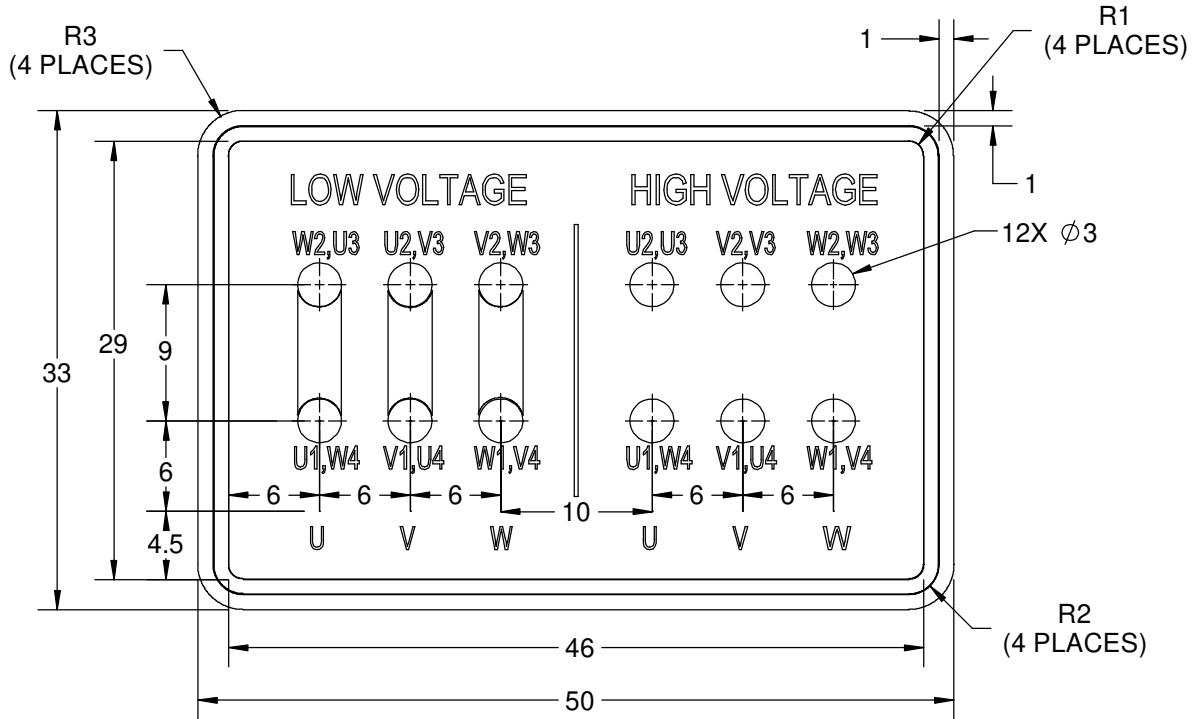
DRAWN BY NIV
DATE 04/12/2018
APPROVED BY JAY
DATE 04/12/2018
REFERENCE
THIRD ANGLE PROJECTION

marathon™ Motors	
DESCRIPTION OUTLINE IEC-132S-FR.- B3 MOTOR TYPE : TEFC-CAST IRON	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER SS810120
SHEET 1 OF 1	

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DRAWING REVISION A	REVISION BY S.MUDDA	DATE 16/11/2020
ECO ECO-0194685	APPROVED BY SUMANTA	DATE 16/11/2020
ECO DESCRIPTION NEW DRAWING		

GEOMETRIC TOLERANCE		
LINEAR DIM	>0~6	±0.1
	>6~30	±0.2
	>30~120	±0.3



NOTES:

1. PRESSURE-SENSITIVE ADHESIVE COATED PAPER ON THE BACK OF SELF-ADHESIVE.
2. AT THE END OF YELLOW, WORDS, SYMBOLS, LETTERS ARE BLACK, BORDER IS BLACK.
3. THE TOLERANCE OF THE LINEAR SIZE OF THE TOLERANCE WITHOUT THE TOLERANCE BY THE TABLE.
4. LEAD TERMINAL MARKINGS FONT SIZE : T1-T12 & U1-U4,V1-V4& W1-W4 OF ARIAL WITH 3mm SIZE
5. OTHER LETTER FONT SIZE SHOULD BE 3.5mm.

