GE
Power Conversion

# Product Information Packet

**November 8, 2016**

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

| | |
|---|---|
| **Model Number:** | **5KS444XAA404D4** |
| **Catalog Number:** | **M9598** |
| **Instruction Manual:** | GEI-56128 |
| **Connection Diagram:** | GEM2034E-FIG1 |
| **Outline Drawing:** | 239C6600YF |

## Accessory Connection Diagrams

| | | | |
|---|---|---|---|
| **Bearing Thermocouple:** | None | **Heater:** | None |
| **RTD:** | None | **Thermistor:** | None |
| **Thermostat:** | None | **Winding Thermocouple:** | None |
| **Bearing RTD:** | None | | |

## Table of Contents



imagination at work

**Marks**:

| | | | |
|---|---|---|---|
| **MODEL NUMBER:** | **5KS444XAA404D4** | **Estimated Weight:** | 1700 Lbs |
| **Outline Drawing:** | 239C6600YF | **Time Rating:** | CONT |
| **Connection Diagram:** | GEM2034E-FIG1 | **Enclosure:** | TEFC |
| **Instruction Book:** | GEI-56128 | **Encl Construction:** | 841 |
| **Design Code:** | 44BD4011B | **Ambient Max(°C):** | 40 |
| **Type:** | KS | **Alt Ambient Max(°C):** | -- |
| **Frame:** | 444T | **Insulation Class:** | H |
| **Phases:** | 3 | **NEMA Design:** | B |
| **Poles:** | 8 | **Nominal Efficiency:** | 93.6 % |
| **Output Power:** | 75HP 55.5KW | **Guaranteed Efficiency:** | 93.0 |
| **RPM:** | 890 | **3/4 Load Efficiency:** | 94.0 |
| **Voltage:** | 575 | **KVA Code:** | G |
| **Hertz:** | 60 | **Max KVAR:** | 34.8 |
| **Amps - FL:** | 80.0 | **Power Factor:** | 75.0 |
| **Service Factor:** | 1.15 | **Bearing - DE:** | 6318ZC3 |
| **Alt Service Factor:** | -- | **Bearing - ODE:** | 6318ZC3 |

**Enclosure is Totally Enclosed Fan-Cooled**

**Stamped Nameplate Notes:**

IEEE-STD-841-2009
DE BRG 90BC03JP3, ODE BRG 90BC03JP3
STAMP NP249A5564P051 AS BELOW:
MODEL:5KS444XAA404D4 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 215C AT 1.15SF ON SINE-WAVE PWR
OR 200C VT OR 230C CT OR 200C CHP PWM CONTROL
ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB
VT 0 - 60 HZ, CT 6-60 HZ, CHP 60-90 HZ.

**Additional Information:**

8P - T EXTN
PAINTED FRAME ID & SHAFT,
FAN COVER INSIDE & ODE E/S OUTSIDE
700 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: 44BD4011B**

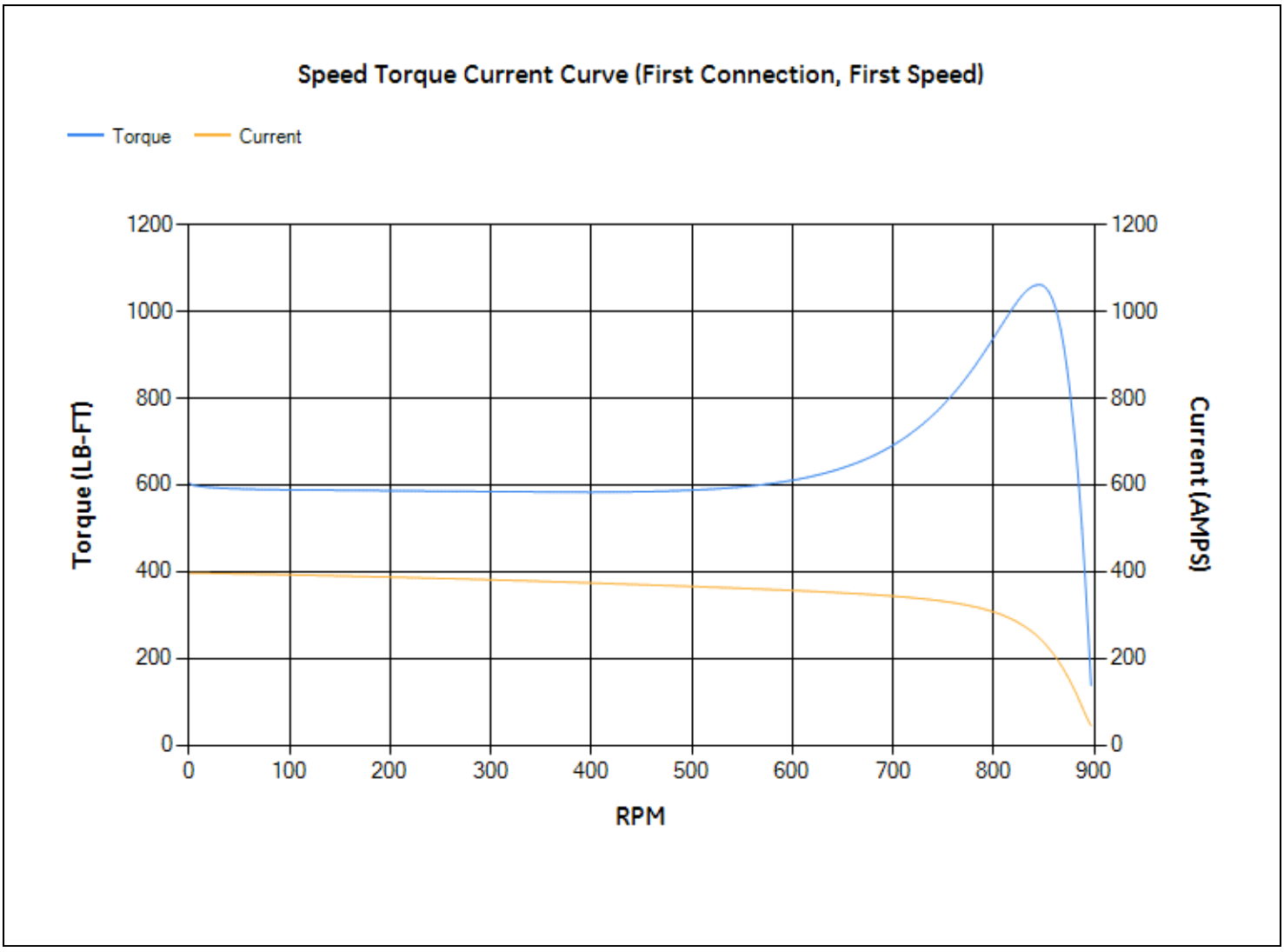
**Marks**:

