

# PRODUCT INFORMATION PACKET

marathon®  
Motors

Model No: 444TSHFCD9002

Catalog No: W604B-P

XRI®-841 Severe Duty Motor, 125 HP, 3 Ph, 60 Hz, 460 V, 3600 RPM, 444TS Frame, TEFC



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RegalRexnord

### Nameplate Specifications

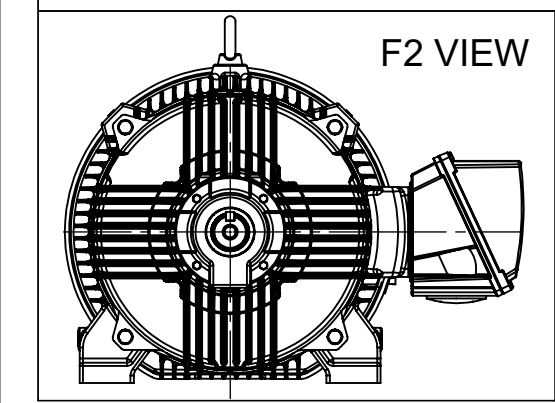
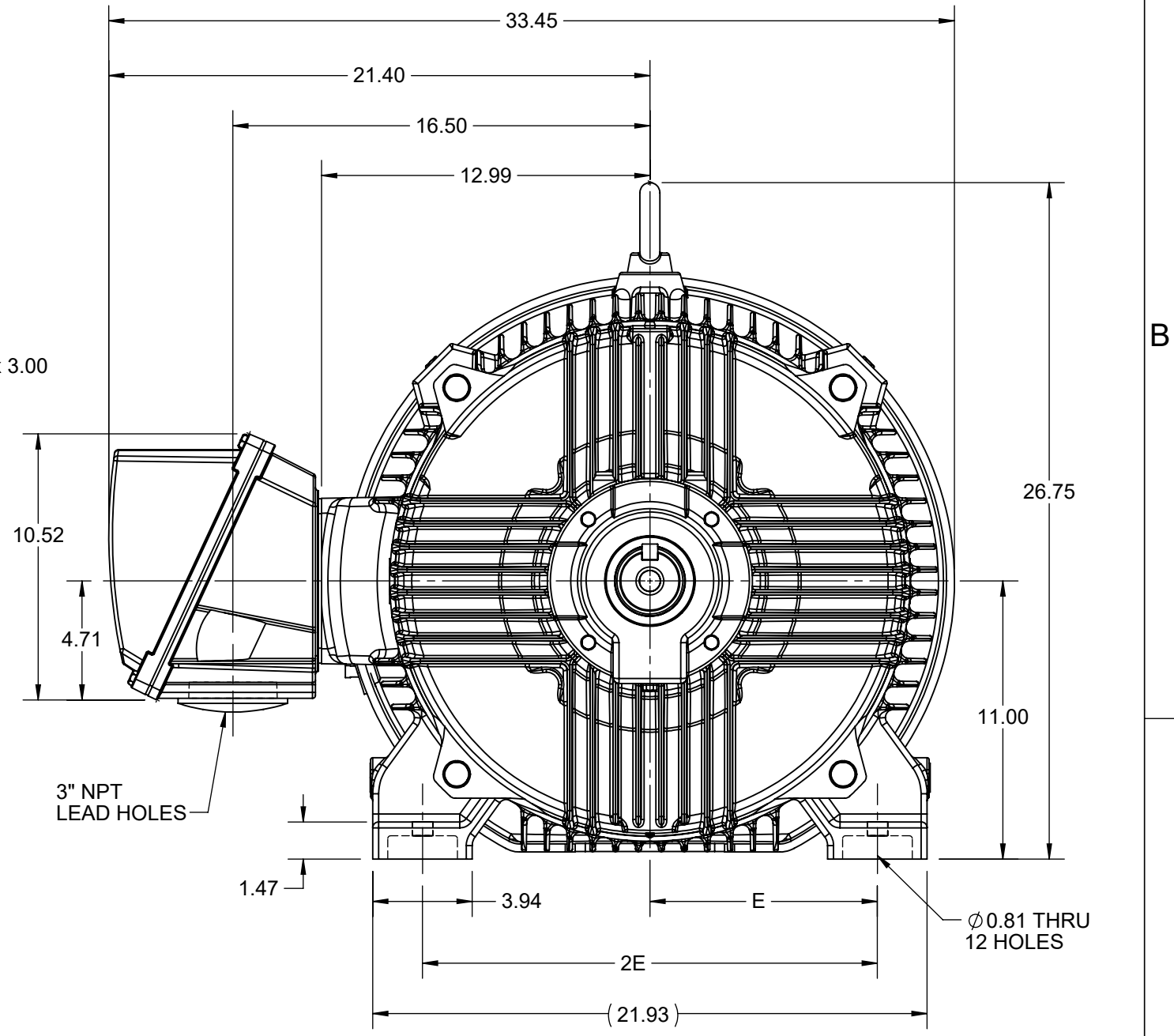
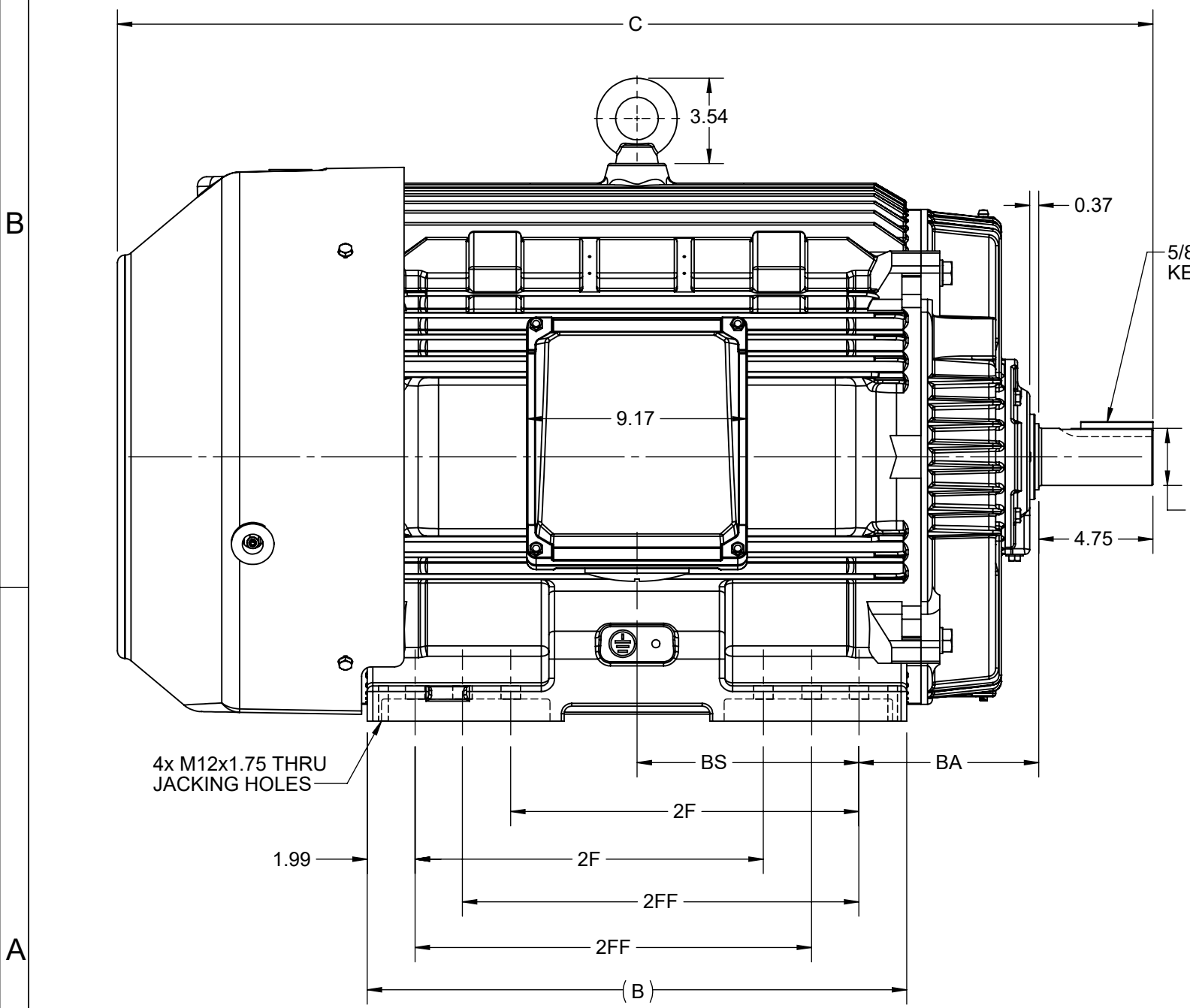
|                        |                      |                            |                                    |
|------------------------|----------------------|----------------------------|------------------------------------|
| Phase                  | <b>3</b>             | Output HP                  | <b>125 Hp</b>                      |
| Output KW              | <b>93.0 kW</b>       | Voltage                    | <b>460 V</b>                       |
| Speed                  | <b>3580 rpm</b>      | Service Factor             | <b>1.15</b>                        |
| Frame                  | <b>444TS</b>         | Enclosure                  | <b>Totally Enclosed Fan Cooled</b> |
| Thermal Protection     | <b>No Protection</b> | Efficiency                 | <b>95 %</b>                        |
| Ambient Temperature    | <b>40 °C</b>         | Frequency                  | <b>60 Hz</b>                       |
| Current                | <b>138.0 A</b>       | Power Factor               | <b>89.5</b>                        |
| Duty                   | <b>Continuous</b>    | Insulation Class           | <b>H</b>                           |
| Design Code            | <b>B</b>             | KVA Code                   | <b>G</b>                           |
| Drive End Bearing Size | <b>6314</b>          | Opp Drive End Bearing Size | <b>6314</b>                        |
| UL                     | <b>Recognized</b>    | CSA                        | <b>Y</b>                           |
| CE                     | <b>Y</b>             | IP Code                    | <b>56</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>2</b>                            | Rotation           | <b>Reversible</b>                 |
| Resistance Main       | <b>.0341 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>TS</b>                           | Shaft Diameter     | <b>2.375 in</b>                   |
| Assembly/Box Mounting | <b>F1/F2 CAPABLE</b>                | Inverter Load      | <b>CONSTANT 2:1/VARIABLE 10:1</b> |
| Outline Drawing       | <b>SS557669</b>                     | Connection Drawing | <b>EE7300U</b>                    |

