

# Product Information Packet

November 8, 2016

Data shown is for the current revision model #. Ensure your nameplate model # matches.

|                            |                       |
|----------------------------|-----------------------|
| <b>Model Number:</b>       | <b>5KS324XAA204D8</b> |
| <b>Catalog Number:</b>     | <b>M9584</b>          |
| <b>Instruction Manual:</b> | GEI-56128             |
| <b>Connection Diagram:</b> | GEM2034E-FIG7         |
| <b>Outline Drawing:</b>    | 239C6000RJ            |

| <b>Accessory Connection Diagrams</b> |      |                              |      |
|--------------------------------------|------|------------------------------|------|
| <b>Bearing Thermocouple:</b>         | None | <b>Heater:</b>               | None |
| <b>RTD:</b>                          | None | <b>Thermistor:</b>           | None |
| <b>Thermostat:</b>                   | None | <b>Winding Thermocouple:</b> | None |
| <b>Bearing RTD:</b>                  | None |                              |      |

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**Marks:**

|                            |                       |                               |         |
|----------------------------|-----------------------|-------------------------------|---------|
| <b>MODEL NUMBER:</b>       | <b>5KS324XAA204D8</b> | <b>Estimated Weight:</b>      | 670 Lbs |
| <b>Outline Drawing:</b>    | 239C6000RJ            | <b>Time Rating:</b>           | CONT    |
| <b>Connection Diagram:</b> | GEM2034E-FIG7         | <b>Enclosure:</b>             | TEFC    |
| <b>Instruction Book:</b>   | GEI-56128             | <b>Encl Construction:</b>     | 841     |
| <b>Design Code:</b>        | 32BD1182B             | <b>Ambient Max(°C):</b>       | 40      |
| <b>Type:</b>               | KS                    | <b>Alt Ambient Max(°C):</b>   | --      |
| <b>Frame:</b>              | 324T                  | <b>Insulation Class:</b>      | H       |
| <b>Phases:</b>             | 3                     | <b>NEMA Design:</b>           | B       |
| <b>Poles:</b>              | 4                     | <b>Nominal Efficiency:</b>    | 94.1 %  |
| <b>Output Power:</b>       | 40HP 29.6KW           | <b>Guaranteed Efficiency:</b> | 93.6    |
| <b>RPM:</b>                | 1780                  | <b>3/4 Load Efficiency:</b>   | 94.3    |
| <b>Voltage:</b>            | 575                   | <b>KVA Code:</b>              | G       |
| <b>Hertz:</b>              | 60                    | <b>Max KVAR:</b>              | 14.9    |
| <b>Amps - FL:</b>          | 39.5                  | <b>Power Factor:</b>          | 80.5    |
| <b>Service Factor:</b>     | 1.15                  | <b>Bearing - DE:</b>          | 6312ZC3 |
| <b>Alt Service Factor:</b> | --                    | <b>Bearing - ODE:</b>         | 6312ZC3 |

**Enclosure is Totally Enclosed Fan-Cooled**

**Stamped Nameplate Notes:**

IEEE-STD-841-2009  
 DE BRG 60BC03JP30, ODE BRG 60BC03JP30  
 STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KS324XAA204D8 S/N: XXX  
 CSA CERTIFIED CSA09.2216219 FOR EX NA IIC 200 C GC  
 CL 1 ZONE2 AEX NA IIC 200C;CL 1 DIV2 GRP ABCD 200C  
 IN -25C <= AMB <= 40C, 1.0 SF ON SINE-WAVE PWR  
 SURF TEMP 230C AT 1.15SF ON SINE-WAVE PWR  
 OR 200 C VT OR 230 C CT OR 200 C CHP PWM CONTROL  
 ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB  
 VT 0-60 HZ, CT 3-60 HZ, CHP 60-90 HZ.

