

PRODUCT INFORMATION PACKET

Model No: TCA7P52AP211GAA009

Catalog No: R431B

Cast Iron Motor, 10 HP, 3 Ph, 60 Hz, 575 V, 1800 RPM, 132M Frame, TEFC



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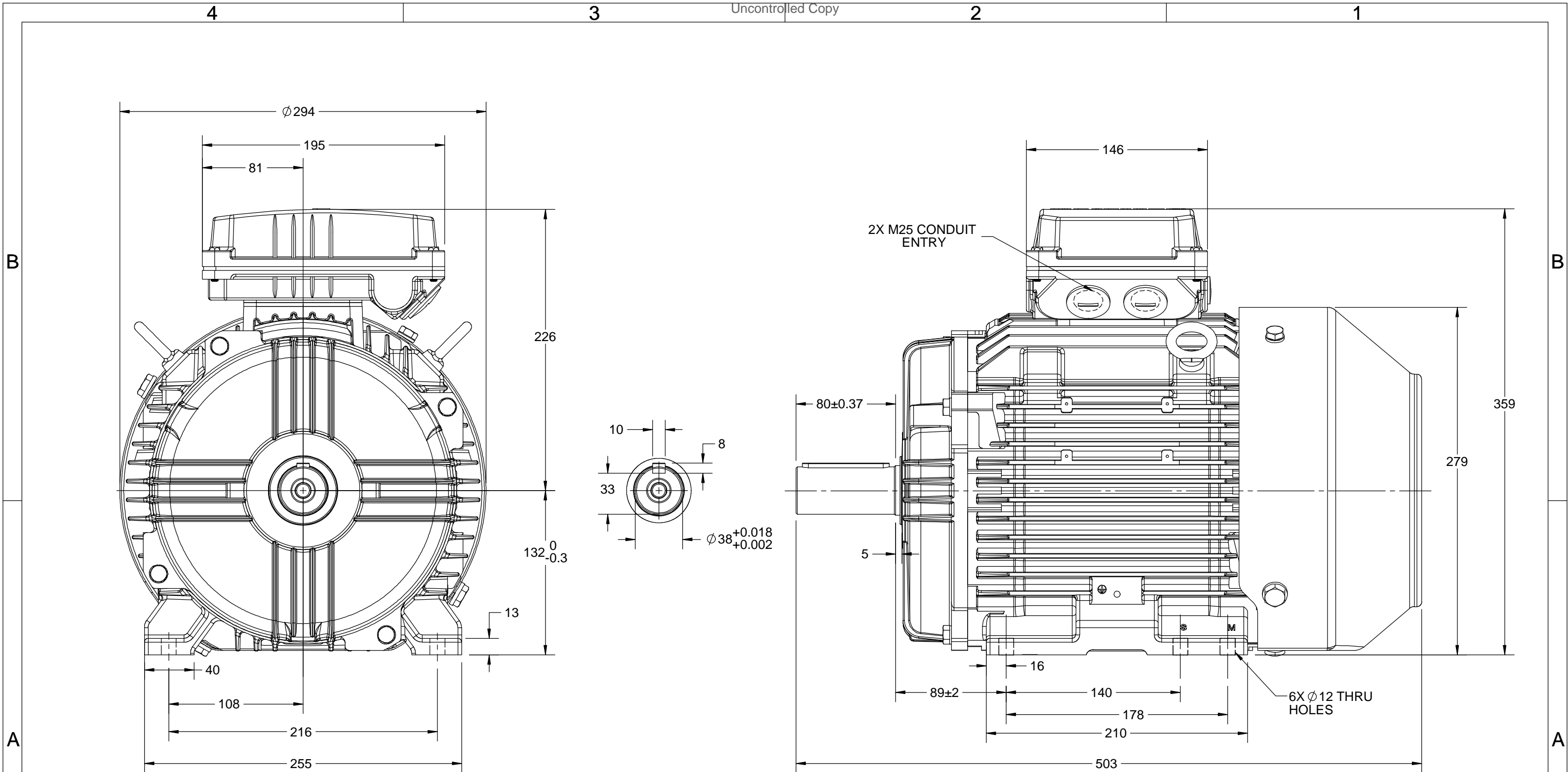
Nameplate Specifications

Output HP	10 Hp	Output KW	7.5 kW
Frequency	60 Hz	Voltage	575 V
Current	10.2 A	Speed	1775 rpm
Service Factor	1.15	Phase	3
Efficiency	91.7 %	Power Factor	81
Duty	Continuous	Insulation Class	F
Design Code	N (IEC)	KVA Code	K
Frame	132M	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	1.05 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	8442000685

