

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: TCA0551AE211GAA009

Catalog No: R503A

Cast Iron Motor, 75 & 60 HP, 3 Ph, 60 & 50 Hz, 230/460 & 200/400 V, 3600 & 3000 RPM, 250M Frame,
TEFC



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RegalRexnord

Nameplate Specifications

Phase	3	Output HP	75 & 60 Hp
Output KW	55.0 & 45.0 kW	Voltage	230/460 & 200/400 V
Speed	3575 & 2980 rpm	Service Factor	1.15 & 1.15
Frame	250M	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	93.6 & 94 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	166/83 & 156/78 A	Power Factor	89
Duty	Continuous	Insulation Class	F
Design Code	N (IEC)	KVA Code	F
Drive End Bearing Size	6314	Opp Drive End Bearing Size	6314
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	2	Rotation	Reversible
Resistance Main	.11 Ohms	Mounting	B3
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	IEC	Overall Length	37.05 in
Frame Length	18.11 in	Shaft Diameter	2.559 in
Shaft Extension	5.51 in	Assembly/Box Mounting	F3
Inverter Load	CONSTANT 2:1/VARIABLE 10:1		
Connection Drawing	8442000715	Outline Drawing	SS557723

4

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Uncontrolled Copy

2

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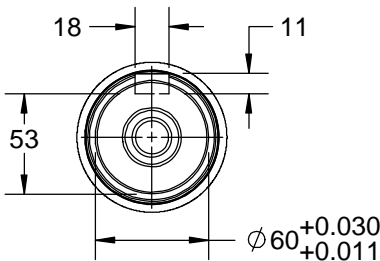
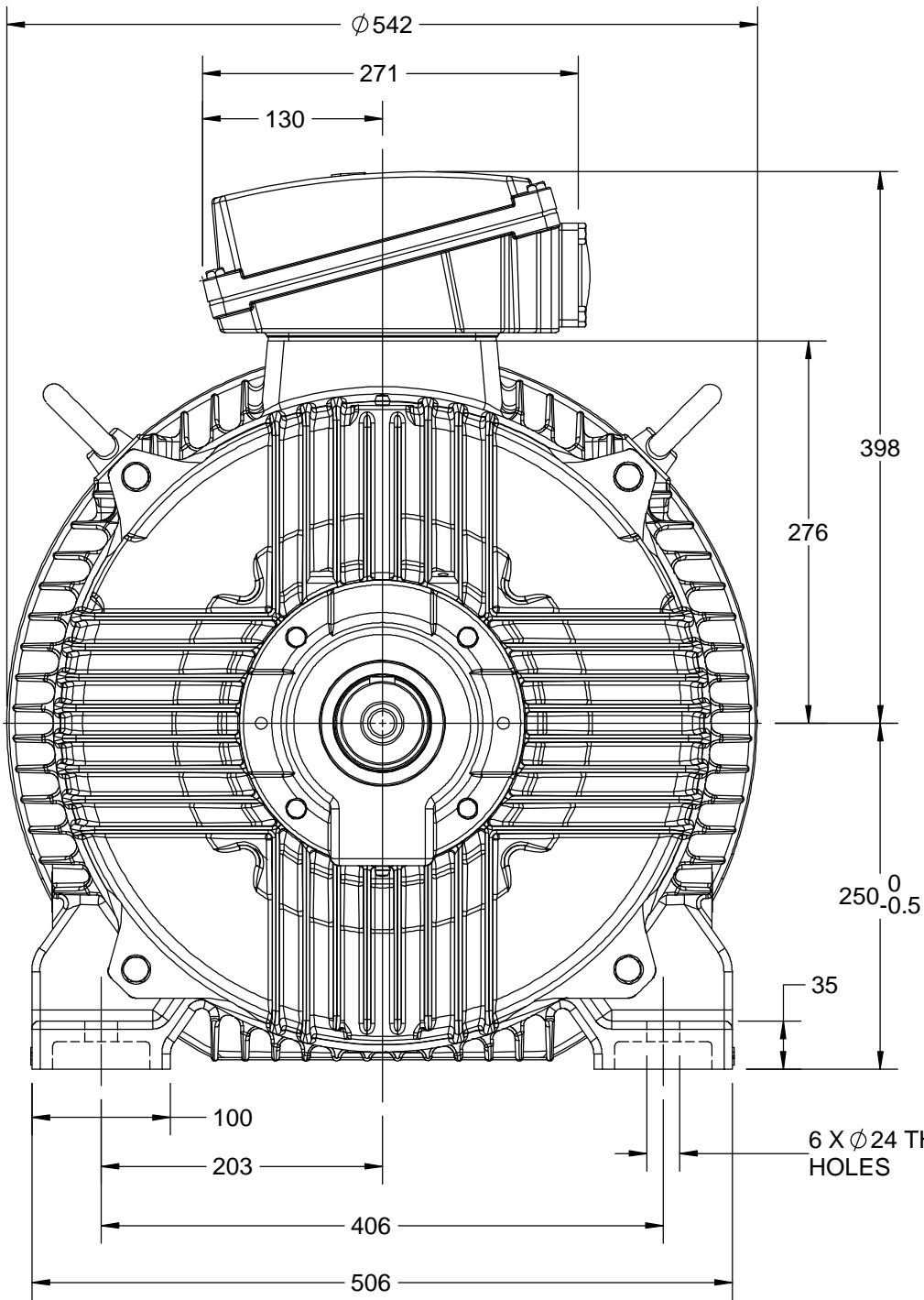
OUTLINE