**Additional Information:**

4P - T EXTN  
 PAINTED FRAME ID & SHAFT,  
 FAN COVER INSIDE & ODE E/S OUTSIDE  
 346 CU IN - 3.00" NPT  
 INPRO SEAL BOTH ENDS  
 OIL RESISTANT SLEEVING ON LEADS  
 .0015" TIR SHAFT RUNOUT  
 ROUTINE TEST REPORT AND 5 POINT VIBRATION TEST  
 REPORT INCLUDED IN C/B  
 COPPER WASHER UNDER HEADS OF BEARING CAP BOLTS,  
 APPLY TITE-SEAL (A50CD427A) ON BEARING CAP SCREWS,  
 RABBETS AND PLUG THREADS.  
 GROUND PAD  
 F1 MOUNTING



**Performance Characteristics**

1st Winding 1st Connection

**Design: 32BD1182B**

**Marks:**

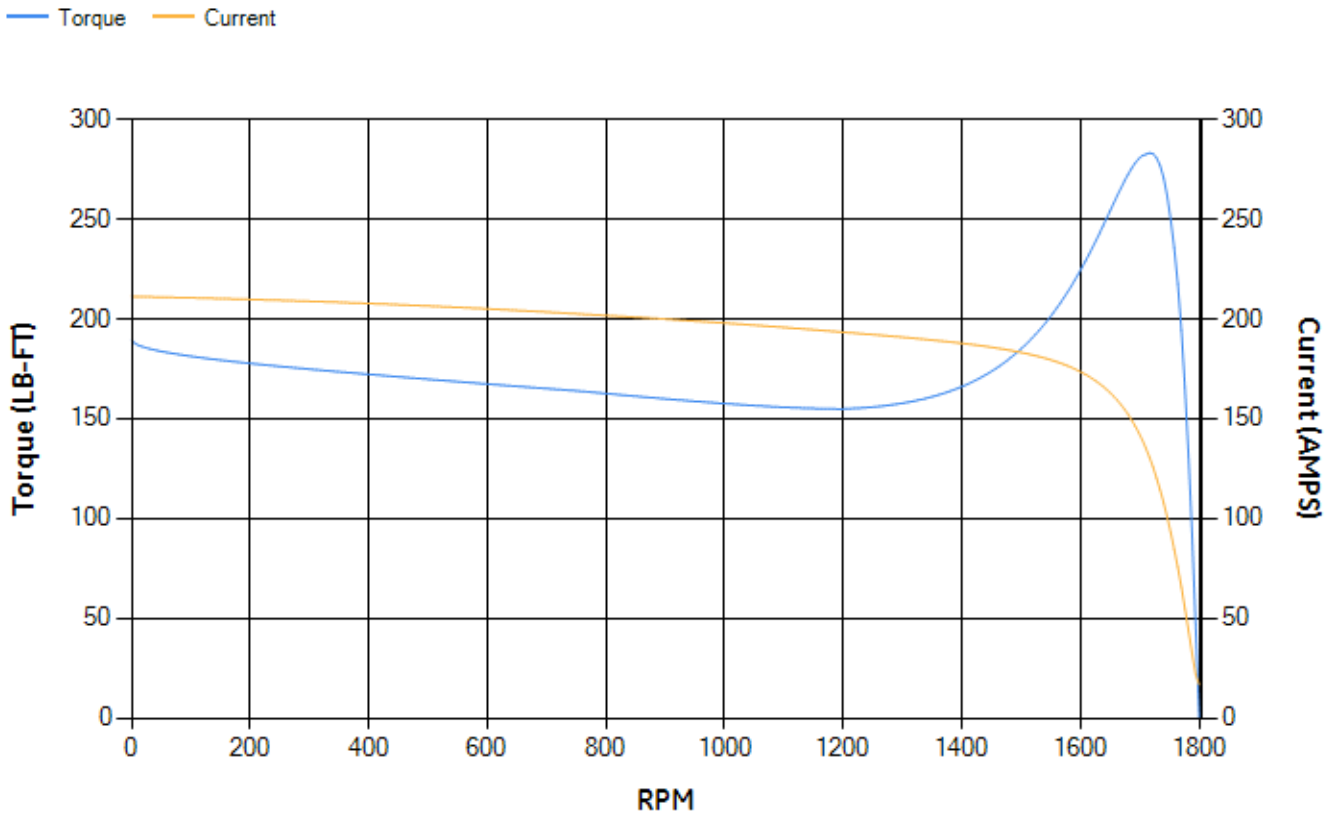
| LOAD % | 125.0 | 115.0 | 100.0 | 75.0  | 50.0  | 25.0  | 0.0   |
|--------|-------|-------|-------|-------|-------|-------|-------|
| % EFF  | 93.33 | 93.64 | 94.22 | 94.34 | 93.95 | 91.06 | 0.00  |
| % PF   | 82.38 | 81.86 | 80.47 | 75.75 | 65.35 | 43.08 | 3.58  |
| AMPS   | 48.69 | 44.93 | 39.42 | 31.43 | 24.39 | 19.08 | 16.59 |

|                    |        |                    |        |                    |        |
|--------------------|--------|--------------------|--------|--------------------|--------|
| <b>TORQ(FL)#FT</b> | 118.14 | <b>TORQ(LR)%FL</b> | 160.51 | <b>TORQ(BD)%FL</b> | 238.72 |
| <b>AMPS(LR)</b>    | 211.21 | <b>PF AT START</b> | 0.33   |                    |        |

