

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 254TTFCA6082

Catalog No: GT3117

Globetrotter® Close-Coupled Pump Motor, 7.50 & 5 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,  
1200 & 1000 RPM, 254JMV Frame, TEFC



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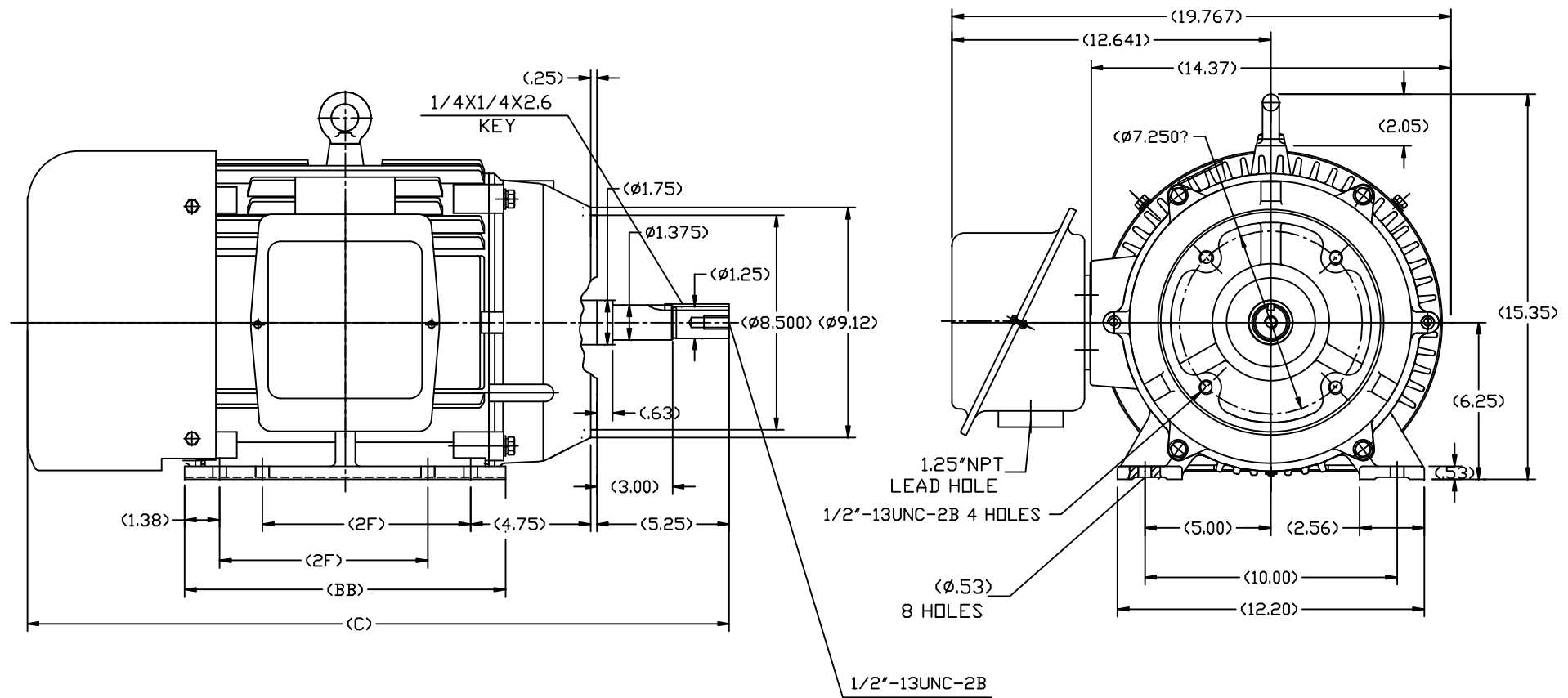
**RegalRexnord**