B

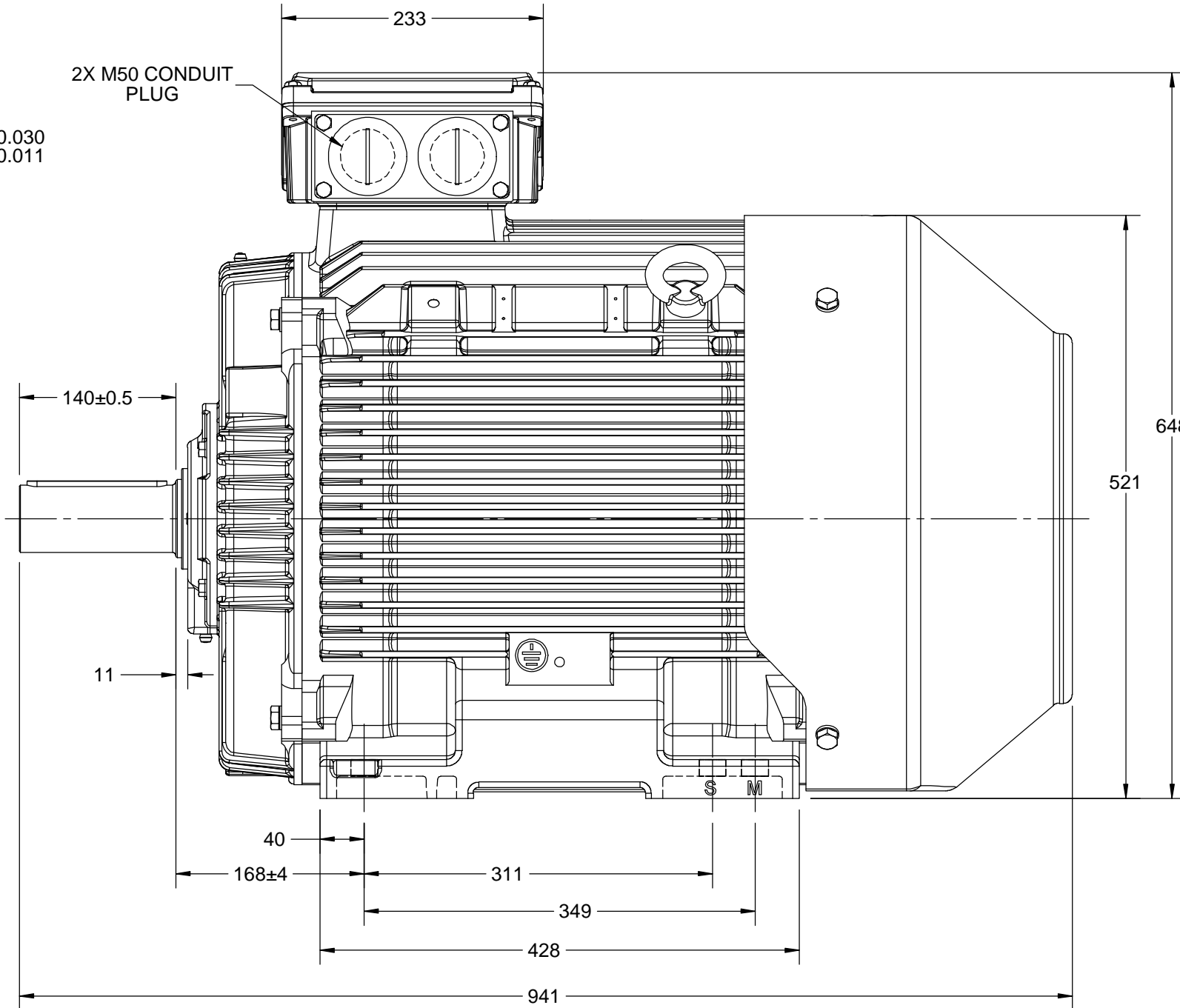
A

B

A



2X M50 CONDUIT PLUG



DRAWING REVISION A	REVISION BY LK	DATE 05/12/2018
ECO ECO-0157830	APPROVED BY JAY	DATE 05/12/2018
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DRAWN BY LK			
DATE 05/12/2018			
APPROVED BY JAY	DESCRIPTION OUTLINE		
DATE 05/12/2018	IEC-250FR-2P-B3 MOTOR TYPE: TEFC-CAST IRON		
