

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: TCA7P51AE251GAA009

Catalog No: R930

TerraMAX® Cast Iron Motor, 10 & 7.50 HP, 3 Ph, 60 & 50 Hz, 230/460 & 200/400 V, 3600 & 3000 RPM,
132S Frame, TEFC



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RegalRexnord

Nameplate Specifications

| | | | |
|------------------------|-----------------------|----------------------------|-----------------------------|
| Phase | 3 | Output HP | 10 & 7.50 Hp |
| Output KW | 7.5 & 5.6 kW | Voltage | 230/460 & 200/400 V |
| Speed | 3540 & 2950 rpm | Service Factor | 1.15 & 1.15 |
| Frame | 132S | Enclosure | Totally Enclosed Fan Cooled |
| Thermal Protection | No Protection | Efficiency | 90.2 & 89.2 % |
| Ambient Temperature | 40 °C | Frequency | 60 & 50 Hz |
| Current | 23.8/11.9 & 21/10.5 A | Power Factor | 88 |
| Duty | Continuous | Insulation Class | F |
| Design Code | N (IEC) | KVA Code | J |
| Drive End Bearing Size | 6308 | Opp Drive End Bearing Size | 6208 |
| 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 | 1.24 Ohms | Mounting | B3 |
| Motor Orientation | Horizontal | Drive End Bearing | Ball |
| Opp Drive End Bearing | Ball | Frame Material | Cast Iron |
| Shaft Type | IEC | Shaft Diameter | 38.000 in |
| Assembly/Box Mounting | F3 | Inverter Load | CONSTANT 2:1/VARIABLE 10:1 |
| Connection Drawing | 8442000715 | Outline Drawing | SS620951 |