### Nameplate Specifications

|                        |                      |                            |                             |
|------------------------|----------------------|----------------------------|-----------------------------|
| Phase                  | 3                    | Output HP                  | 7.50 & 5 Hp                 |
| Output KW              | 5.6 & 3.7 kW         | Voltage                    | 230/460 & 190/380 V         |
| Speed                  | 1182 & 985 rpm       | Service Factor             | 1.15 & 1.15                 |
| Frame                  | 254JMV               | Enclosure                  | Totally Enclosed Fan Cooled |
| Thermal Protection     | No Protection        | Efficiency                 | 91 & 90.2 %                 |
| Ambient Temperature    | 40 °C                | Frequency                  | 60 & 50 Hz                  |
| Current                | 21/10.5 & 17.6/8.8 A | Power Factor               | 74                          |
| Duty                   | Continuous           | Insulation Class           | F                           |
| Design Code            | B                    | KVA Code                   | G                           |
| Drive End Bearing Size | 6309                 | Opp Drive End Bearing Size | 6209                        |
| UL                     | Recognized           | CSA                        | Y                           |
| CE                     | Y                    | IP Code                    | 43                          |
| Number of Speeds       | 1                    |                            |                             |

### Technical Specifications

|                       |                              |                   |                  |
|-----------------------|------------------------------|-------------------|------------------|
| Electrical Type       | Squirrel Cage Inverter Rated | Starting Method   | Line Or Inverter |
| Poles                 | 6                            | Rotation          | Reversible       |
| Resistance Main       | 1.32 Ohms                    | Mounting          | Rigid Base       |
| Motor Orientation     | Horizontal Or Shaft Down     | Drive End Bearing | Ball             |
| Opp Drive End Bearing | Ball                         | Frame Material    | Cast Iron        |
| Shaft Type            | JM                           | Overall Length    | 26.60 in         |
| Shaft Diameter        | 1.250 in                     | Shaft Extension   | 5.25 in          |
| Assembly/Box Mounting | F1/F2 CAPABLE                |                   |                  |
| Connection Drawing    | EE-7308K                     | Outline Drawing   | SS620564-254     |



|       |       |       |       |
|-------|-------|-------|-------|
| 254   | 26.60 | 12.80 | 8.25  |
| 256   | 27.80 | 13.98 | 10.00 |
| FRAME | C     | BB    | 2F    |

| TOLERANCES UNLESS SPECIFIED                                                                                                                                                                                                        |          |           |     | DRAWN L.S.J 05-16-2012 |             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|-----|------------------------|-------------|
| DEC.                                                                                                                                                                                                                               | INCHES   |           |     | CHK                    |             |
| .X                                                                                                                                                                                                                                 | ±.1      |           |     | APPD                   |             |
| .XX                                                                                                                                                                                                                                | ±.03     |           |     | SCALE                  | 1=4         |
| .XXX                                                                                                                                                                                                                               | ±.005    |           |     | REF                    |             |
| .XXXX                                                                                                                                                                                                                              | ±.0005   |           |     | FMF                    | HWADA       |
| NO.                                                                                                                                                                                                                                | REVISION | BY & DATE | CHK | ANG                    | ±1/2        |
| 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                    |             |
|                                                                                                                                                                                                                                    |          |           |     | DIST                   |             |
|                                                                                                                                                                                                                                    |          |           |     | CAD FILE               | SS620564    |
|                                                                                                                                                                                                                                    |          |           |     | SIZE                   | DRAWING NO. |
|                                                                                                                                                                                                                                    |          |           |     | B                      | SS620564    |
|                                                                                                                                                                                                                                    |          |           |     | REV.                   |             |