REFERENCE	MATERIAL	PROCESS/FINISH	
THIRD ANGLE PROJECTION	SIZE B	DRAWING NUMBER SS557723	SHEET 1 OF 1

4

3

2

1

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DRAWING REVISION
A
 ECO
 ECO-0194685
 ECO DESCRIPTION

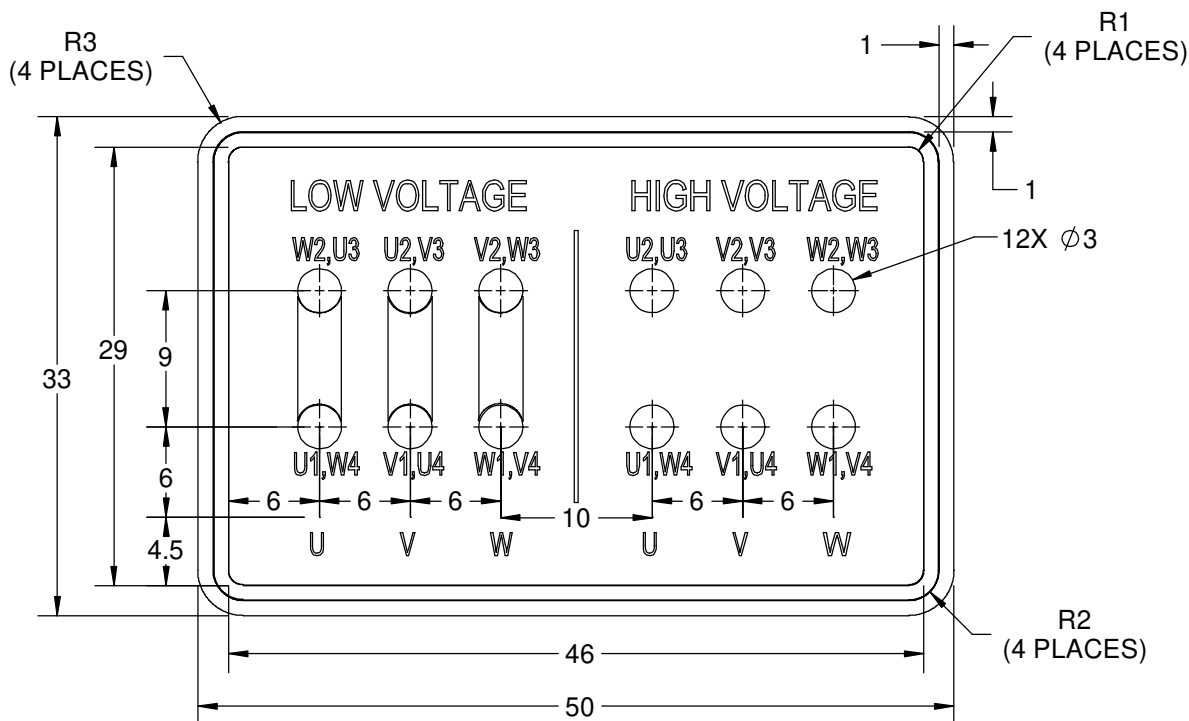
REVISION BY
S.MUDDA
 APPROVED BY
SUMANTA

