

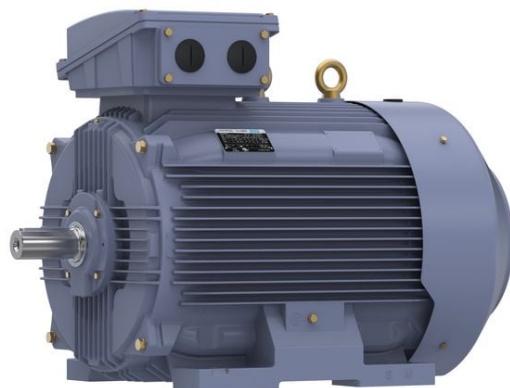
# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: TCA0753AE211GAA009

Catalog No: R508A

Cast Iron Motor, 100 & 75 HP, 3 Ph, 60 & 50 Hz, 230/460 & 200/400 V, 1200 & 1000 RPM, 315S Frame,  
TEFC



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**RegalRexnord**



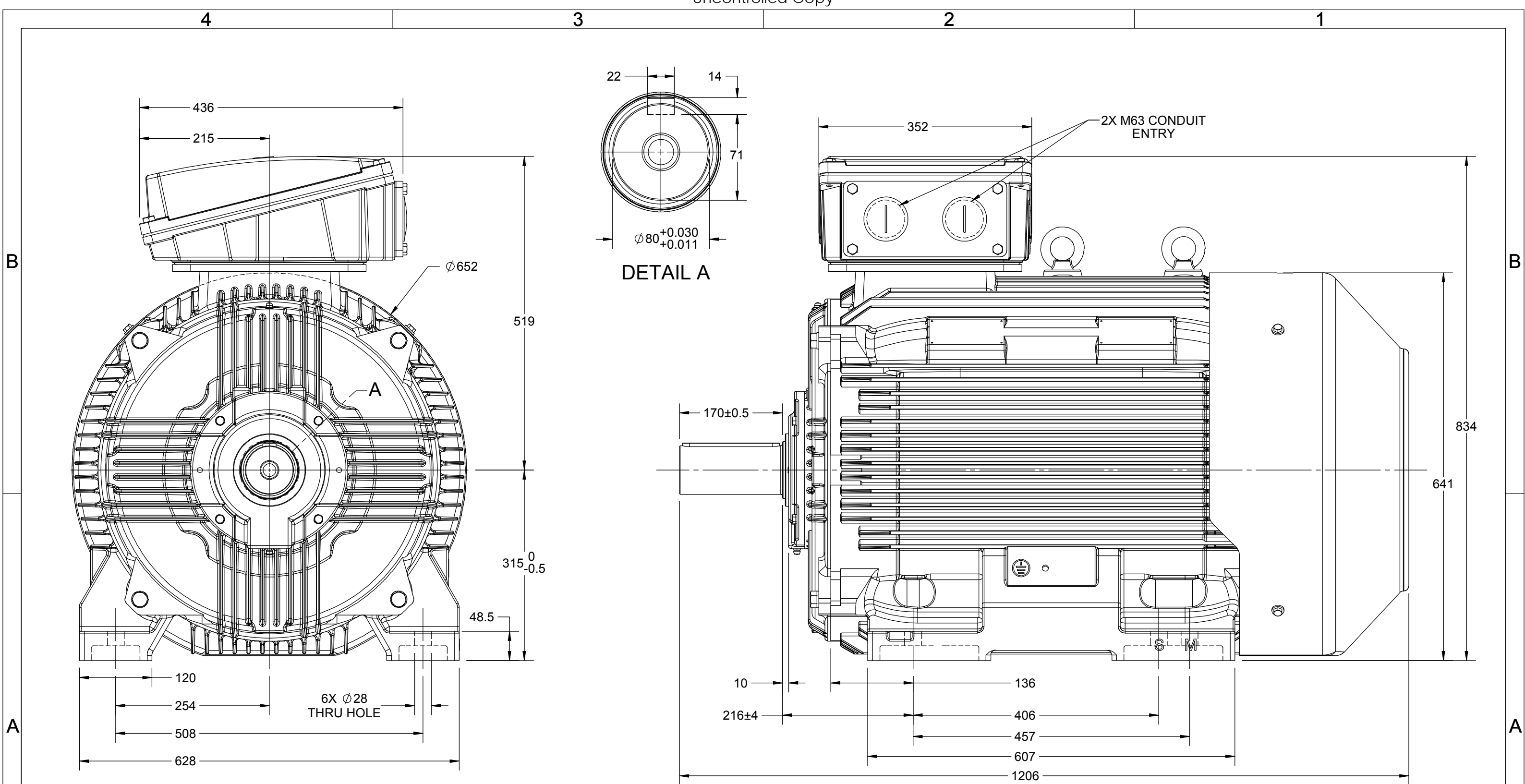
### Nameplate Specifications

Phase	<b>3</b>	Output HP	<b>100 &amp; 75 Hp</b>
Output KW	<b>75.0 &amp; 55.0 kW</b>	Voltage	<b>230/460 &amp; 200/400 V</b>
Speed	<b>1190 &amp; 995 rpm</b>	Service Factor	<b>1.15 &amp; 1.15</b>
Frame	<b>315S</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No Protection</b>	Efficiency	<b>95 &amp; 94.1 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 &amp; 50 Hz</b>