## CERTIFICATION DATA SHEET

Model#: 254TTFCA6082 AA  
 CONN. DIAGRAM: EE-7308K  
 OUTLINE: SS620564

WINDING#: CHT25460001 NONE 1  
 ASSEMBLY: F1/F2 CAPABLE

## TYPICAL MOTOR PERFORMANCE DATA

| HP      | KW      | SYNC. RPM | F.L. RPM | FRAME  | ENCLOSURE | KVA CODE | DESIGN |
|---------|---------|-----------|----------|--------|-----------|----------|--------|
| 7 1/2&5 | 5.6&3.7 | 1200      | 1182&985 | 254JMV | TEFC      | G        | B      |

| PH | Hz    | VOLTS               | FL AMPS              | START TYPE          | DUTY           | INSL | S.F       | AMB°C | ELEVATION |
|----|-------|---------------------|----------------------|---------------------|----------------|------|-----------|-------|-----------|
| 3  | 60/50 | 230/460#190/<br>380 | 21/10.5&17.6/<br>8.8 | LINE OR<br>INVERTER | CONTINUOU<br>S | F7   | 1.15/1.15 | 40    | 3300      |

| FULL LOAD EFF:<br>91&90.2 | 3/4 LOAD EFF: 91 | 1/2 LOAD EFF: 89.5 | GTD. EFF | ELEC. TYPE        | NO LOAD AMPS |
|---------------------------|------------------|--------------------|----------|-------------------|--------------|
| FULL LOAD PF: 74&71       | 3/4 LOAD PF: 67  | 1/2 LOAD PF: 55    | 90.2     | SQ CAGE INV RATED | 11.2 / 5.6   |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE  | B.D. TORQUE   | F.L. RISE°C |
|-------------|-------------------|--------------|---------------|-------------|
| 33.4 LB-FT  | 110 / 55          | 51 LB-FT 153 | 100 LB-FT 305 | 40          |

| SOUND PRESSURE<br>@ 3 FT. | SOUND POWER | ROTOR WK^2  | MAX. WK^2   | SAFE STALL TIME | STARTS<br>/HOUR | APPROX. MOTOR<br>WGT |
|---------------------------|-------------|-------------|-------------|-----------------|-----------------|----------------------|
| 56 dBA                    | 66 dBA      | 2.5 LB-FT^2 | 150 LB-FT^2 | 20 SEC.         | 2               | 325 LBS.             |

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

| DE BRACKET<br>TYPE | ODE BRACKET<br>TYPE | MOUNT<br>TYPE | ORIENTATION                    | SEVERE<br>DUTY | HAZARDOUS<br>LOCATION | DRIP<br>COVER | SCREENS | PAINT            |
|--------------------|---------------------|---------------|--------------------------------|----------------|-----------------------|---------------|---------|------------------|
| C-FACE             | STANDARD            | RIGID         | HORIZONTAL<br>OR SHAFT<br>DOWN | FALSE          | NONE                  | FALSE         | NONE    | BLUE<br>(ENAMEL) |

| BEARINGS |      | GREASE     | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT<br>MATERIAL          | FRAME<br>MATERIAL |
|----------|------|------------|------------|------------|-------------|----------------------------|-------------------|
| DE       | OPE  |            |            |            |             |                            |                   |
| BALL     | BALL | POLYREX EM | JM         | NONE       | NONE        | 1045 HOT<br>ROLLED (C-204) | CAST IRON         |
| 6309     | 6209 |            |            |            |             |                            |                   |

| 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

|                                 |                                                                             |
|---------------------------------|-----------------------------------------------------------------------------|
| *<br>N<br>O<br>T<br>E<br>S<br>* | INVERTER TORQUE: VARIABLE 10:1                                              |
|                                 | INV. HP SPEED RANGE: NONE                                                   |
|                                 | ENCODER: NONE<br>NONE NONE<br>NONE NONE PPR                                 |
|                                 | BRAKE: NONE NONE<br>NONE P/N NONE<br>NONE NONE<br>NONE FT-LB NONE V NONE Hz |

