

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: TCA0033AE231GAA009

Catalog No: R853

TerraMAX® Cast Iron Motor, 4 & 3 HP, 3 Ph, 60 & 50 Hz, 230/460 & 200/400 V, 1200 & 1000 RPM,
132S Frame, TEFC



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RegalRexnord

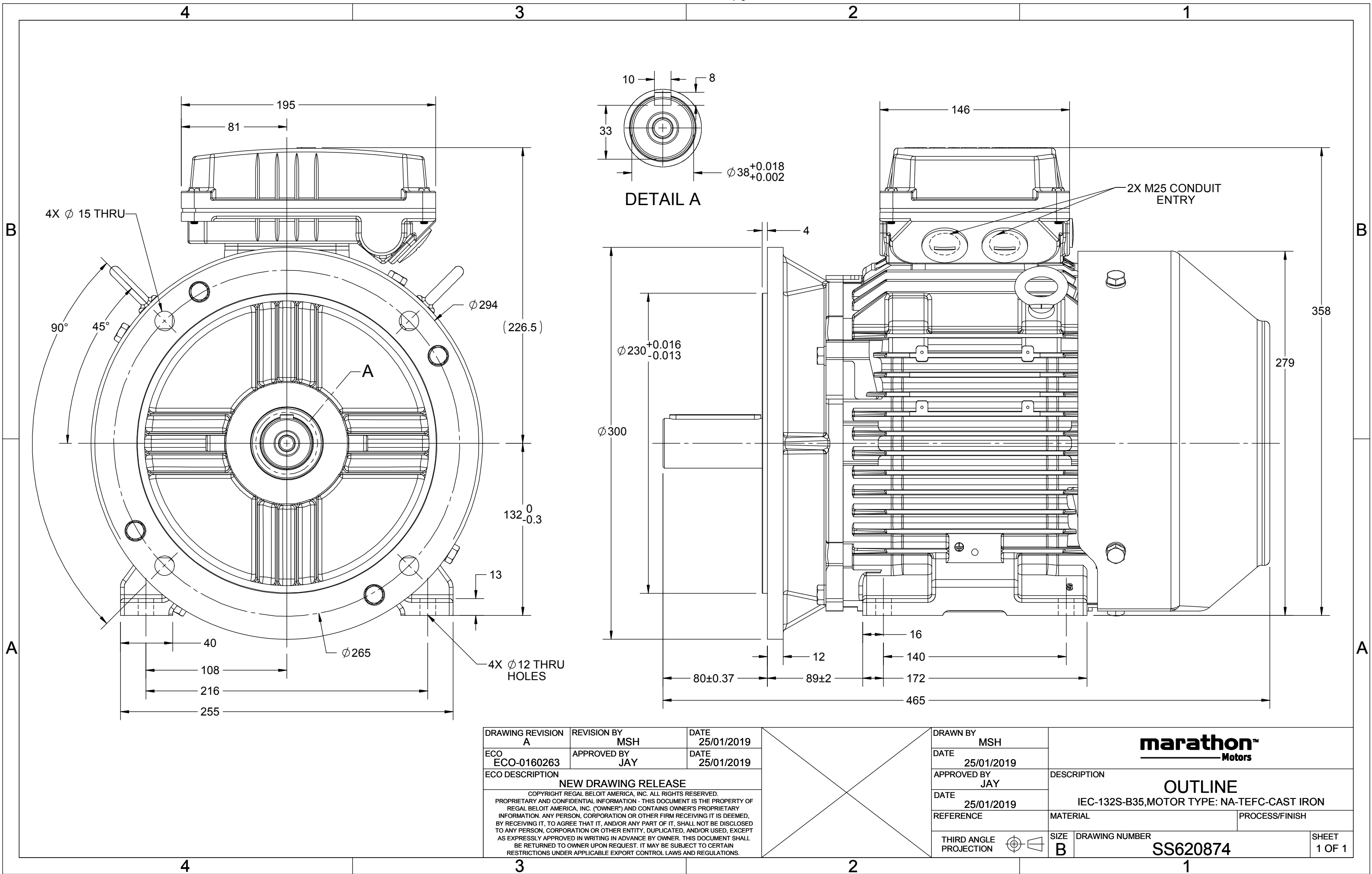
Nameplate Specifications

Phase	3	Output HP	4 & 3 Hp
Output KW	3.0 & 2.2 kW	Voltage	230/460 & 200/400 V
Speed	1180 & 980 rpm	Service Factor	1.15 & 1.15
Frame	132S	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	89.5 & 84.3 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	11.6/5.8 & 10.4/5.2 A	Power Factor	73
Duty	Continuous	Insulation Class	F
Design Code	N (IEC)	KVA Code	J
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	2.75 Ohms	Mounting	B3
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	IEC	Shaft Diameter	38.000 in
Assembly/Box Mounting	F3	Inverter Load	CONSTANT 2:1/VARIABLE 10:1
Outline Drawing	SS620874	Connection Drawing	8442000729

