

# PRODUCT INFORMATION PACKET

marathon®  
Motors

Model No: 213TTFC6101

Catalog No: GT10105

General Purpose Motor, 2 & 1.50 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 900 & 750 RPM,  
213T Frame, TEFC



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RegalRexnord



**Nameplate Specifications**

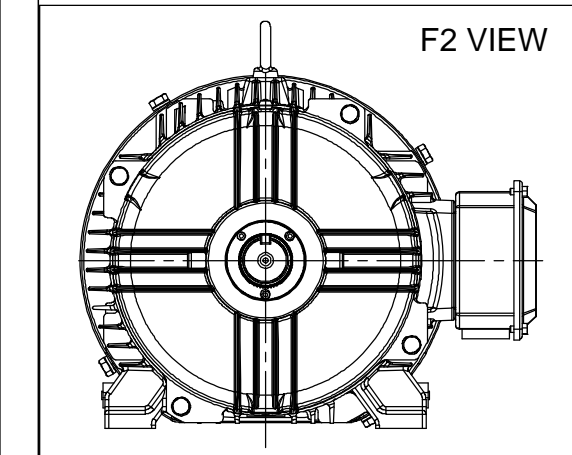
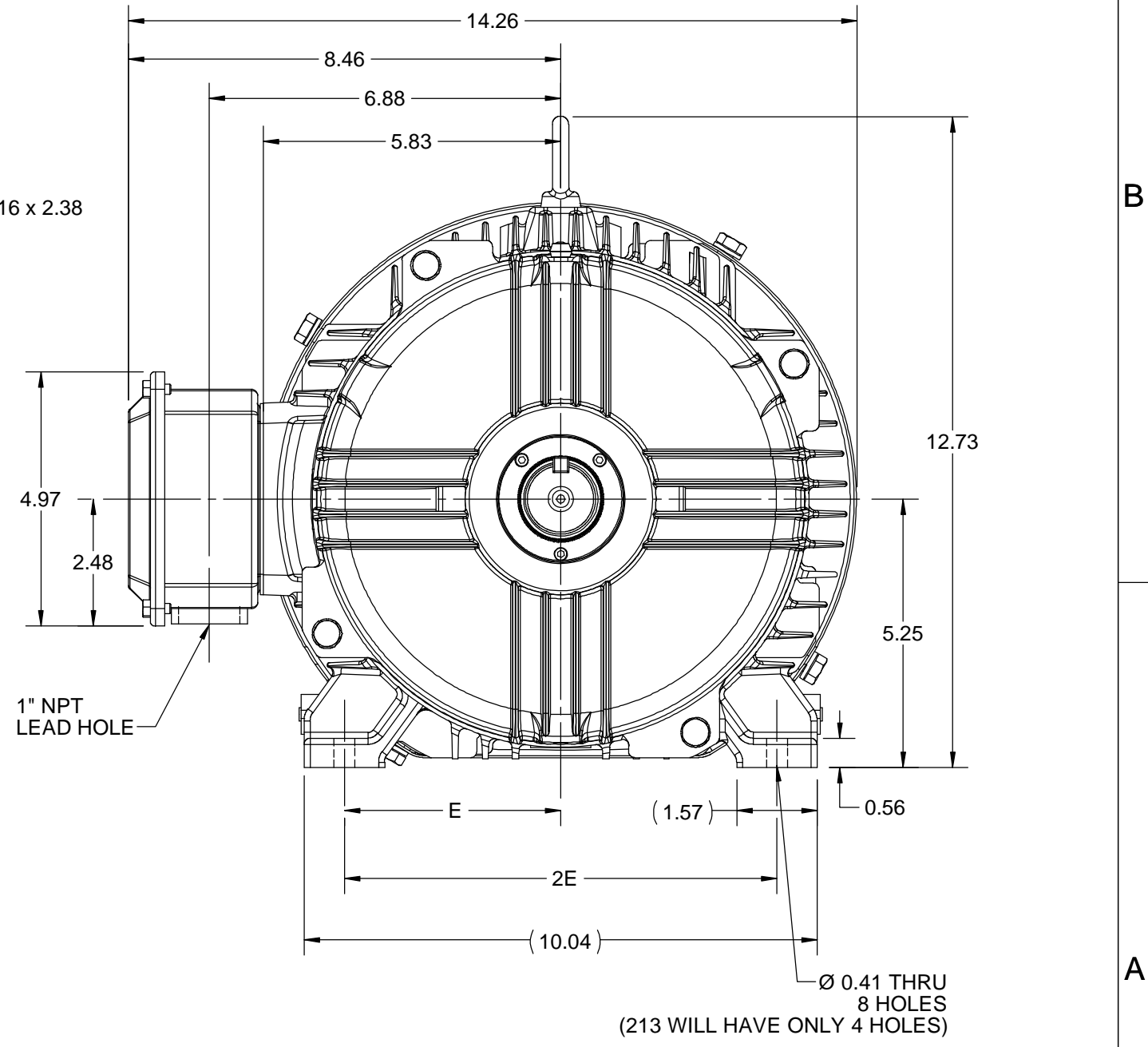
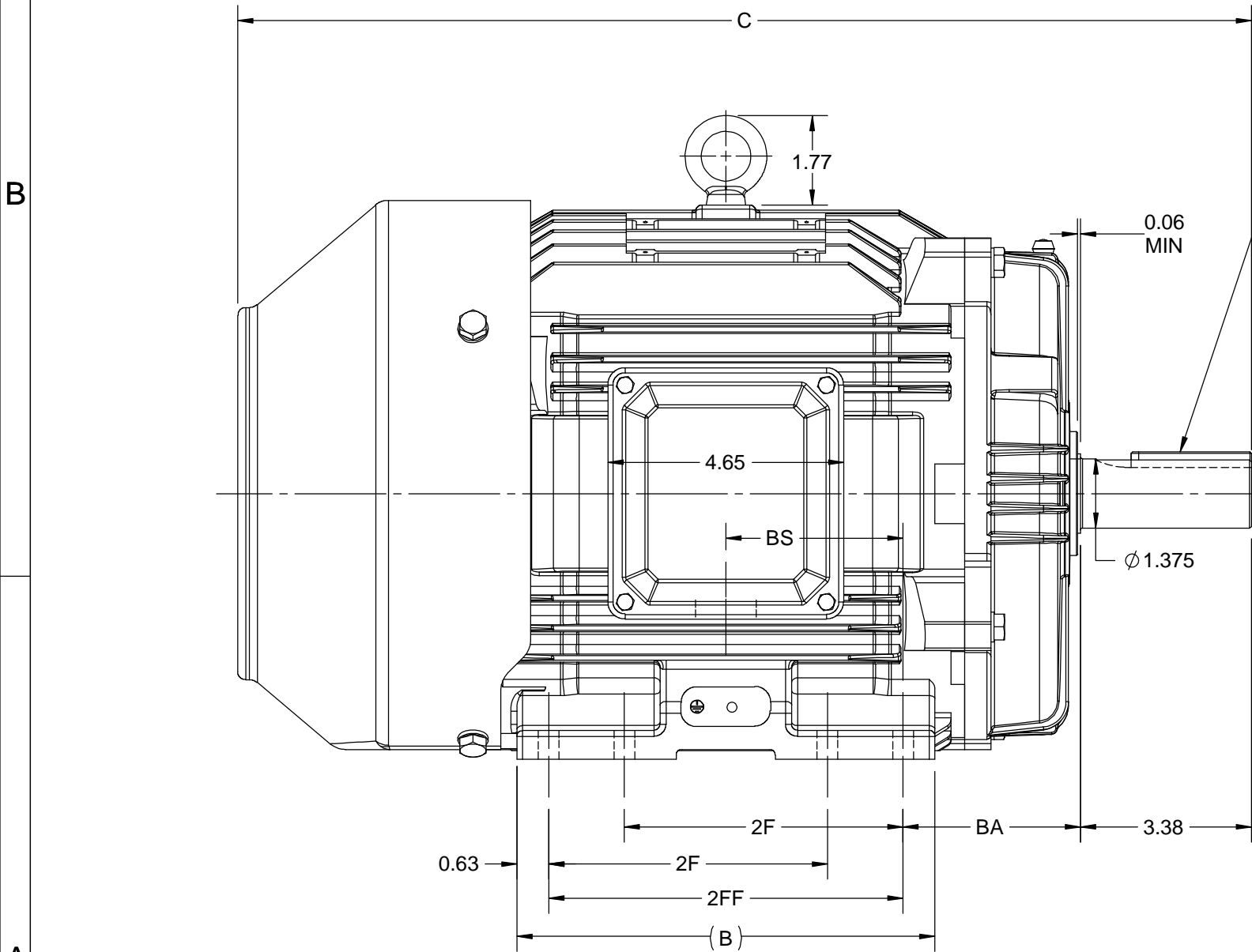
|                        |                            |                            |                                    |
|------------------------|----------------------------|----------------------------|------------------------------------|
| Phase                  | <b>3</b>                   | Output HP                  | <b>2 &amp; 1.50 Hp</b>             |
