

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: TCA2P23AE251GAA009

Catalog No: R923

TerraMAX® Cast Iron Motor, 3 & 2 HP, 3 Ph, 60 & 50 Hz, 230/460 & 200/400 V, 1200 & 1000 RPM,  
112M Frame, TEFC



Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E

**RegalRexnord**

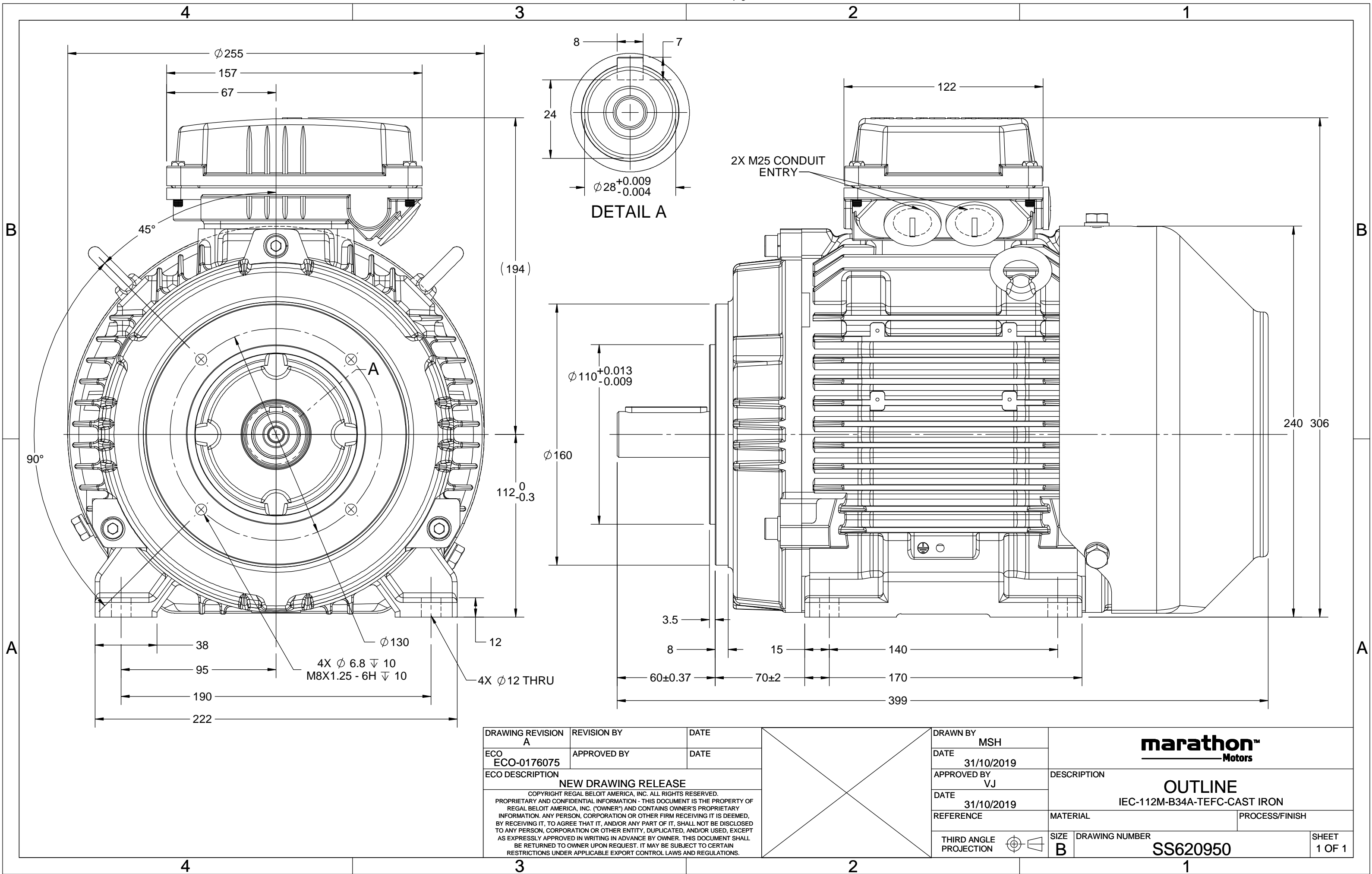
### Nameplate Specifications

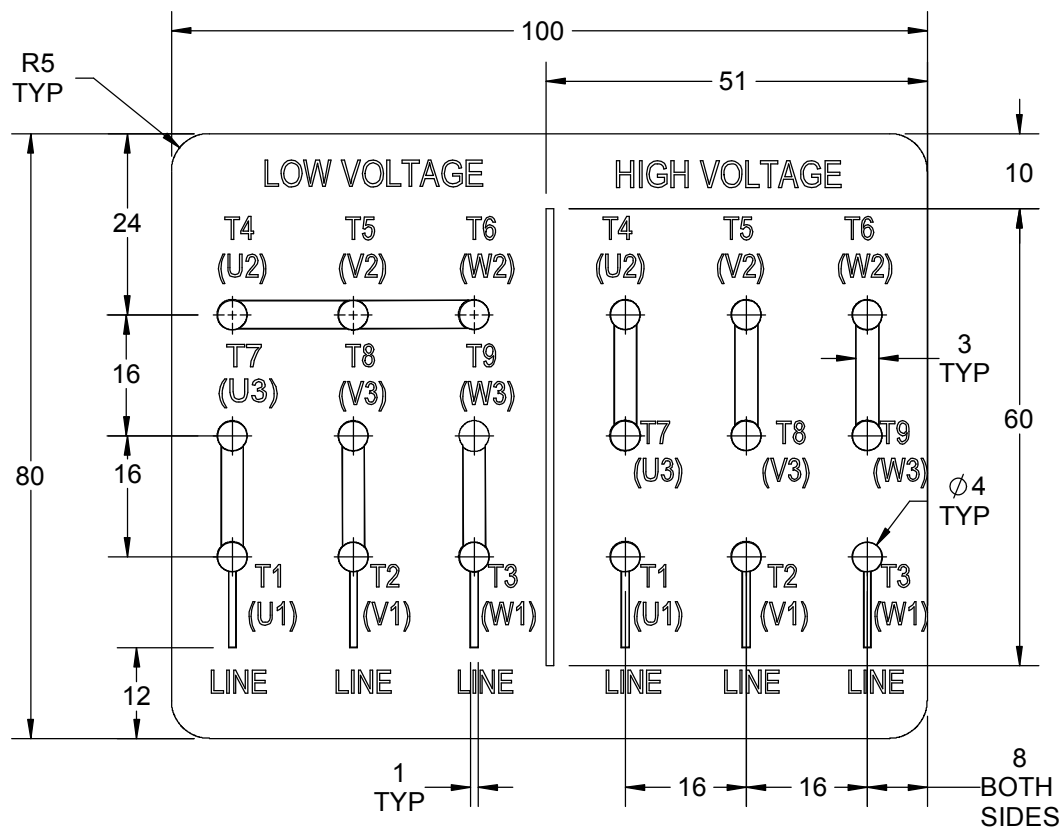
Phase	3	Output HP	3 & 2 Hp
Output KW	2.2 & 1.5 kW	Voltage	230/460 & 200/400 V
Speed	1170 & 980 rpm	Service Factor	1.15 & 1.15
Frame	112M	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	89.5 & 82.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	8.8/4.4 & 8.2/4.1 A	Power Factor	70
Duty	Continuous	Insulation Class	F
Design Code	N (IEC)	KVA Code	M
Drive End Bearing Size	6306	Opp Drive End Bearing Size	6206
UL	Recognized	CSA	N
CE	Y	IP Code	55
Number of Speeds	1	Efficiency Class	IE3

### Technical Specifications



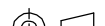
Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	6	Rotation	Reversible
Resistance Main	3.31 Ohms	Mounting	B3
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	IEC	Shaft Diameter	28.000 in
Assembly/Box Mounting	F3	Inverter Load	CONSTANT 2:1/VARIABLE 10:1
Outline Drawing	SS620950	Connection Drawing	8442000675

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:06/22/2023