DATE
 16/11/2020
 DATE
 16/11/2020

NEW DRAWING

GEOMETRIC TOLERANCE

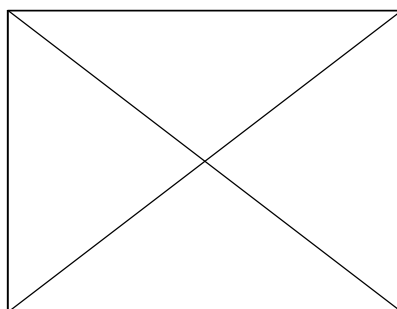
LINEAR DIM	>0~6	±0.1
	>6~30	±0.2
	>30~120	±0.3



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
 APPROVED BY
SUMANTA
 DATE
 16/11/2020
 REFERENCE

THIRD ANGLE
 PROJECTION



Regal Beloit America, Inc.

DESCRIPTION

CONN DIAGRAM-NAMEPLATE

MATERIAL

PROCESS/FINISH

SIZE
A

DRAWING NUMBER

8442000715

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: 8442000677
OUTLINE: SS557723
WINDING: IE3L2502201 NONE 1
SPEED: _____

CUSTOMER P.O. #: _____
REFERENCE MODEL #: TCA0551AE211GAA009
CAT #: R503B
CUSTOMER PART #: _____
MOUNTING: F3

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
75	56	3600	3575	250M	TEFC	TCA 250MA02	F	N

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (* C)	ELEV.(Ft.)
3	60/50	230/460#200/400	166/63&156/78	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	93.6	3/4 LD EFF	93.6	1/2 LD EFF	92.9	GTD EFF	ELECT. TYPE
F.L. PF	89.0	3/4 LD PF	87.0	1/2 LD PF	81.0	92.6	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (* C)
110 LB-FT	522	155 LB-FT 141%	287 LB-FT 261%	80

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK ²	MAX. LOAD WK ²	SAFE STALL TIME	STARTS/HOUR	APROX.	MOTOR WGT
79 dBA	88 dBA	14.8 LB-FT ²	14.8 LB-FT ²	15 SEC.	2	515	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 ODE						
BALL BALL	SG S5-V100	STANDARD IEC	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6314 6314						

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
0.068	0.023	0.295	0.284	10.919	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

PREPARED BY: _____ DATE: 11/10/2020	BRAKE: NONE NONE NONE FT-LB: NA VOLTAGE: NONE UL: V - LI,ME-INS,CONST UL REC
FORM: 3531 REV_4 2/27/06	HZ: _____