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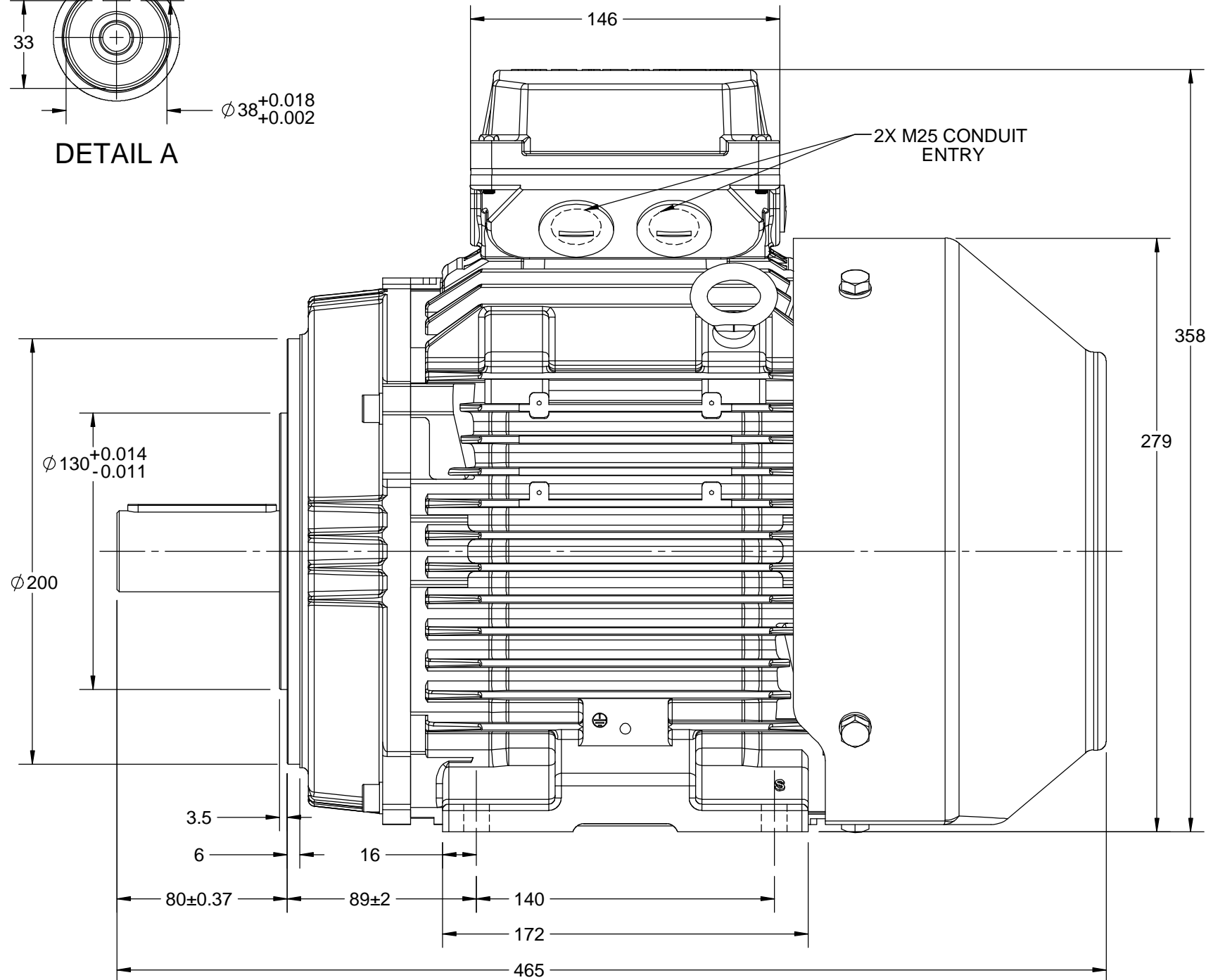
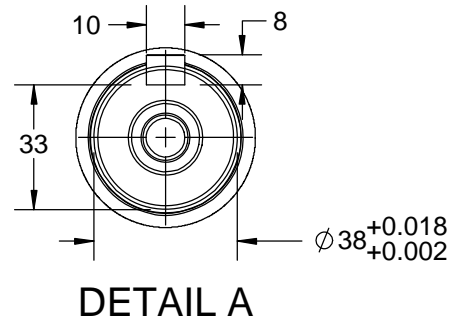
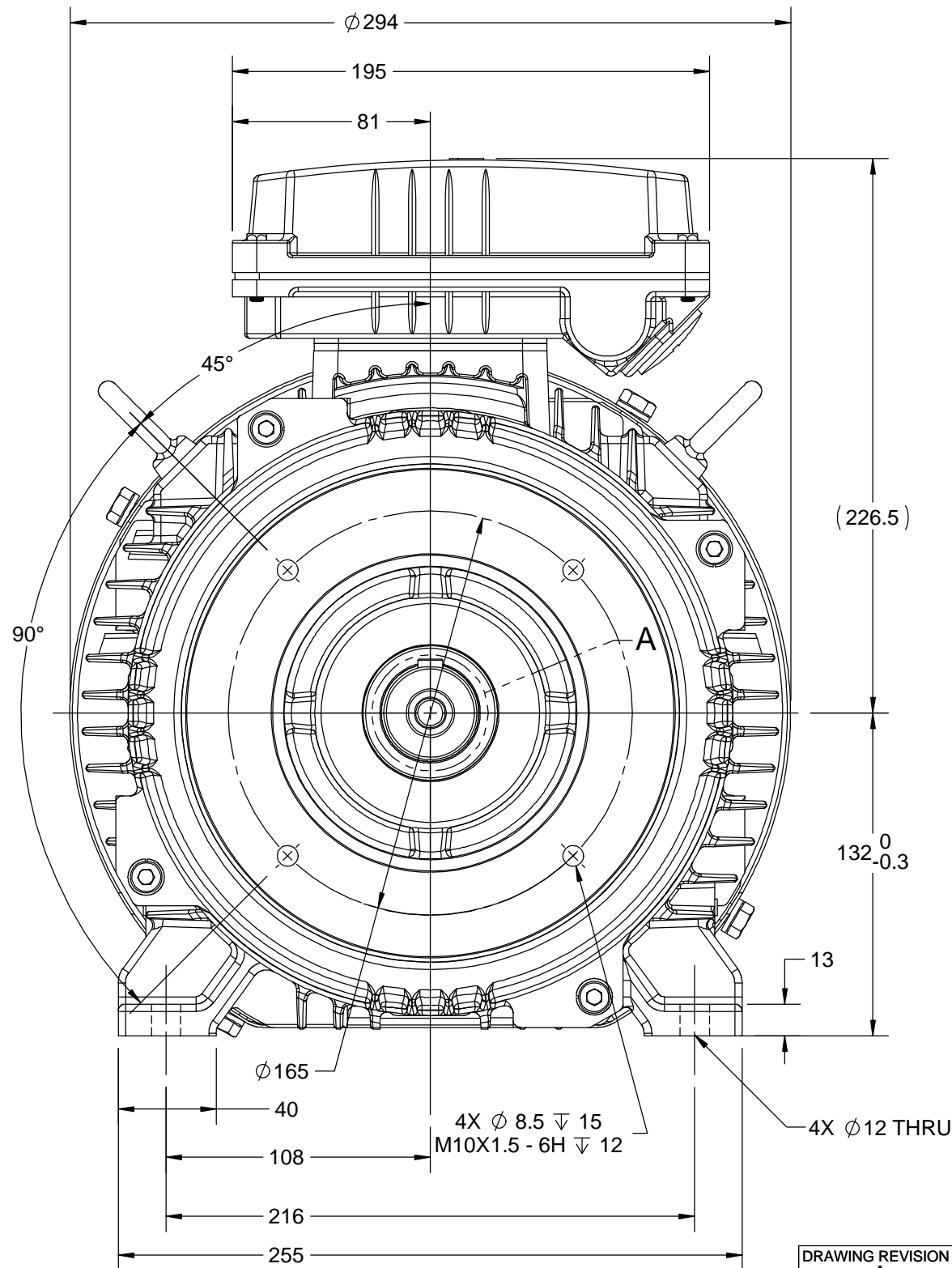
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B