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|       |       |      |       |       |       |      |      |          |
|-------|-------|------|-------|-------|-------|------|------|----------|
| 4     |       |      |       | 3     |       |      |      |          |
| B     | C     | E    | 2E    | 2F    | 2FF   | BA   | BS   | MOUNTING |
| 22.44 | 43.08 | 9.00 | 18.00 | 14.50 | 16.50 | 7.50 | 9.23 | F1 OR F2 |



|   |                      |                               |
|---|----------------------|-------------------------------|
| DRAWING REVISION<br>D   | REVISION BY<br>BISWA | REV DATE/© DATE<br>15/07/2021 |
| ECO<br>CR-0003577   | APPROVED BY<br>SBD   | DATE<br>15/07/2021            |
| ECO DESCRIPTION<br>JACKING HOLE DETAILS #NOTE ADDED.  |                      |                               |
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PRIMARY DIMENSIONS ARE INCH  
mm DIMENSIONS IN [BRACKETS]  
ARE FOR REFERENCE ONLY

|                        |   |
|------------------------|---|
| DRAWN BY<br>BISWA      | <b>REGAL</b> ® Regal Beloit America, Inc.                       |
| DATE<br>10/10/2018     |   |
| APPROVED BY<br>SBD     | DESCRIPTION<br><b>OUTLINE</b><br>444/445TS FR NEMA-SD & IEEE841 |
| DATE<br>10/10/2018     | MATERIAL  |
| REFERENCE              | PROCESS/FINISH  |
| THIRD ANGLE PROJECTION | SIZE<br>B   |
|                        | DRAWING NUMBER<br>SS557669                                      |
|                        | SHEET<br>1 OF 1   |