Current	<b>246/123 &amp; 220/110 A</b>	Power Factor	<b>81</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>N (IEC)</b>	KVA Code	<b>G</b>
Drive End Bearing Size	<b>6319</b>	Opp Drive End Bearing Size	<b>6319</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>

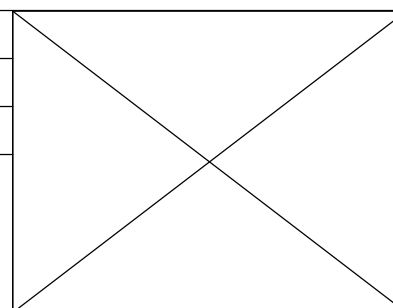
### Technical Specifications

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>.04 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>	Overall Length	<b>47.48 in</b>
Frame Length	<b>28.70 in</b>	Shaft Diameter	<b>3.150 in</b>
Shaft Extension	<b>6.69 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>SS557802</b>





DRAWING REVISION A	REVISION BY MSH	DATE 27/02/2019
ECO ECO-0162599	APPROVED BY JAY	DATE 27/02/2019
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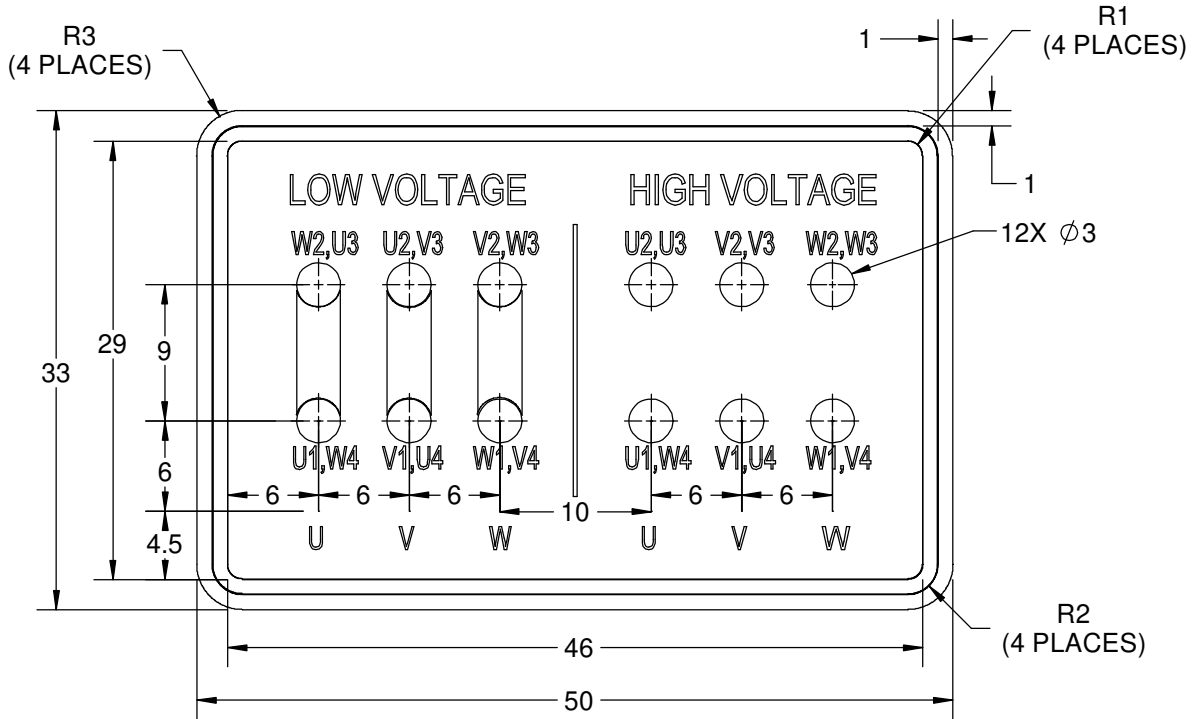


