

# PRODUCT INFORMATION PACKET

marathon®  
Motors

Model No: 444TSTD4010

Catalog No: U536A

Fire Pump Motor, 200 & 150 HP, 3 Ph, 60 & 50 Hz, 460 & 380-400 V, 3600 & 3000 RPM, 444TS Frame, DP



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RegalRexnord

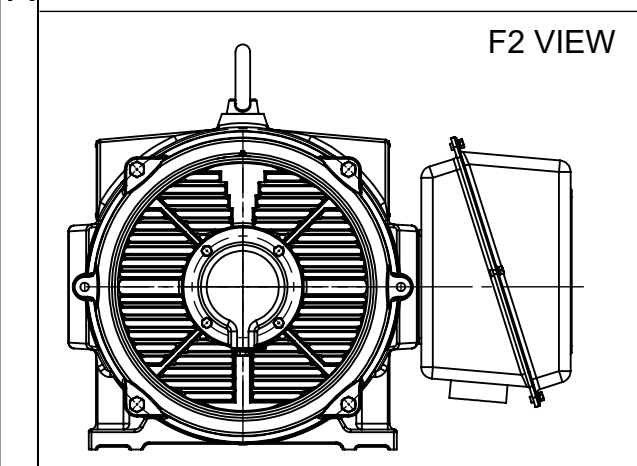
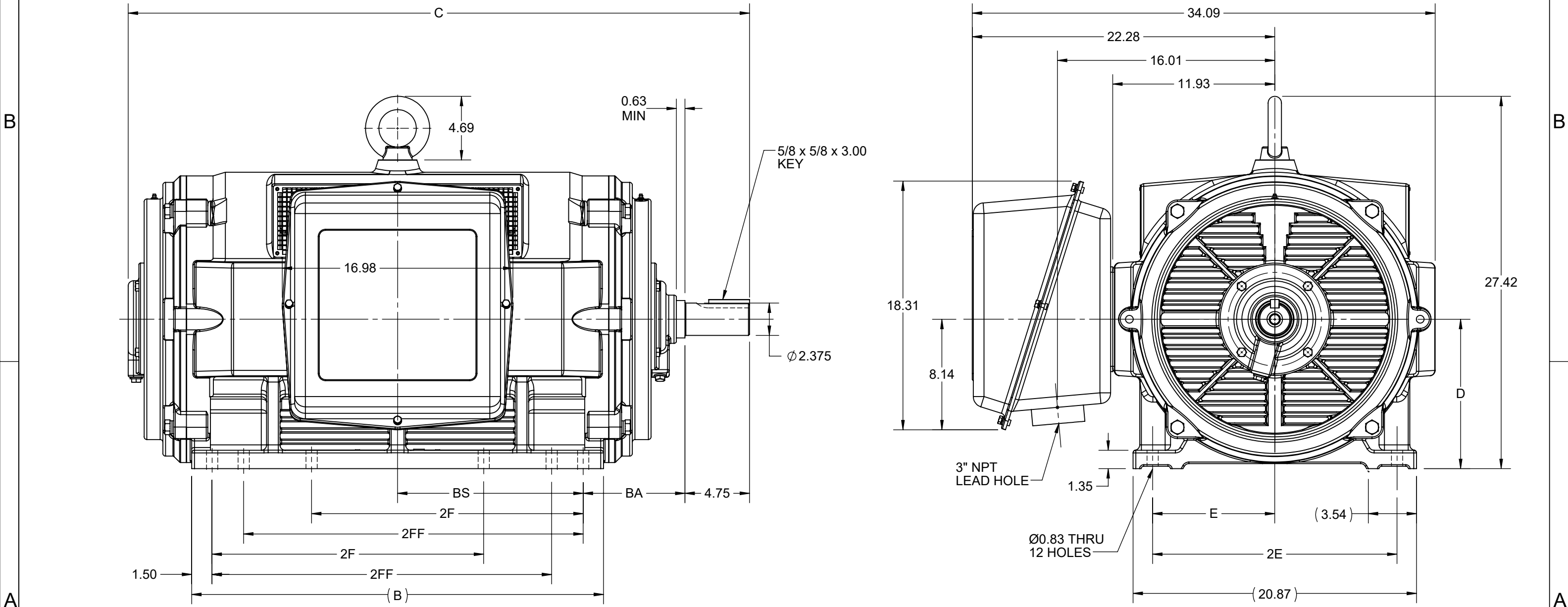
### Nameplate Specifications