**IF MOTOR HAS 9 LEADS**

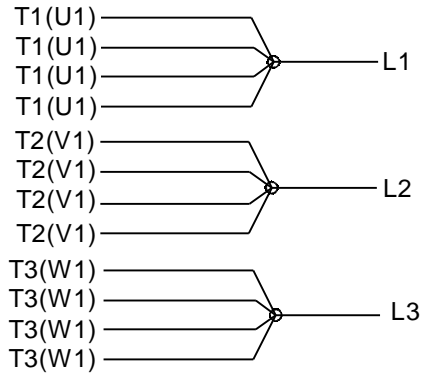


**IF MOTOR HAS 6 LEADS**



A-9806 DECAL IF CALLED FOR

**IF MOTOR HAS 12 LEADS**



**VIEW OF TERMINAL END**

|  |                           |                           |  |                        |                                   |                           |                |           |                        |    |      |        |         |     |       |         |  |      |        |          |  |       |         |           |  |                           |
|--|---------------------------|---------------------------|--|------------------------|-----------------------------------|---------------------------|----------------|-----------|------------------------|----|------|--------|---------|-----|-------|---------|--|------|--------|----------|--|-------|---------|-----------|--|---------------------------|
| DRAWING REVISION<br><b>L</b>   | REVISION BY<br><b>AJW</b> | DATE<br><b>05-04-2015</b> | TOLERANCES UNLESS OTHERWISE SPECIFIED:   | DRAWN BY<br><b>DRS</b> | <b>Regal Beloit America, Inc.</b> |                           |                |           |                        |    |      |        |         |     |       |         |  |      |        |          |  |       |         |           |  |                           |
| ECO<br><b>ECO-0077067</b>  | APPROVED BY<br><b>EWH</b> | DATE<br><b>05-05-2015</b> | <table style="font-size: small; border-collapse: collapse;"> <tr> <td><u>DEC.</u></td> <td><u>INCH</u></td> <td><u>mm</u></td> <td><u>ANGLE</u></td> </tr> <tr> <td>.X</td> <td>±0.1</td> <td>[±2.5]</td> <td>±7' 30"</td> </tr> <tr> <td>.XX</td> <td>±0.02</td> <td>[±0.51]</td> <td></td> </tr> <tr> <td>.XXX</td> <td>±0.005</td> <td>[±0.127]</td> <td></td> </tr> <tr> <td>.XXXX</td> <td>±0.0005</td> <td>[±0.0127]</td> <td></td> </tr> </table> | <u>DEC.</u>            |                                   |                           | <u>INCH</u>    | <u>mm</u> | <u>ANGLE</u>           | .X | ±0.1 | [±2.5] | ±7' 30" | .XX | ±0.02 | [±0.51] |  | .XXX | ±0.005 | [±0.127] |  | .XXXX | ±0.0005 | [±0.0127] |  | DATE<br><b>09-27-1996</b> |
| <u>DEC.</u>  | <u>INCH</u>               | <u>mm</u>                 | <u>ANGLE</u>   |                        |                                   |                           |                |           |                        |    |      |        |         |     |       |         |  |      |        |          |  |       |         |           |  |                           |
| .X   | ±0.1                      | [±2.5]                    | ±7' 30"  |                        |                                   |                           |                |           |                        |    |      |        |         |     |       |         |  |      |        |          |  |       |         |           |  |                           |
| .XX  | ±0.02                     | [±0.51]                   |  |                        |                                   |                           |                |           |                        |    |      |        |         |     |       |         |  |      |        |          |  |       |         |           |  |                           |
| .XXX   | ±0.005                    | [±0.127]                  |  |                        |                                   |                           |                |           |                        |    |      |        |         |     |       |         |  |      |        |          |  |       |         |           |  |                           |
| .XXXX  | ±0.0005                   | [±0.0127]                 |  |                        |                                   |                           |                |           |                        |    |      |        |         |     |       |         |  |      |        |          |  |       |         |           |  |                           |
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|  |                           |                           | REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45°<br>CORNER FILLETS: R.02 [.51]<br>MACHINED SURFACES: 200 $\sqrt{\text{INCH}}$ 5.1 $\sqrt{\text{mm}}$<br>mm SHOWN IN [BRACKETS]  |                        |                                   | DATE<br><b>09-30-1996</b> | <b>EE7300U</b> |           |                        |    |      |        |         |     |       |         |  |      |        |          |  |       |         |           |  |                           |
| REFERENCE  | THIRD ANGLE PROJECTION    | SIZE<br><b>A</b>          |  |                        |                                   | DRAWING NUMBER            |                |           | SHEET<br><b>1 OF 1</b> |    |      |        |         |     |       |         |  |      |        |          |  |       |         |           |  |                           |