| Output KW              | <b>1.5 &amp; 1.1 kW</b>    | Voltage                    | <b>230/460 &amp; 190/380 V</b>     |
| Speed                  | <b>878 &amp; 730 rpm</b>   | Service Factor             | <b>1.15 &amp; 1.15</b>             |
| Frame                  | <b>213T</b>                | Enclosure                  | <b>Totally Enclosed Fan Cooled</b> |
| Thermal Protection     | <b>No Protection</b>       | Efficiency                 | <b>84 &amp; 84.5 %</b>             |
| Ambient Temperature    | <b>40 °C</b>               | Frequency                  | <b>60 &amp; 50 Hz</b>              |
| Current                | <b>6.4/3.2 &amp; 6/3 A</b> | Power Factor               | <b>68.5</b>                        |
| Duty                   | <b>Continuous</b>          | Insulation Class           | <b>F</b>                           |
| Design Code            | <b>B</b>                   | KVA Code                   | <b>K</b>                           |
| Drive End Bearing Size | <b>6308</b>                | Opp Drive End Bearing Size | <b>6208</b>                        |
| UL                     | <b>Recognized</b>          | CSA                        | <b>Y</b>                           |
| CE                     | <b>Y</b>                   | IP Code                    | <b>55</b>                          |
| Number of Speeds       | <b>1</b>                   |                            |                                    |