|                        |                             |                            |                            |
|------------------------|-----------------------------|----------------------------|----------------------------|
| Phase                  | <b>3</b>                    | Output HP                  | <b>200 &amp; 150 Hp</b>    |
| Output KW              | <b>149.0 &amp; 112.0 kW</b> | Voltage                    | <b>460 &amp; 380-400 V</b> |
| Speed                  | <b>3575 &amp; 2978 rpm</b>  | Service Factor             | <b>1.15 &amp; 1.15</b>     |
| Frame                  | <b>444TS</b>                | Enclosure                  | <b>Drip Proof</b>          |
| Thermal Protection     | <b>No Protection</b>        | Efficiency                 | <b>94.5 &amp; 94.1 %</b>   |
| Ambient Temperature    | <b>50 °C</b>                | Frequency                  | <b>60 &amp; 50 Hz</b>      |
| Current                | <b>220 &amp; 200-190 A</b>  | Power Factor               | <b>89</b>                  |
| Duty                   | <b>Continuous</b>           | Insulation Class           | <b>F</b>                   |
| Design Code            | <b>B</b>                    | KVA Code                   | <b>F</b>                   |
| Drive End Bearing Size | <b>6314</b>                 | Opp Drive End Bearing Size | <b>6314</b>                |
| UL                     | <b>Listed</b>               | CSA                        | <b>Y</b>                   |
| CE                     | <b>Y</b>                    | IP Code                    | <b>23</b>                  |
| Number of Speeds       | <b>1</b>                    |                            |                            |

### Technical Specifications

|                       |                                    |                       |   |
|-----------------------|------------------------------------|-----------------------|---|
| Electrical Type       | <b>Squirrel Cage Induction Run</b> | Starting Method       | <b>Part Wdg Start &amp; Wye Start Delta Run</b> |
| Poles                 | <b>2</b>                           | Rotation              | <b>Reversible</b>                               |
| Resistance Main       | <b>.038 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>                          | Overall Length        | <b>40.83 in</b>                                 |
| Frame Length          | <b>25.98 in</b>                    | Shaft Diameter        | <b>2.375 in</b>                                 |
| Shaft Extension       | <b>4.75 in</b>                     | Assembly/Box Mounting | <b>F1/F2 CAPABLE</b>                            |
| Connection Drawing    | <b>EE7300BH</b>                    | Outline Drawing       | <b>SS620756-444TS</b>                           |

| DASH NO. | 4     |       | 3     |      |       |       | 2     |      | 1     |          |           |
|----------|-------|-------|-------|------|-------|-------|-------|------|-------|----------|-----------|
|          | B     | C     | D     | E    | 2E    | 2F    | 2FF   | BA   | BS    | MOUNTING | FRAME     |
| 100      | 25.20 | 40.64 | 11.00 | 9.00 | 18.00 | 14.50 | 16.50 | 7.50 | 11.10 | F1 OR F2 | 444/445TS |
| 200      | 30.31 | 45.76 |       |      |       | 20.00 | 25.00 |      | 13.66 |          | 447/449TS |



|   |                       |                               |
|---|-----------------------|-------------------------------|
| DRAWING REVISION<br>C   | REVISION BY<br>GOPI J | REV DATE/© DATE<br>09/02/2022 |
| REQUEST NUMBER<br>CR-0006851  | APPROVED BY<br>SBD    | DATE<br>09/02/2022            |
| REQUEST NUMBER DESCRIPTION<br>VIEWS UPDATED AS PER 3D   |                       |                               |
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PRIMARY DIMENSIONS ARE INCH  
mm DIMENSIONS IN [BRACKETS]  
ARE FOR REFERENCE ONLY

|                        |   |                            |
|------------------------|---|----------------------------|
| DRAWN BY<br>ZXW        | Regal Beloit America, Inc.              |                            |
| DATE<br>21/07/2016     |   |                            |
| APPROVED BY            | DESCRIPTION<br><b>OUTLINE</b>           |                            |
| DATE                   | 444/445/447/449TS FR NEMA ODP CAST IRON |                            |
| REFERENCE              | MATERIAL                                | PROCESS/FINISH             |
| THIRD ANGLE PROJECTION | SIZE<br>B                               | DRAWING NUMBER<br>SS620756 |
|                        |   | SHEET<br>1 OF 1            |