Data Sheet

Date: 9/11/2023  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: RAMYA



444TSHFCD9002

Submittal

Data @ 460 V

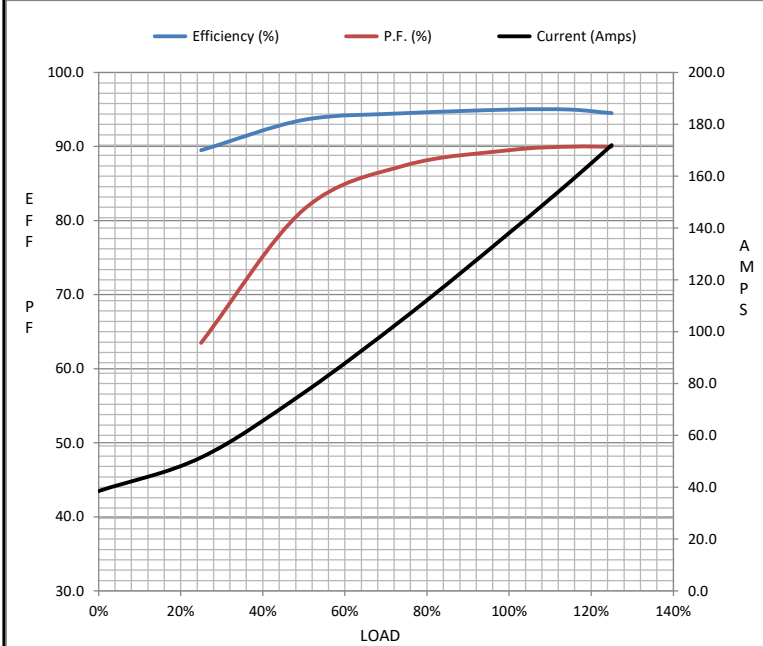
Motor Load Data

| Load           | 0%   | 25%  | 50%  | 75%  | 100% | 115%  | 125% | LR   |
|----------------|------|------|------|------|------|-------|------|------|
| Current (Amps) | 38.5 | 51.5 | 76.5 | 106  | 138  | 158   | 172  | 905  |
| Torque (ft-lb) | 0.00 | 45.5 | 91.5 | 138  | 183  | 211   | 230  | 275  |
| RPM            | 3600 | 3595 | 3590 | 3585 | 3580 | 3,578 | 3575 | 0    |
| Efficiency (%) |      | 89.5 | 93.6 | 94.5 | 95.0 | 95.0  | 94.5 |      |
| P.F. (%)       | 8.0  | 63.5 | 81.5 | 87.5 | 89.5 | 90.0  | 90.0 | 27.0 |

Motor Speed Data

|                | LR  | Pull-Up | BD   | Rated | Idle |
|----------------|-----|---------|------|-------|------|
| Speed (RPM)    | 0   | 1800    | 3480 | 3580  | 3600 |
| Current (Amps) | 905 | 725     | 532  | 138   | 38.5 |
| Torque (ft-lb) | 275 | 226     | 513  | 183   | 0.00 |

| Information Block           |                            |        |        |        |
|-----------------------------|----------------------------|--------|--------|--------|
| HP                          | 125.0                      |        |        |        |
| Sync. RPM                   | 3600                       |        |        |        |
| Frame                       | 444                        |        |        |        |
| Enclosure                   | TEFC                       |        |        |        |
| Construction                | TFC                        |        |        |        |
| Voltage                     | 460 V                      |        |        |        |
| Frequency                   | 60 Hz                      |        |        |        |
| Design                      | B                          |        |        |        |
| LR Code letter              | G                          |        |        |        |
| Service Factor              | 1.15                       |        |        |        |
| Temp Rise @ FL              | 60 ° C                     |        |        |        |
| Duty                        | CONT                       |        |        |        |
| Ambient                     | 40 ° C                     |        |        |        |
| Elevation                   | 3,300 feet                 |        |        |        |
| Rotor/Shaft wk <sup>2</sup> | 31.0 Lb-F <sup>2</sup>     |        |        |        |
| Ref Wdg                     | HA32802009 NONE            |        |        |        |
| Sound Pressure @ 1M         | 80 dBA                     |        |        |        |
| VFD Rating                  | CONSTANT 2:1/VARIABLE 10:1 |        |        |        |
| Outline Dwg                 |                            |        |        |        |
| Conn. Diag                  | EE7300U                    |        |        |        |
| Additional Specifications:  |                            |        |        |        |
| 0                           |                            |        |        |        |
| 0                           |                            |        |        |        |
| EQUIV CKT (OHMS / PHASE)    |                            |        |        |        |
| R1                          | R2                         | X1     | X2     | Xm     |
| 0.0210                      | 0.0110                     | 0.1610 | 0.1860 | 6.8550 |



Speed - Torque Curve

