

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 213TTFC6030

Catalog No: GT1116

7.50 HP General Purpose Motor, 3 phase, 1800 RPM, 575 V, 213T Frame, TEFC  
General Purpose Motors



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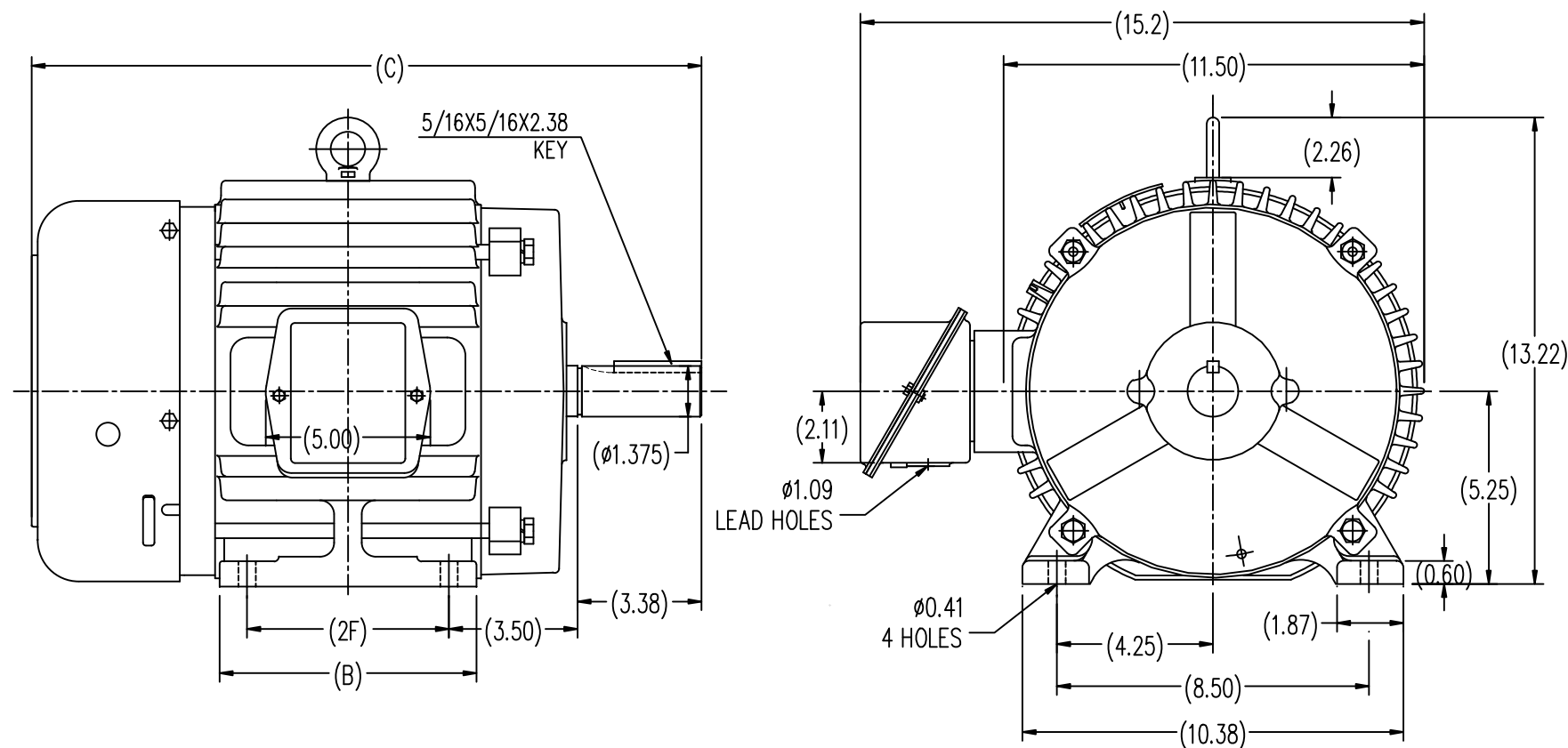
**RegalRexnord**

### Nameplate Specifications

|                        |            |                            |                             |
|------------------------|------------|----------------------------|-----------------------------|
| Output HP              | 7.50 Hp    | Output KW                  | 5.6 kW                      |
| Frequency              | 60 Hz      | Voltage                    | 575 V                       |
| Current                | 7.5 A      | Speed                      | 1770 rpm                    |
| Service Factor         | 1.15       | Phase                      | 3                           |
| Efficiency             | 91.7 %     | Power Factor               | 82.5                        |
| Duty                   | Continuous | Insulation Class           | F                           |
| Design Code            | B          | KVA Code                   | H                           |
| Frame                  | 213T       | Enclosure                  | Totally Enclosed Fan Cooled |
| Thermal Protection     | No         | Ambient Temperature        | 40 °C                       |
| Drive End Bearing Size | 6307       | Opp Drive End Bearing Size | 6206                        |
| UL                     | Recognized | CSA                        | Y                           |
| CE                     | Y          | IP Code                    | 43                          |
| Number of Speeds       | 1          |                            |                             |

