

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 213TTFC6005  
Catalog No: GT1115  
7 1/2,3600,TEFC,213T,3/60/575  
Totally Enclosed Fan Cooled (TEFC)



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**REGAL**<sup>®</sup>



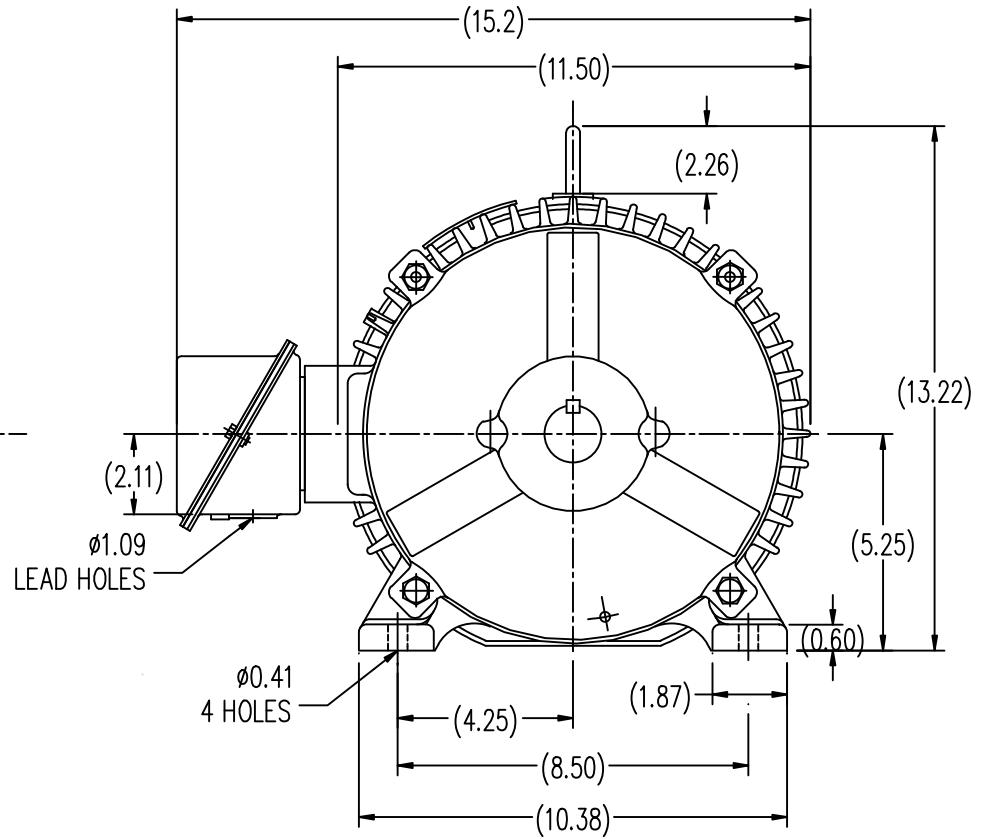
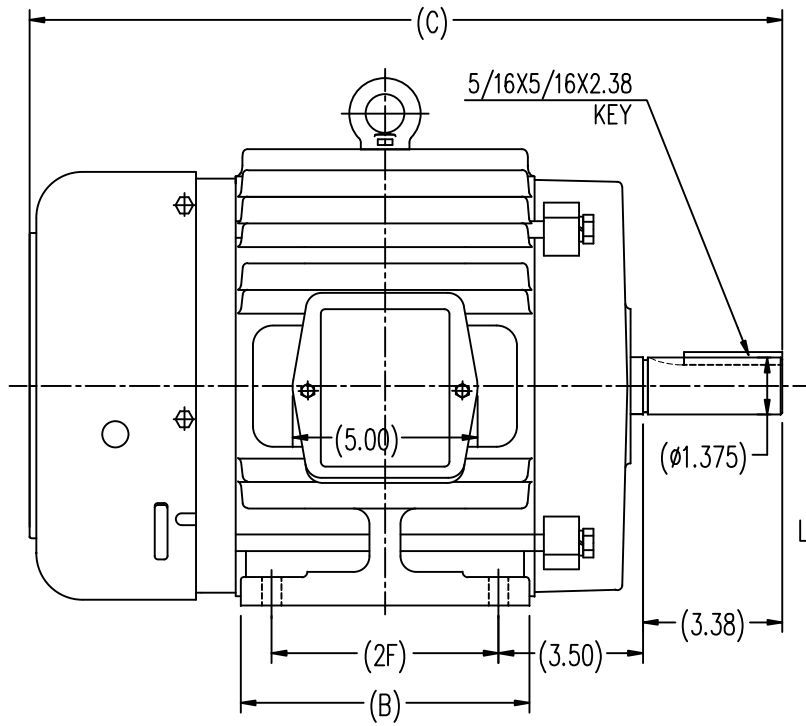
### Nameplate Specifications