| LOAD % | 125.0 | 115.0 | 100.0 | 75.0 | 50.0 | 25.0 | 0.0 |
|---|---|---|---|---|---|---|---|
| % EFF | 93.35 | 93.61 | 94.09 | 93.99 | 93.23 | 89.51 | 0.00 |
| % PF | 77.32 | 76.61 | 74.84 | 69.16 | 57.77 | 36.52 | 3.65 |
| AMPS | 97.25 | 90.05 | 79.76 | 64.79 | 52.13 | 42.95 | 38.87 |

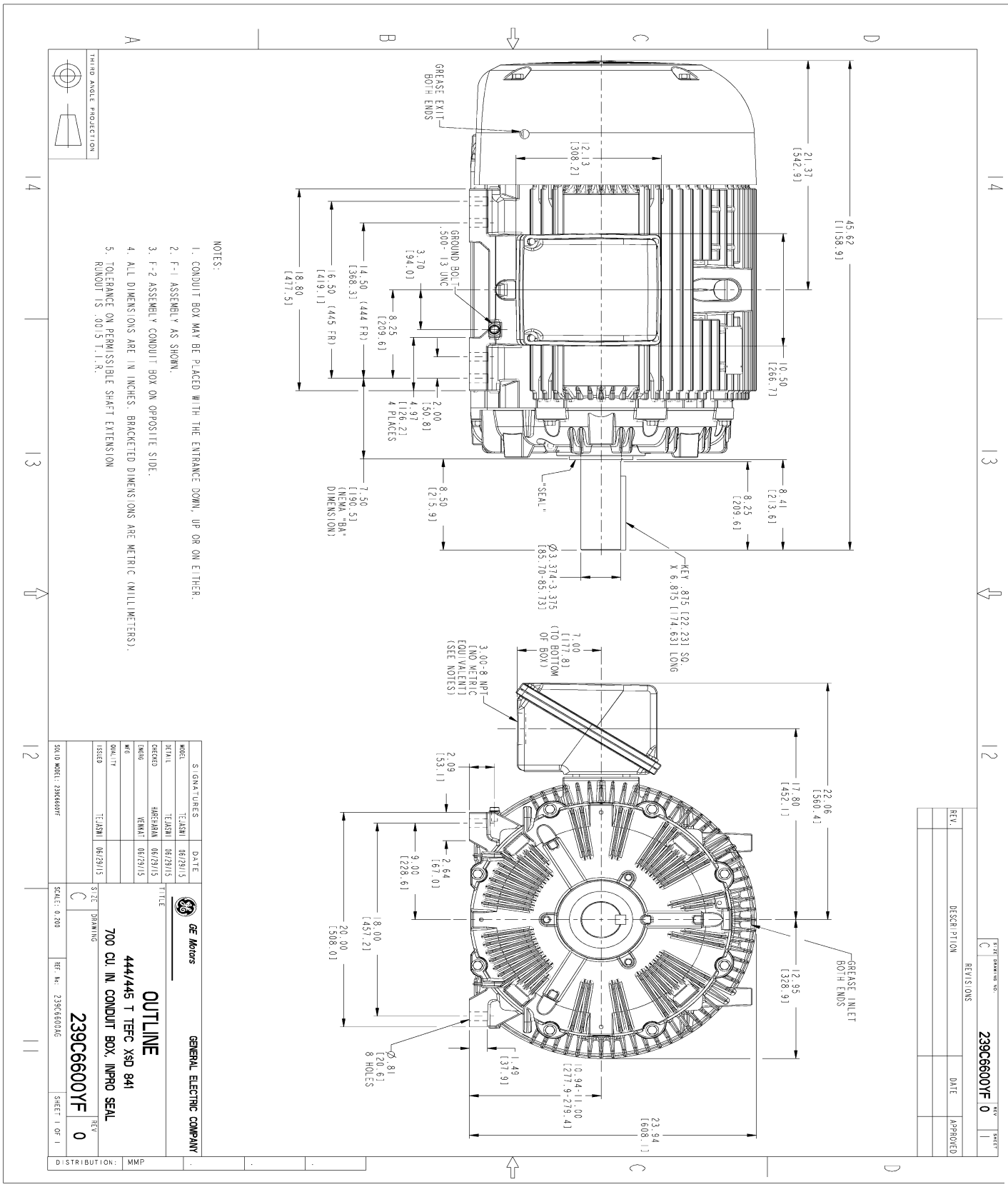
| | | | | | |
|---|---|---|---|---|---|
| **TORQ(FL)#FT** | 443.13 | **TORQ(LR)%FL** | 136.27 | **TORQ(BD)%FL** | 239.05 |
| **AMPS(LR)** | 396.82 | **PF AT START** | 0.33 | | |