1. PRESSURE-SENSITIVE ADHESIVE TAPE COATED WITH ANTI-ADHESIVE.
2. YELLOW COLOR BACK GROUND LETTERS WILL BE 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.

DRAWING REVISION B		REVISION BY NIV		DATE 05/03/2019			DRAWN BY NIV		 Regal Beloit America, Inc.					
ECO ECO-0162986		APPROVED BY JAY		DATE 05/03/2019			DATE 29/01/2019							
ECO DESCRIPTION							APPROVED BY JAY		DESCRIPTION  CONNECTION DIAGRAM 9 LEADS- STAR CONNECTON					
UPDATED DRAWING  COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.							DATE 29/01/2019							
							REFERENCE						MATERIAL	
						THIRD ANGLE PROJECTION			SIZE A		DRAWING NUMBER 8442000675		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: 8442000675  
OUTLINE: SS620950  
WINDING: IE3L1126201 NONE 1  
SPEED: \_\_\_\_\_

CUSTOMER P.O. #: \_\_\_\_\_  
REFERENCE MODEL #: TCA2P23AE251GAA009  
CAT #: R923  
CUSTOMER PART #: \_\_\_\_\_  
MOUNTING: F3

### TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
3	2.2	1200	1170	112M	TEFC	TCA 112MA06	M	N

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (* C)	ELEV.(Ft.)
3	60/50	230/460#200/400	8.8/4.4&8.2/4.1	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	89.5	3/4 LD EFF	89.5	1/2 LD EFF	83.4	GTD EFF	ELECT. TYPE
F.L. PF	70.0	3/4 LD PF	61.0	1/2 LD PF	50.0	87.9	SQ CAGE INV RATED