VIEW OF TERMINAL END

|  |                              |             |                | TOLERANCES UNLESS SPECIFIED |              | REGAL REGAL - BELOIT CORPORATION | DRAWN RJW 02-11-2005 |             |            |      |
|--|------------------------------|-------------|----------------|-----------------------------|--------------|----------------------------------|----------------------|-------------|------------|------|
|  |                              |             |                | DEC.                        | INCHES       |                                  | CHK                  | ML          | 02-11-2005 |      |
|  |                              |             |                | .X                          | ±.1          |                                  | APPD                 | GK          | 02-11-2005 |      |
|  |                              |             |                | .XX                         | ±.02         | TITLE CONNECTION DIAGRAM         | SCALE                |             |            |      |
| D  | CHANGED TO REGAL TITLE BLOCK | ECO-0108299 | WGJ 08/22/2016 | EMH                         | .XXX ±.005   | 12 LEAD- SINGLE VOLTAGE          | REF                  |             |            |      |
| 1  | ADDED IEC TERMINAL MARKINGS  | CN 41429    | JJB 05/24/2007 | ML                          | .XXXX ±.0005 | MAT'L.                           | FMF                  |             |            |      |
| NO.  | REVISION                     | BY & DATE   | CHK            | ANG                         | ±7'30"       | FINISH                           | 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                         | 02-11-2005   | CAD FILE ee7300bh                | SIZE                 | DRAWING NO. | PAGE OF    | REV. |
|  |                              |             |                | DIST                        | LB           |                                  | A                    | EE7300BH    |            | C    |



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

DATA VOLTS: 460

**CERTIFICATION DATA SHEET**

CUSTOMER: \_\_\_\_\_ CUSTOMER P.O. #: \_\_\_\_\_  
 ORDER #: \_\_\_\_\_ REFERENCE MODEL #: 444TSTD4010  
 CONN. DIAGRAM: EE7300BH CAT #: U536A  
 OUTLINE: SS620756 CUSTOMER PART #: \_\_\_\_\_  
 WINDING: IE3L2802110 NONE 1 MOUNTING: F1/F2 CAPABLE  
 SPEED: \_\_\_\_\_

**TYPICAL MOTOR PERFORMANCE DATA**

| HP  | KW  | SYNC RPM | FL RPM | FRAME | ENCLOSURE | TYPE | KVA CODE | DESIGN |
|-----|-----|----------|--------|-------|-----------|------|----------|--------|
| 200 | 149 | 3600     | 3575   | 444TS | DP        | TDC  | F        | B      |

| PH | HZ    | VOLTS   | AMPS    | START TYPE  | DUTY | INSL | S.F. | AMB | ELEV. |
|----|-------|---------|---------|-------------|------|------|------|-----|-------|
| 3  | 60/50 | 460#380 | 220&200 | PWS & YDRUN | CONT | F    | 1.15 | 50  | 3300  |

| F.L. EFF | 94.5 | 3/4 LD EFF | 94.5 | 1/2 LD EFF | 94.1 | GTD EFF | 93.6 | ELECT. TYPE | SQ CAGE IND RUN |
|----------|------|------------|------|------------|------|---------|------|-------------|-----------------|
| F.L. PF  | 89.0 | 3/4 LD PF  | 88.0 | 1/2 LD PF  | 84.0 |         |      |             |                 |

| F.L. TORQUE | LR AMPS @ 460 V | L.R. TORQUE    | B.D. TORQUE    | F.L. RISE (°C) |
|-------------|-----------------|----------------|----------------|----------------|
| 294 LB-FT   | 1,300           | 425 LB-FT 145% | 675 LB-FT 230% | 50             |

| @ 3 FT. | POWER    | ROTOR WK²   | MAX. LOAD WK² | SAFE STALL TIME | STARTS/HOUR | MOTOR WGT |
|---------|----------|-------------|---------------|-----------------|-------------|-----------|
| 999 dBA | 1008 dBA | 0.00 LB-FT² | 250 LB-FT²    | 20 SEC.         | 2           | 0 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               | NO         | NONE    | RED (ENAMEL) |

| BEARINGS |      | GREASE     | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL          | FRAME MATERIAL |
|----------|------|------------|------------|------------|-------------|-------------------------|----------------|
| DE       | ODE  |            |            |            |             |                         |                |
| BALL     | BALL | POLYREX EM | TS         | NONE       | NONE        | 1045 HOT ROLLED (C-204) | CAST IRON      |
| 6314     | 6314 |            |            |            |             |                         |                |

