

Product Information Packet

January 12, 2017

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

| | |
|----------------------------|----------------------|
| Model Number: | 5KS513SAA326B |
| Catalog Number: | Q519 |
| Instruction Manual: | GEI-56128 |
| Connection Diagram: | GEM2034E-FIG2 |
| Outline Drawing: | 239C6C00GS |

| Accessory Connection Diagrams | | | |
|--------------------------------------|------------|------------------------------|-----------|
| Bearing Thermocouple: | None | Heater: | 3027JE-1C |
| RTD: | 235A3027XY | Thermistor: | None |
| Thermostat: | None | Winding Thermocouple: | None |
| Bearing RTD: | 235A3027NA | | |

| Table of Contents | |
|-----------------------------|----|
| Specification | 01 |
| Performance Characteristics | 02 |
| Outline Drawing | 03 |
| Connection Drawing(s) | 04 |

Marks:

| | | | |
|----------------------------|----------------------|-------------------------------|----------|
| MODEL NUMBER: | 5KS513SAA326B | Estimated Weight: | 6917 Lbs |
| Outline Drawing: | 239C6C00GS | Time Rating: | CONT |
| Connection Diagram: | GEM2034E-FIG2 | Enclosure: | TEFC |
| Instruction Book: | GEI-56128 | Encl Construction: | SD |
| Design Code: | 50BD3208E | Ambient Max(°C): | 40 |
| Type: | KS | Alt Ambient Max(°C): | -- |
| Frame: | 5013S | Insulation Class: | F |
| Phases: | 3 | NEMA Design: | -- |
| Poles: | 6 | Nominal Efficiency: | 95.0 % |
| Output Power: | 450HP 333KW | Guaranteed Efficiency: | 94.1 |
| RPM: | 1190 | 3/4 Load Efficiency: | 96.4 |
| Voltage: | 2300/4000 | KVA Code: | G |
| Hertz: | 60 | Max KVAR: | 111.3 |
| Amps - FL: | 103.1/59.3 | Power Factor: | 86.0 |
| Service Factor: | 1.15 | Bearing - DE: | 6320ZC3 |
| Alt Service Factor: | -- | Bearing - ODE: | 6320ZC3 |

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

HTR LDS HE1-HE2 115V 350W
FOR DIRECT COUPLED LOAD ONLY

Additional Information:

6P - S EXTN
2500 CU IN - 2(4.00" NPT)
100 OHM WINDING RTD LEADS TO AUX C/BOX OPP MAIN C/BOX
SUGGESTED WINDING RTD SETTINGS
ALARM 165C TRIP 175C
115V HTR LDS TO AUX BOX OPP MAIN CONDUIT BOX
SPACE HEATER CAUTION NAMEPLATE
BEARING RTD 100 OHM ON BOTH ENDS
SUGGESTED BEARING RTD SETTINGS
ALARM 115C TRIP 125C
NEMA TYPE GRD PAD
F1 MOUNTING

Performance Characteristics

1st Winding 1st Connection

Design: 50BD3208E

Marks:

| LOAD % | 125.0 | 115.0 | 100.0 | 75.0 | 50.0 | 25.0 | 0.0 |
|--------|-------|-------|-------|-------|-------|-------|-------|
| % EFF | 95.59 | 95.82 | 96.3 | 96.38 | 96.23 | 94.56 | 0.00 |
| % PF | 86.6 | 86.58 | 86.13 | 83.66 | 76.57 | 56.08 | 3.29 |
| AMPS | 73.14 | 67.14 | 58.42 | 45.06 | 32.87 | 22.84 | 17.85 |

TORQ(FL)#FT 1987.55
AMPS(LR) 357.59

TORQ(LR)%FL 118.72
PF AT START 0.24

TORQ(BD)%FL 255.81

This motor is capable of two cold or one hot start with a maximum connected load inertia of 24903 Lb-Ft Sq (1048.42 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 48 seconds. Safe stall time at 100% voltage is 113 seconds cold, 66 seconds hot. Rotor inertia is 346.42 Lb-Ft Sq (14.58 Kg-meter Sq).