B

A

A



| DRAWING REVISION | REVISION BY | DATE |
|--|-------------|------|
| A | | |
| ECO | APPROVED BY | DATE |
| ECO-0176075 | | |
| ECO DESCRIPTION | | |
| NEW DRAWING RELEASE | | |
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| | | | | | |
|---|--|---|----------------|----------------|-----------------|
| DRAWN BY MSH | | <div>marathon™ Motors</div> | | | |
| DATE 01/11/2019 | | | | | |
| APPROVED BY VJ | | DESCRIPTION <div>OUTLINE</div> <div>IEC-132S-B34A-TEFC-CAST IRON</div> | | | |
| DATE 01/11/2019 | | | | | |
| REFERENCE | | MATERIAL | | PROCESS/FINISH | |
| THIRD ANGLE PROJECTION | | SIZE B | DRAWING NUMBER | | SHEET 1 OF 1 |
|  | | | SS620951 | | |

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DRAWING REVISION
A
 ECO
 ECO-0194685
 ECO DESCRIPTION

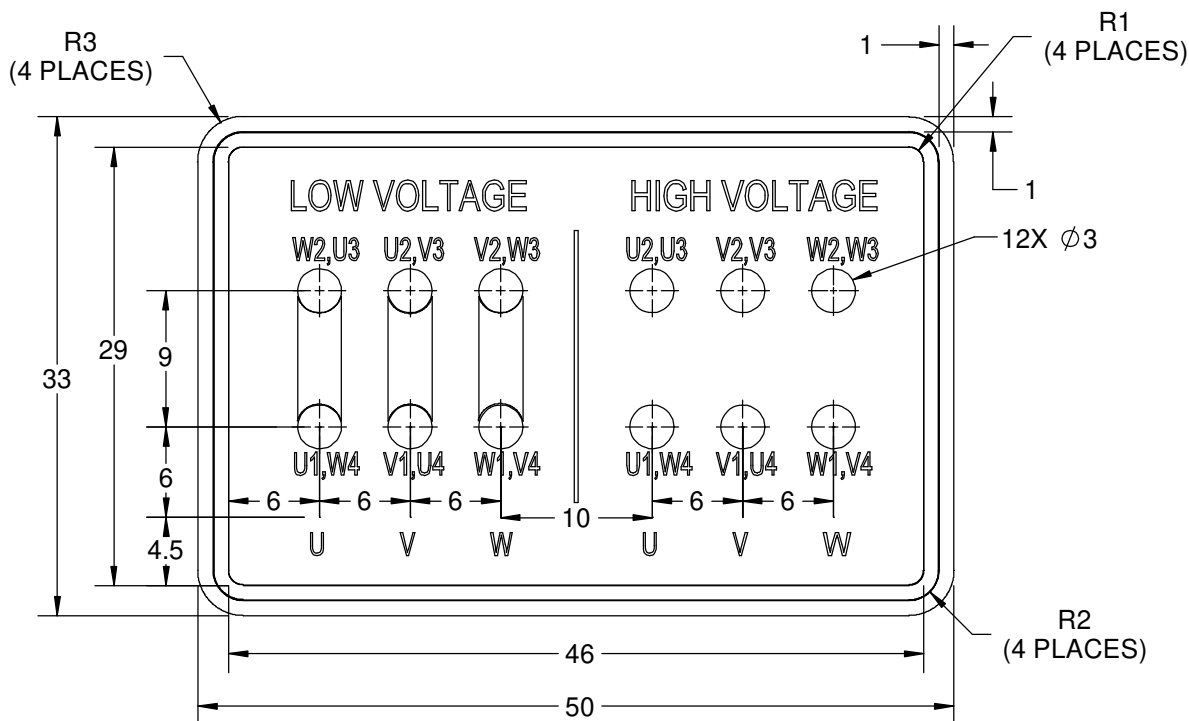
REVISION BY
S.MUDDA
 APPROVED BY
SUMANTA