**Technical Specifications**

|                       |                                     |                    |                                    |
|-----------------------|-------------------------------------|--------------------|------------------------------------|
| Electrical Type       | <b>Squirrel Cage Inverter Rated</b> | Starting Method    | <b>Line Or Inverter</b>            |
| Poles                 | <b>8</b>                            | Rotation           | <b>Reversible</b>                  |
| Resistance Main       | <b>7.1513 Ohms</b>                  | Mounting           | <b>Rigid Base</b>                  |
| Motor Orientation     | <b>Horizontal</b>                   | Drive End Bearing  | <b>Ball</b>                        |
| Opp Drive End Bearing | <b>Ball</b>                         | Frame Material     | <b>Cast Iron</b>                   |
| Shaft Type            | <b>T</b>                            | Shaft Diameter     | <b>1.375 in</b>                    |
| Assembly/Box Mounting | <b>F1/F2 CAPABLE</b>                | Inverter Load      | <b>CONSTANT 10:1/VARIABLE 10:1</b> |
| Outline Drawing       | <b>SS620702-100</b>                 | Connection Drawing | <b>EE7308</b>                      |

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| DASH NO. | 4    |       | 3    |      |      |      | 2    |      | 1        |          |
|----------|------|-------|------|------|------|------|------|------|----------|----------|
|          | B    | C     | E    | 2E   | 2F   | 2FF  | BA   | BS   | MOUNTING | FRAME    |
| 100      | 6.76 | 18.53 | 4.25 | 8.50 | ---  | 5.50 | 3.50 | 2.75 | F1 OR F2 | 213T     |
| 200      | 8.26 | 20.03 |      |      | 5.50 | 7.00 |      | 3.50 |          | 213/215T |



|   |                    |                               |
|---|--------------------|-------------------------------|
| DRAWING REVISION<br>C   | REVISION BY<br>VS  | REV DATE/© DATE<br>30-09-2020 |
| ECO<br>ECO-0194527  | APPROVED BY<br>GNK | DATE<br>30-09-2020            |
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|                        |
|------------------------|
| DRAWN BY<br>JOY        |
| DATE<br>04/05/2015     |
| APPROVED BY<br>SBD     |
| DATE<br>04/05/2015     |
| REFERENCE              |
| THIRD ANGLE PROJECTION |

|  |                                   |
|--|-----------------------------------|
| <b>REGAL</b> Regal Beloit America, Inc.                      |                                   |
| DESCRIPTION<br><b>OUTLINE</b><br>213/215T FR TEFC- CAST IRON |                                   |
| MATERIAL   | PROCESS/FINISH                    |
| SIZE<br><b>B</b>   | DRAWING NUMBER<br><b>SS620702</b> |
| SHEET<br>1 OF 1  |                                   |

EE7308

THREE PHASE  
DUAL VOLTAGE MOTOR



VIEW OF TERMINAL END

REF.  
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G  
T6BZ, T2B, T6BL, T4AV, T6B, T4B

OPTIONAL CORD  
CONNECTION

L1 — WHITE  
L2 — RED  
L3 — BLACK

| NO.  | REVISION                                       | BY & DATE      | CHK | ANG   | TOLERANCES<br>UNLESS SPECIFIED |        | FINISH                   | DRAWN RM 11/20/1990 |        |                    |           |        |
|--|--|----------------|-----|-------|--------------------------------|--------|--------------------------|---------------------|--------|--------------------|-----------|--------|
|  |  |                |     |       | DEC.                           | INCHES |                          |                     |        |                    |           |        |
| 5  | CHG TO REGAL LOGO                              | SL 09/10/2015  | AB  |       |                                |        |                          | CHK ML 11/21/1990   |        |                    |           |        |
| 4  | REVISED IEC NOTATIONS                          | MSG 11/15/2011 | CMN | .X    | ±.1                            |        |                          | APPD SAS 04/24/2003 |        |                    |           |        |
| 3  | ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194 | MSG 5/10/2010  | MJS | .XX   | ±.02                           |        | TITLE CONNECTION DIAGRAM | SCALE 1=1           |        |                    |           |        |
| 2  | ADDED THE OPTIONAL CORD CONNECTION MU46318     | RDH 04/24/2003 | DRS | .XXX  | ±.005                          |        | 3Ø - DUAL VOLTAGE MOTOR  | REF                 |        |                    |           |        |
| 1  | REDRAWN  | RM 11/20/1990  |     | .XXXX | ±.0005                         |        | MAT'L.                   | FMF                 |        |                    |           |        |
|  |  |                |     |       | ±7'30"                         |        |                          | PREV                |        |                    |           |        |
| THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT |  |                |     |       |                                |        | RFP                      | CAD FILE ee7308     | SIZE A | DRAWING NO. EE7308 | PAGE OF 5 | REV. 5 |
|  |  |                |     |       |                                |        | DIST WP                  |                     |        |                    |           |        |





P.O. BOX 8003  
WAUSAU, WI 54401-8003  
PH. 715-675-3311

DATA VOLTS: 460

**CERTIFICATION DATA SHEET**

CUSTOMER:  
ORDER #: \_\_\_\_\_  
CONN. DIAGRAM: EE7308  
OUTLINE: SS620702-100  
WINDING: HA31328014 NONE 2  
SPEED: \_\_\_\_\_

