

PRODUCT INFORMATION PACKET

Model No: TCA0302AE231GAA009

Catalog No: R846

TerraMAX® Cast Iron Motor, 40 & 30 HP, 3 Ph, 60 & 50 Hz, 230/460 & 200/400 V, 1800 & 1500 RPM,
200L Frame, TEFC



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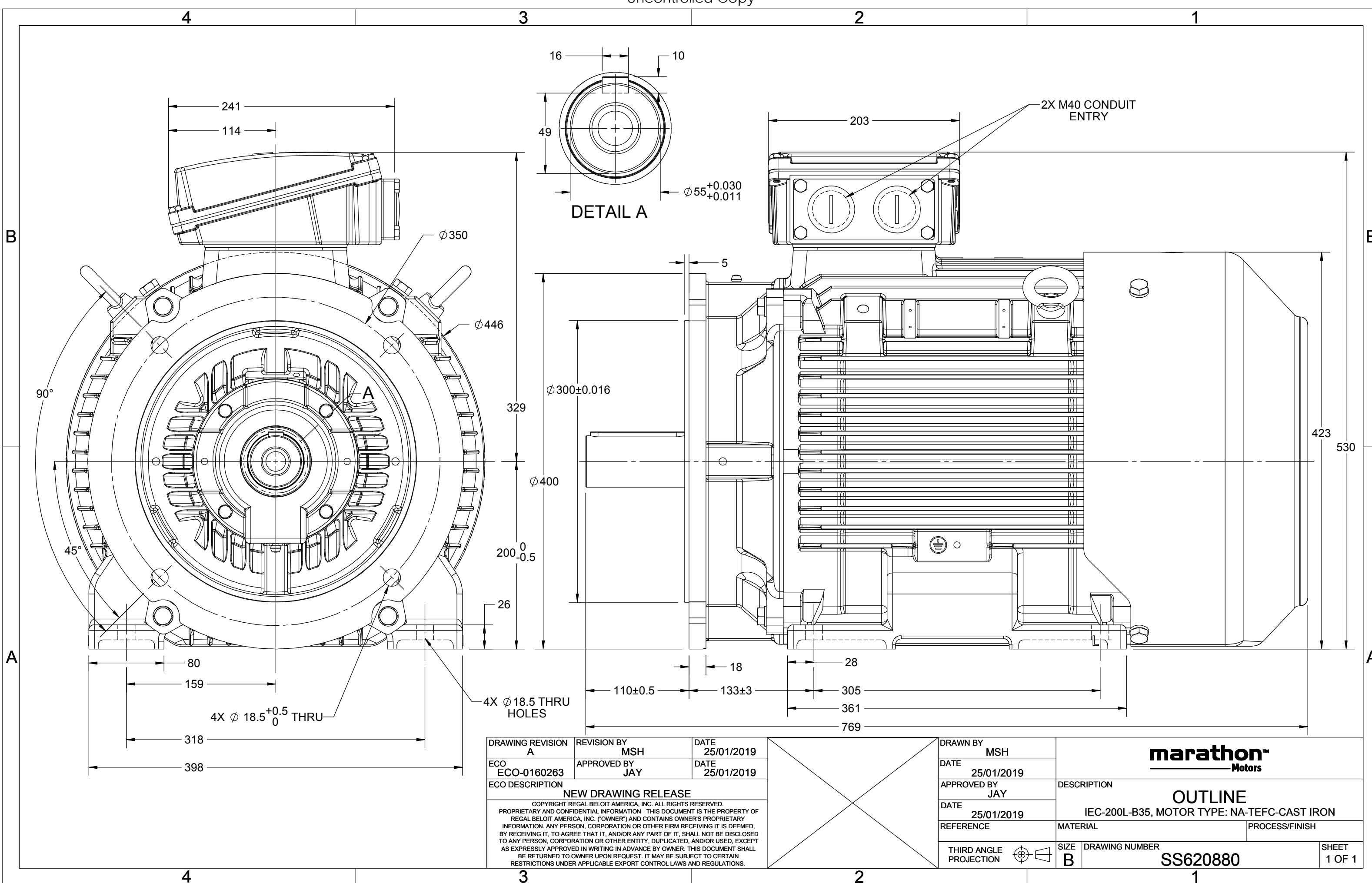
Nameplate Specifications