Open Circuit A-C: 0.911

Short Circuit D-C: 0.037

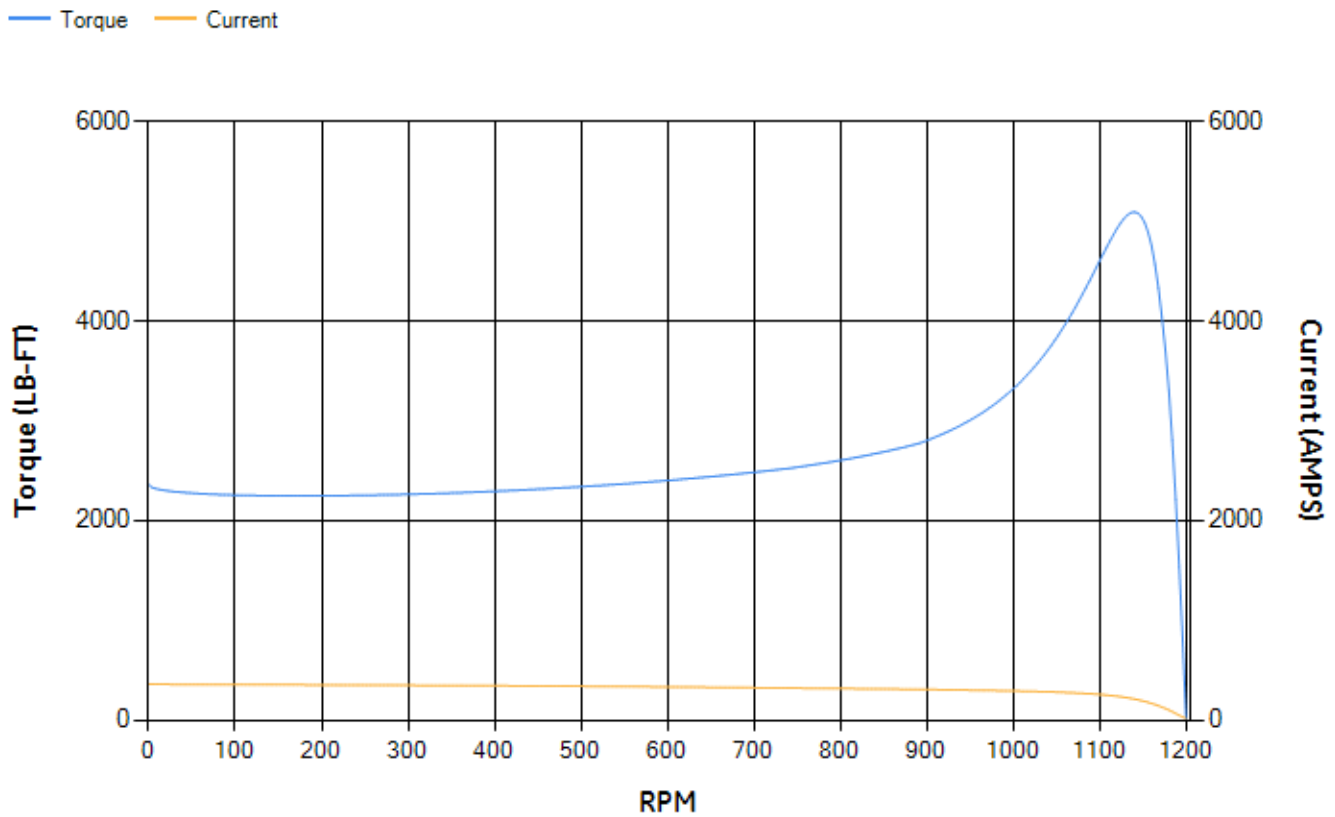
Short Circuit A-C: 0.043

X/R Ratio: 13.996