8WD.442.2017



DRAWN BY S.MUDDA	REGAL™ Regal Beloit America, Inc.	
	DATE 16/11/2020	DESCRIPTION CONN DIAGRAM-NAMEPLATE
	APPROVED BY SUMANTA	
	DATE 16/11/2020	MATERIAL
	REFERENCE	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE A	DRAWING NUMBER 8442000715
		SHEET 1 OF 1



P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER: _____
ORDER #: _____
CONN. DIAGRAM: 8442000677
OUTLINE: SS810120
WINDING: IE3L1326203 NONE 1
SPEED: _____

CUSTOMER P.O. #: _____
REFERENCE MODEL #: TCA5P53AE211GAA009
CAT #: R329B
CUSTOMER PART #: _____
MOUNTING: F3

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
7.5	5.6	1200	1180	132M	TEFC	TCA 132MB06	K	N

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV.(Ft.)
3	60/50	230/460#200/400	20.8/10.4&19/9.5	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	91.0	3/4 LD EFF	91.0	1/2 LD EFF	88.6	GTD EFF	ELECT. TYPE
F.L. PF	73.0	3/4 LD PF	65.0	1/2 LD PF	53.0	89.7	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
33.5 LB-FT	76.1	86.1 LB-FT 257%	104 LB-FT 310%	80

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK ²	MAX. LOAD WK ²	SAFE STALL TIME	STARTS/HOUR	APROX. MOTOR WGT
55 dBA	64 dBA	1.87 LB-FT ²	1.87 LB-FT ²	15 SEC.	2	100 KG.

***** SUPPLEMENTAL INFORMATION *****

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	B3	HORIZONTAL	NO	NONE	NO	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE	POLYREX EM	STANDARD IEC	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL	BALL						
6308	6208						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
0.756	0.492	2.685	2.572	43.606	0.150	ODE

* N O T E S *	INVERTER TORQUE: CONSTANT 2:1/VARIABLE 10:1 INV. HP SPEED RANGE: NONE					
	ENCODER: NONE					
	NONE					
	NONE PPR					
	BRAKE: NONE					

PREPARED BY: _____	BRAKE: NONE
DATE: 11/16/2020	NONE NONE
	FT-LB: NA
	VOLTAGE: NONE HZ:
FORM: 3531 REV_4 2/27/06	UL: V - LI,ME-INS,CONST UL REC



Data Sheet

TCA5P53AE211GAA009

Date: 5/28/2019
Customer:
Attention:

Submittal

Submitted by: Fareeda Dudekula

Data @ 460 V

Motor Load Data

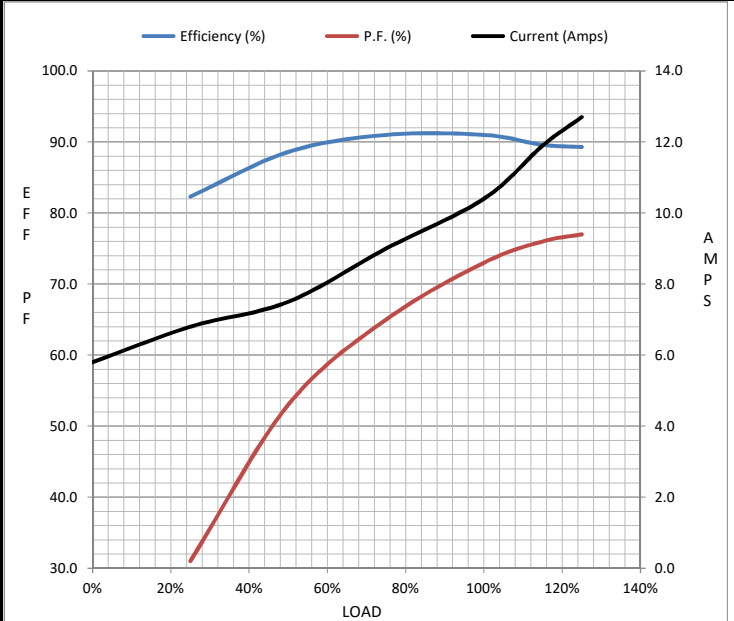
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	5.8	6.8	7.5	9.0	10.4	11.9	12.7	76.1
Torque (ft-lb)	0.00	8.3	16.6	25.0	33.5	38.6	42.0	86.1
RPM	1200	1195	1190	1185	1180	1,176	1173	0
Efficiency (%)		82.3	88.6	91.0	91.0	89.6	89.3	
P.F. (%)	6.0	31.0	53.0	65.0	73.0	76.0	77.0	63.4