F.L. TORQUE		LR AMPS @ 460 V		L.R. TORQUE		B.D. TORQUE		F.L. RISE (° C)		
13.5	LB-FT	38.2		43.6	LB-FT 323%	51.4	LB-FT 381%	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
55 dBA	64 dBA	0.50 LB-FT <sup>2</sup>	0.5 LB-FT <sup>2</sup>	15 SEC.	2	59	KG.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
FT-FLANGE-130	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	POLYREX EM	STANDARD IEC	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6306 6206						

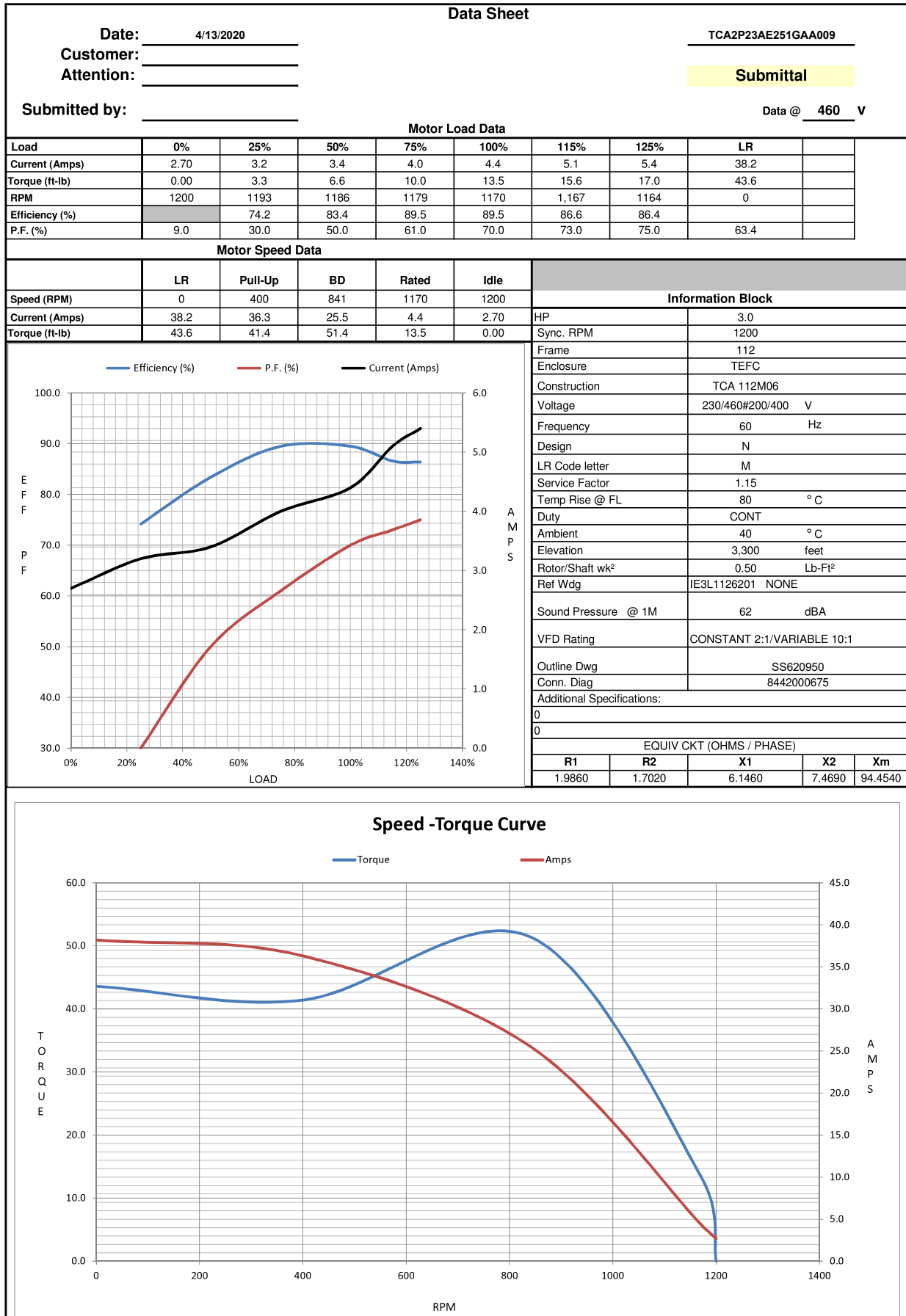
THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
1.986	1.702	6.146	7.469	94.454	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: 11/27/2020	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®



## 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 : TCA2P23AE251GAA009

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

Catalog No : R923

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**