

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: TCA0552AE211GAA009

Catalog No: R504A

Cast Iron Motor, 75 & 60 HP, 3 Ph, 60 & 50 Hz, 230/460 & 200/400 V, 1800 & 1500 RPM, 250M Frame,
TEFC



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RegalRexnord

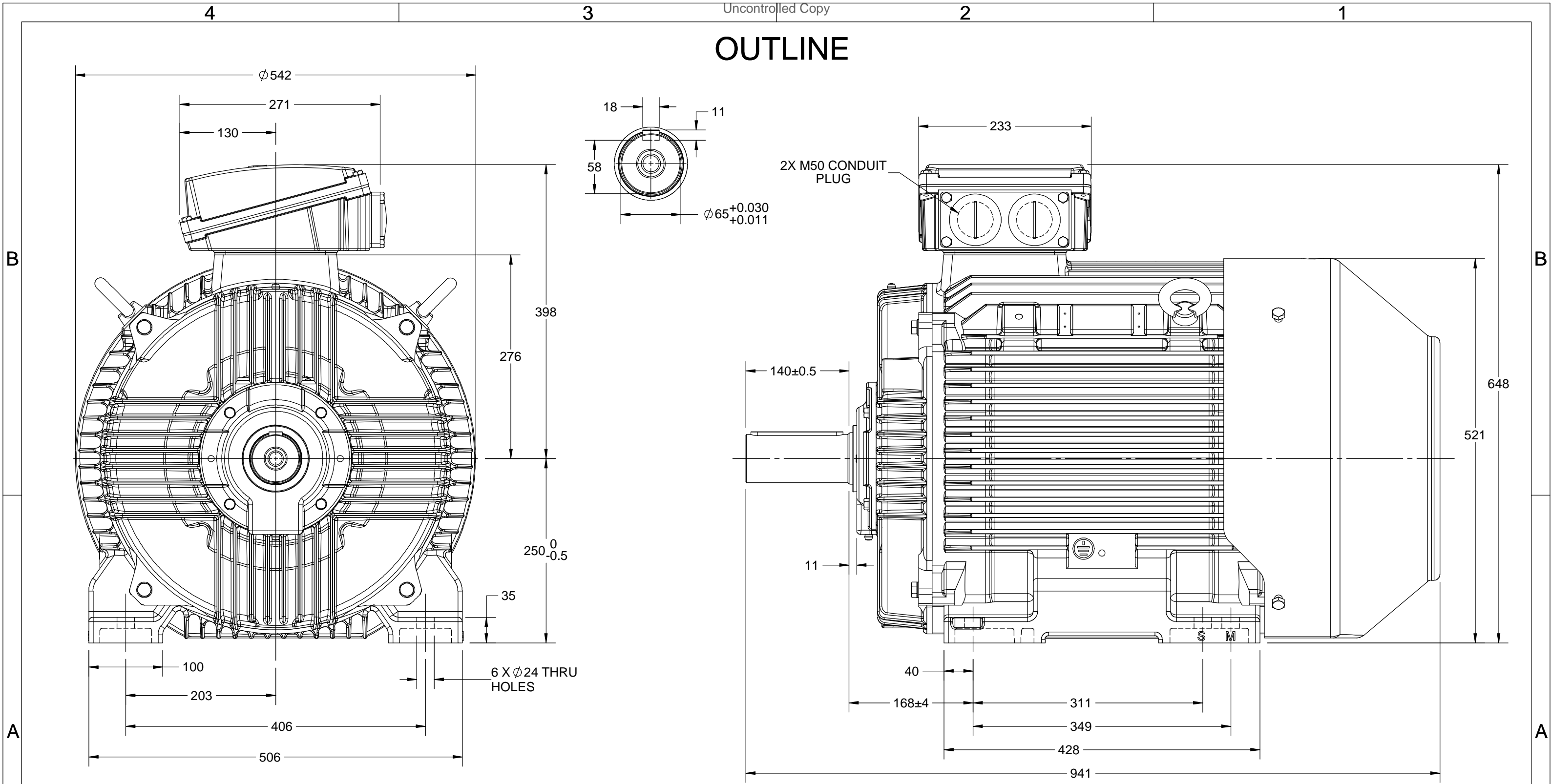
Nameplate Specifications

Phase	3	Output HP	75 & 60 Hp
Output KW	55.0 & 45.0 kW	Voltage	230/460 & 200/400 V
Speed	1790 & 1490 rpm	Service Factor	1.15 & 1.15
Frame	250M	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	95.4 & 94.2 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	174/87 & 168/84 A	Power Factor	84
Duty	Continuous	Insulation Class	F