| 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 |
|--------------|--------------|--------------|--------------|--------------|--------------------|-------|
| 0.023        | 0.008        | 0.114        | 0.137        | 5.069        | 0.150              | ODE   |

|                                 |                           |  |
|---------------------------------|---------------------------|--|
| *<br>N<br>O<br>T<br>E<br>S<br>* | INVERTER TORQUE: NONE     |  |
|                                 | INV. HP SPEED RANGE: NONE |  |
|                                 | ENCODER: NONE             |  |
|                                 | NONE                      |  |
|                                 | NONE NONE PPR             |  |

|                               |                   |
|-------------------------------|-------------------|
| PREPARED BY: FAREEDA DUDEKULA | BRAKE: NONE       |
| DATE: 8/20/2018               | NONE NONE         |
|                               | FT-LB: NA         |
|                               | VOLTAGE: NONE HZ: |
|                               | UL: NONE          |

FORM: 3531 REV\_4 2/27/06

Data Sheet

444TSTD4010

Date: 12/12/2018  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



Submittal

Data @ 460 V

Motor Load Data

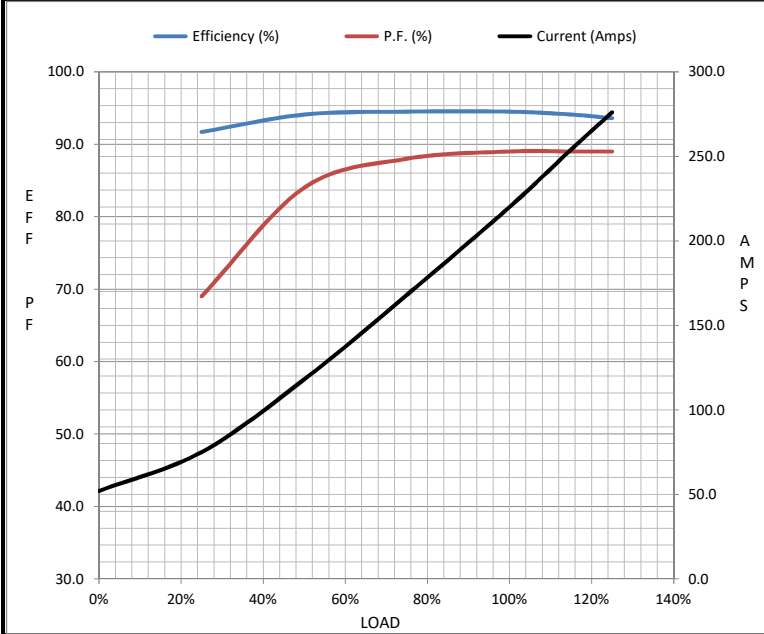
| Load           | 0%   | 25%  | 50%  | 75%  | 100% | 115% | 125% | LR    |
|----------------|------|------|------|------|------|------|------|-------|
| Current (Amps) | 52.0 | 75.0 | 118  | 168  | 220  | 254  | 276  | 1,300 |
| Torque (ft-lb) | 0.00 | 73.0 | 146  | 220  | 294  | 338  | 368  | 425   |
| RPM            | 3600 | 3595 | 3588 | 3582 | 3575 | 3572 | 3568 | 0     |
| Efficiency (%) |      | 91.7 | 94.1 | 94.5 | 94.5 | 94.1 | 93.6 |       |
| P.F. (%)       | 7.0  | 69.0 | 84.0 | 88.0 | 89.0 | 89.0 | 89.0 | 33.0  |

