

# PRODUCT INFORMATION PACKET

Model No: TCA18P3AE231GAA009

Catalog No: R841

TerraMAX® Cast Iron Motor, 25 & 20 HP, 3 Ph, 60 & 50 Hz, 230/460 & 200/400 V, 1200 & 1000 RPM,  
200L Frame, TEFC



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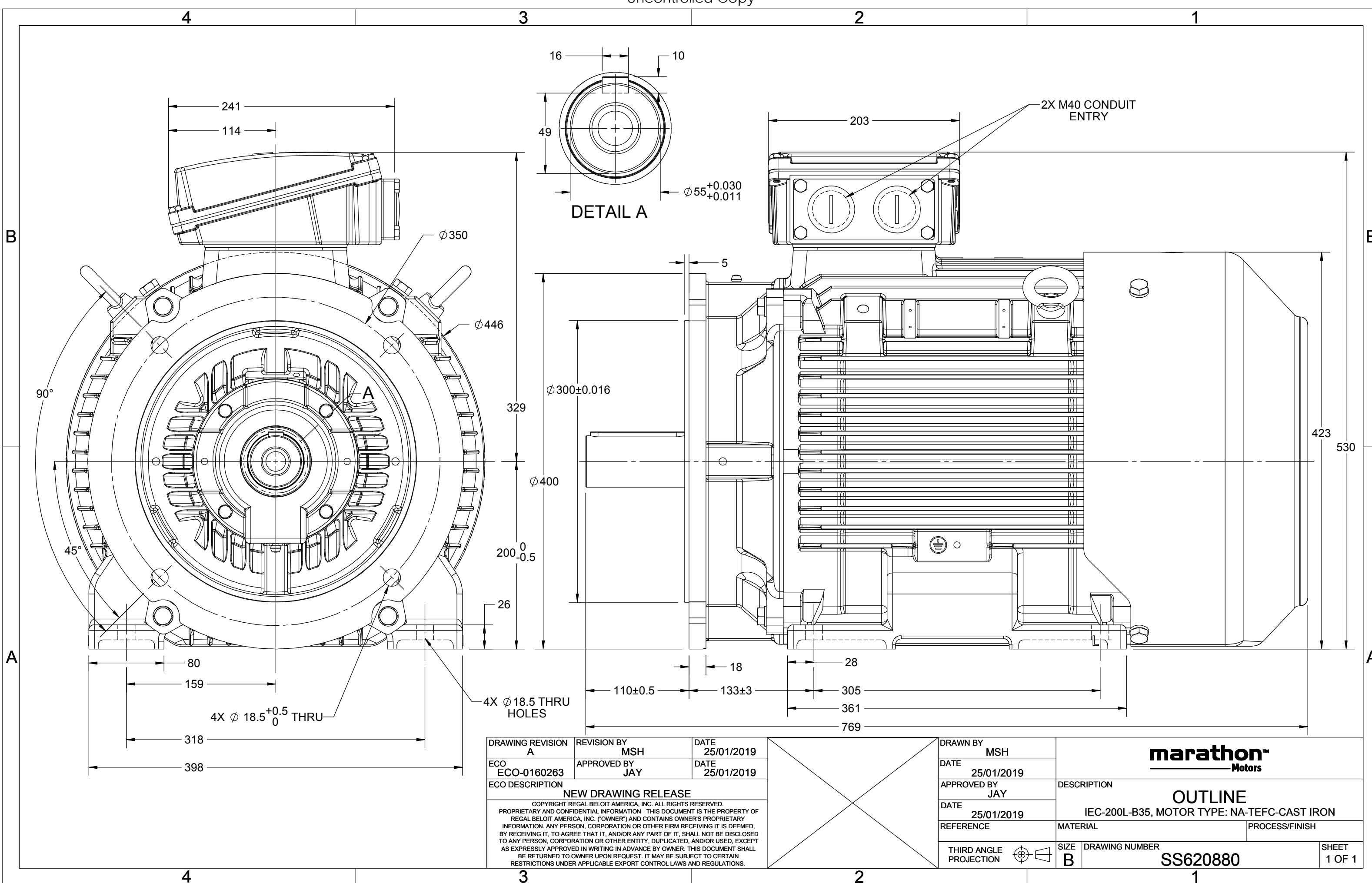
### Nameplate Specifications

