

Product Information Packet

January 12, 2017

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

| | |
|----------------------------|----------------------|
| Model Number: | 5KS513SAA127C |
| Catalog Number: | Q506 |
| Instruction Manual: | GEI-56128 |
| Connection Diagram: | GEM2034E-FIG2 |
| Outline Drawing: | 239C6C00GV |

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

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Marks:

| | | | |
|----------------------------|----------------------|-------------------------------|----------|
| MODEL NUMBER: | 5KS513SAA127C | Estimated Weight: | 6685 Lbs |
| Outline Drawing: | 239C6C00GV | Time Rating: | CONT |
| Connection Diagram: | GEM2034E-FIG2 | Enclosure: | TEFC |
| Instruction Book: | GEI-56128 | Encl Construction: | SD |
| Design Code: | 50BD0118F | Ambient Max(°C): | 40 |
| Type: | KS | Alt Ambient Max(°C): | -- |
| Frame: | 5013ST | Insulation Class: | F |
| Phases: | 3 | NEMA Design: | -- |
| Poles: | 2 | Nominal Efficiency: | 95.8 % |
| Output Power: | 600HP 444KW | Guaranteed Efficiency: | 95.0 |
| RPM: | 3565 | 3/4 Load Efficiency: | 96.1 |
| Voltage: | 2300/4000 | KVA Code: | F |
| Hertz: | 60 | Max KVAR: | 59.0 |
| Amps - FL: | 124.0/71.3 | Power Factor: | 94.5 |
| Service Factor: | 1.00 | Bearing - DE: | 6315ZC3 |
| Alt Service Factor: | -- | Bearing - ODE: | 6315ZC3 |

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

HTR LDS HE1-HE2 115V 350W
 ROT CCW FACING ODE LEAD/PH SEQUENCE 3-2-1/1-2-3
 FOR DIRECT COUPLED LOAD ONLY

Additional Information:

2P - ST 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 155C TRIP 165C
 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: 50BD0118F

Marks:

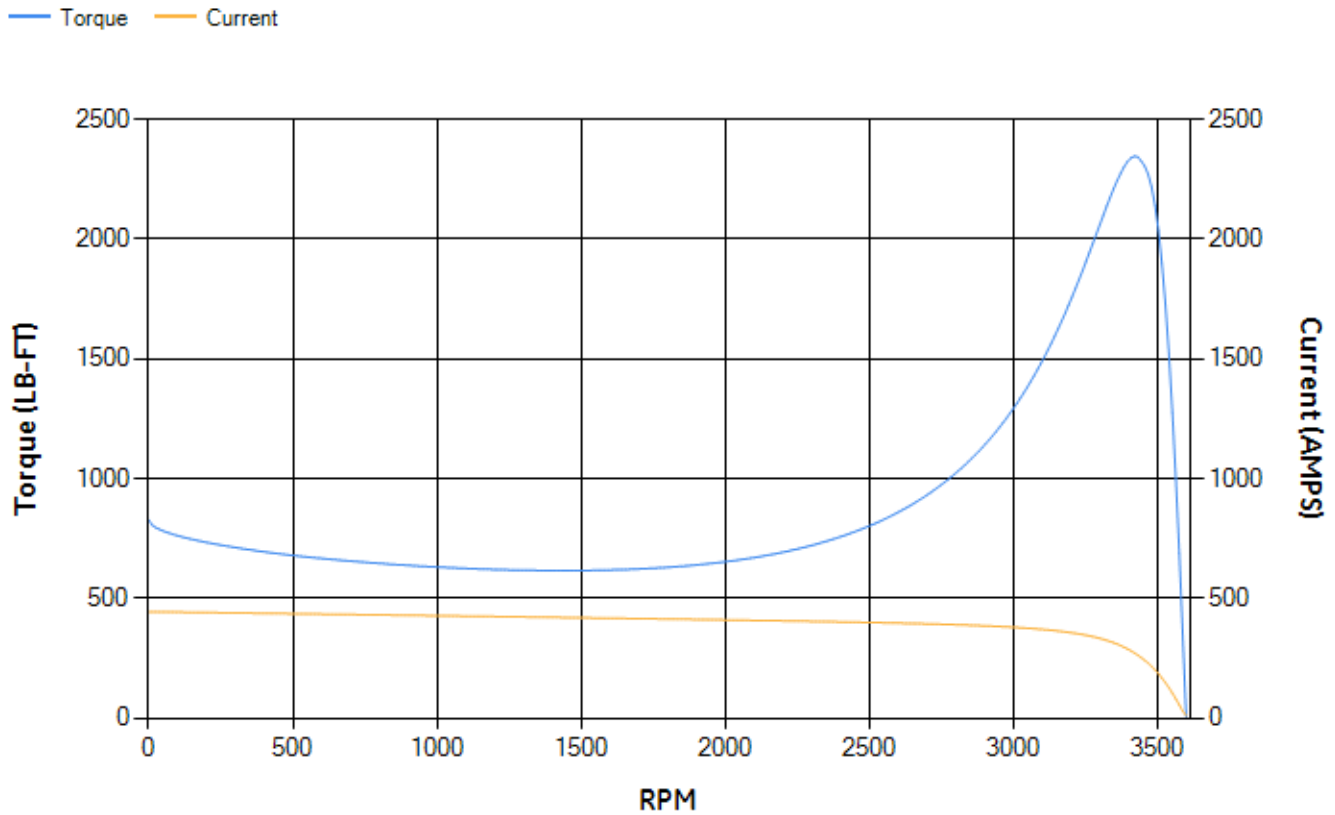
| LOAD % | 125.0 | 115.0 | 100.0 | 75.0 | 50.0 | 25.0 | 0.0 |
|--------|-------|-------|-------|-------|-------|-------|------|
| % EFF | 95.04 | 95.32 | 95.88 | 96.09 | 96.1 | 94.64 | 0.00 |
| % PF | 93.67 | 94.04 | 94.42 | 94.47 | 93.02 | 84.84 | 7.65 |
| AMPS | 90.68 | 82.86 | 71.23 | 53.35 | 36.12 | 20.11 | 9.46 |