CUSTOMER P.O. #: \_\_\_\_\_  
REFERENCE MODEL #: 213TTFCD6101  
CAT #: GT10105  
CUSTOMER PART #: \_\_\_\_\_  
MOUNTING: F1/F2 CAPABLE

**TYPICAL MOTOR PERFORMANCE DATA**

| HP | KW  | SYNC RPM | FL RPM | FRAME | ENCLOSURE | TYPE | KVA CODE | DESIGN |
|----|-----|----------|--------|-------|-----------|------|----------|--------|
| 2  | 1.5 | 900      | 878    | 213T  | TEFC      | TFC  | K        | B      |

| PH | HZ    | VOLTS           | AMPS        | START TYPE       | DUTY | INSL | S.F. | AMB | ELEV. |
|----|-------|-----------------|-------------|------------------|------|------|------|-----|-------|
| 3  | 60/50 | 230/460#190/380 | 6.4/3.2&6/3 | LINE OR INVERTER | CONT | F    | 1.15 | 40  | 3300  |

| F.L. EFF | 84.0 | 3/4 LD EFF | 85.7 | 1/2 LD EFF | 83.4 | GTD EFF | ELECT. TYPE       |
|----------|------|------------|------|------------|------|---------|-------------------|
| F.L. PF  | 68.5 | 3/4 LD PF  | 60.2 | 1/2 LD PF  | 47.5 | 82.5    | SQ CAGE INV RATED |

| F.L. TORQUE | LR AMPS @ 460 V | L.R. TORQUE | B.D. TORQUE | F.L. RISE (°C) |
|-------------|-----------------|-------------|-------------|----------------|
| 12.0 LB-FT  | 20.3            | 23.0 LB-FT  | 192%        | 30             |

| 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 |
|------------------------|--------|-------|-------------------------|---------------------------|-----------------|-------------|---------|-----------|
| 61 dBA                 | 70 dBA |       | 1.07 LB-FT <sup>2</sup> | 60 LB-FT <sup>2</sup>     | 25 SEC.         | 2           | 134 LB. |           |

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

| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | MOTOR ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER | SCREENS | PAINT         |
|-----------------|------------------|------------|-------------------|-------------|--------------------|------------|---------|---------------|
| STANDARD        | STANDARD         | RIGID      | HORIZONTAL        | NO          | NONE               | YES        | NONE    | BLUE (ENAMEL) |

| BEARINGS |      | GREASE     | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL          | FRAME MATERIAL |
|----------|------|------------|------------|------------|-------------|-------------------------|----------------|
| DE       | ODE  |            |            |            |             |                         |                |
| BALL     | BALL | POLYREX EM | T          | 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 |
|--------------|--------------|--------------|--------------|--------------|--------------------|-------|
| 4.467        | 2.581        | 9.318        | 11.034       | 119.855      | 0.150              | ODE   |

|       |  |  |  |  |  |  |
|-------|--|--|--|--|--|--|
| NOTES | INVERTER TORQUE: CONSTANT 10:1/VARIABLE 10:1 |  |  |  |  |  |
|       | INV. HP SPEED RANGE: NONE                    |  |  |  |  |  |
|       | ENCODER: NONE                                |  |  |  |  |  |
|       | NONE PPR                                     |  |  |  |  |  |

|                           |                               |
|---------------------------|-------------------------------|
| PREPARED BY: _____        | BRAKE: NONE                   |
| DATE: 11/17/2021          | NONE NONE                     |
|                           | FT-LB: NA                     |
|                           | VOLTAGE: NONE HZ:             |
| FORM: 3531 REV. 4 2/27/06 | UL: V - L1ME-INS.CONST UL REC |

Data Sheet

Date: 11/17/2021  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: \_\_\_\_\_