Design Code	N (IEC)	KVA Code	J
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	4	Rotation	Reversible
Resistance Main	.0687 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	SS557724

OUTLINE



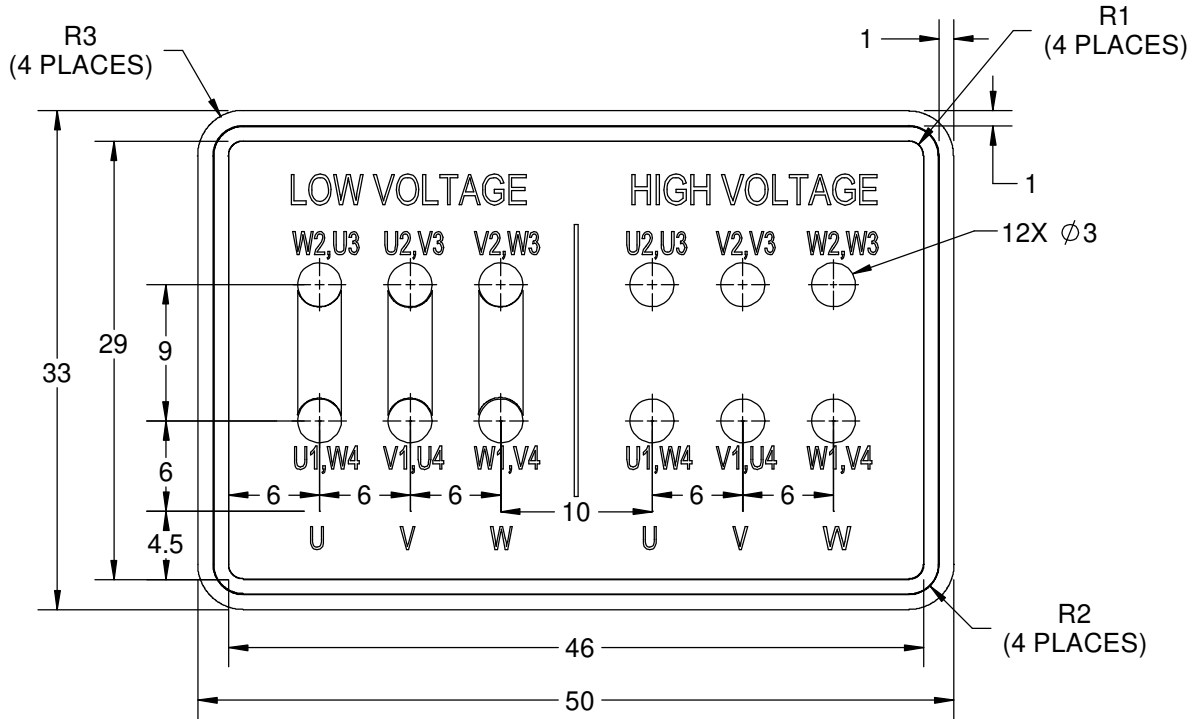
DRAWING REVISION A	REVISION BY LK	DATE 05/12/2018
ECO ECO-0157830	APPROVED BY JAY	DATE 05/12/2018
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DRAWN BY LK	marathon™ Motors	
DATE 05/12/2018		
APPROVED BY JAY	DESCRIPTION OUTLINE IEC-250FR-4P-B3 MOTOR TYPE: TEFC-CAST IRON	
DATE 05/12/2018	MATERIAL	PROCESS/FINISH
REFERENCE	SIZE B	DRAWING NUMBER SS557724
THIRD ANGLE PROJECTION		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		