|                            |                                    |                        |                   |
|----------------------------|------------------------------------|------------------------|-------------------|
| Output HP                  | <b>7.50 Hp</b>                     | Output KW              | <b>5.6 kW</b>     |
| Frequency                  | <b>60 Hz</b>                       | Voltage                | <b>575 V</b>      |
| Current                    | <b>7.1 A</b>                       | Speed                  | <b>3525 rpm</b>   |
| Service Factor             | <b>1.15</b>                        | Phase                  | <b>3</b>          |
| Efficiency                 | <b>89.5 %</b>                      | Duty                   | <b>Continuous</b> |
| Insulation Class           | <b>F</b>                           | Design Code            | <b>B</b>          |
| KVA Code                   | <b>G</b>                           | Frame                  | <b>213T</b>       |
| Enclosure                  | <b>Totally Enclosed Fan Cooled</b> | Overload Protector     | <b>No</b>         |
| Ambient Temperature        | <b>40 °C</b>                       | Drive End Bearing Size | <b>6307</b>       |
| Opp Drive End Bearing Size | <b>6206</b>                        | UL                     | <b>Recognized</b> |
| CSA                        | <b>Y</b>                           | CE                     | <b>Y</b>          |
| IP Code                    | <b>43</b>                          |                        |                   |


### Technical Specifications

|                   |                                    |                       |                        |
|-------------------|------------------------------------|-----------------------|------------------------|
| Electrical Type   | <b>Squirrel Cage Induction Run</b> | Starting Method       | <b>Across The Line</b> |
| Poles             | <b>2</b>                           | Rotation              | <b>Reversible</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>               |
| Overall Length    | <b>18.23 in</b>                    | Shaft Diameter        | <b>1.375 in</b>        |
| Shaft Extension   | <b>3.37 in</b>                     | Assembly/Box Mounting | <b>F1/F2 Capable</b>   |
| Outline Drawing   | <b>B-SS620291</b>                  | Connection Diagram    | <b>A-EE7300</b>        |

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|       |      |       |      |
|-------|------|-------|------|
| 213T  | 7.00 | 18.23 | 5.50 |
| 215T  | 8.50 | 19.73 | 7.00 |
| FRAME | B    | C     | 2F   |

|  |          |                             |      |   |       |                      |                      |      |
|--|----------|-----------------------------|------|---|-------|----------------------|----------------------|------|
|  |          | TOLERANCES UNLESS SPECIFIED |      |  <b>REGAL-BELOIT CORPORATION</b> |       | DRAWN HZJ 03-05-2010 |                      |      |
|  |          | DEC. INCHES                 |      |   |       | CHK ZYH 03-05-2010   |                      |      |
|  |          | .X ±.1                      |      |   |       | APPD CL 03-05-2010   |                      |      |
|  |          | .XX ±.03                    |      |   |       | SCALE 1=3            |                      |      |
|  |          | .XXX ±.005                  |      |   |       | REF                  |                      |      |
|  |          | .XXXX ±.0005                |      | MAT'L   |       | FMF HWADA            |                      |      |
| NO.  | REVISION | BY & DATE                   | CHK  | ANG   | ±1/2- | FINISH               | PREV                 |      |
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|  |          |                             | DIST |   |       |                      |                      |      |

**THREE PHASE - SINGLE VOLTAGE  
MOTOR - CONDUIT BOX @ 'A'**

**TO REVERSE ROTATION:  
INTERCHANGE ANY TWO  
LINE LEAD CONNECTIONS.**

**TERMINAL BLOCK WHEN SPECIFIED**



**VIEW OF TERMINAL END**

**IF MOTOR HAS  
6 LEADS**



A-9806 DECAL

**OPTIONAL CORD  
CONNECTION**

- L1 \_\_\_\_\_ WHITE
- L2 \_\_\_\_\_ RED
- L3 \_\_\_\_\_ BLACK

|   |                    |                    |
|---|--------------------|--------------------|
| DRAWING REVISION<br>AB  | REVISION BY<br>JJB | DATE<br>06-27-2017 |
| ECO<br>ECO-0125361  | APPROVED BY<br>TB  | DATE<br>06-27-2017 |
| ECO DESCRIPTION<br><b>UPDATED TO CURRENT STANDARDS</b>  |                    |                    |
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|                           |
|---------------------------|
| DRAWN BY<br>DA            |
| DATE<br>03-26-1993        |
| APPROVED BY<br>TB         |
| DATE<br>03-26-1993        |
| REFERENCE                 |
| THIRD ANGLE<br>PROJECTION |