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DRAWING REVISION A	REVISION BY MSH	DATE 25/01/2019
ECO ECO-0160263	APPROVED BY JAY	DATE 25/01/2019
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DRAWN BY MSH			
DATE 25/01/2019			
APPROVED BY JAY	DESCRIPTION OUTLINE		
DATE 25/01/2019	IEC-132S-B35,MOTOR TYPE: NA-TEFC-CAST IRON		
REFERENCE	MATERIAL	PROCESS/FINISH	
THIRD ANGLE PROJECTION	SIZE B	DRAWING NUMBER SS620874	SHEET 1 OF 1

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ECO DESCRIPTION

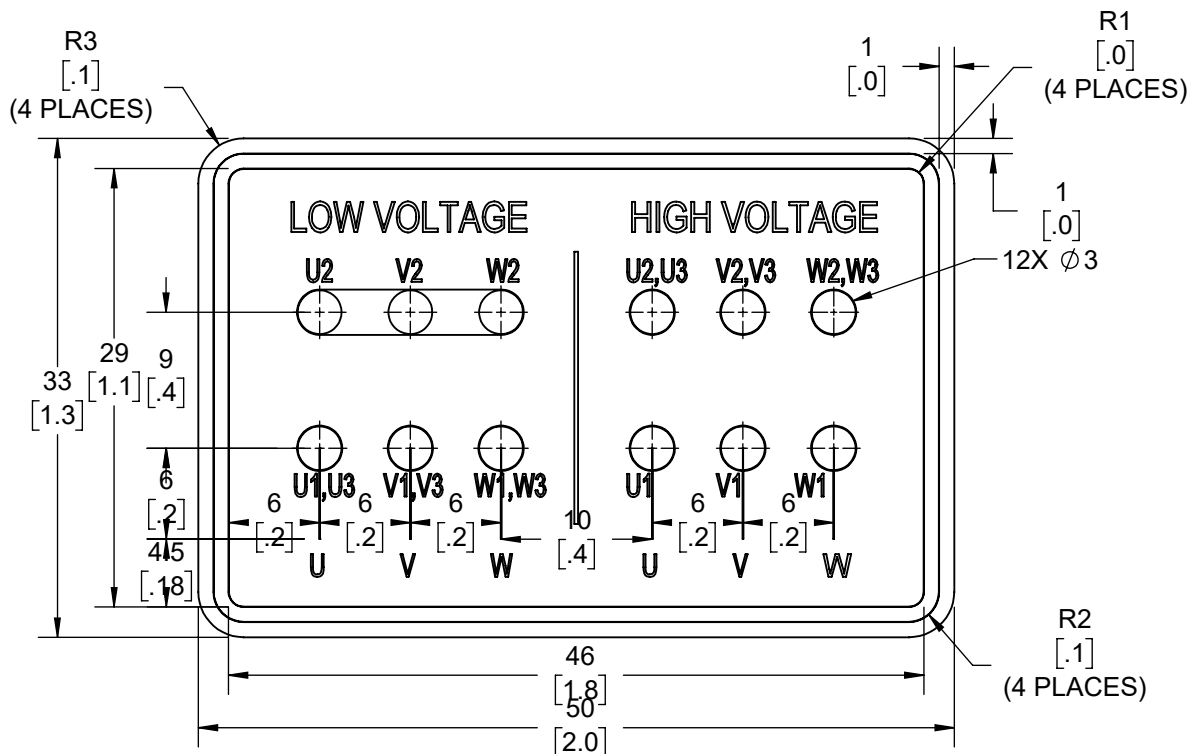
REVISION BY
LK
APPROVED BY
JAY

REV DATE/© DATE
30/6/2021
DATE
30/6/2021

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 : U1-U3, V1-V3 AND W1-W3 OF ARIAL WITH 3mm SIZE
5. OTHER LETTER FONT SIZE SHOULD BE 3.5mm.

