

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: TCA5P52AP211GAA009

Catalog No: R428B

Cast Iron Motor, 7.50 HP, 3 Ph, 60 Hz, 575 V, 1800 RPM, 132S Frame, TEFC



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RegalRexnord

Nameplate Specifications

Output HP	7.50 Hp	Output KW	5.5 kW
Frequency	60 Hz	Voltage	575 V
Current	7.9 A	Speed	1775 rpm
Service Factor	1.15	Phase	3
Efficiency	91.7 %	Power Factor	77
Duty	Continuous	Insulation Class	F
Design Code	N (IEC)	KVA Code	J
Frame	132S	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
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	4	Rotation	Reversible
Resistance Main	1.56 Ohms	Mounting	B3
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	IEC	Overall Length	18.31 in
Frame Length	7.95 in	Shaft Diameter	1.496 in
Shaft Extension	3.15 in	Assembly/Box Mounting	F3
Inverter Load	CONSTANT 2:1/VARIABLE 10:1		
Connection Drawing	8442000685	Outline Drawing	SS810118

4

3

Uncontrolled Copy

2

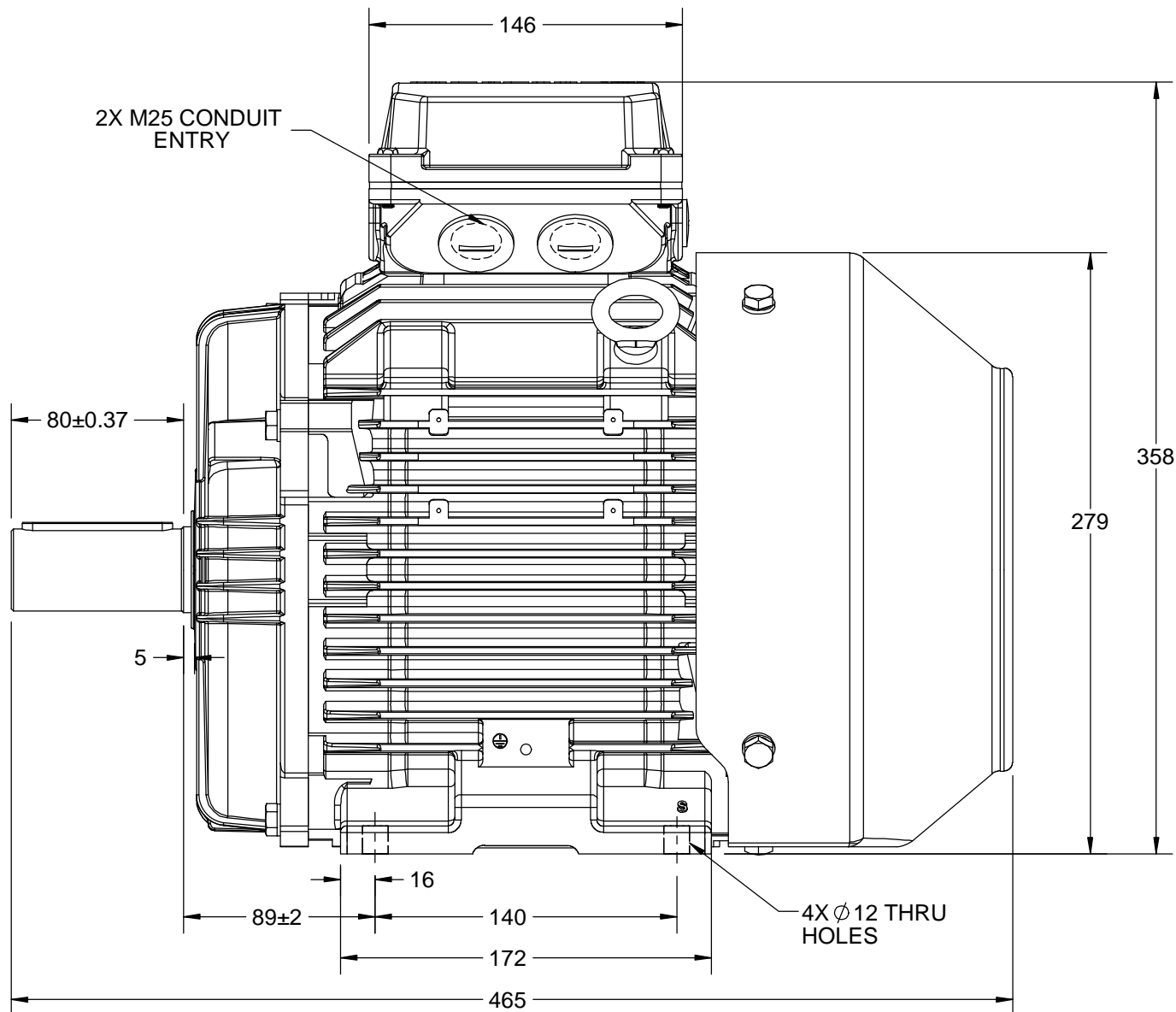
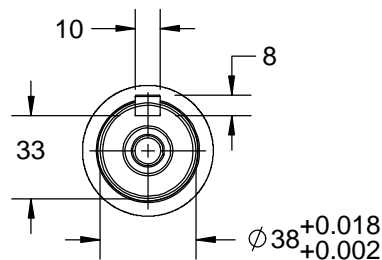
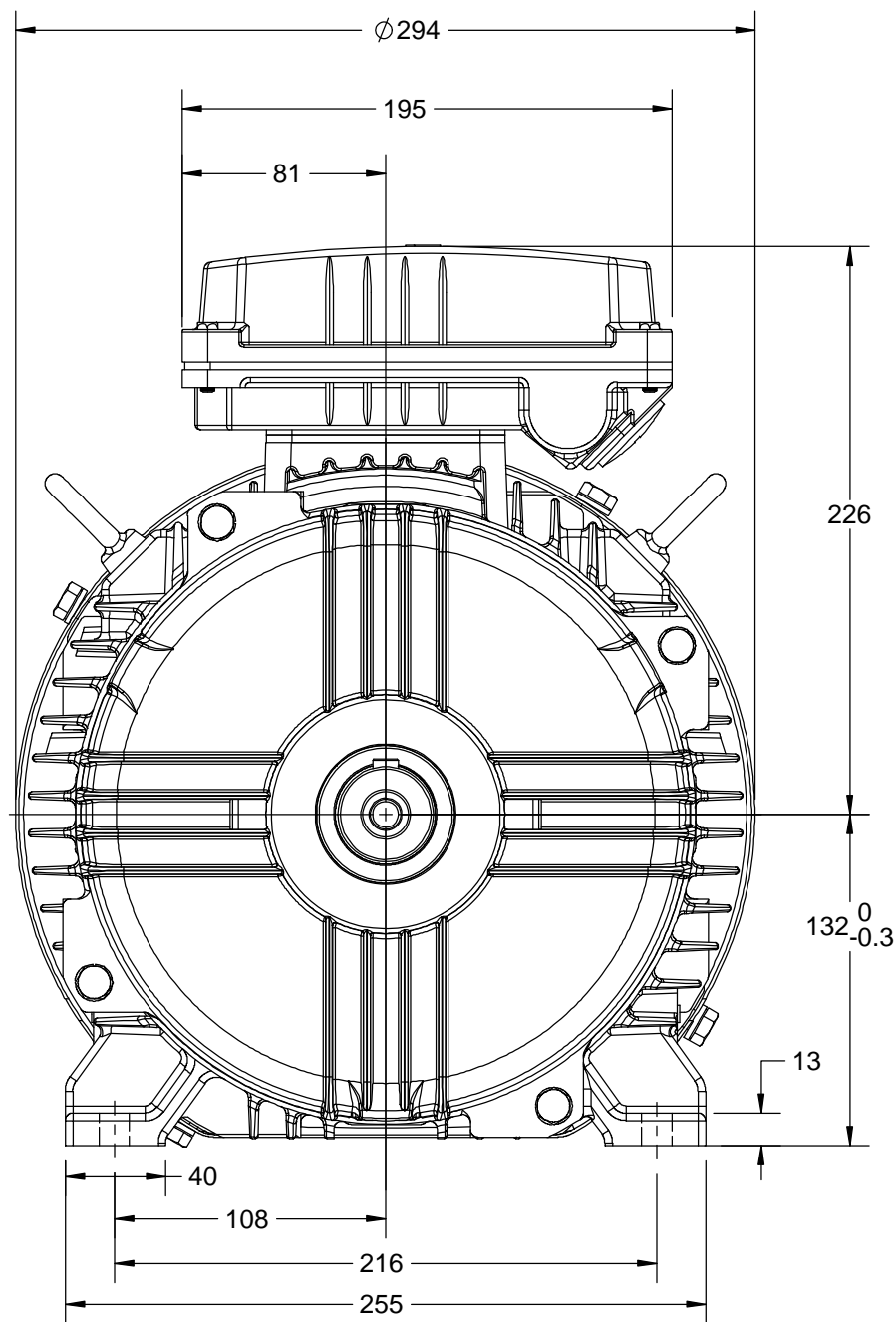
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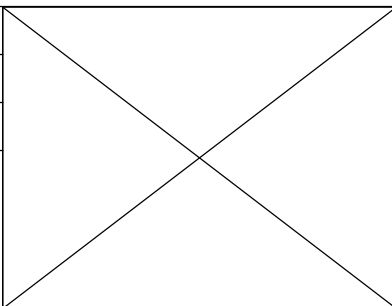
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DRAWING REVISION A	REVISION BY NIV	DATE 04/12/2018
ECO ECO-0157171	APPROVED BY JAY	DATE 04/12/2018
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DRAWN BY NIV	marathon™ Motors		
DATE 04/12/2018			
APPROVED BY JAY	DESCRIPTION OUTLINE		
DATE 04/12/2018	IEC-132S-FR.- B3 MOTOR TYPE :TEFC-CAST IRON		
REFERENCE	MATERIAL	PROCESS/FINISH	
THIRD ANGLE PROJECTION	SIZE B	DRAWING NUMBER SS810118	SHEET 1 OF 1