This motor is capable of two cold or one hot start with a maximum connected load inertia of 9115 Lb-Ft Sq (383.74 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 53 seconds. Safe stall time at 100% voltage is 118 seconds cold, 63 seconds hot. Rotor inertia is 54.42 Lb-Ft Sq (2.29 Kg-meter Sq).

| | | | |
|---|---|---|---|
| **Open Circuit A-C:** | 0.395 | **Short Circuit D-C:** | 0.026 |
| **Short Circuit A-C:** | 0.034 | **X/R Ratio:** | 9.875 |
| **Stator Slots:** | 72 | **Rotor Slots:** | 58 |



Marks:

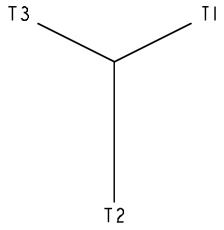

GREASE EXIT BOTH ENDS
GROUND BOLT .500-13 UNC
"SEAL"
KEY .875 [22.23] SQ X 6.875 [174.63] LONG
3.00-8 NPT [NO METRIC EQUIVALENT] (SEE NOTES)
7.00 [177.8] (TO BOTTOM OF BOX)
GREASE INLET BOTH ENDS
Ø.81 [20.6] 8 HOLES
23.94 [608.1]
NOTES:
1. CONDUIT BOX MAY BE PLACED WITH THE ENTRANCE DOWN, UP OR ON EITHER.
2. F-1 ASSEMBLY AS SHOWN.
3. F-2 ASSEMBLY CONDUIT BOX ON OPPOSITE SIDE.
4. ALL DIMENSIONS ARE IN INCHES. BRACKETED DIMENSIONS ARE METRIC (MILLIMETERS).
5. TOLERANCE ON PERMISSIBLE SHAFT EXTENSION RUNOUT IS .001 T.I.R.
THIRD ANGLE PROJECTION
SIGNATURES
MODEL TE.ASWI 06/29/15
DETAIL TE.ASWI 06/29/15
CHECKED HABEEBRAN 06/29/15
ENGRG VERMAT 06/29/15
MFG
QUALITY
ISSUED TE.ASWI 06/29/15
GE Motors
GENERAL ELECTRIC COMPANY
TITLE
OUTLINE
444/445 T TEFC XSD 841
700 CU. IN. CONDUIT BOX. INPRO SEAL
SIZE C
DRAWING 239C6600YF
REV 0
SOLID MODEL: 239C6600YF
SCALE: 0.200
REF No: 239C6600AG
SHEET 1 OF 1
DISTRIBUTION: MMP
REVISIONS
REV. DESCRIPTION DATE APPROVED
SIZE C DRAWING NO. 239C6600YF REV 0 SHEET 1

## Connection Diagram

*GEM2034E-FIG1*

SINGLE VOLTAGE

CONNECTION Y GEM2034E-FIGI




| | VOLTS | LI | L2 | L3 | TOGETHER |
| --- | --- | --- | --- | --- | --- |
| IY | SINGLE | TI | T2 | T3 | |
| | | | | | |

| End shield Assembly | | |
|---|---|---|
| Part Description | DE Side Part# | ODE Side Part# |
| End Shield | 115E4355AA1 | 115E4355LM1 |
| Bearing | 235A2514AG01 | 235A2514AG01 |
| Slinger/Inproseal | 235A4575GS5 | 235A4575GS5 |

| Fan & Fan Cover Assembly | |
|---|---|
| Part Description | Part# |
| Fan | 159C7100G03 |
| Fan Cover | 128D6841AA1 |

| Conduit & Accessories Box Assembly | |
|---|---|
| Part Description | Part# |
| Conduit Box | 118D4408AD2 |

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