### Technical Specifications

|                       |                             |                    |                 |
|-----------------------|-----------------------------|--------------------|-----------------|
| Electrical Type       | Squirrel Cage Induction Run | Starting Method    | Across The Line |
| Poles                 | 4                           | Rotation           | Reversible      |
| Resistance Main       | 1.035 Ohms                  | Mounting           | Rigid Base      |
| Motor Orientation     | Horizontal                  | Drive End Bearing  | Ball            |
| Opp Drive End Bearing | Ball                        | Frame Material     | Cast Iron       |
| Shaft Type            | T                           | Overall Length     | 18.23 in        |
| Shaft Diameter        | 1.375 in                    | Shaft Extension    | 3.37 in         |
| Assembly/Box Mounting | F1/F2 CAPABLE               |                    |                 |
| Outline Drawing       | SS620291-213T               | Connection Drawing | A-EE7300        |



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

| TOLERANCES UNLESS SPECIFIED  |          | 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   | FMF                  | HWADA          |
| NO.  | REVISION | BY & DATE            | CHK            |
|  |          |                      | ANG ±1/2-      |
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|  |          | CAD FILE             | SS620291       |
|  |          | SIZE                 | B              |
|  |          | DRAWING NO.          | SS620291       |
|  |          | REV.                 |                |

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

TO REVERSE ROTATION:  
INTERCHANGE ANY TWO  
LINE LEAD CONNECTIONS.

## TERMINAL BLOCK WHEN SPECIFIED



### IF MOTOR HAS 6 LEADS



A-9806 DECAL

### OPTIONAL CORD CONNECTION



## VIEW OF TERMINAL END

|   |                    |                    |
|---|--------------------|--------------------|
| 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>UPDATED TO CURRENT STANDARDS   |                    |                    |
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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  
**CONNECTION DIAGRAM**  
EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR

MATERIAL PROCESS/FINISH

|           |                          |                 |
|-----------|--------------------------|-----------------|
| SIZE<br>A | DRAWING NUMBER<br>EE7300 | SHEET<br>1 OF 1 |
|-----------|--------------------------|-----------------|

## CERTIFICATION DATA SHEET

Model#: 213TTFC6030 AA  
 CONN. DIAGRAM: A-EE7300  
 OUTLINE: B-SS620291

WINDING#: CHT21340001 NONE 3  
 ASSEMBLY: F1/F2 CAPABLE

## TYPICAL MOTOR PERFORMANCE DATA

| HP    | KW   | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|-------|------|-----------|----------|-------|-----------|----------|--------|
| 7 1/2 | 5.60 | 1800      | 1770     | 213T  | TEFC      | H        | B      |

| PH | Hz | VOLTS | FL AMPS | START TYPE      | DUTY       | INSL | S.F  | AMB°C | ELEVATION |
|----|----|-------|---------|-----------------|------------|------|------|-------|-----------|
| 3  | 60 | 575   | 7.5     | ACROSS THE LINE | CONTINUOUS | F7   | 1.15 | 40    | 3300      |

|                     |                    |                    |          |                 |              |
|---------------------|--------------------|--------------------|----------|-----------------|--------------|
| FULL LOAD EFF: 91.7 | 3/4 LOAD EFF: 91.7 | 1/2 LOAD EFF: 90.2 | GTD. EFF | ELEC. TYPE      | NO LOAD AMPS |
| FULL LOAD PF: 82.5  | 3/4 LOAD PF: 78.5  | 1/2 LOAD PF: 69    | 91       | SQ CAGE IND RUN | 3            |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE    | B.D. TORQUE  | F.L. RISE°C |
|-------------|-------------------|----------------|--------------|-------------|
| 22.3 LB-FT  | 50.4              | 39.5 LB-FT 177 | 60 LB-FT 269 | 55          |

| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2  | MAX. WK^2  | SAFE STALL TIME | STARTS /HOUR | APPROX. MOTOR WGT |
|------------------------|-------------|-------------|------------|-----------------|--------------|-------------------|
| 62 dBA                 | 72 dBA      | 0.9 LB-FT^2 | 75 LB-FT^2 | 25 SEC.         | 2            | 175 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  |            |            |            |             |                         |                |
| BALL     | BALL |            |            |            |             |                         |                |
| 6307     | 6206 | POLYREX EM | T          | NONE       | NONE        | 1045 HOT ROLLED (C-204) | CAST IRON      |

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

If Inverter equals NONE, contact factory for further information

|                           |
|---------------------------|
| 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 |

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DATE: 06/21/2017 09:48:32 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