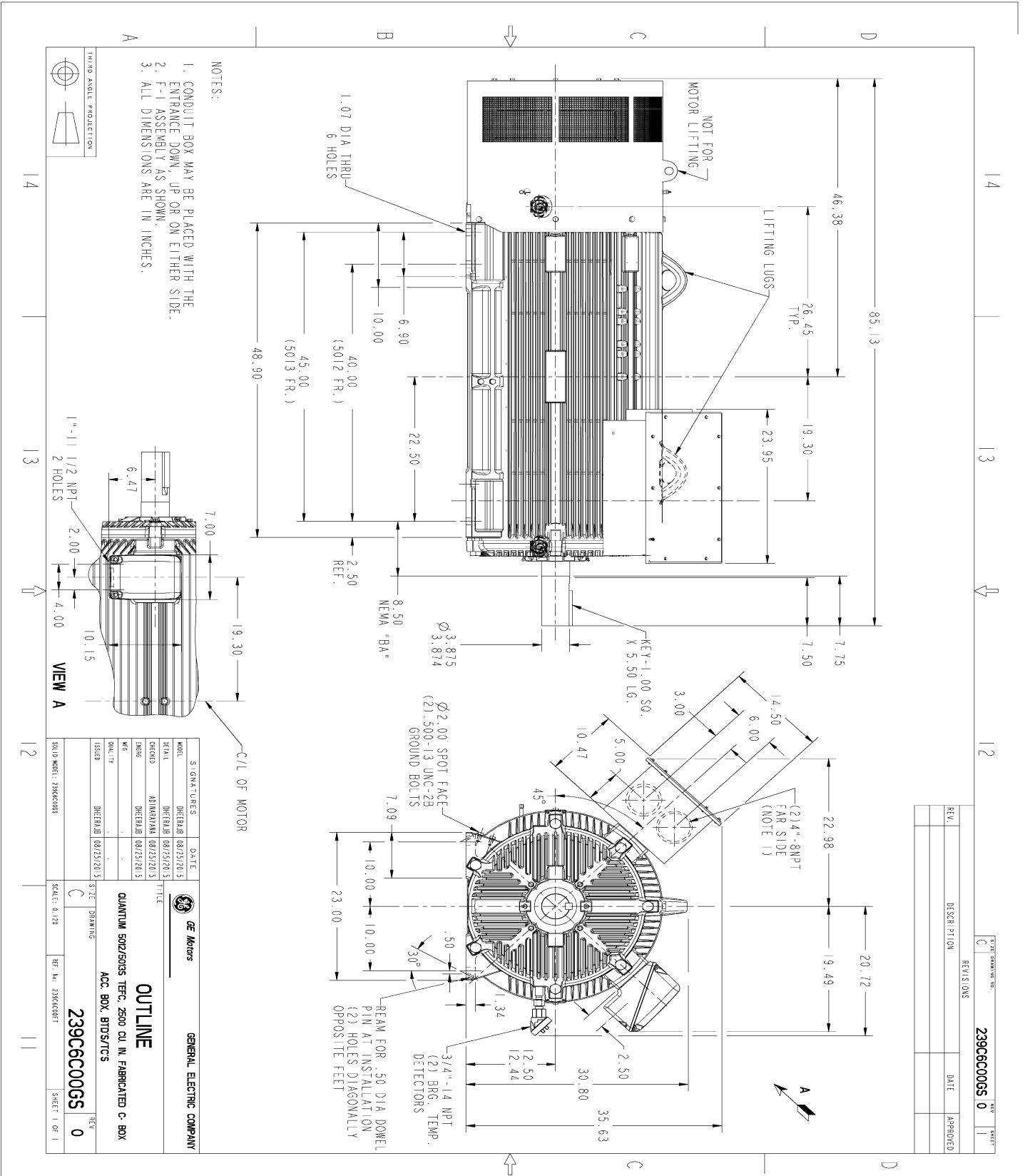
Stator Slots: 72

Rotor Slots: 58

Speed Torque Current Curve (First Connection, First Speed)



Marks:

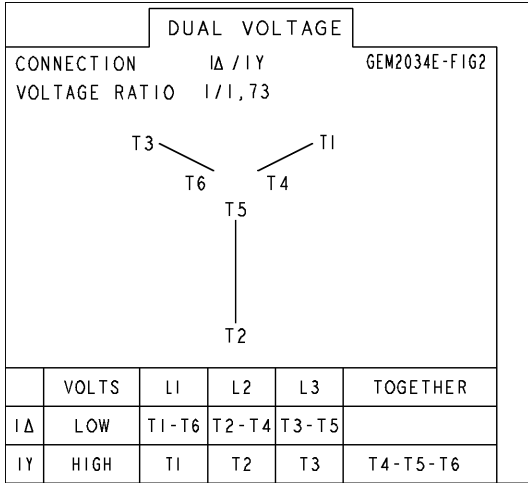


| | | | |
|------|-------------|------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| | | | |

| | | | |
|---|---------------------|--------------|---|
| SIGNATURES | | DATE | |
| MODEL | 08/25/2015 | | |
| SCALE | 08/25/2015 | | |
| DESIGN | 08/25/2015 | | |
| DATE | 08/25/2015 | | |
| ISSUED | 08/25/2015 | | |
| GENERAL ELECTRIC COMPANY | | | |
| OUTLINE QUANTUM 50W/250GS TERC, 2500 CU. IN. FABRICATED C-BOX ACC. BOX, BTDS/7CS | | | |
| SCALE: 0.120 | REF. NO. 239C6C0065 | REV | 0 |
| SHEET 1 OF 1 | | 239C6C0065 0 | |

Marks:

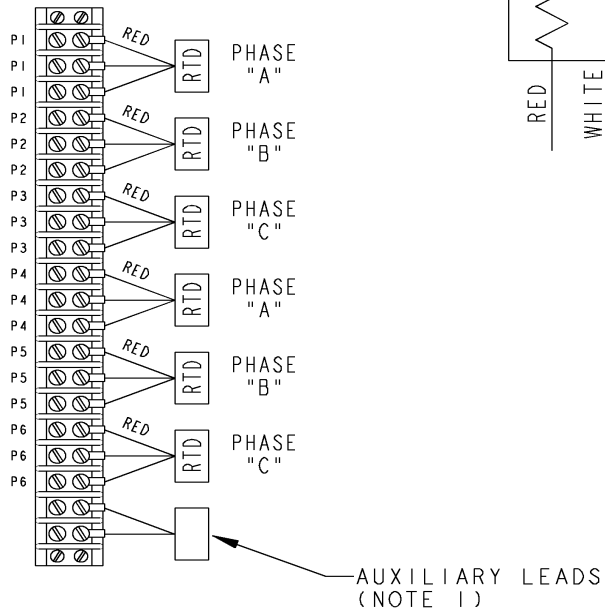
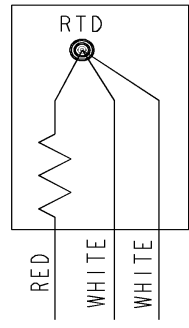
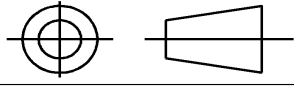
Connection Diagram
GEM2034E-FIG2



Heater Connection
3027JE-1C



| | | | | |
|---|---|---------------------------------------|-------------------------|---------------------|
| SHEET 2 REV 235A3027XY SIZE A DRAWING NO. | GE PROPRIETARY INFORMATION This document is the property of General Electric Company ("GE") and contains proprietary information of GE. This document is loaned on the express condition that neither it nor the information contained herein shall be disclosed to others without the express written consent of GE Industrial Systems, and that the information shall be used by the recipient only as approved expressly by GE Industrial Systems. This document shall be returned to GE upon its request. This document may be subject to certain restrictions under U.S. export control laws and regulations. | REVISIONS | | |
| | THIRD ANGLE PROJECTION | REV. 1 ISAAC# 15-0790 HARIKIRAN | DATE 07/28/15 | APPROVED DHEERAJ |
| | REV. 2 ISAAC# 16-0422 SAGAR K | DATE 05/04/2016 | APPROVED ADINARAYANA | |



NOTE 1: AUXILIARY LEADS SHOWN MAY OR MAY NOT BE PROVIDED IN MOTOR.
 NOTE 2: SPARE RTDS (P7 & P8) FURNISHED IN CASE OF FAILURE IN OTHER RTDS (P1-P6). PHASE LOCATION WILL DEPEND UPON NUMBER OF POLES WINDING CONFIGURATION.