REGAL®

Data Sheet

TCA0551AE211GAA009

Date: 5/29/2019

Customer: _____

Attention: _____

Submitted by: Fareeda Dudekula

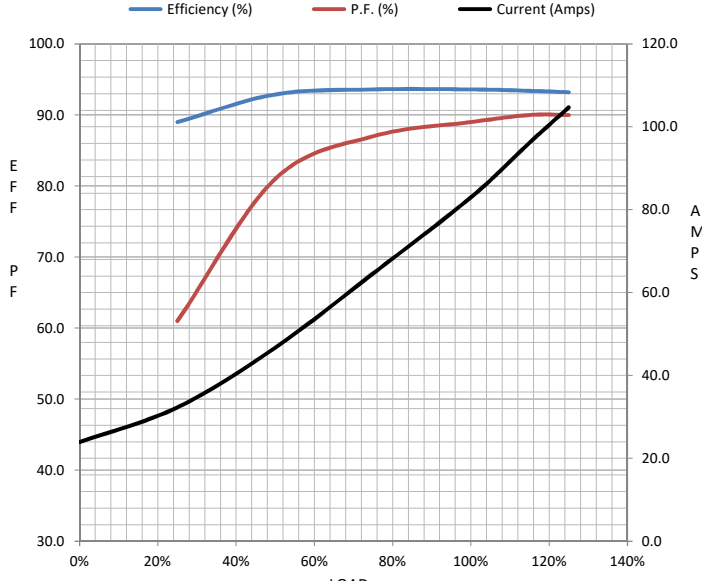
Submittal

Data @ 460 V

Motor Load Data

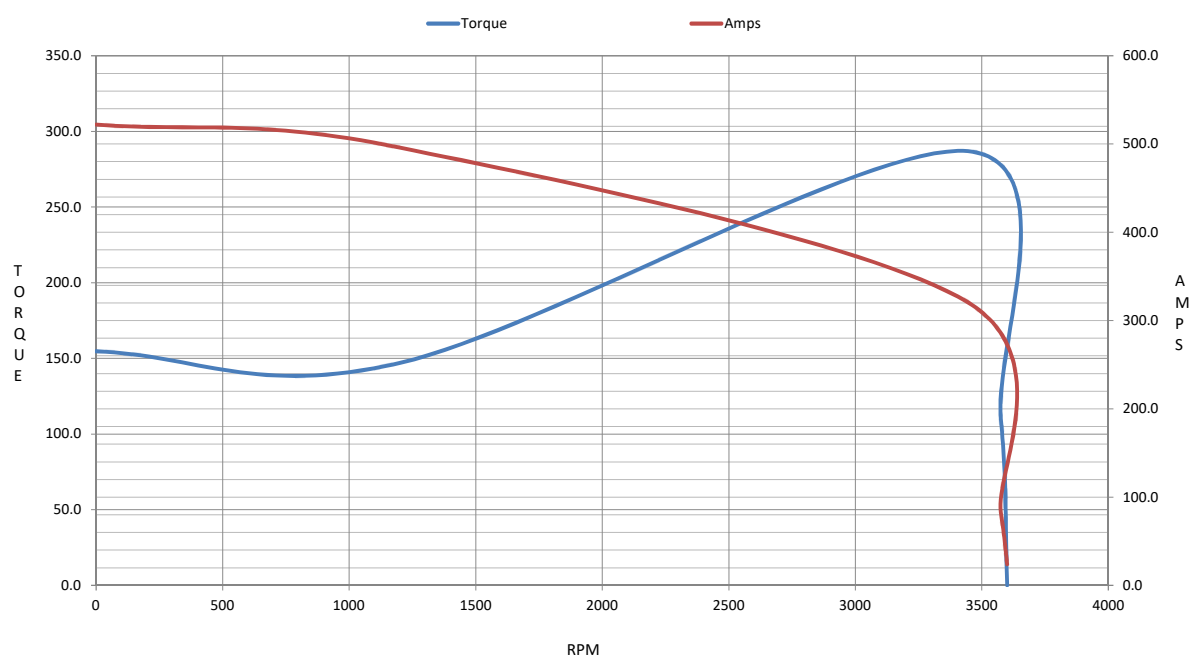
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	23.9	32.3	46.7	64.6	83.0	96.2	105	522	
Torque (ft-lb)	0.00	27.4	54.9	82.5	110	127	138	155	
RPM	3600	3594	3588	3582	3575	3,571	3568	0	
Efficiency (%)		89.0	92.9	93.6	93.6	93.4	93.2		
P.F. (%)	8.0	61.0	81.0	87.0	89.0	90.0	90.0	63.4	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle					
Speed (RPM)	0	1200	3445	3575	3600					
Current (Amps)	522	496	321	83.0	23.9					
Torque (ft-lb)	155	147	287	110	0.00					
<div><div>— Efficiency (%)</div><div>— P.F. (%)</div><div>— Current (Amps)</div></div>						Information Block				
						HP	75.0			
						Sync. RPM	3600			
						Frame	250			
						Enclosure	TEFC			
						Construction	TCA 250MA02			
						Voltage	230/460#200/400	V		
						Frequency	60	Hz		
						Design	N			
						LR Code letter	F			
						Service Factor	1.15			
						Temp Rise @ FL	80	° C		
						Duty	CONT			
						Ambient	40	° C		
						Elevation	3,300	feet		
						Rotor/Shaft wk ²	14.8	Lb-Ft ²		
						Ref Wdg	IE3L2502201	NONE		
Sound Pressure @ 1M	79	dBA								
VFD Rating	CONSTANT 2:1/VARIABLE 10:1									
Outline Dwg	SS557723									
Conn. Diag	8442000677									
Additional Specifications:										
0										
0										
EQUIV CKT (OHMS / PHASE)										
R1	R2	X1	X2	Xm						
0.0680	0.0230	0.2950	0.2840	10.9190						

IEC

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 : TCA0551AE211GAA009

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

Catalog No : R503A

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