

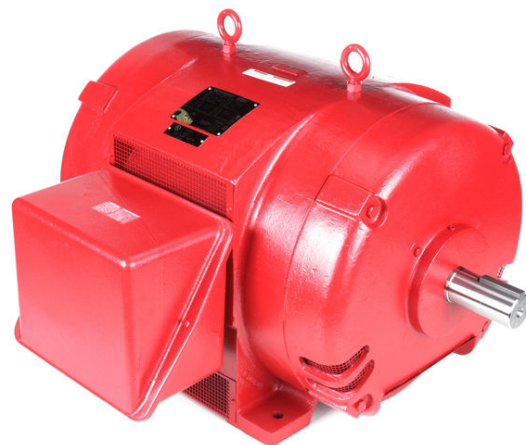
# PRODUCT INFORMATION PACKET

Model No: 445TSTDCD4008

Catalog No: U1130

250 HP Fire Pump Motor, 3 phase, 3600 RPM, 575 V, 445TS Frame, ODP

Fire Pump Motors



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### Nameplate Specifications

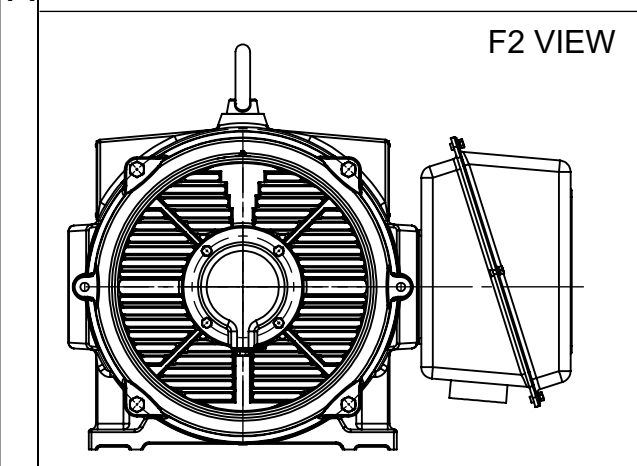
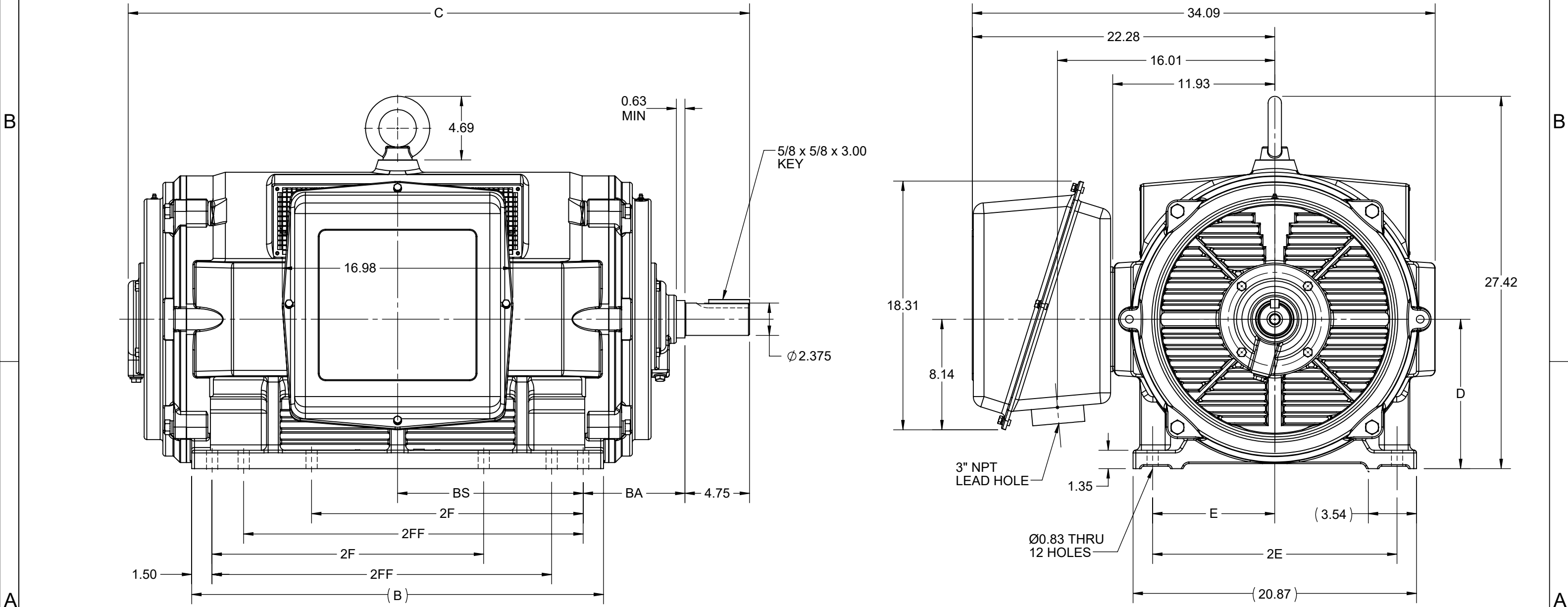
|                        |                   |                            |                   |
|------------------------|-------------------|----------------------------|-------------------|
| Output HP              | <b>250 Hp</b>     | Output KW                  | <b>187.0 kW</b>   |
| Frequency              | <b>60 Hz</b>      | Voltage                    | <b>575 V</b>      |
| Current                | <b>218.0 A</b>    | Speed                      | <b>3575 rpm</b>   |
| Service Factor         | <b>1.15</b>       | Phase                      | <b>3</b>          |
| Efficiency             | <b>94.5 %</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>          |
| Frame                  | <b>445TS</b>      | Enclosure                  | <b>Drip Proof</b> |
| Thermal Protection     | <b>No</b>         | Ambient Temperature        | <b>50 °C</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>.032 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>                            |
| Outline Drawing       | <b>SS620756-445TS</b>              | Connection Drawing    | <b>EE7300BH</b>                                 |