DRAWN BY MSH	<b>marathon™</b> Motors	
DATE 27/02/2019		
APPROVED BY JAY	DESCRIPTION <b>OUTLINE</b> IEC-315S-B3, MOTOR TYPE: NA-TEFC-CAST IRON	
DATE 27/02/2019	MATERIAL	PROCESS/FINISH
REFERENCE	SIZE B	DRAWING NUMBER SS557802
THIRD ANGLE PROJECTION	SHEET 1 OF 1	

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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>		DESCRIPTION <b>CONN DIAGRAM-NAMEPLATE</b>	
	DATE <b>16/11/2020</b>	MATERIAL	PROCESS/FINISH	
	REFERENCE	SIZE <b>A</b>	DRAWING NUMBER <b>8442000715</b>	SHEET <b>1 OF 1</b>
	THIRD ANGLE PROJECTION 			



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

DATA VOLTS: 460

**CERTIFICATION DATA SHEET**

CUSTOMER: \_\_\_\_\_  
ORDER #: \_\_\_\_\_  
CONN. DIAGRAM: 8442000677  
OUTLINE: SS557802  
WINDING: IE3L3156201 NONE 1  
SPEED: \_\_\_\_\_

CUSTOMER P.O. #: \_\_\_\_\_  
REFERENCE MODEL #: TCA0753AE211GAA009  
CAT #: R508A  
CUSTOMER PART #: \_\_\_\_\_  
MOUNTING: F3

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
100	75	1200	1190	315S	TEFC	TCA 315SA06	G	N

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV.(Ft.)
3	60/50	230/460#200/400	246/123&220/110	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	95.0	3/4 LD EFF	95.0	1/2 LD EFF	94.0	GTD EFF	ELECT. TYPE
F.L. PF	81.0	3/4 LD PF	76.0	1/2 LD PF	67.0	94.3	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
441 LB-FT	716	791 LB-FT 179%	1,035 LB-FT 235%	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
70 dBA	79 dBA	80.1 LB-FT <sup>2</sup>	80.1 LB-FT <sup>2</sup>	15 SEC.	2	821 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 BALL	ODE BALL	SG S5-V100	STANDARD IEC	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6319	6319						

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
0.028	0.017	0.218	0.315	5.422	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: 11/16/2020	FT-LB: NA	VOLTAGE: NONE	HZ: _____
FORM: 3531 REV_4 2/27/06	UL: V - LI,ME-INS,CONST UL REC		