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

NEW DRAWING

GEOMETRIC TOLERANCE

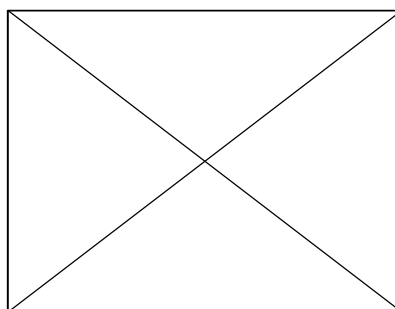
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|------------|---------|------|
| LINEAR DIM | >0~6 | ±0.1 |
| | >6~30 | ±0.2 |
| | >30~120 | ±0.3 |



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: SS620951
WINDING: IE3L1322202 NONE 1
SPEED: _____

CUSTOMER P.O. #: _____
REFERENCE MODEL #: TCA7P51AE251GAA009
CAT #: R930
CUSTOMER PART #: _____
MOUNTING: F3

TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC RPM | FL RPM | FRAME | ENCLOSURE | TYPE | KVA CODE | DESIGN |
|----|-----|----------|--------|-------|-----------|-------------|----------|--------|
| 10 | 7.5 | 3600 | 3540 | 132S | TEFC | TCA 132SB02 | J | N |

| PH | HZ | VOLTS | AMPS | START TYPE | DUTY | INSL | S.F. | AMB (* C) | ELEV.(Ft.) |
|----|-------|-----------------|-------------------|------------------|------|------|------|-----------|------------|
| 3 | 60/50 | 230/460#200/400 | 23.8/11.9&21/10.5 | LINE OR INVERTER | CONT | F | 1.15 | 40 | 3300 |

| | | | | | | | |
|----------|------|------------|------|------------|------|---------|-------------------|
| F.L. EFF | 90.2 | 3/4 LD EFF | 90.2 | 1/2 LD EFF | 89.0 | GTD EFF | ELECT. TYPE |
| F.L. PF | 88.0 | 3/4 LD PF | 83.0 | 1/2 LD PF | 74.0 | 88.7 | SQ CAGE INV RATED |

| | | | | |
|-------------|-----------------|-----------------|-----------------|-----------------|
| F.L. TORQUE | LR AMPS @ 460 V | L.R. TORQUE | B.D. TORQUE | F.L. RISE (* C) |
| 14.8 LB-FT | 79.0 | 28.0 LB-FT 189% | 41.0 LB-FT 277% | 80 |

| | | | | | | | |
|------------------------|--------|-------------------------|---------------------------|-----------------|-------------|--------|-----------|
| SOUND PRESSURE @ 3 FT. | POWER | ROTOR WK ² | MAX. LOAD WK ² | SAFE STALL TIME | STARTS/HOUR | APROX. | MOTOR WGT |
| 72 dBA | 81 dBA | 0.51 LB-FT ² | 0.51 LB-FT ² | 10 SEC. | 2 | 86 | KG. |

*** SUPPLEMENTAL INFORMATION ***

| | | | | | | | | |
|-----------------|------------------|------------|-------------------|-------------|--------------------|------------|---------|---------------|
| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | MOTOR ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER | SCREENS | PAINT |
| FT-FLANGE-165 | 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 |
| 6308 6208 | | | | | | |