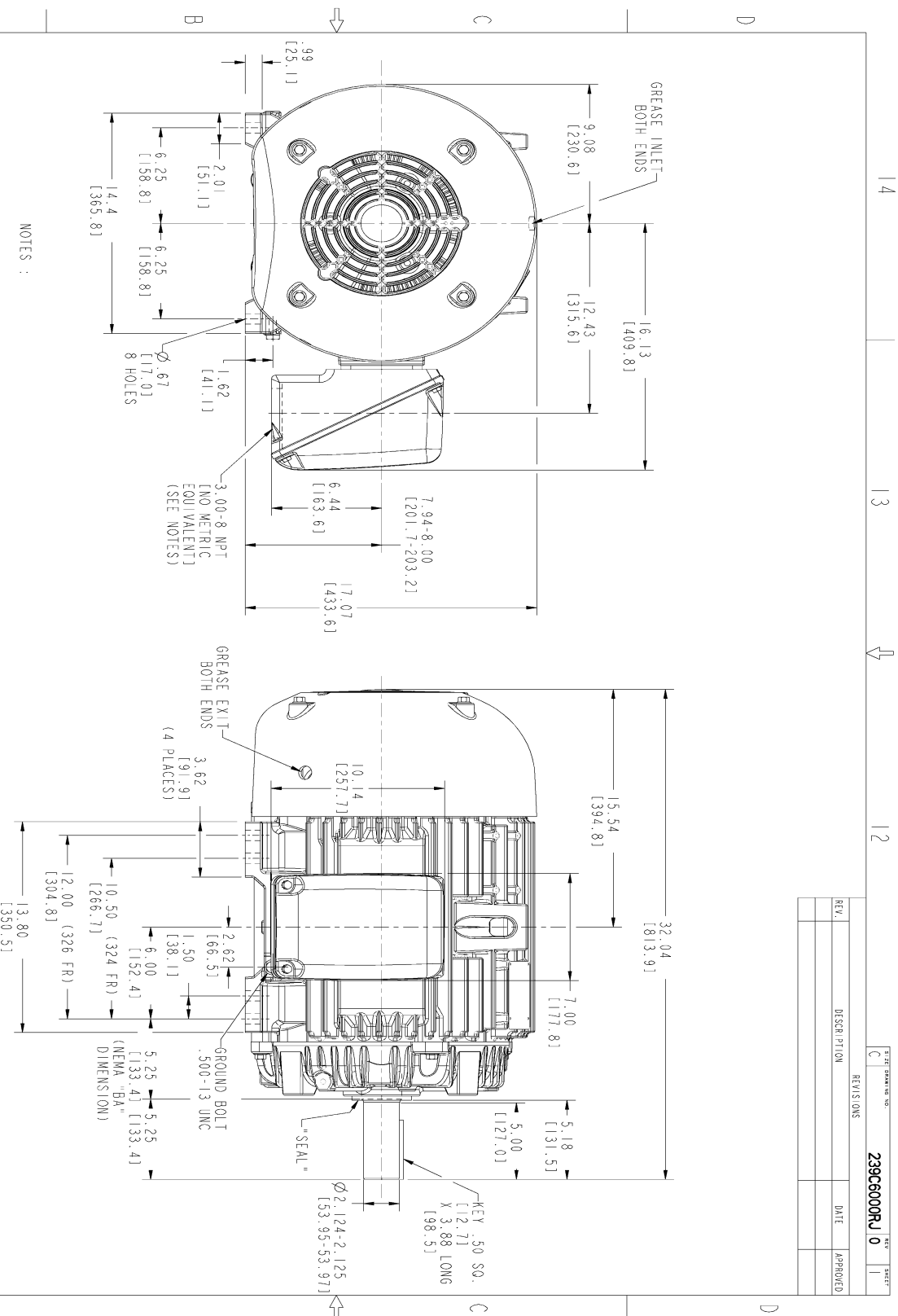
This motor is capable of two cold or one hot start with a maximum connected load inertia of 931 Lb-Ft Sq (39.2 Kg-meter Sq) at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 39 seconds. Safe stall time at 100% voltage is 88 seconds cold, 47 seconds hot. Rotor inertia is 7.01 Lb-Ft Sq (0.3 Kg-meter Sq).

