

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: TCA2P22AE231GAA009

Catalog No: R822

TerraMAX® Cast Iron Motor, 3 & 2 HP, 3 Ph, 60 & 50 Hz, 230/460 & 200/400 V, 1800 & 1500 RPM,  
100L Frame, TEFC



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**RegalRexnord**

### Nameplate Specifications

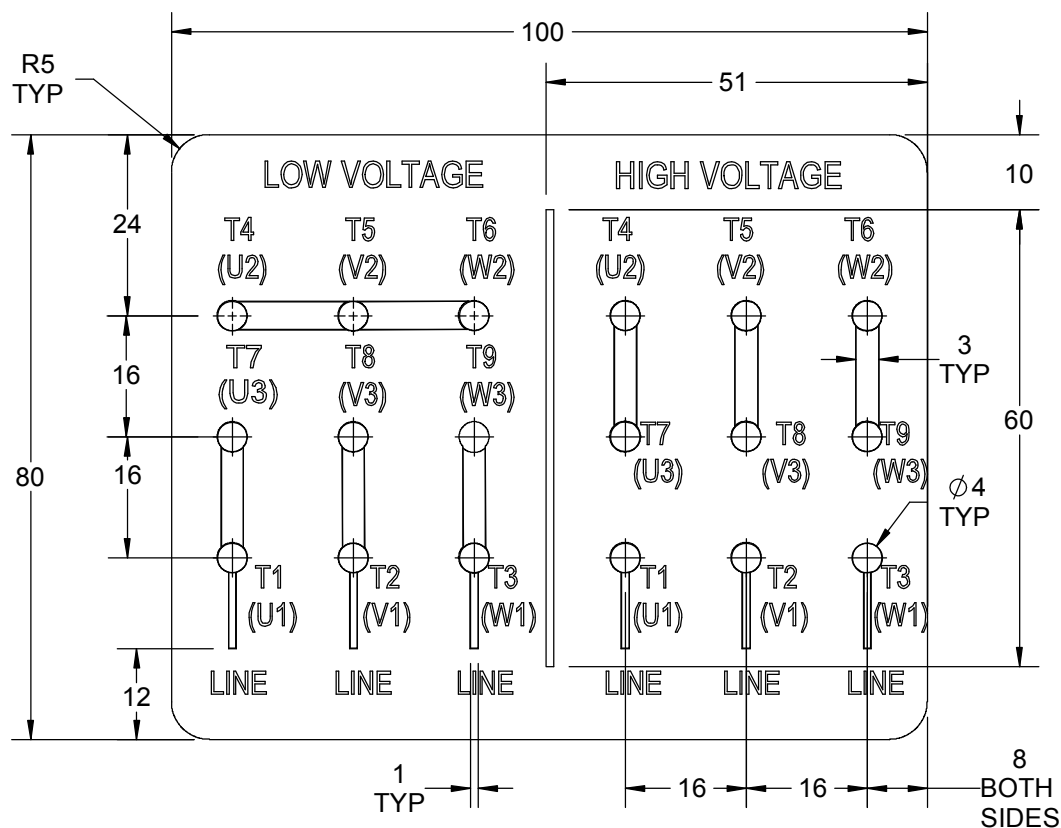
Phase	3	Output HP	3 & 2 Hp
Output KW	2.2 & 1.5 kW	Voltage	230/460 & 200/400 V
Speed	1770 & 1475 rpm	Service Factor	1.15 & 1.15
Frame	100L	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	89.5 & 85.3 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	7.8/3.9 & 7/3.5 A	Power Factor	80
Duty	Continuous	Insulation Class	F
Design Code	N (IEC)	KVA Code	M
Drive End Bearing Size	6206	Opp Drive End Bearing Size	6206
UL	Recognized	CSA	N
CE	Y	IP Code	55
Number of Speeds	1	Efficiency Class	IE3

### Technical Specifications



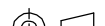
Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	3.79 Ohms	Mounting	B3
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	IEC	Shaft Diameter	28.000 in
Assembly/Box Mounting	F3	Inverter Load	CONSTANT 2:1/VARIABLE 10:1
Connection Drawing	8442000675	Outline Drawing	SS620872

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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								
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							DATE 29/01/2019								
							REFERENCE						MATERIAL		PROCESS/FINISH
							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: SS620872  
WINDING: IE3L1004201 NONE 1  
SPEED: \_\_\_\_\_

CUSTOMER P.O. #: \_\_\_\_\_  
REFERENCE MODEL #: TCA2P22AE231GAA009  
CAT #: R822  
CUSTOMER PART #: \_\_\_\_\_  
MOUNTING: F3

### TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
3	2.2	1800	1770	100L	TEFC	TCA 100LA04	M	N

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (* C)	ELEV.(Ft.)
3	60/50	230/460#200/400	7.8/3.9&7/3.5	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	89.5	3/4 LD EFF	89.5	1/2 LD EFF	85.3	GTD EFF	ELECT. TYPE
F.L. PF	80.0	3/4 LD PF	73.0	1/2 LD PF	62.0	87.9	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (* C)
8.9 LB-FT	39.0	26.8 LB-FT 301%	33.7 LB-FT 379%	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	0.34 LB-FT <sup>2</sup>	0.34 LB-FT <sup>2</sup>	10 SEC.	2	46	KG.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
FF-FLANGE-215	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
6206 6206						

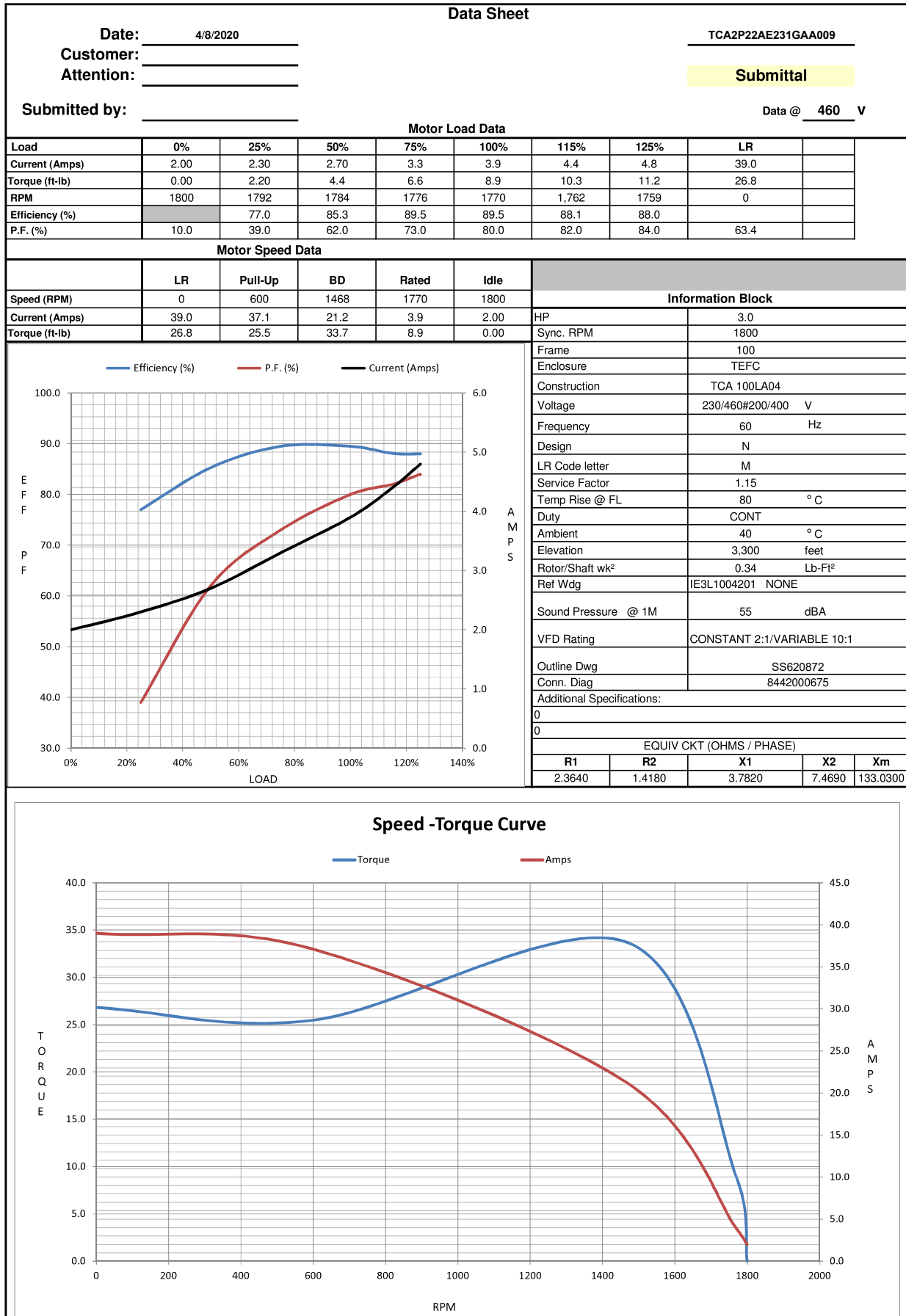
THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
2.364	1.418	3.782	7.469	133.030	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 : TCA2P22AE231GAA009

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

Catalog No : R822

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**