Phase	3	Output HP	40 & 30 Hp
Output KW	30.0 & 22.0 kW	Voltage	230/460 & 200/400 V
Speed	1780 & 1485 rpm	Service Factor	1.15 & 1.15
Frame	200L	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	94.1 & 93 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	94/47 & 82/41 A	Power Factor	84
Duty	Continuous	Insulation Class	F
Design Code	N (IEC)	KVA Code	G
Drive End Bearing Size	6312	Opp Drive End Bearing Size	6212
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	.2 Ohms	Mounting	B35
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	IEC	Shaft Diameter	55.000 in
Assembly/Box Mounting	F3	Inverter Load	CONSTANT 2:1/VARIABLE 10:1
Connection Drawing	8442000715	Outline Drawing	SS620880

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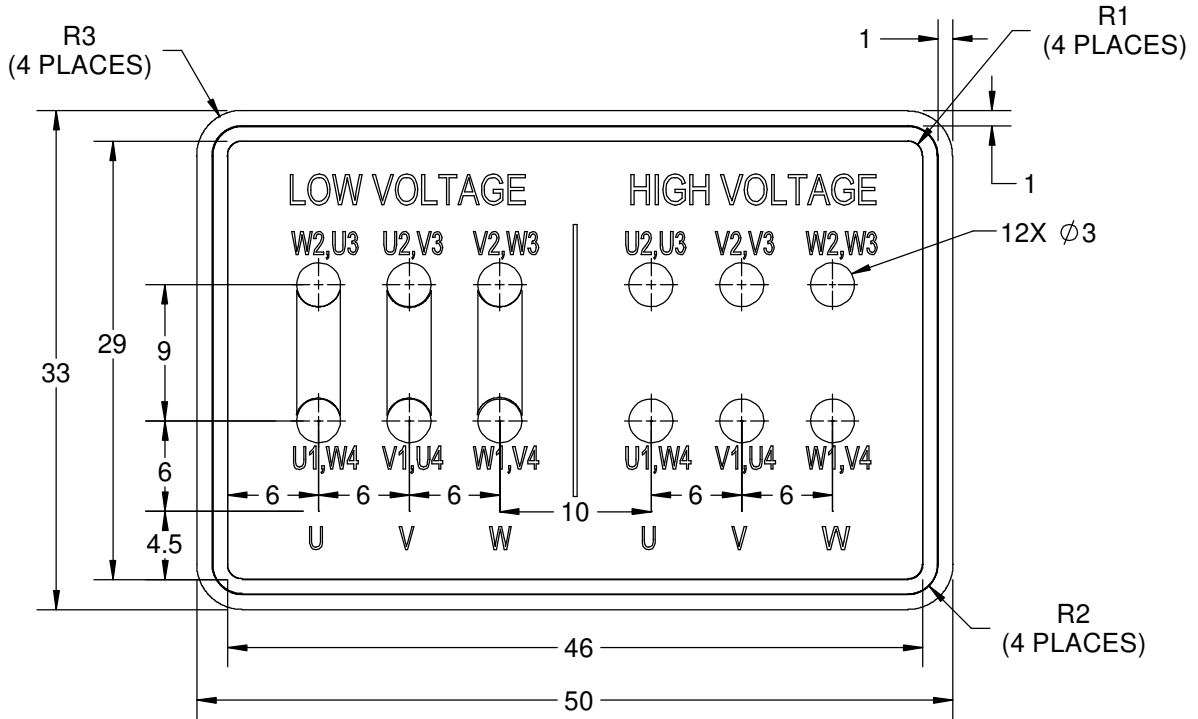
DRAWN BY MSH
DATE 25/01/2019
APPROVED BY JAY
DATE 25/01/2019
REFERENCE
THIRD ANGLE PROJECTION