|                           |       |                           |       |
|---------------------------|-------|---------------------------|-------|
| <b>Open Circuit A-C:</b>  | 0.481 | <b>Short Circuit D-C:</b> | 0.022 |
| <b>Short Circuit A-C:</b> | 0.031 | <b>X/R Ratio:</b>         | 8.268 |
| <b>Stator Slots:</b>      | 48    | <b>Rotor Slots:</b>       | 38    |

**Speed Torque Current Curve (First Connection, First Speed)**



Marks:



NOTES :

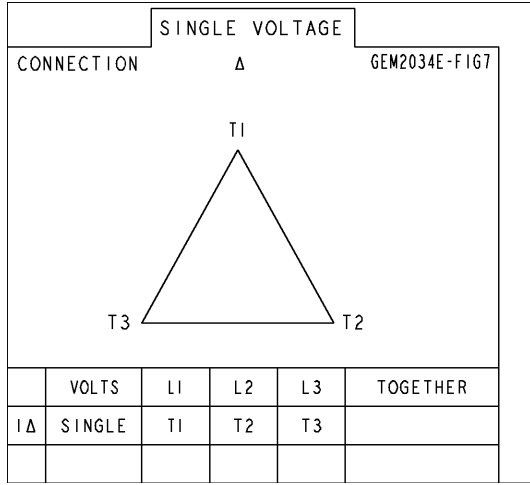
1. CONDUIT BOX MAY BE PLACED WITH THE ENTRANCE DOWN, UP OR ON EITHER SIDE.
2. F-1 ASM AS SHOWN.
3. BRACKETED DIMENSIONS ARE METRIC (MILLIMETERS).
4. TOLERANCE ON PERMISSIBLE SHAFT EXTENSION RUNOUT IS .0015 T.I.R.

|      |             |      |          |
|------|-------------|------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
|      |             |      |          |
|      |             |      |          |

|                                     |         |              |  |
|-------------------------------------|---------|--------------|--|
| SIGNATURES                          |         | DATE         |  |
| MODEL                               | TEJASNI | 06/19/15     |  |
| SCALE                               | TEJASNI | 06/19/15     |  |
| <br><b>GENERAL ELECTRIC COMPANY</b> |         |              |  |
| <b>OUTLINE</b>                      |         |              |  |
| <b>324/326 T TFC XSD 94I</b>        |         |              |  |
| <b>346 CU IN CONDUIT BOX</b>        |         |              |  |
| TITLE                               |         |              |  |
| DESIGN                              | KANTHIK | 06/19/15     |  |
| DRAW                                | VENKAT  | 06/19/15     |  |
| CHKD                                |         |              |  |
| ISSUED                              | TEJASNI | 06/19/15     |  |
| SIZE                                |         | DRAWING      |  |
| C                                   |         |              |  |
| SOLID MODEL: 239C6000RJ             |         | SCALE: 0.250 |  |
| REF. NO: 239C6000RJ                 |         | SHEET 1 OF 1 |  |

Marks:

**Connection Diagram**  
**GEM2034E-FIG7**



| End shield Assembly |               |                |
|---------------------|---------------|----------------|
| Part Description    | DE Side Part# | ODE Side Part# |
| End Shield          | 115E4200AA1   | 115E4200LA1    |
| Bearing             | 235A2609AA01  | 235A2609AA01   |
| Slinger/Inproseal   | 235A4575GS2   | 235A4575GS2    |

| Fan & Fan Cover Assembly |             |
|--------------------------|-------------|
| Part Description         | Part#       |
| Fan                      | 159C6900G04 |
| Fan Cover                | 128D6800AA1 |

| Conduit & Accessories Box Assembly |             |
|------------------------------------|-------------|
| Part Description                   | Part#       |
| Conduit Box                        | 149C4429AA2 |

| Mechanical Accessories |       |
|------------------------|-------|
| Part Description       | Part# |
| Brake                  |       |
| Tachometer             |       |