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| 4        |       |       |       | 3    |       |       |       | 2    |       | 1        |           |
|----------|-------|-------|-------|------|-------|-------|-------|------|-------|----------|-----------|
| DASH NO. | 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  
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|                        |   |                            |
|------------------------|---|----------------------------|
| 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 #: 445TSTDCD4008  
 CONN. DIAGRAM: EE7300BH CAT #: U1130  
 OUTLINE: SS620756 CUSTOMER PART #: \_\_\_\_\_  
 WINDING: IE3L2802111 NONE 3 MOUNTING: F1/F2 CAPABLE  
 SPEED: \_\_\_\_\_

**TYPICAL MOTOR PERFORMANCE DATA**

| HP  | KW  | SYNC RPM | FL RPM | FRAME | ENCLOSURE | TYPE | KVA CODE | DESIGN |
|-----|-----|----------|--------|-------|-----------|------|----------|--------|
| 250 | 187 | 3600     | 3575   | 445TS | DP        | TDC  | F        | B      |

| PH | HZ | VOLTS | AMPS | START TYPE  | DUTY | INSL | S.F. | AMB | ELEV. |
|----|----|-------|------|-------------|------|------|------|-----|-------|
| 3  | 60 | 575   | 218  | 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) |
|-------------|-----------------|----------------|----------------|----------------|
| 367 LB-FT   | 1,340           | 575 LB-FT 157% | 850 LB-FT 232% | 50             |

| @ 3 FT. | POWER    | ROTOR WK <sup>2</sup>   | MAX. LOAD WK <sup>2</sup> | SAFE STALL TIME | STARTS/HOUR | MOTOR WGT |
|---------|----------|-------------------------|---------------------------|-----------------|-------------|-----------|
| 999 dBA | 1008 dBA | 0.00 LB-FT <sup>2</sup> | 250 LB-FT <sup>2</sup>    | 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 |
|--------------|--------------|--------------|--------------|--------------|--------------------|-------|
| 0.029        | 0.01         | 0.134        | 0.176        | 6.418        | 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: 8/31/2018               | NONE NONE         |
|                               | FT-LB: NA         |
|                               | VOLTAGE: NONE HZ: |
|                               | UL: NONE          |

FORM: 3531 REV\_4 2/27/06

Data Sheet

445TSTDCD4008

Date: 12/14/2018  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



Submittal

Data @ 575 V

Motor Load Data

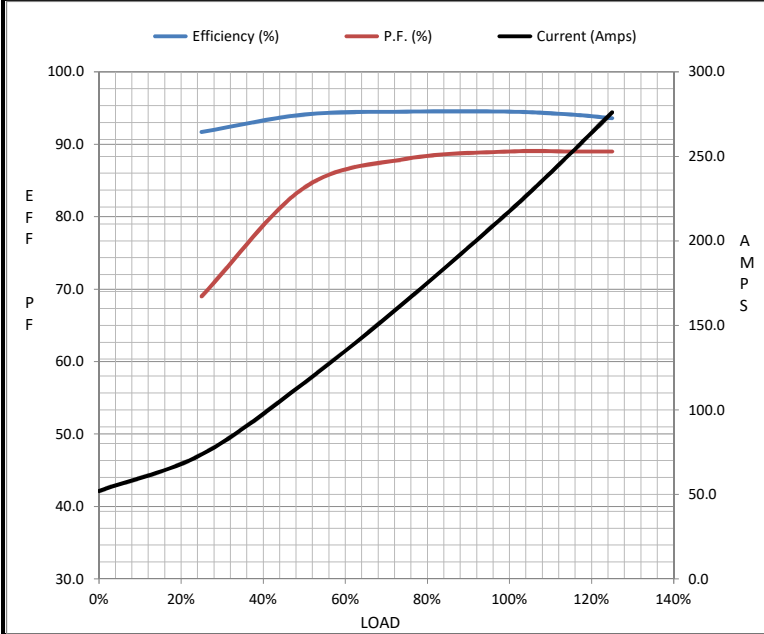
| Load           | 0%   | 25%  | 50%  | 75%  | 100% | 115% | 125% | LR    |
|----------------|------|------|------|------|------|------|------|-------|
| Current (Amps) | 52.0 | 73.6 | 116  | 165  | 218  | 252  | 276  | 1,340 |
| Torque (ft-lb) | 0.00 | 91.5 | 183  | 275  | 367  | 423  | 460  | 575   |
| RPM            | 3600 | 3595 | 3588 | 3582 | 3575 | 3572 | 3568 | 0     |
| Efficiency (%) |      | 91.7 | 94.1 | 94.5 | 94.5 | 94.1 | 93.6 |       |
| P.F. (%)       | 6.0  | 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) | 1,340 | 1,200   | 800  | 218   | 52.0 |
| Torque (ft-lb) | 575   | 475     | 850  | 367   | 0.00 |

Information Block

|                             |                         |        |        |        |
|-----------------------------|-------------------------|--------|--------|--------|
| HP                          | 250.0                   |        |        |        |
| Sync. RPM                   | 3600                    |        |        |        |
| Frame                       | 445                     |        |        |        |
| Enclosure                   | DP                      |        |        |        |
| Construction                | TDC                     |        |        |        |
| Voltage                     | 575 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                     | IE3L2802111 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     |
| 0.0290                      | 0.0100                  | 0.1340 | 0.1760 | 6.4180 |



Speed -Torque Curve