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

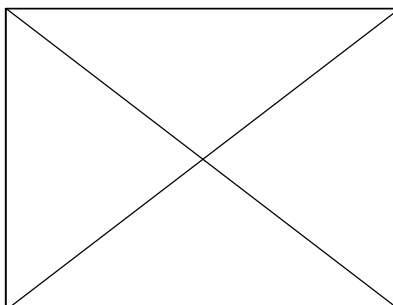
GEOMETRIC TOLERANCE		
LINEAR DIM	>0~6	±0.1
	>6~30	±0.2
	>30~120	±0.3





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



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: IE3L2004201 NONE 1
SPEED: _____

CUSTOMER P.O. #: _____
REFERENCE MODEL #: TCA0302AE231GAA009
CAT #: R846
CUSTOMER PART #: _____
MOUNTING: F3

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
40	30	1800	1780	200L	TEFC	TCA 200LA04	G	N

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV.(Ft.)
3	60/50	230/460#200/400	94/47&82/41	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	94.1	3/4 LD EFF	94.1	1/2 LD EFF	94.2	GTD EFF	ELECT. TYPE
F.L. PF	84.0	3/4 LD PF	81.0	1/2 LD PF	73.0	93.2	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
118 LB-FT	288	182 LB-FT 154%	306 LB-FT 259%	70

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK ²	MAX. LOAD WK ²	SAFE STALL TIME	STARTS/HOUR	APROX.	MOTOR WGT
69 dBA	78 dBA	11.8 LB-FT ²	11.8 LB-FT ²	15 SEC.	2	312	KG.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
FF-FLANGE-350	STANDARD	B35	HORIZONTAL	NO	NONE	NO	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE	SG S5-V100	STANDARD IEC	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL	BALL						
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
0.121	0.064	0.475	0.844	16.068	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: 11/27/2020	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