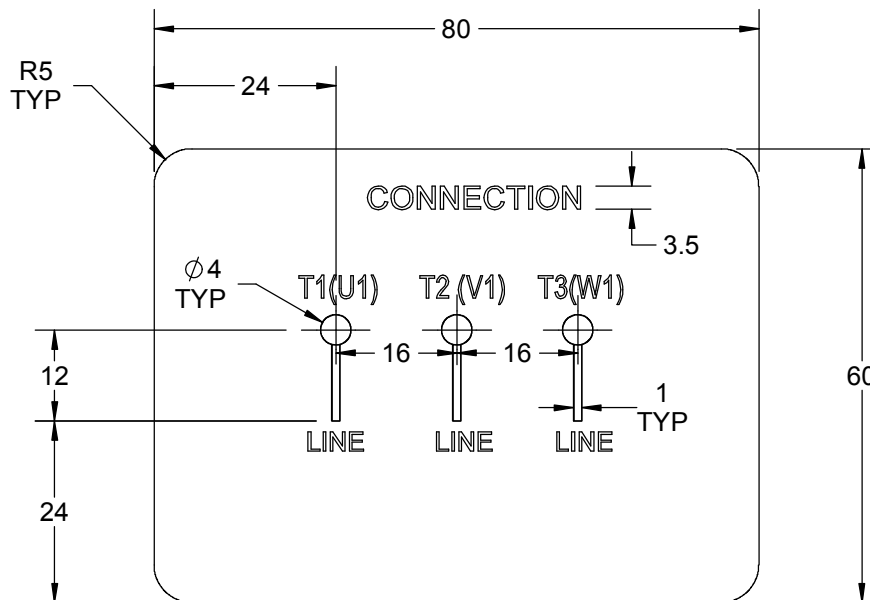
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DRAWING REVISION A	REVISION BY NIV	DATE 04/12/2018
ECO ECO-0157171	APPROVED BY JAY	DATE 04/12/2018
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DRAWN BY NIV	marathon™ Motors	
DATE 04/12/2018		
APPROVED BY JAY	DESCRIPTION OUTLINE IEC-132S-FR.- B3 MOTOR TYPE : TEFC-CAST IRON	
DATE 04/12/2018	MATERIAL	PROCESS/FINISH
REFERENCE	SIZE B	DRAWING NUMBER SS810120
THIRD ANGLE PROJECTION	SHEET 1 OF 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		DRAWN BY A. KEETHA	Regal Beloit America, Inc.	
ECO ECO-0171114	APPROVED BY SN	DATE 25/07/2019		DATE 24/07/2019		
ECO DESCRIPTION NEW DRAWING RELEASE				APPROVED BY SN	DESCRIPTION CONNECTION DIAGRAM 3 LEAD CONNECTION	
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				THIRD ANGLE PROJECTION		SIZE A



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

DATA VOLTS: 575

CERTIFICATION DATA SHEET

CUSTOMER: _____
ORDER #: _____
CONN. DIAGRAM: 8442000685
OUTLINE: SS810120
WINDING: IE3L1324202 NONE 3
SPEED: _____

CUSTOMER P.O. #: _____
REFERENCE MODEL #: TCA7P52AP211GAA009
CAT #: R431B
CUSTOMER PART #: _____
MOUNTING: F3

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
10	7.5	1800	1775	132M	TEFC	TCA 132MA04	K	N

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV.(Ft.)
3	60	575	10.2	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	91.7	3/4 LD EFF	91.7	1/2 LD EFF	90.1	GTD EFF	ELECT. TYPE
F.L. PF	81.0	3/4 LD PF	75.0	1/2 LD PF	64.0	90.5	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
29.6 LB-FT	88.1	90.0 LB-FT	304%	95.7 LB-FT

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	1.31 LB-FT ²	1.31 LB-FT ²	10 SEC.	2	98 KG.

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

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

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE BALL	ODE 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
1.592	0.831	3.809	5.402	109.970	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
	FT-LB: NA
	VOLTAGE: NONE
	HZ: _____
	UL: V - LI,ME-INS,CONST UL REC