Phase	<b>3</b>	Output HP	<b>25 &amp; 20 Hp</b>
Output KW	<b>18.5 &amp; 15.0 kW</b>	Voltage	<b>230/460 &amp; 200/400 V</b>
Speed	<b>1185 &amp; 990 rpm</b>	Service Factor	<b>1.15 &amp; 1.15</b>
Frame	<b>200L</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No Protection</b>	Efficiency	<b>93 &amp; 91.2 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 &amp; 50 Hz</b>
Current	<b>64/32 &amp; 64/32 A</b>	Power Factor	<b>78</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>N (IEC)</b>	KVA Code	<b>J</b>
Drive End Bearing Size	<b>6312</b>	Opp Drive End Bearing Size	<b>6212</b>
UL	<b>Recognized</b>	CSA	<b>N</b>
CE	<b>Y</b>	IP Code	<b>55</b>
Number of Speeds	<b>1</b>	Efficiency Class	<b>IE3</b>

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>6</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.29 Ohms</b>	Mounting	<b>B3</b>
Motor Orientation	<b>Horizontal</b>	Drive End Bearing	<b>Ball</b>
Opp Drive End Bearing	<b>Ball</b>	Frame Material	<b>Cast Iron</b>
Shaft Type	<b>IEC</b>	Shaft Diameter	<b>55.000 in</b>
Assembly/Box Mounting	<b>F3</b>	Inverter Load	<b>CONSTANT 2:1/VARIABLE 10:1</b>
Connection Drawing	<b>8442000715</b>	Outline Drawing	<b>SS620880</b>

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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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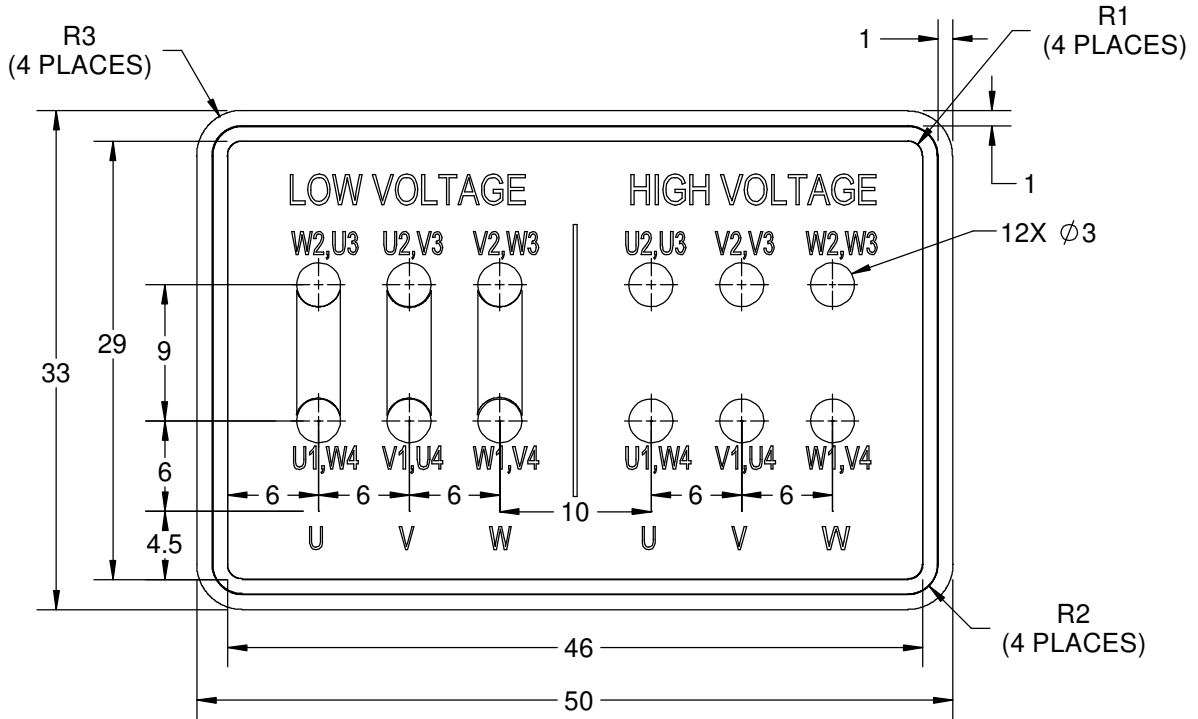
DRAWN BY MSH
DATE 25/01/2019
APPROVED BY JAY
DATE 25/01/2019
REFERENCE
THIRD ANGLE PROJECTION

<b>marathon™ Motors</b>	
<b>OUTLINE</b>	
IEC-200L-B35, MOTOR TYPE: NA-TEFC-CAST IRON	
MATERIAL	PROCESS/FINISH
SIZE <b>B</b>	DRAWING NUMBER <b>SS620880</b>
SHEET 1 OF 1	