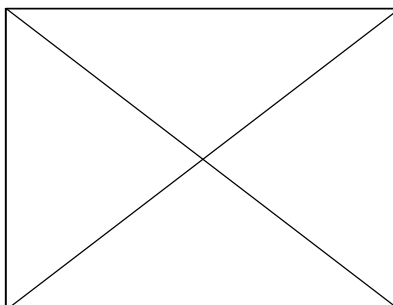
GEOMETRIC TOLERANCE		
LINEAR DIM	>0~6	±0.1
	>6~30	±0.2
	>30~120	±0.3





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



DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: 8442000677
 OUTLINE: SS557724
 WINDING: IE3L2504201 NONE 1

REFERENCE MODEL #: TCA0552AE211GAA009
 CAT #: R504B

MOUNTING: F3

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
75	55.00	1800	1790	250M	TEFC	TFN	J	N

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV. (Ft)
3	60/50	230/460#200/400	174/87&168/84	LINE OR INVERTER	CONT	F	1.15/1.15	40	3300

F.L. EFF	95.4	3/4 LD EFF	95.4	1/2 LD EFF	94.0	GTD EFF	ELECT. TYPE
F.L. PF	84.0	3/4 LD PF	78.0	1/2 LD PF	68.0	94.7	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
220 LB-FT	694	508 LB-FT 231%	750 LB-FT 341%	80

SOUND PRESSURE	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX. MOTOR
72 dBA	81 dBA	36.3 LB-FT²	36.3 LB-FT²	15 SEC.	2	590 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	SG S5-V100	STANDARD IEC	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL	BALL						
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)
0.042	0.019	0.17	0.299	7.061	0.150

* N O T E S *	If Inverter equals NONE, contact factory for further information	
	INVERTER TORQUE: CONSTANT 2:1/VARIABLE 10:1	
	INV. HP SPEED RANGE: NONE	
	ENCODER: NONE	
	NONE PPR	

PREPARED BY:	BRAKE: NONE
DATE: 9/22/2021	NONE NONE
	FT-LB: NA
	VOLTAGE: NONE HZ:

FORM: 3531 REV_4 2/27/06
 ** Subject to change without notice.

Data Sheet

TCA0552AE211GAA009

Date: 5/29/2019
Customer: _____
Attention: _____

Submittal

Submitted by: Fareeda Dudekula

Data @ 460 V

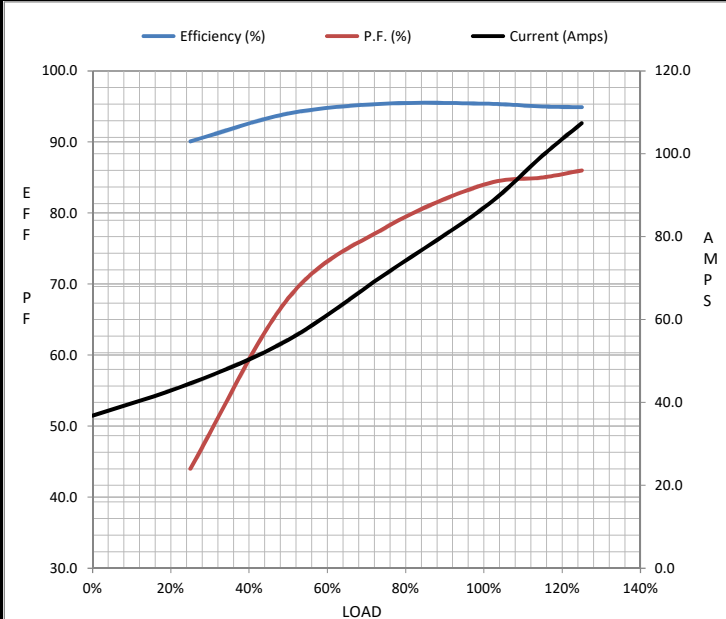
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	36.8	44.6	55.1	71.1	87.0	99.6	107	694
Torque (ft-lb)	0.00	54.8	110	165	220	254	276	508
RPM	1800	1797	1795	1792	1790	1,787	1786	0
Efficiency (%)		90.1	94.0	95.4	95.4	95.0	94.9	
P.F. (%)	5.0	44.0	68.0	78.0	84.0	85.0	86.0	63.4