213TTFCD6101

Submittal

Data @ 460 V

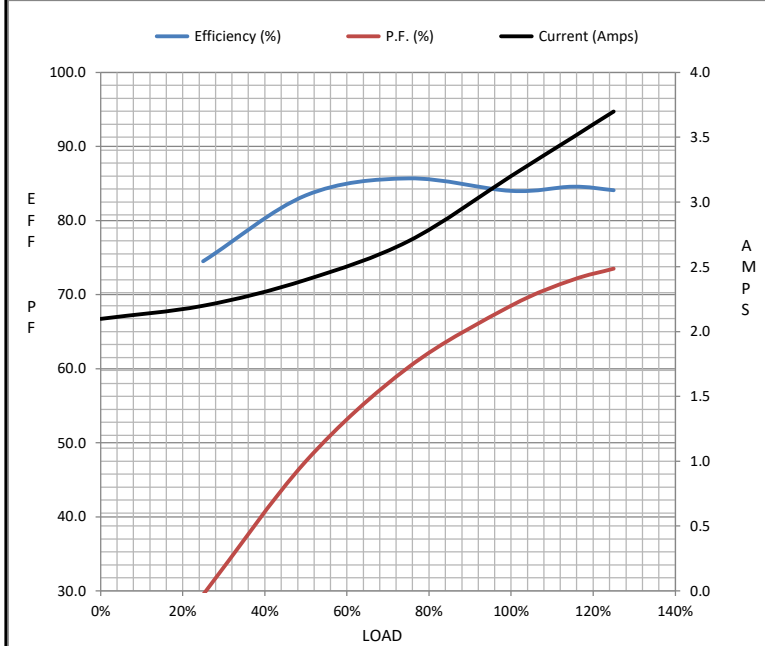
Motor Load Data

| Load           | 0%   | 25%  | 50%  | 75%  | 100% | 115% | 125% | LR   |
|----------------|------|------|------|------|------|------|------|------|
| Current (Amps) | 2.10 | 2.20 | 2.40 | 2.70 | 3.2  | 3.5  | 3.7  | 20.3 |
| Torque (ft-lb) | 0.00 | 2.94 | 5.9  | 8.9  | 12.0 | 13.9 | 15.1 | 23.0 |
| RPM            | 900  | 895  | 890  | 885  | 878  | 872  | 870  | 0    |
| Efficiency (%) |      | 74.5 | 83.4 | 85.7 | 84.0 | 84.6 | 84.1 |      |
| P.F. (%)       | 7.4  | 29.5 | 47.5 | 60.2 | 68.5 | 72.0 | 73.5 | 47.0 |