Data Sheet

TCA0753AE211GAA009

Date: 5/29/2019  
Customer: \_\_\_\_\_  
Attention: \_\_\_\_\_

Submittal

Submitted by: Fareeda Dudekula

Data @ 460 V

Motor Load Data

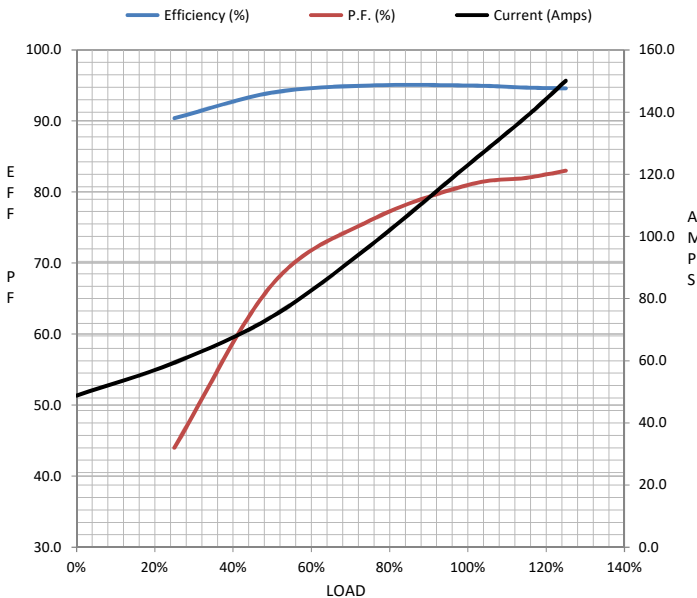
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	48.8	59.4	74.2	97.0	123	139	150	716
Torque (ft-lb)	0.00	110	220	330	441	508	553	791
RPM	1200	1198	1196	1193	1190	1,189	1188	0
Efficiency (%)		90.4	94.0	95.0	95.0	94.7	94.6	
P.F. (%)	5.0	44.0	67.0	76.0	81.0	82.0	83.0	63.4

Motor Speed Data

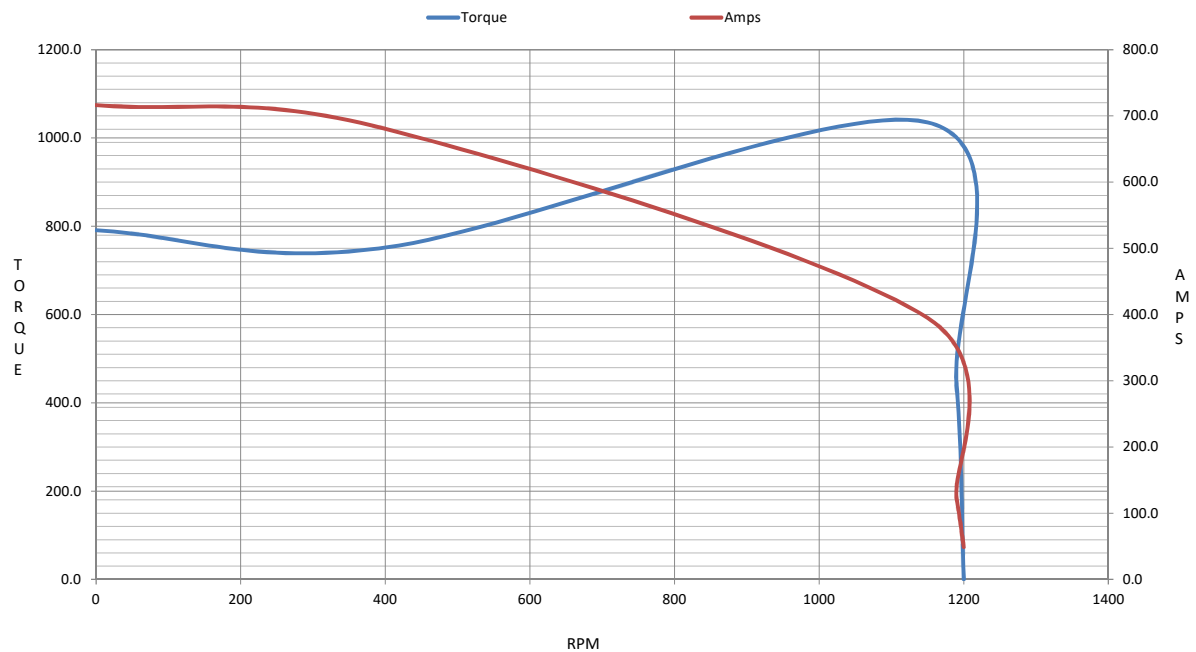
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	400	1150	1190	1200
Current (Amps)	716	681	395	123	48.8
Torque (ft-lb)	791	752	1,035	441	0.00

Information Block

HP	100.0			
Sync. RPM	1200			
Frame	315			
Enclosure	TEFC			
Construction	TCA 315S06			
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 <sup>2</sup>	80.1 Lb-Ft <sup>2</sup>			
Ref Wdg	IE3L3156201 NONE			
Sound Pressure @ 1M	70 dBA			
VFD Rating	CONSTANT 2:1/VARIABLE 10:1			
Outline Dwg	SS557802			
Conn. Diag	8442000677			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0280	0.0170	0.2180	0.3150	5.4220



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 : TCA0753AE211GAA009

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

Catalog No : R508A

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**