|                            |                                 |  |
|----------------------------|---------------------------------|--|
| Regal Beloit America, Inc. |                                 |  |
|                            |                                 | DESCRIPTION<br><b>CONNECTION DIAGRAM</b><br>EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR |
| MATERIAL                   | PROCESS/FINISH                  |  |
| SIZE<br><b>A</b>           | DRAWING NUMBER<br><b>EE7300</b> | SHEET<br>1 OF 1  |

**CERTIFICATION DATA SHEET**

**Model#:** 213TTFC6005 BB      **WINDING#:** CHT21320005 NONE 1  
**CONN. DIAGRAM:** A-EE7300      **ASSEMBLY:** F1/F2 CAPABLE  
**OUTLINE:** B-SS620291

**TYPICAL MOTOR PERFORMANCE DATA**

| HP    | KW   | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|-------|------|-----------|----------|-------|-----------|----------|--------|
| 7 1/2 | 5.60 | 3600      | 3525     | 213T  | TEFC      | G        | B      |

| PH | Hz | VOLTS | FL AMPS | START TYPE      | DUTY       | INSL | S.F  | AMB°C | ELEVATION |
|----|----|-------|---------|-----------------|------------|------|------|-------|-----------|
| 3  | 60 | 575   | 7.1     | ACROSS THE LINE | CONTINUOUS | F7   | 1.15 | 40    | 3300      |

| FULL LOAD EFF: 89.5 | 3/4 LOAD EFF: 89.5 | 1/2 LOAD EFF: 88.5 | GTD. EFF | ELEC. TYPE      | NO LOAD AMPS |
|---------------------|--------------------|--------------------|----------|-----------------|--------------|
| FULL LOAD PF: 88    | 3/4 LOAD PF: 84    | 1/2 LOAD PF: 75.5  | 88.5     | SQ CAGE IND RUN | 2.4          |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE    | B.D. TORQUE    | F.L. RISE°C |
|-------------|-------------------|----------------|----------------|-------------|
| 11.2 LB-FT  | 46.4              | 22.8 LB-FT 205 | 26.8 LB-FT 240 | 40          |

| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2   | MAX. WK^2  | SAFE STALL TIME | STARTS /HOUR | APPROX. MOTOR WGT |
|------------------------|-------------|--------------|------------|-----------------|--------------|-------------------|
| 72 dBA                 | 82 dBA      | 0.32 LB-FT^2 | 12 LB-FT^2 | 20 SEC.         | 2            | 146 LBS.          |

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

| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER | SCREENS | PAINT         |
|-----------------|------------------|------------|-------------|-------------|--------------------|------------|---------|---------------|
| STANDARD        | STANDARD         | RIGID      | HORIZONTAL  | FALSE       | NONE               | FALSE      | NONE    | BLUE (ENAMEL) |

| BEARINGS |      | GREASE     | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL          | FRAME MATERIAL |
|----------|------|------------|------------|------------|-------------|-------------------------|----------------|
| DE       | OPE  | POLYREX EM | T          | NONE       | NONE        | 1045 HOT ROLLED (C-204) | CAST IRON      |
| 6307     | 6206 |            |            |            |             |                         |                |

| THERMO-PROTECTORS |            |          |          | THERMISTORS | CONTROL | SPACE /n HEATERS |
|-------------------|------------|----------|----------|-------------|---------|------------------|
| THERMOSTATS       | PROTECTORS | WDG RTDs | BRG RTDs | NONE        | FALSE   | NONE VOLTS       |
| NONE              | NOT        | NONE     | NONE     |             |         |                  |

If Inverter equals NONE, contact factory for further information

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\*

|                           |
|---------------------------|
| INVERTER TORQUE: NONE     |
| INV. HP SPEED RANGE: NONE |
| ENCODER: NONE             |
| NONE NONE                 |
| NONE NONE PPR             |
| BRAKE: NONE NONE          |
| NONE P/N NONE             |
| NONE NONE                 |
| NONE FT-LB NONE V NONE Hz |

DATE: 06/22/2017 05:36:51 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.