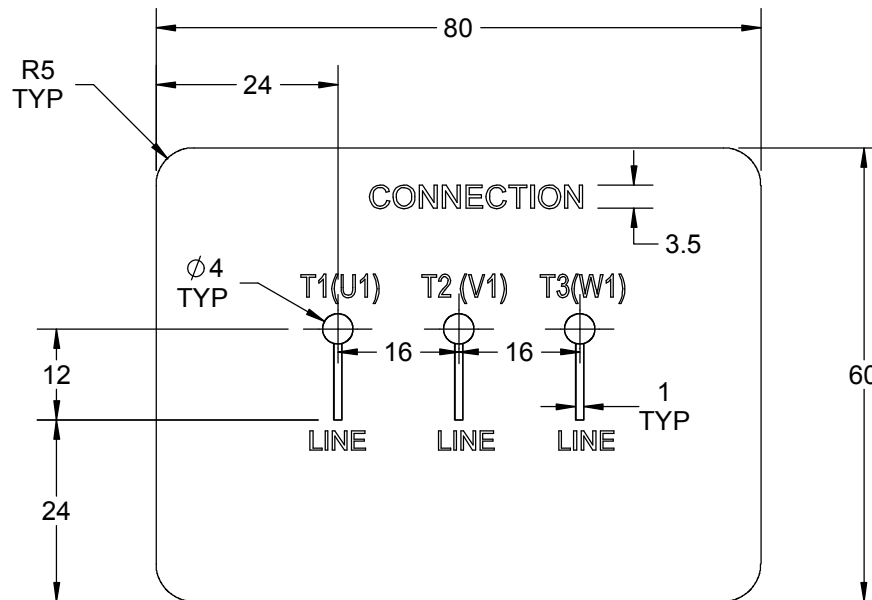
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1

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



NOTES:

1. PRESSURE-SENSITIVE ADHESIVE TAPE COATED WITH ANTI-ADHESIVE.
2. YELLOW COLOR BACK GROUND LETTERS WILL BE BLACK.
3. THE TOLERANCE OF THE LINEAR SIZE OF THE TOLERANCE WITHOUT THE TOLERANCE BY THE TABLE.
4. LEAD TERMINAL MARKINGS FONT SIZE : T1-T2 - T3 & U1-V1-W1 OF ARIAL WITH 3mm SIZE
5. OTHER LETTER FONT SIZE SHOULD BE 3.5mm.