## Data Sheet

Date: 20-06-2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA

213TTC6030



Submittal

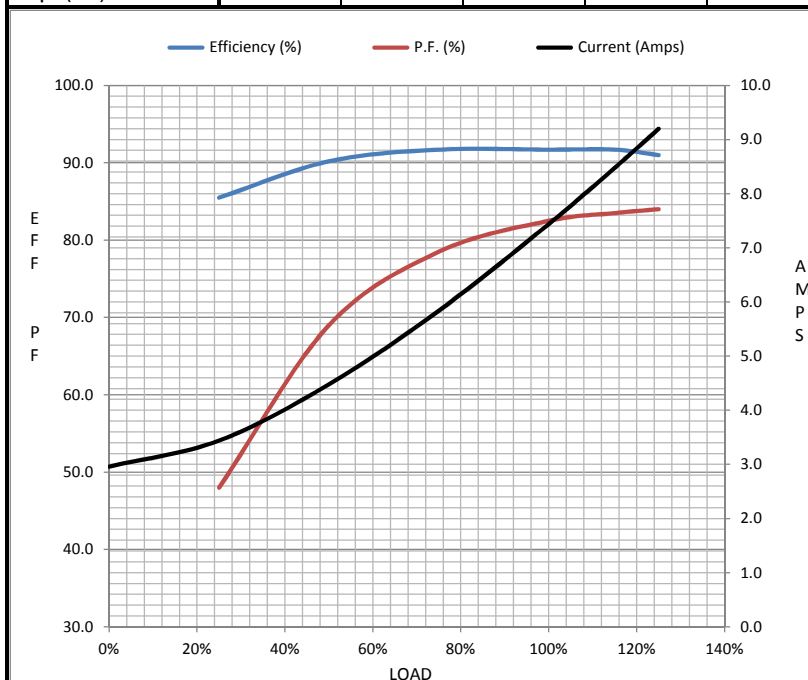
Data @ 575 V

## Motor Load Data

| Load           | 0%   | 25%  | 50%  | 75%  | 100% | 115%  | 125% | LR   |  |
|----------------|------|------|------|------|------|-------|------|------|--|
| Current (Amps) | 2.96 | 3.4  | 4.5  | 5.8  | 7.4  | 8.5   | 9.2  | 50.4 |  |
| Torque (ft-lb) | 0.00 | 5.5  | 11.0 | 16.6 | 22.3 | 25.8  | 28.0 | 39.5 |  |
| RPM            | 1800 | 1792 | 1785 | 1778 | 1770 | 1,765 | 1762 | 0    |  |
| Efficiency (%) |      | 85.5 | 90.2 | 91.7 | 91.7 | 91.7  | 91.0 |      |  |
| P.F. (%)       | 7.0  | 48.0 | 69.0 | 78.5 | 82.5 | 83.5  | 84.0 | 31.0 |  |

## Motor Speed Data

|                | LR   | Pull-Up | BD   | Rated | Idle | Information Block |      |  |  |
|----------------|------|---------|------|-------|------|-------------------|------|--|--|
| Speed (RPM)    | 0    | 900     | 1650 | 1770  | 1800 | HP                | 7.5  |  |  |
| Current (Amps) | 50.4 | 44.0    | 30.0 | 7.4   | 2.96 | Sync. RPM         | 1800 |  |  |
| Torque (ft-lb) | 39.5 | 34.0    | 60.0 | 22.3  | 0.00 | Frame             | 213  |  |  |



|                            |                  |        |        |          |
|----------------------------|------------------|--------|--------|----------|
| HP                         | 7.5              |        |        |          |
| Sync. RPM                  | 1800             |        |        |          |
| Frame                      | 213              |        |        |          |
| Enclosure                  | TEFC             |        |        |          |
| Construction               | TFC              |        |        |          |
| Voltage                    | 575 V            |        |        |          |
| Frequency                  | 60 Hz            |        |        |          |
| Design                     | B                |        |        |          |
| LR Code letter             | H                |        |        |          |
| Service Factor             | 1.15             |        |        |          |
| Temp Rise @ FL             | 55 ° C           |        |        |          |
| Duty                       | CONT             |        |        |          |
| Ambient                    | 40 ° C           |        |        |          |
| Elevation                  | 1,000 feet       |        |        |          |
| Rotor/Shaft wk²            | 0.90 Lb-Ft²      |        |        |          |
| Ref Wdg                    | CHT21340001 NONE |        |        |          |
| Sound Pressure @ 1M        | 62 dBA           |        |        |          |
| VFD Rating                 | NONE             |        |        |          |
| Outline Dwg                | B-SS620291       |        |        |          |
| Conn. Diag                 | A-EE7300         |        |        |          |
| Additional Specifications: |                  |        |        |          |
| 0                          |                  |        |        |          |
| 365THFS8036                |                  |        |        |          |
| EQUIV CKT (OHMS / PHASE)   |                  |        |        |          |
| R1                         | R2               | X1     | X2     | Xm       |
| 0.9750                     | 0.7800           | 4.4300 | 5.8470 | 111.7460 |

## Speed -Torque Curve