Motor Speed Data

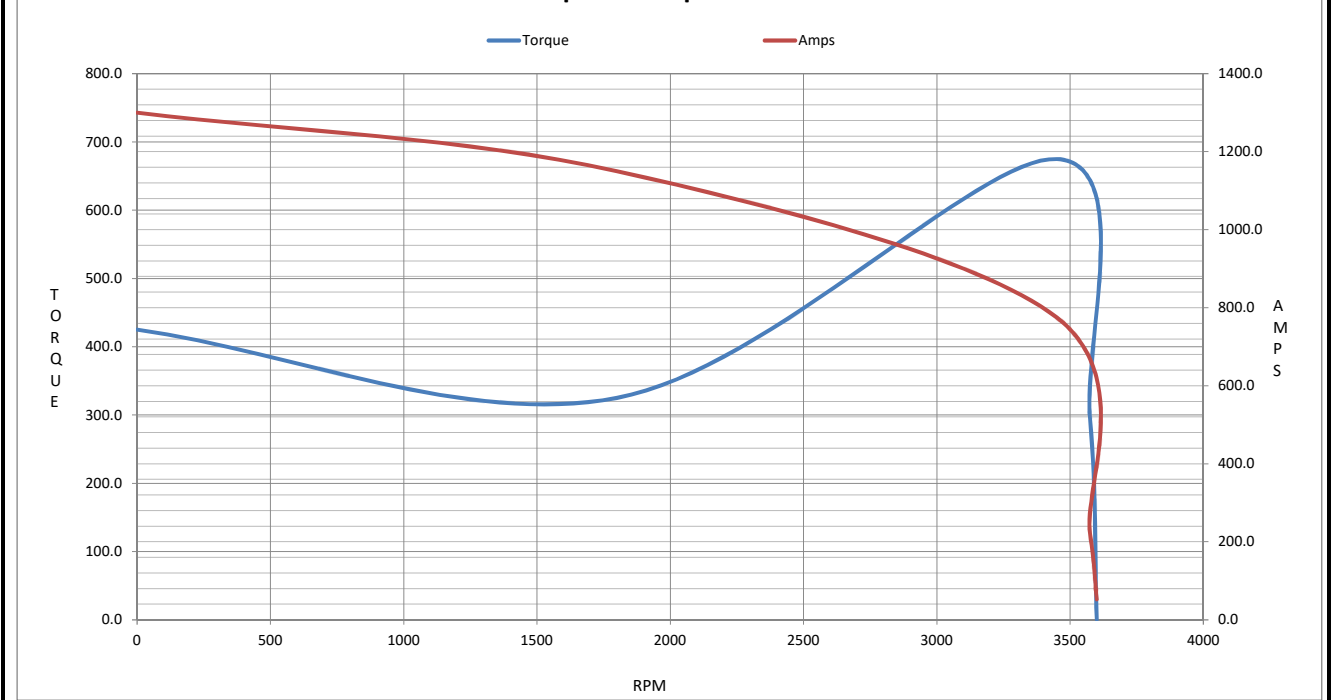
|                | LR    | Pull-Up | BD   | Rated | Idle |
|----------------|-------|---------|------|-------|------|
| Speed (RPM)    | 0     | 1800    | 3450 | 3575  | 3600 |
| Current (Amps) | 1,300 | 1,150   | 775  | 220   | 52.0 |
| Torque (ft-lb) | 425   | 325     | 675  | 294   | 0.00 |

Information Block

|                             |                         |        |        |        |
|-----------------------------|-------------------------|--------|--------|--------|
| HP                          | 200.0                   |        |        |        |
| Sync. RPM                   | 3600                    |        |        |        |
| Frame                       | 444                     |        |        |        |
| Enclosure                   | DP                      |        |        |        |
| Construction                | TDC                     |        |        |        |
| Voltage                     | 460#380 V               |        |        |        |
| Frequency                   | 60 Hz                   |        |        |        |
| Design                      | B                       |        |        |        |
| LR Code letter              | F                       |        |        |        |
| Service Factor              | 1.15                    |        |        |        |
| Temp Rise @ FL              | 50 °C                   |        |        |        |
| Duty                        | CONT                    |        |        |        |
| Ambient                     | 40 °C                   |        |        |        |
| Elevation                   | 1,000 feet              |        |        |        |
| Rotor/Shaft wk <sup>2</sup> | 0.00 Lb-Ft <sup>2</sup> |        |        |        |
| Ref Wdg                     | IE3L2802110 NONE        |        |        |        |
| Sound Pressure @ 1M         | 999 dBA                 |        |        |        |
| VFD Rating                  | NONE                    |        |        |        |
| Outline Dwg                 | SS620756                |        |        |        |
| Conn. Diag                  | EE7300BH                |        |        |        |
| Additional Specifications:  |                         |        |        |        |
| 0                           |                         |        |        |        |
| 0                           |                         |        |        |        |
| EQUIV CKT (OHMS / PHASE)    |                         |        |        |        |
| R1                          | R2                      | X1     | X2     | Xm     |
| 0.0230                      | 0.0080                  | 0.1140 | 0.1370 | 5.0690 |



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 : 444TSTD4010

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

Catalog No : U536A

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**