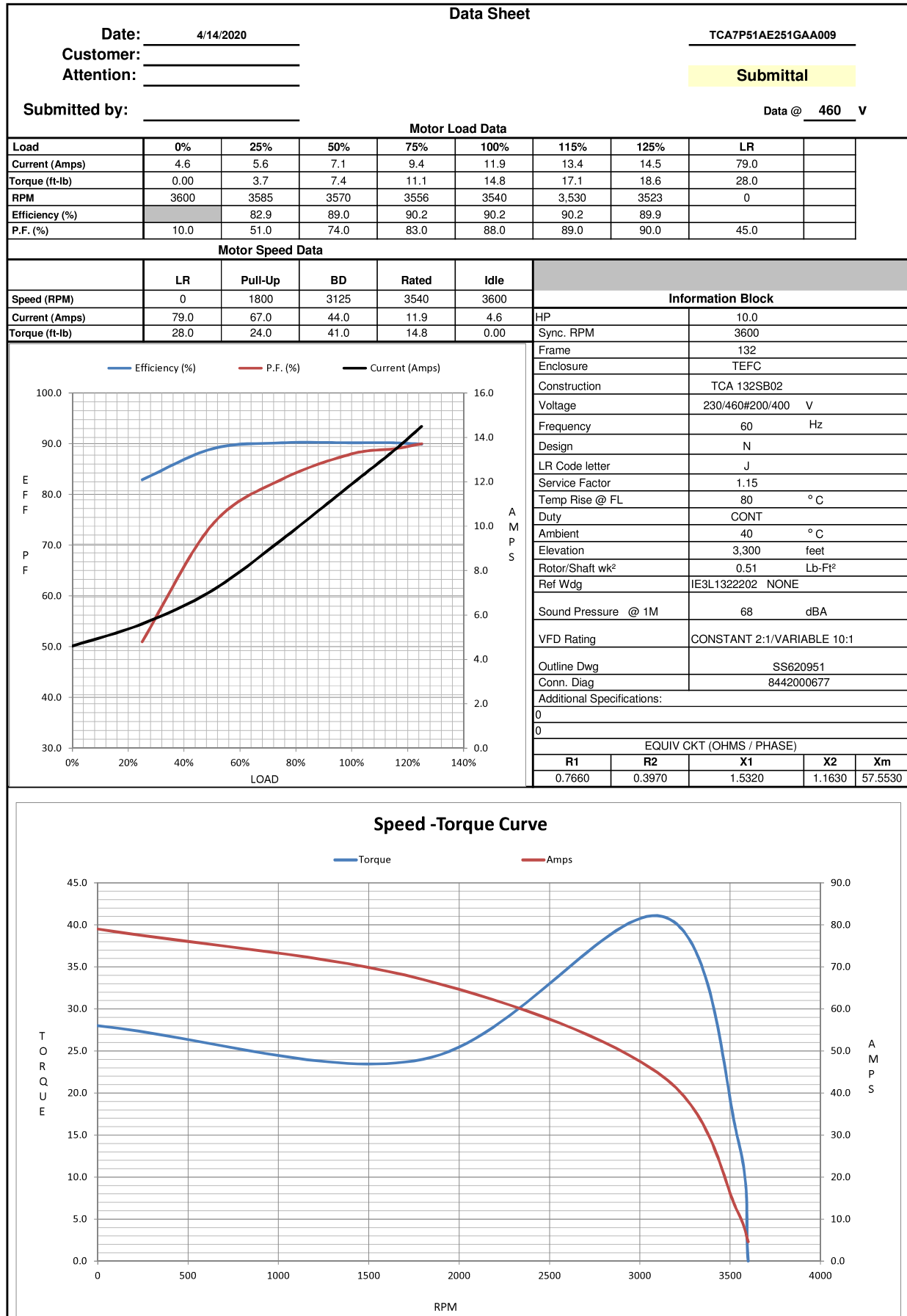
| | | | | | | |
|-------------|------------|-----------|-----------|-------------|---------|---------------|
| THERMOSTATS | PROTECTORS | WDG RTD's | BRG RTD's | THERMISTORS | CONTROL | SPACE HEATERS |
| NONE | NOT | NONE | NONE | NONE | FALSE | NA |

| | | | | | | |
|--------------|--------------|--------------|--------------|--------------|--------------------|-------|
| R1 (ohms/ph) | R2 (ohms/ph) | X1 (ohms/ph) | X2 (ohms/ph) | Xm (ohms/ph) | VIBRATION (in/sec) | FLOAT |
| 0.766 | 0.397 | 1.532 | 1.163 | 57.553 | 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 : TCA7P51AE251GAA009

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

Catalog No : R930

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