Submital  
Data @ 575 V

Date: 6/20/2017

Customer:   
Attention:   
Submitted by: FAREEDA DUDEKULA

Motor Load Data

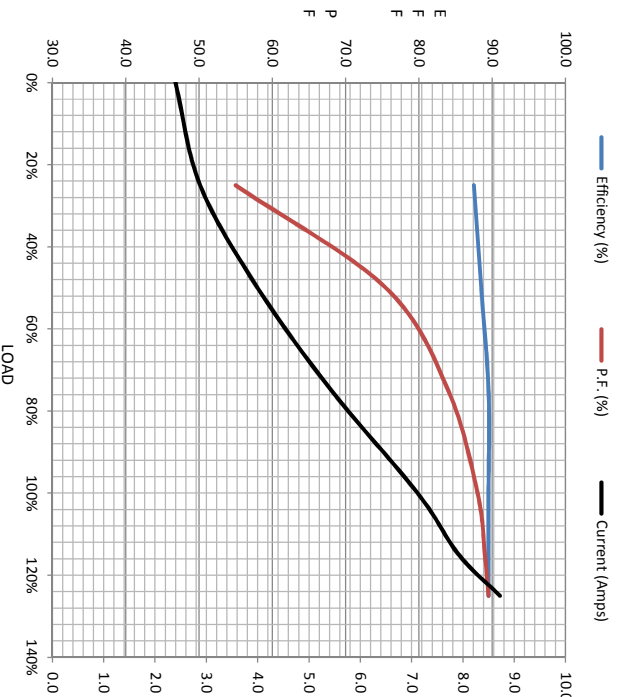
| Load           | 0%   | 25%  | 50%  | 75%  | 100% | 115% | 125% | LR   |
|----------------|------|------|------|------|------|------|------|------|
| Current (Amps) | 2.40 | 2.88 | 4.0  | 5.4  | 7.1  | 7.9  | 8.7  | 46.4 |
| Torque (ft-lb) | 0.00 | 2.80 | 5.5  | 8.3  | 11.2 | 12.9 | 14.1 | 22.8 |
| RPM            | 3600 | 3580 | 3555 | 3535 | 3525 | 3510 | 3490 | 0    |
| Efficiency (%) |      | 87.5 | 88.5 | 89.5 | 89.5 | 89.5 | 89.5 |      |
| P.F. (%)       | 7.0  | 55.0 | 75.5 | 84.0 | 88.0 | 89.0 | 89.5 | 42.5 |

Motor Speed Data

|                | LR   | Pull-Up | BD   | Rated | Idle |
|----------------|------|---------|------|-------|------|
| Speed (rpm)    | 0    | 500     | 3040 | 3525  | 3600 |
| Current (Amps) | 46.4 | 45.6    | 29.6 | 7.1   | 2.40 |
| Torque (ft-lb) | 22.8 | 25.0    | 26.8 | 11.2  | 0.00 |

Information Block

|                             |                  |        |        |          |
|-----------------------------|------------------|--------|--------|----------|
| HP                          | 7.5              |        |        |          |
| Sync. RPM                   | 3600             |        |        |          |
| Frame                       | 213              |        |        |          |
| Enclosure                   | TEFC             |        |        |          |
| Construction                | TFC              |        |        |          |
| Voltage                     | 575 V            |        |        |          |
| Frequency                   | 60 HZ            |        |        |          |
| Design                      | B                |        |        |          |
| LR Code letter              | G                |        |        |          |
| Service Factor              | 1.15             |        |        |          |
| Temp Rise @ FL              | 40 °C            |        |        |          |
| Duty                        | CONT             |        |        |          |
| Ambient                     | 40 °C            |        |        |          |
| Elevation                   | 1,000 feet       |        |        |          |
| Rotor/Shaft wk <sup>e</sup> | 0.32 Lb-Fe       |        |        |          |
| Rel Wdg                     | CHT21320005 NONE |        |        |          |
| Sound Pressure @ 1M         | 72 dBA           |        |        |          |
| VFD Rating                  | NONE             |        |        |          |
| Outline Dwg                 | B-SS620291       |        |        |          |
| Conn. Diag                  | A-EE7300         |        |        |          |
| Additional Specifications:  |                  |        |        |          |
| 0                           |                  |        |        |          |
| EQUIV CKT (OHMS / PHASE)    |                  |        |        |          |
| R1                          | R2               | X1     | X2     | Xm       |
| 0.7680                      | 0.6500           | 2.7760 | 2.5400 | 117.2390 |



Speed - Torque Curve