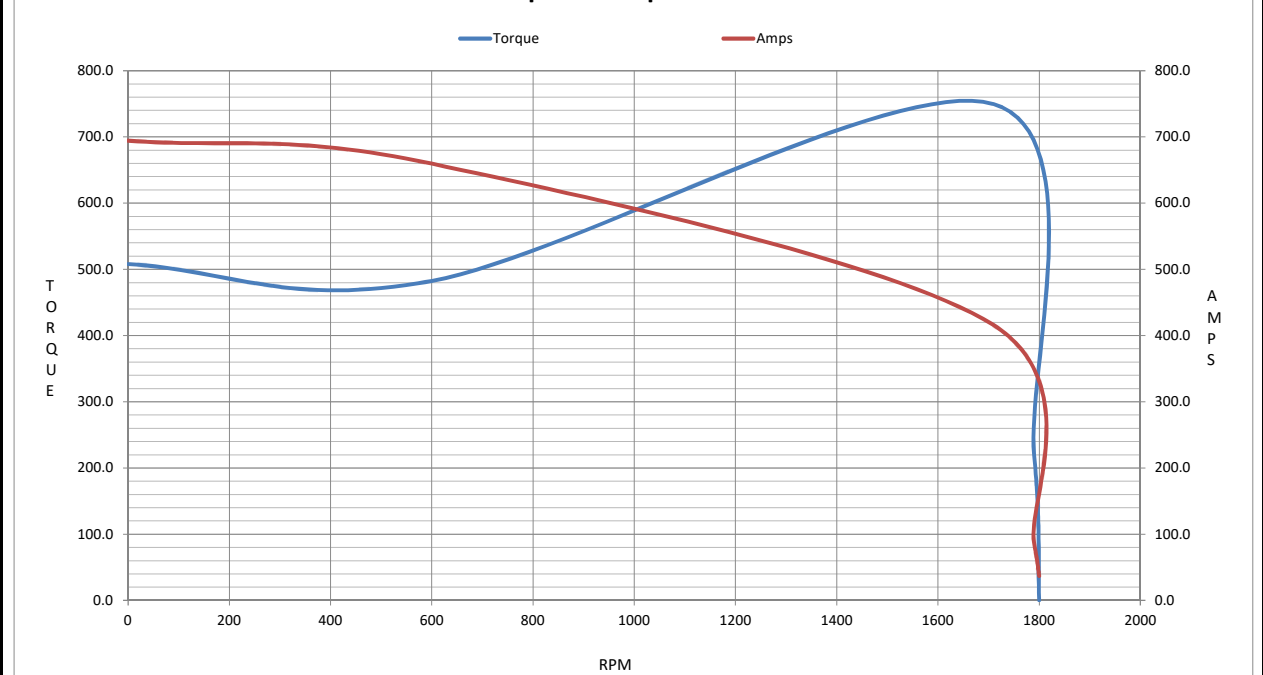
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1709	1790	1800
Current (Amps)	694	660	416	87.0	36.8
Torque (ft-lb)	508	483	750	220	0.00

Information Block				
HP	75.0			
Sync. RPM	1800			
Frame	250			
Enclosure	TEFC			
Construction	TFN			
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 ²	36.3 Lb-Ft ²			
Ref Wdg	IE3L2504201 NONE			
Sound Pressure @ 1M	72 dBA			
VFD Rating	CONSTANT 2:1/VARIABLE 10:1			
Outline Dwg	SS557724			
Conn. Diag	8442000677			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0420	0.0190	0.1700	0.2990	7.0610



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 : TCA0552AE211GAA009

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

Catalog No : R504A

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