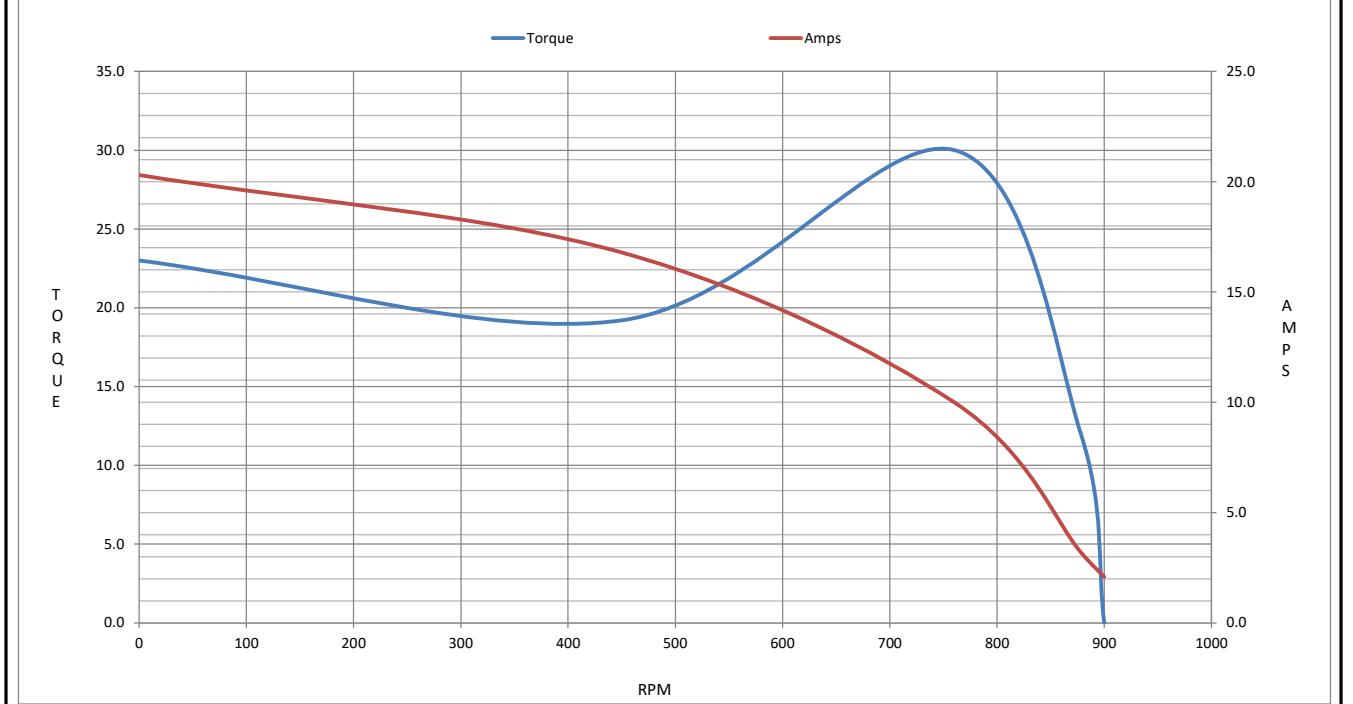
Motor Speed Data

|                | LR   | Pull-Up | BD   | Rated | Idle |
|----------------|------|---------|------|-------|------|
| Speed (RPM)    | 0    | 450     | 760  | 878   | 900  |
| Current (Amps) | 20.3 | 16.8    | 10.0 | 3.2   | 2.10 |
| Torque (ft-lb) | 23.0 | 19.2    | 30.0 | 12.0  | 0.00 |

| Information Block           |                             |        |         |          |
|-----------------------------|-----------------------------|--------|---------|----------|
| HP                          | 2.0                         |        |         |          |
| Sync. RPM                   | 900                         |        |         |          |
| Frame                       | 213                         |        |         |          |
| Enclosure                   | TEFC                        |        |         |          |
| Construction                | TFC                         |        |         |          |
| Voltage                     | 230/460#190/380 V           |        |         |          |
| Frequency                   | 60 Hz                       |        |         |          |
| Design                      | B                           |        |         |          |
| LR Code letter              | K                           |        |         |          |
| Service Factor              | 1.15                        |        |         |          |
| Temp Rise @ FL              | 30 ° C                      |        |         |          |
| Duty                        | CONT                        |        |         |          |
| Ambient                     | 40 ° C                      |        |         |          |
| Elevation                   | 3,300 feet                  |        |         |          |
| Rotor/Shaft wk <sup>2</sup> | 1.07 Lb-F <sup>2</sup>      |        |         |          |
| Ref Wdg                     | HA31328014 NONE             |        |         |          |
| Sound Pressure @ 1M         | 61 dBA                      |        |         |          |
| VFD Rating                  | CONSTANT 10:1/VARIABLE 10:1 |        |         |          |
| Outline Dwg                 | SS620702-100                |        |         |          |
| Conn. Diag                  | EE7308                      |        |         |          |
| Additional Specifications:  |                             |        |         |          |
| 0                           |                             |        |         |          |
| 0                           |                             |        |         |          |
| EQUIV CKT (OHMS / PHASE)    |                             |        |         |          |
| R1                          | R2                          | X1     | X2      | Xm       |
| 4.4670                      | 2.5810                      | 9.3180 | 11.0340 | 119.8550 |



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 : 213TTFC6101

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

Catalog No : GT10105

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**