DRAWING REVISION A	REVISION BY A. KEETHA	DATE 25/07/2019	<div></div>	DRAWN BY A. KEETHA	<div><div>REGALTM</div><div>Regal Beloit America, Inc.</div></div>		
ECO ECO-0171114	APPROVED BY SN	DATE 25/07/2019		DATE 24/07/2019	<div>DESCRIPTION</div> <div>CONNECTION DIAGRAM</div> <div>3 LEAD CONNECTION</div>		
ECO DESCRIPTION NEW DRAWING RELEASE				APPROVED BY SN			
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				REFERENCE	MATERIAL	PROCESS/FINISH	
				THIRD ANGLE PROJECTION	<div></div>	SIZE A	DRAWING NUMBER 8442000685



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

DATA VOLTS: 575

CERTIFICATION DATA SHEET

CUSTOMER: _____
ORDER #: _____
CONN. DIAGRAM: 8442000685
OUTLINE: SS810118
WINDING: IE3L1324201 NONE 3
SPEED: _____

CUSTOMER P.O. #: _____
REFERENCE MODEL #: TCA5P52AP211GAA009
CAT #: R428B
CUSTOMER PART #: _____
MOUNTING: F3

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
7.5	5.6	1800	1775	132S	TEFC	TCA 132SA04	J	N

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (* C)	ELEV.(Ft.)
3	60	575	7.9	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	91.7	3/4 LD EFF	91.7	1/2 LD EFF	90.3	GTD EFF	ELECT. TYPE
F.L. PF	77.0	3/4 LD PF	69.0	1/2 LD PF	57.0	90.5	SQ CAGE INV RATED

F.L. TORQUE		LR AMPS @ 460 V	L.R. TORQUE		B.D. TORQUE		F.L. RISE (° C)		
22.2	LB-FT	58.7	54.2	LB-FT 244%	71.3	LB-FT 321%	75		

SOUND PRESSURE @ 3 FT.	SOUND	POWER	ROTOR WK ²	MAX. LOAD WK ²	SAFE STALL TIME	STARTS/HOUR	APROX.	MOTOR WGT
65 dBA	74 dBA		1.10 LB-FT ²	1.1 LB-FT ²	10 SEC.	2	92	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							
BALL BALL	POLYREX EM	STANDARD IEC	NONE	NONE	1045 HOT ROLLED (C-204)		CAST IRON
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
2.216	1.108	4.894	6.278	120.219	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
		NONE PPR

PREPARED BY: _____ DATE: 11/10/2020	BRAKE: NONE NONE NONE	FT-LB: NA VOLTAGE: NONE	HZ: _____ UL: V - LI,ME-INS,CONST UL REC
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FORM: 3531 REV_4 2/27/06