FORM: 3531 REV_4 2/27/06



Data Sheet

TCA7P52AP211GAA009

Date: 5/29/2019
Customer: _____
Attention: _____

Submittal

Submitted by: Fareeda Dudekula

Data @ 575 V

Motor Load Data

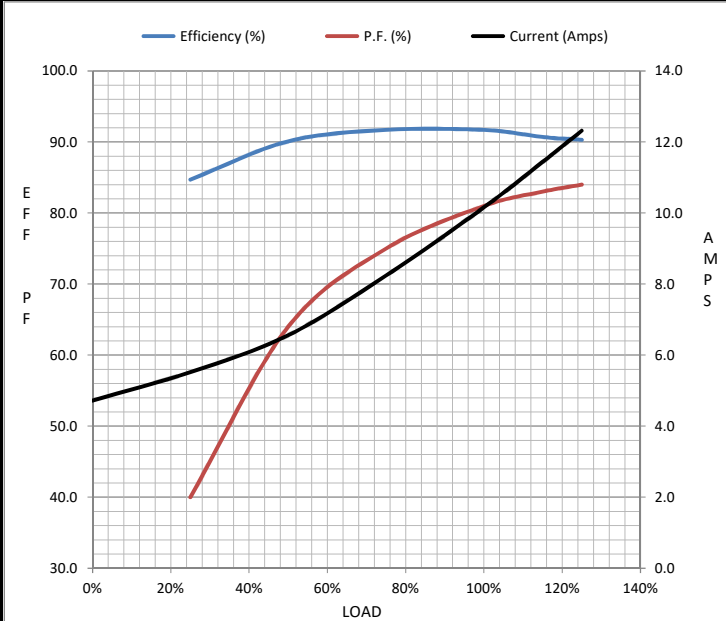
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	4.7	5.5	6.6	8.2	10.2	11.4	12.3	88.1
Torque (ft-lb)	0.00	7.3	14.7	22.1	29.6	34.2	37.2	90.0
RPM	1800	1794	1787	1781	1775	1,769	1766	0
Efficiency (%)		84.7	90.1	91.7	91.7	90.7	90.3	
P.F. (%)	7.0	40.0	64.0	75.0	81.0	83.0	84.0	63.4

Motor Speed Data

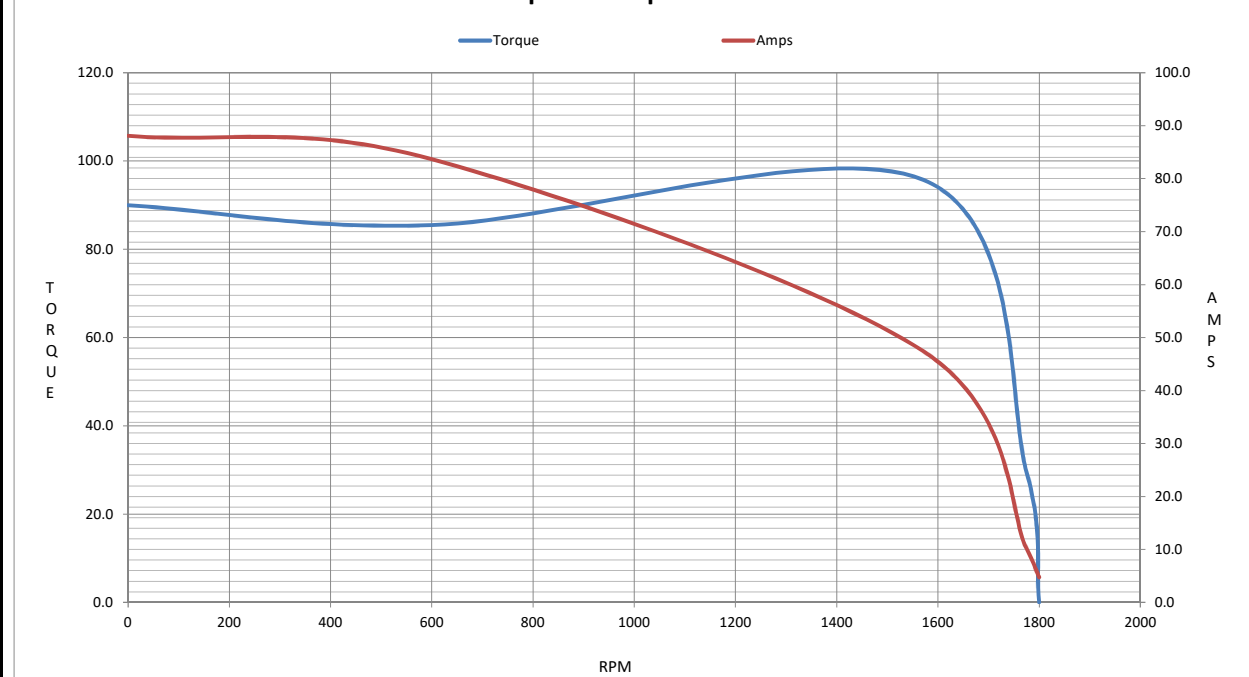
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1572	1775	1800
Current (Amps)	88.1	83.7	47.4	10.2	4.7
Torque (ft-lb)	90.0	85.5	95.7	29.6	0.00

Information Block

HP	10.0			
Sync. RPM	1800			
Frame	132			
Enclosure	TEFC			
Construction	TCA 132M04			
Voltage	575 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	1.31 Lb-Ft ²			
Ref Wdg	IE3L1324202 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
1.0190	0.5320	2.4380	3.4570	70.3810



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 : TCA7P52AP211GAA009

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

Catalog No : R431B

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