Motor Speed Data

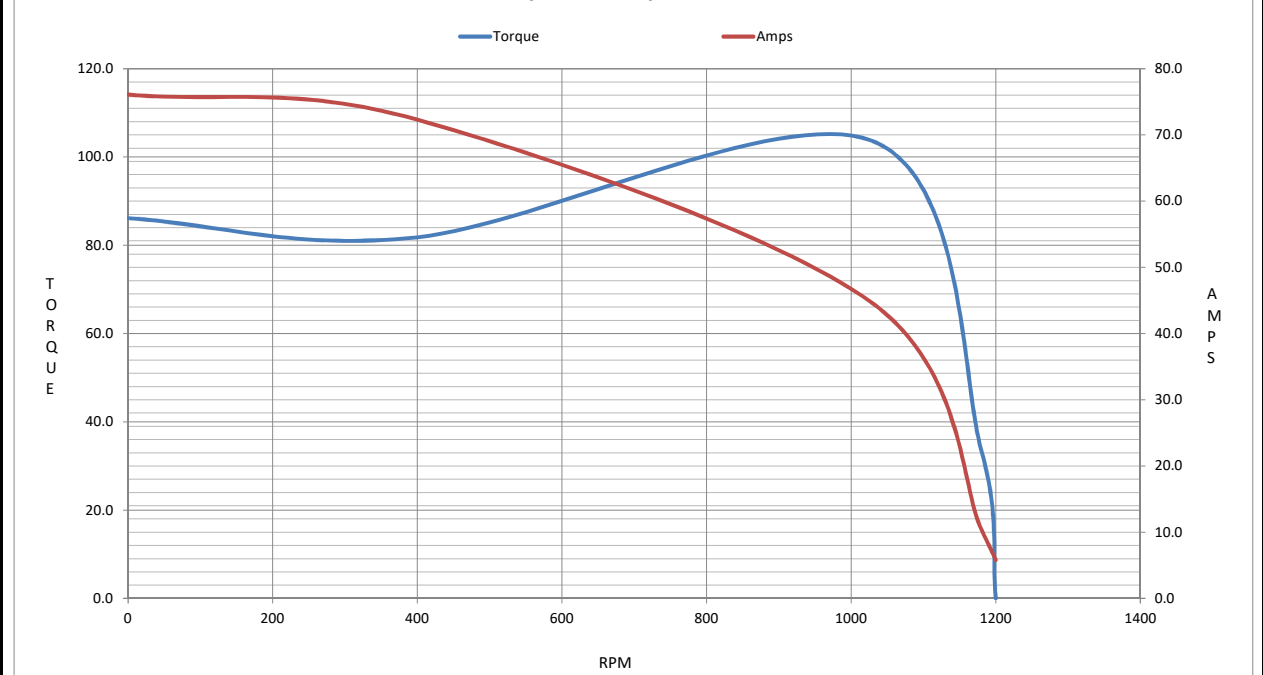
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	400	1028	1180	1200
Current (Amps)	76.1	72.3	44.7	10.4	5.8
Torque (ft-lb)	86.1	81.8	104	33.5	0.00

Information Block

HP	7.5			
Sync. RPM	1200			
Frame	132			
Enclosure	TEFC			
Construction	TCA 132MB06			
Voltage	230/460#200/400 V			
Frequency	60 Hz			
Design	N			
LR Code letter	K			
Service Factor	1.15			
Temp Rise @ FL	80 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	3,300 feet			
Rotor/Shaft wk ²	1.87 Lb-Ft ²			
Ref Wdg	IE3L1326203 NONE			
Sound Pressure @ 1M	65 dBA			
VFD Rating	CONSTANT 2:1/VARIABLE 10:1			
Outline Dwg	SS810120			
Conn. Diag	8442000677			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.7560	0.4920	2.6850	2.5720	43.6060



Speed - Torque Curve



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IEC

IEC

IEC

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 : TCA5P53AE211GAA009

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

Catalog No : R329B

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