| | | | | | |
|--------------------|--------|--------------------|-------|--------------------|--------|
| TORQ(FL)#FT | 884.18 | TORQ(LR)%FL | 93.56 | TORQ(BD)%FL | 264.91 |
| AMPS(LR) | 443.68 | PF AT START | 0.17 | | |

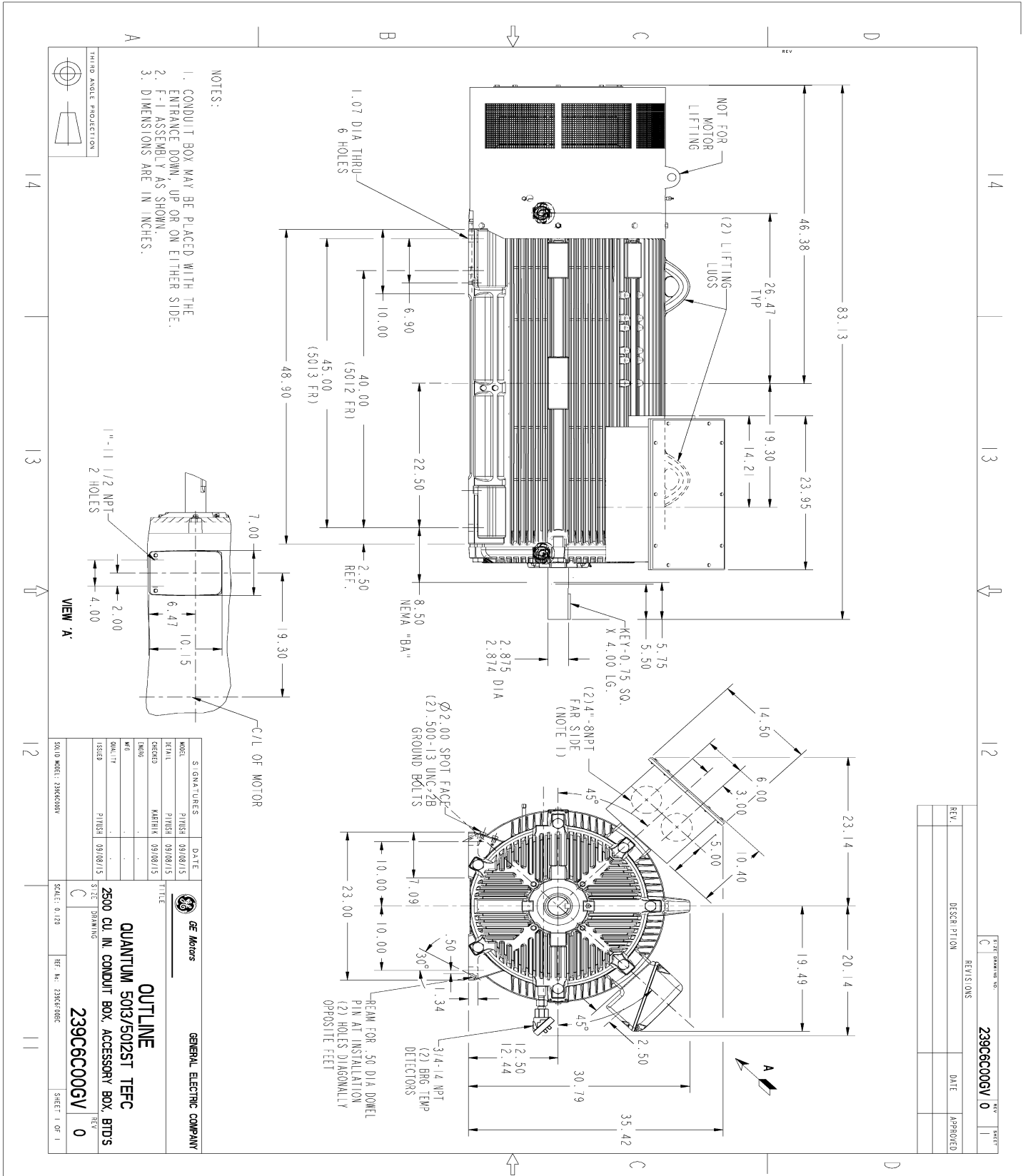
This motor is capable of two cold or one hot start with a maximum connected load inertia of 987 Lb-Ft Sq (41.55 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 22 seconds. Safe stall time at 100% voltage is 57 seconds cold, 26 seconds hot. Rotor inertia is 147.71 Lb-Ft Sq (6.22 Kg-meter Sq).