Date: 4/8/2020 TCA0302AE231GAA009

Customer: _____

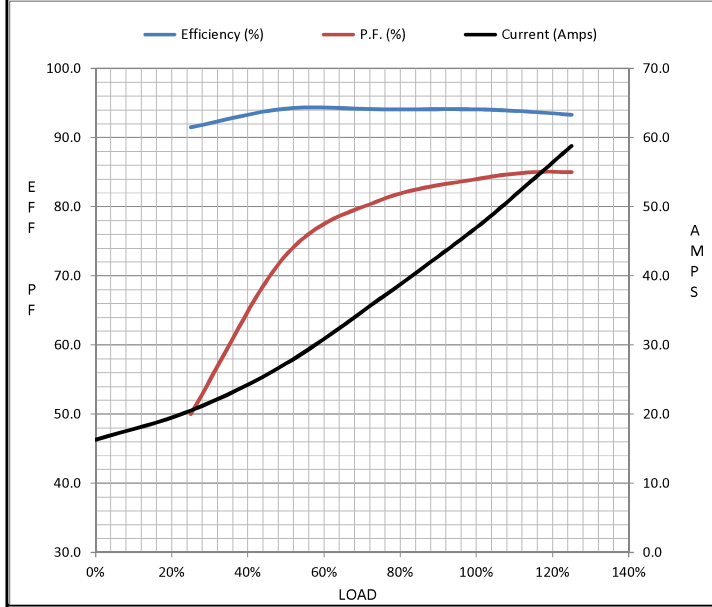
Attention: _____

Submittal

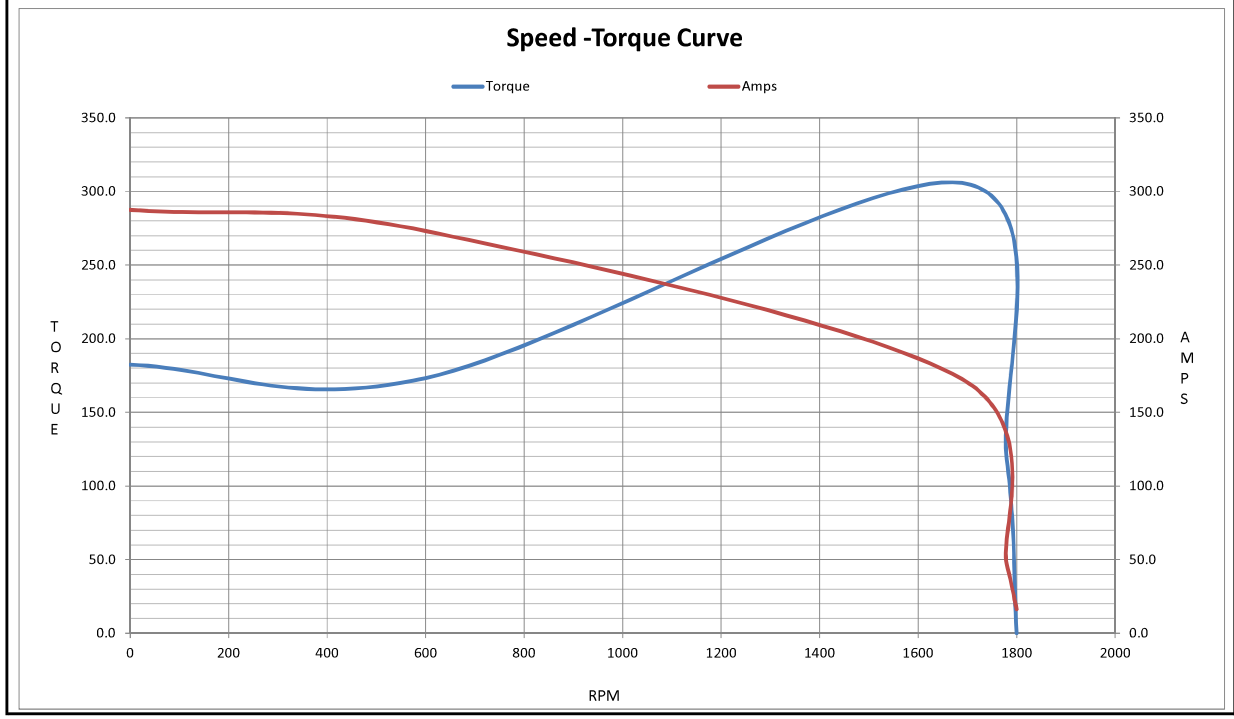
Submitted by: _____ Data @ 460 V

Motor Load Data									
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	16.3	20.5	27.3	36.8	47.0	54.0	58.8	288	
Torque (ft-lb)	0.00	29.2	58.6	88.2	118	136	148	182	
RPM	1800	1796	1791	1787	1780	1,778	1776	0	
Efficiency (%)		91.5	94.2	94.1	94.1	93.7	93.3		
P.F. (%)	5.0	50.0	73.0	81.0	84.0	85.0	85.0	63.4	

Motor Speed Data						Information Block				
	LR	Pull-Up	BD	Rated	Idle					
Speed (RPM)	0	600	1689	1780	1800	HP	40.0			
Current (Amps)	288	273	173	47.0	16.3	Sync. RPM	1800			
Torque (ft-lb)	182	173	306	118	0.00	Frame	200			
						Enclosure	TEFC			
						Construction	TCA 200LA04			
						Voltage	230/460#200/400 V			
						Frequency	60 Hz			
						Design	N			
						LR Code letter	G			
						Service Factor	1.15			
						Temp Rise @ FL	80 °C			
						Duty	CONT			
						Ambient	40 °C			
						Elevation	3,300 feet			
						Rotor/Shaft wk ²	11.8 Lb-Ft ²			
						Ref Wdg	IE3L2004201 NONE			
						Sound Pressure @ 1M	69 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
						0.1210	0.0640	0.4750	0.8440	16.0680



Information Block				
HP	40.0			
Sync. RPM	1800			
Frame	200			
Enclosure	TEFC			
Construction	TCA 200LA04			
Voltage	230/460#200/400 V			
Frequency	60 Hz			
Design	N			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	80 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	3,300 feet			
Rotor/Shaft wk ²	11.8 Lb-Ft ²			
Ref Wdg	IE3L2004201 NONE			
Sound Pressure @ 1M	69 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
0.1210	0.0640	0.4750	0.8440	16.0680



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 : TCA0302AE231GAA009

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

Catalog No : R846

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