DATE: 06/23/2017 04:00:29 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

## Data Sheet

Date: 16-06-2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA



254TTFCA6082

Submittal

Data @ 460 V

## Motor Load Data

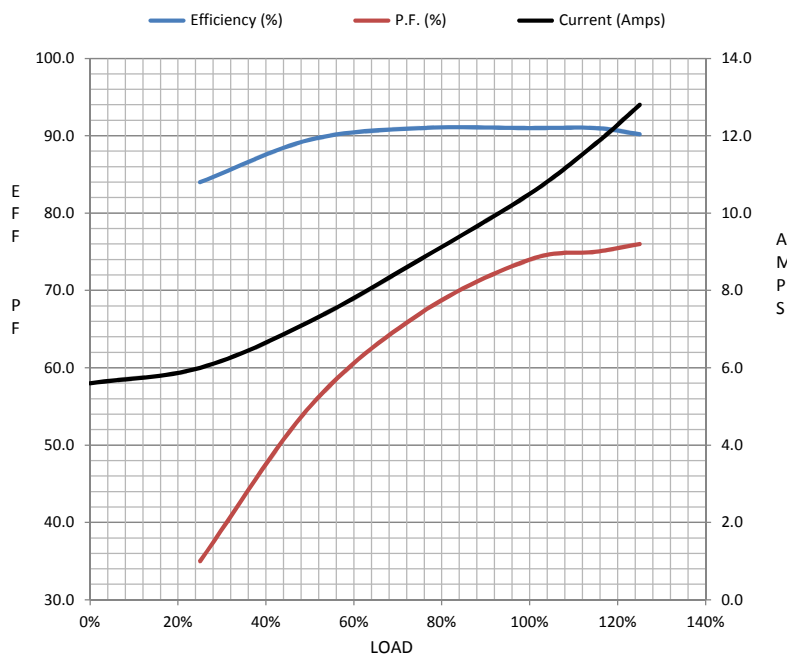
| Load           | 0%   | 25%  | 50%  | 75%  | 100% | 115%  | 125% | LR   |  |
|----------------|------|------|------|------|------|-------|------|------|--|
| Current (Amps) | 5.6  | 6.0  | 7.2  | 8.8  | 10.5 | 11.8  | 12.8 | 55.0 |  |
| Torque (ft-lb) | 0.00 | 8.3  | 16.5 | 25.0 | 33.4 | 38.5  | 42.0 | 51.0 |  |
| RPM            | 1200 | 1195 | 1192 | 1185 | 1182 | 1,180 | 1178 | 0    |  |
| Efficiency (%) |      | 84.0 | 89.5 | 91.0 | 91.0 | 91.0  | 90.2 |      |  |
| P.F. (%)       | 5.5  | 35.0 | 55.0 | 67.0 | 74.0 | 75.0  | 76.0 | 34.0 |  |

## Motor Speed Data

|                | LR   | Pull-Up | BD   | Rated | Idle |
|----------------|------|---------|------|-------|------|
| Speed (RPM)    | 0    | 600     | 1100 | 1182  | 1200 |
| Current (Amps) | 55.0 | 49.0    | 34.0 | 10.5  | 5.6  |
| Torque (ft-lb) | 51.0 | 46.0    | 100  | 33.4  | 0.00 |

## Information Block

|                            |                   |        |        |         |
|----------------------------|-------------------|--------|--------|---------|
| HP                         | 7.5               |        |        |         |
| Sync. RPM                  | 1200              |        |        |         |
| Frame                      | 254               |        |        |         |
| Enclosure                  | TEFC              |        |        |         |
| Construction               | TFC               |        |        |         |
| Voltage                    | 230/460#190/38( 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 wk²            | 2.50 Lb-Ft²       |        |        |         |
| Ref Wdg                    | CHT25460001 NONE  |        |        |         |
| Sound Pressure @ 1M        | 56 dBA            |        |        |         |
| VFD Rating                 | VARIABLE 10:1     |        |        |         |
| Outline Dwg                | SS620564          |        |        |         |
| Conn. Diag                 | EE-7308K          |        |        |         |
| Additional Specifications: |                   |        |        |         |
| 0                          |                   |        |        |         |
| 365THFS8036                |                   |        |        |         |
| EQUIV CKT (OHMS / PHASE)   |                   |        |        |         |
| R1                         | R2                | X1     | X2     | Xm      |
| 0.7940                     | 0.4540            | 2.1550 | 3.5150 | 46.3050 |



## Speed -Torque Curve