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

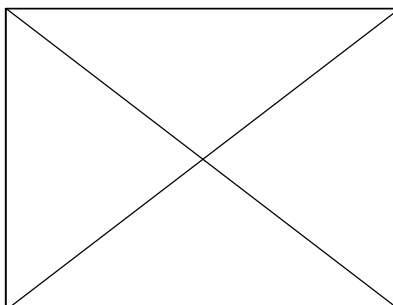
GEOMETRIC TOLERANCE		
LINEAR DIM	>0~6	±0.1
	>6~30	±0.2
	>30~120	±0.3





**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 <b>S.MUDDA</b>	DATE <b>16/11/2020</b>	 <b>Regal Beloit America, Inc.</b>	
	APPROVED BY <b>SUMANTA</b>		
	DATE <b>16/11/2020</b>	DESCRIPTION <b>CONN DIAGRAM-NAMEPLATE</b>	
	REFERENCE	MATERIAL	PROCESS/FINISH
	THIRD ANGLE PROJECTION 	SIZE <b>A</b>	DRAWING NUMBER <b>8442000715</b>



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

DATA VOLTS: 460

**CERTIFICATION DATA SHEET**

CUSTOMER: \_\_\_\_\_  
ORDER #: \_\_\_\_\_  
CONN. DIAGRAM: 8442000677  
OUTLINE: SS620880  
WINDING: IE3L2006201 NONE 1  
SPEED: \_\_\_\_\_

CUSTOMER P.O. #: \_\_\_\_\_  
REFERENCE MODEL #: TCA18P3AE231GAA009  
CAT #: R641  
CUSTOMER PART #: \_\_\_\_\_  
MOUNTING: F3

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
25	18.50	1200	1185	200L	TEFC	TCA 200LA06	J	N

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV.(Ft.)
3	60/50	230/460#200/400	64/32&64/32	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	93.0	3/4 LD EFF	93.0	1/2 LD EFF	91.6	GTD EFF	ELECT. TYPE
F.L. PF	78.0	3/4 LD PF	72.0	1/2 LD PF	61.0	92.0	SG CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
111 LB-FT	226	263 LB-FT 237%	311 LB-FT 280%	80

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK <sup>2</sup>	MAX. LOAD WK <sup>2</sup>	SAFE STALL TIME	STARTS/HOUR	APROX.	MOTOR WGT
65 dBA	74 dBA	13.4 LB-FT <sup>2</sup>	13.4 LB-FT <sup>2</sup>	15 SEC.	2	297	KG.

**\*\*\* SUPPLEMENTAL INFORMATION \*\*\***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAIN
FF-FLANGE-350	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	SG S5-V100	STANDARD IEC	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6312	6212						

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
0.182	0.102	0.669	1.123	17.189	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	NONE	NONE
DATE: 11/27/2020	FT-LB: NA	VOLTAGE: NONE	HZ: _____
FORM: 3531 REV_4 2/27/06	UL: V - LI,ME-INS,CONST UL REC		