| | | | |
|---------------------------|-------|---------------------------|--------|
| Open Circuit A-C: | 1.98 | Short Circuit D-C: | 0.038 |
| Short Circuit A-C: | 0.045 | X/R Ratio: | 14.357 |
| Stator Slots: | 48 | Rotor Slots: | 40 |

Speed Torque Current Curve (First Connection, First Speed)

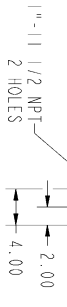


Marks:



- NOTES:
1. CONDUIT BOX MAY BE PLACED WITH THE ENTRANCE DOWN, UP OR ON EITHER SIDE.
 2. F-1 ASSEMBLY AS SHOWN.
 3. DIMENSIONS ARE IN INCHES.

THIRD ANGLE PROJECTION



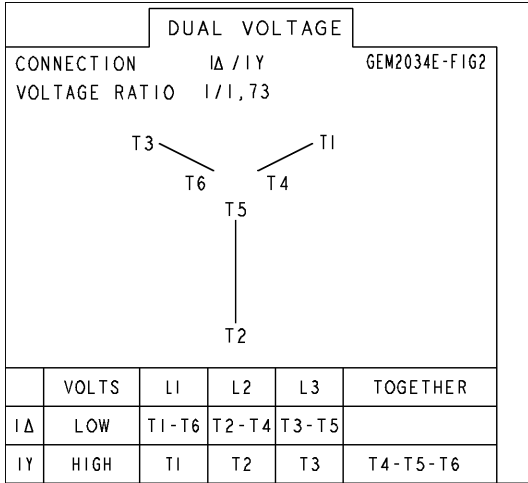
VIEW 'A'

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

| | | | |
|---------------------------------------------|--------|--------------------|--|
| SIGNATURES | | DATE | |
| MODEL | PIVOSH | 09/08/15 | |
| SERIAL | PIVOSH | 09/08/15 | |
| ORDER | MAHNIK | 09/08/15 | |
| DESIG | | | |
| QUALITY | PIVOSH | 09/08/15 | |
| ISSUED | | | |
| TITLE | | SCALE: 0.120 | |
| GENERAL ELECTRIC COMPANY | | REF. No. 239CF086C | |
| OUTLINE | | SHEET DRAWING | |
| QUANTUM 5013/5025T TEFC | | 239C6C00GV | |
| 2500 CU IN CONDUIT BOX, ACCESSORY BOX, BTDS | | REV 0 | |
| SHEET 0 | | SHEET 1 OF 1 | |

Marks:

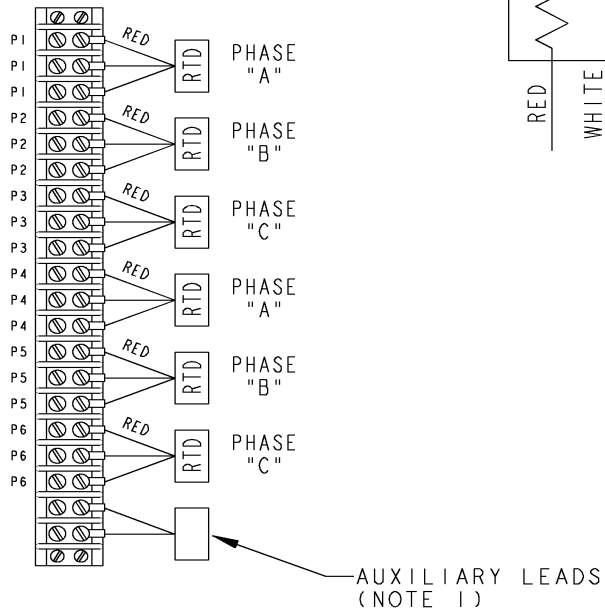
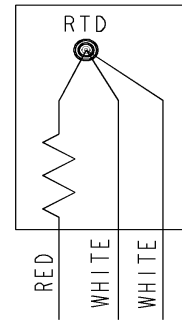
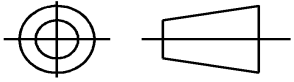
Connection Diagram
GEM2034E-FIG2



Heater Connection
3027JE-1C



| | | | | | |
|-------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------------------------------------|-----------------|----------------------|
| SHEET 2 REV 235A3027XY SIZE A DRAWING NO. | GE PROPRIETARY INFORMATION <small>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.</small> | REVISIONS | | | |
| | THIRD ANGLE PROJECTION | REV. 1 | DESCRIPTION ISAAC# 15-0790 HARIKIRAN | DATE 07/28/15 | APPROVED DHEERAJ |
| | | REV. 2 | DESCRIPTION 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: | | SIGNATURES | | DATE | | GE Motors GENERAL ELECTRIC COMPANY | |
| APPLIED PRACTICES | | MODEL | | DETAIL VIVEK 06/26/15 | | TITLE CONNECTION DIAGRAM WINDING RTD & AUXILIARY LEADS | |
| DIMENSIONS ARE IN INCHES | | CHECKED KARTHIK 06/26/15 | | ENGRG | | | |
| TOLERANCE ON: 1 PL DECIMALS ± 0.1 2 PL DECIMALS ± 0.02 3 PL DECIMALS ± 0.005 ANGLES ± 0.5 FRACTIONS ± | | MFG | | QUALITY | | SIZE DRAWING A | |
| FINISH ✓ | | ISSUED VIVEK 06/26/15 | | REF: - 235A4594X | | 235A3027XY REV 2 | |
| MATERIAL | | SOLID MODEL: MODEL NAME | | SCALE: N.T.S. | | SHEET 1 of 1 | |

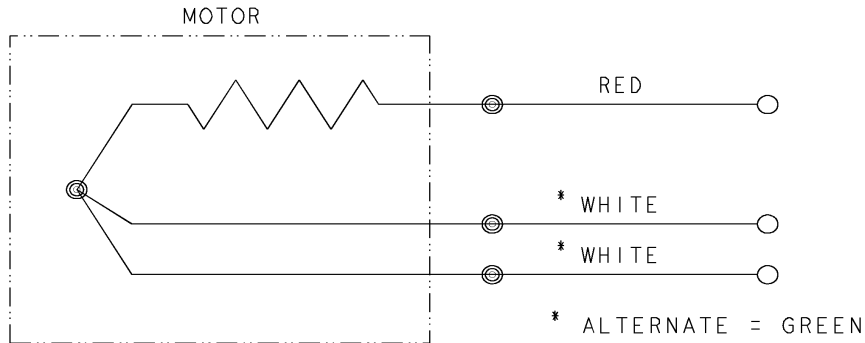


| | | | | | | |
|----------------------------------------------------|------------------------|--|-----------|----------------|------|----------|
| REV 1 SH SIZE A DWG NO 235A3027NA | THIRD ANGLE PROJECTION | | REVISIONS | | | |
| | | | REV | DESCRIPTION | DATE | APPROVED |
| | | | 1 | ISAAC #12-1124 | HARI | 11/19/12 |

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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 | | |
| | 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 | DWG NO 235A3027NA | SHEET 1 OF 1 | |
| SCALE 1/1 | | | | | |

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