Part must conform to SI 900000 Sect. 4, Toxicity Procedure

| | | | | |
|---|--|--|--|--|
| FOR ADDITIONAL INFO REFER TO: APPLIED PRACTICES DIMENSIONS ARE IN INCHES TOLERANCE ON: 1 PL DECIMALS ± 0.1 2 PL DECIMALS ± 0.02 3 PL DECIMALS ± 0.005 ANGLES ± 0.5 FRACTIONS ± FINISH ✓ | | SIGNATURES MODEL DETAIL VIVEK 06/26/15 CHECKED KARTHIK 06/26/15 ENGRG MFG QUALITY ISSUED VIVEK 06/26/15 | DATE 06/26/15 06/26/15 06/26/15 | GE Motors GENERAL ELECTRIC COMPANY |
| MATERIAL | | SOLID MODEL: MODEL NAME | | TITLE CONNECTION DIAGRAM WINDING RTD & AUXILIARY LEADS |
| SCALE: N.T.S. | | REF: - 235A4594X | | SIZE DRAWING 235A3027XY |
| SHEET 1 OF 1 | | | REV 2 | SHEET 1 OF 1 |



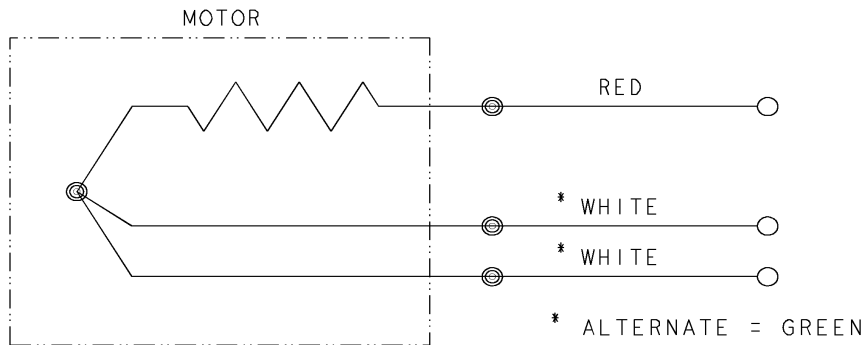
| | | | | | |
|---------------------|------------------------|----------------|-------------|----------|----------|
| REV SH 1 1 | THIRD ANGLE PROJECTION | | REVISIONS | | |
| | | REV | DESCRIPTION | DATE | APPROVED |
| | 1 | ISAAC #12-1124 | HARI | 11/19/12 | KARTHIK |

SIZE A
 DWG NO 235A3027NA

CONFIDENTIAL AND PROPRIETARY

This document is the property of General Electric Company and contains proprietary and confidential information of the Motor Business Group (MBG). The document is loaned on the express conditions that neither it nor the information contained therein shall be disclosed to others without the express consent of MBG and that the information shall be used by the recipient only as approved expressly by MBG. Also, the document shall be returned to MBG upon its request.

BEARING RTDS



| | | | |
|--|----------------------------|--------------|---|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: 2 PL DECIMALS ± 3 PL DECIMALS ± ANGLES ± FRACTIONS ± MATERIAL: APPLIED PRACTICES: | SIGNATURES | DATE | Fort Wayne, Indiana <h2>CONNECTION DIAGRAM</h2> BEARING RTDS |
| | DRAWN D.E. BAIR | 12/16/92 | |
| | CHECKED D.E. BAIR | 12/16/92 | |
| | ENGRG K. DESAI | 12/16/92 | |
| | ISSUED D.E. BAIR | 12/16/92 | |
| | CAD NO. F500:235A3027NA | SIZE A | FSCM NO |
| | | SCALE 1/1 | DWG NO 235A3027NA |
| | | | SHEET 1 OF 1 |

DISTR TO