Data Sheet

TCA5P52AP211GAA009

Date: 5/29/2019

Customer: _____

Attention: _____

Submitted by: Fareeda Dudekula

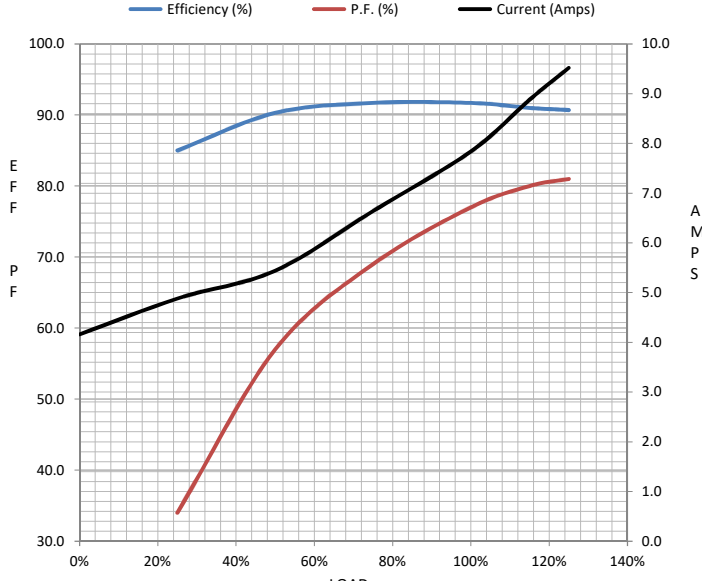
Submittal

Data @ 575 V

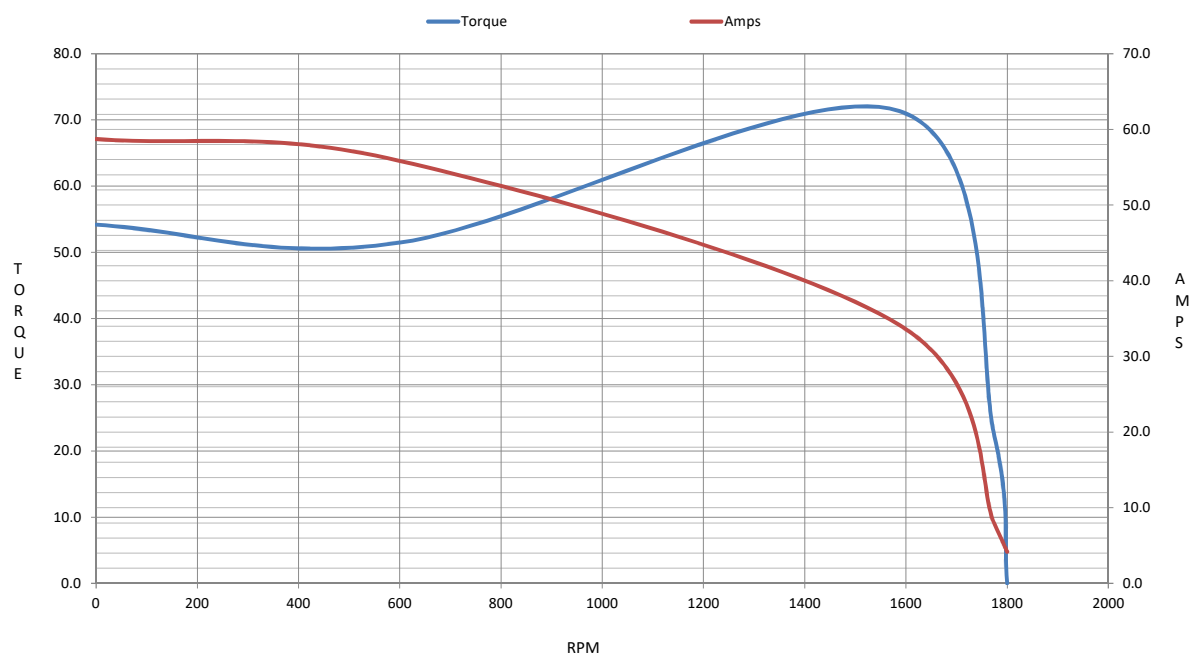
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	4.2	4.9	5.4	6.6	7.8	8.9	9.5	58.7	
Torque (ft-lb)	0.00	5.5	11.0	16.6	22.2	25.6	27.9	54.2	
RPM	1800	1794	1788	1781	1775	1,770	1767	0	
Efficiency (%)		85.0	90.3	91.7	91.7	91.0	90.7		
P.F. (%)	6.0	34.0	57.0	69.0	77.0	80.0	81.0	63.4	

Motor Speed Data

Motor Speed Data							
	LR	Pull-Up	BD	Rated	Idle	Information Block	
Speed (RPM)	0	600	1587	1775	1800	HP	7.5
Current (Amps)	58.7	55.8	34.2	7.8	4.2	Sync. RPM	1800
Torque (ft-lb)	54.2	51.5	71.3	22.2	0.00	Frame	132
<div><div>— Efficiency (%)</div><div>— P.F. (%)</div><div>— Current (Amps)</div></div>						Enclosure	TEFC
						Construction	TCA 132S04
						Voltage	575 V
						Frequency	60 Hz
						Design	N
						LR Code letter	J
						Service Factor	1.15
						Temp Rise @ FL	80 °C
						Duty	CONT
						Ambient	40 °C
						Elevation	3,300 feet
						Rotor/Shaft wk²	1.10 Lb-Ft²
						Ref Wdg	IE3L1324201 NONE
						Sound Pressure @ 1M	65 dBA
						VFD Rating	CONSTANT 2:1/VARIABLE 10:1
						Outline Dwg	SS810118
						Conn. Diag	8442000677
Additional Specifications:							
0							
0							
EQUIV CKT (OHMS / PHASE)							
R1	R2	X1	X2	Xm			
1.4180	0.7090	3.1320	4.0180	76.9400			

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 : TCA5P52AP211GAA009

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

Catalog No : R428B

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