**Data Sheet**

Date: 4/8/2020 TCA18P3AE231GAA009

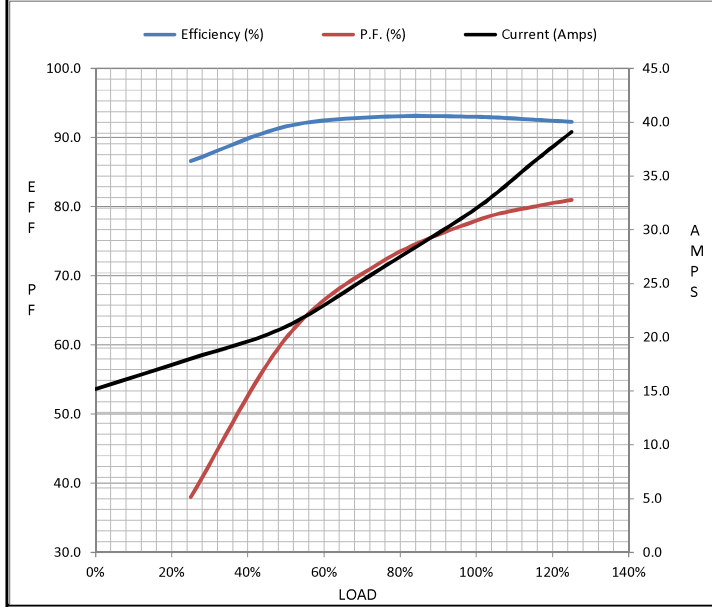
Customer: \_\_\_\_\_

Attention: \_\_\_\_\_ **Submittal**

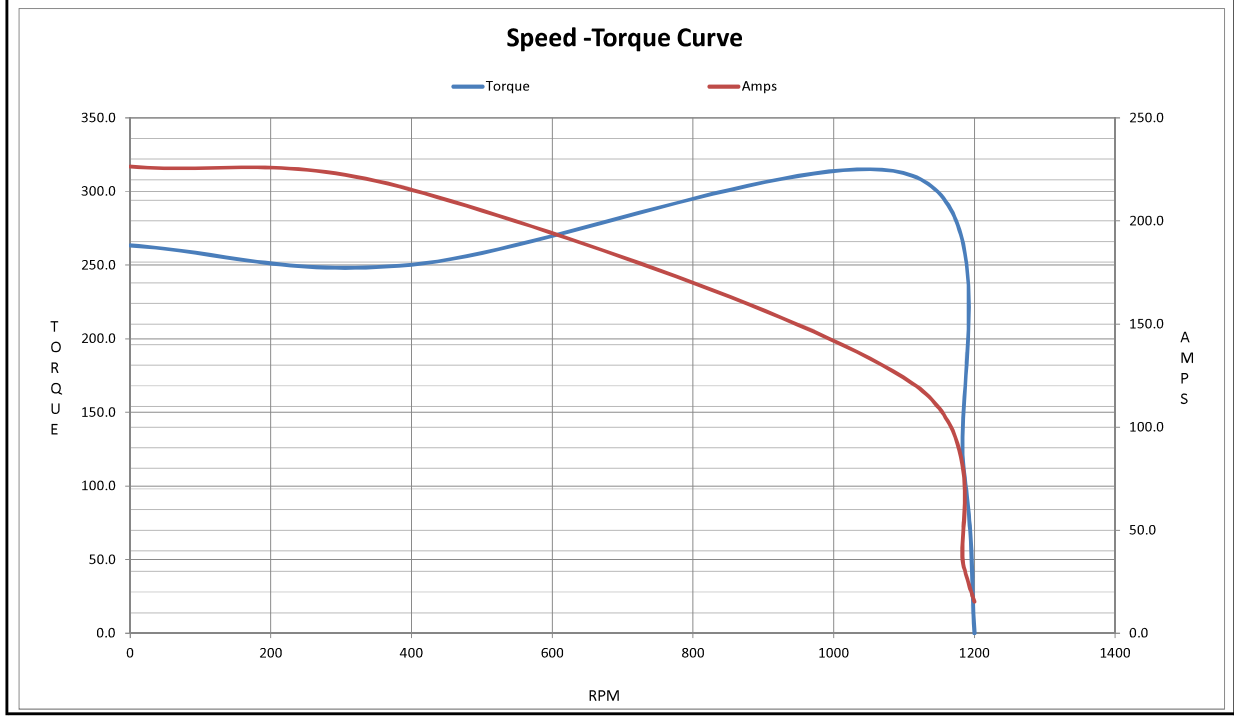
Submitted by: \_\_\_\_\_ Data @ 460 V

Motor Load Data									
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	15.2	18.0	21.0	26.4	32.0	36.3	39.1	226	
Torque (ft-lb)	0.00	27.4	55.0	82.8	111	128	139	263	
RPM	1200	1197	1194	1191	1185	1,185	1183	0	
Efficiency (%)		86.6	91.6	93.0	93.0	92.6	92.3		
P.F. (%)	6.0	38.0	61.0	72.0	78.0	80.0	81.0	63.4	

Motor Speed Data						Information Block	
	LR	Pull-Up	BD	Rated	Idle		
Speed (RPM)	0	400	1112	1185	1200	HP	25.0
Current (Amps)	226	215	121	32.0	15.2	Sync. RPM	1200
Torque (ft-lb)	263	250	311	111	0.00	Frame	200
						Enclosure	TEFC
						Construction	TCA 200LA06
						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 wk <sup>2</sup>	13.4 Lb-Ft <sup>2</sup>
						Ref Wdg	IE3L2006201 NONE
						Sound Pressure @ 1M	66 dBA
						VFD Rating	CONSTANT 2:1/VARIABLE 10:1
						Outline Dwg	SS620880
						Conn. Diag	8442000677
Additional Specifications:							
0							
0							
EQUIV CKT (OHMS / PHASE)							
	R1	R2	X1	X2	Xm		
	0.1820	0.1020	0.6690	1.1230	17.1890		



HP		25.0			
Sync. RPM		1200			
Frame		200			
Enclosure		TEFC			
Construction		TCA 200LA06			
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 wk <sup>2</sup>		13.4 Lb-Ft <sup>2</sup>			
Ref Wdg		IE3L2006201 NONE			
Sound Pressure @ 1M		66 dBA			
VFD Rating		CONSTANT 2:1/VARIABLE 10:1			
Outline Dwg		SS620880			
Conn. Diag		8442000677			
Additional Specifications:					
0					
0					
EQUIV CKT (OHMS / PHASE)					
	R1	R2	X1	X2	Xm
	0.1820	0.1020	0.6690	1.1230	17.1890



## 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 : TCA18P3AE231GAA009

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

Catalog No : R841

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**