PRIMARY DIMENSIONS ARE mm
INCH DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

DRAWN BY
LK
DATE
30/6/2021
APPROVED BY
JAY
DATE
30/6/2021
REFERENCE

THIRD ANGLE
PROJECTION



Regal Beloit America, Inc.

DESCRIPTION

CONN DIAGRAM-NAMEPLATE
9LEADS - STAR CONNECTION

MATERIAL

REFER NOTES

PROCESS/FINISH

SIZE
A

DRAWING NUMBER

8442000729

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: 8442000675
OUTLINE: SS620874
WINDING: IE3L1326201 NONE 1
SPEED: _____

CUSTOMER P.O. #: _____
REFERENCE MODEL #: TCA0033AE231GAA009
CAT #: R853
CUSTOMER PART #: _____
MOUNTING: F3

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
4	3.0	1200	1180	132S	TEFC	TCA 132SA06	J	N

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (* C)	ELEV.(Ft.)
3	60/50	230/460#200/400	11.6/5.8&10.4/5.2	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	89.5	3/4 LD EFF	89.5	1/2 LD EFF	86.8	GTD EFF	ELECT. TYPE
F.L. PF	73.0	3/4 LD PF	64.0	1/2 LD PF	53.0	87.9	SQ CAGE INV RATED

F.L. TORQUE		LR AMPS @ 460 V		L.R. TORQUE		B.D. TORQUE		F.L. RISE (° C)			
17.9	LB-FT	37.7		38.9	LB-FT	217%	51.4	LB-FT	287%	80	

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		1.17 LB-FT ²	1.17 LB-FT ²	15 SEC.	2	79	KG.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
FF-FLANGE-265	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
1.702	0.993	5.177	4.538	78.145	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: 11/27/2020	BRAKE: NONE NONE NONE	FT-LB: NA VOLTAGE: NONE	HZ: _____
FORM: 3531 REV_4 2/27/06	UL: V - LI,ME-INS,CONST UL REC		

REGAL[®]

Data Sheet										
Date: 4/8/2020		TCA0033AE231GAA009								
Customer: _____		Submittal								
Attention: _____		Data @ 460 V								
Submitted by: _____										
Motor Load Data										
Load	0%	25%	50%	75%	100%	115%	125%	LR		
Current (Amps)	3.2	3.8	4.1	4.9	5.8	6.5	6.9	37.7		
Torque (ft-lb)	0.00	4.4	8.8	13.3	17.9	20.6	22.4	38.9		
RPM	1200	1195	1190	1184	1180	1,174	1172	0		
Efficiency (%)		79.6	86.8	89.5	89.5	88.3	87.9			
P.F. (%)	7.0	31.0	53.0	64.0	73.0	76.0	77.0	63.4		
Motor Speed Data										
	LR	Pull-Up	BD	Rated	Idle					
Speed (RPM)	0	400	1037	1180	1200	Information Block				
Current (Amps)	37.7	35.8	22.1	5.8	3.2	HP	4.0			
Torque (ft-lb)	38.9	36.9	51.4	17.9	0.00	Sync. RPM	1200			
						Frame	132			
						Enclosure	TEFC			
						Construction	TCA 132SA06			
						Voltage	230/460#200/400 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	1.17 Lb-Ft²			
						Ref Wdg	IE3L1326201 NONE			
						Sound Pressure @ 1M	65 dBA			
						VFD Rating	CONSTANT 2:1/VARIABLE 10:1			
						Outline Dwg	SS620874			
						Conn. Diag	8442000675			
						Additional Specifications:				
						0				
						0				
						EQUIV CKT (OHMS / PHASE)				
						R1	R2	X1	X2	Xm
						1.7020	0.9930	5.1770	4.5380	78.1450

LOAD

Information Block

HP: 4.0

Sync. RPM: 1200

Frame: 132

Enclosure: TEFC

Construction: TCA 132SA06

Voltage: 230/460#200/400 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: 1.17 Lb-Ft²

Ref Wdg: IE3L1326201 NONE

Sound Pressure @ 1M: 65 dBA

VFD Rating: CONSTANT 2:1/VARIABLE 10:1

Outline Dwg: SS620874

Conn. Diag: 8442000675

Additional Specifications:

0

0

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
1.7020	0.9930	5.1770	4.5380	78.1450

Speed -Torque Curve

RPM

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 : TCA0033AE231GAA009

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

Catalog No : R853

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