

Product Information Packet

January 12, 2017

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

| | |
|----------------------------|----------------------|
| Model Number: | 5KS511SAA357B |
| Catalog Number: | Q538 |
| Instruction Manual: | GEI-56128 |
| Connection Diagram: | GEM2034E-FIG2 |
| Outline Drawing: | 239C6B00MC |

| 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: | 5KS511SAA357B | Estimated Weight: | 5800 Lbs |
| Outline Drawing: | 239C6B00MC | Time Rating: | CONT |
| Connection Diagram: | GEM2034E-FIG2 | Enclosure: | TEFC |
| Instruction Book: | GEI-56128 | Encl Construction: | SD |
| Design Code: | 50BD3205EC | Ambient Max(°C): | 40 |
| Type: | KS | Alt Ambient Max(°C): | -- |
| Frame: | 5011LL | Insulation Class: | F |
| Phases: | 3 | NEMA Design: | -- |
| Poles: | 6 | Nominal Efficiency: | 95.4 % |
| Output Power: | 400HP 296KW | Guaranteed Efficiency: | 94.5 |
| RPM: | 1190 | 3/4 Load Efficiency: | 96.3 |
| Voltage: | 2300/4000 | KVA Code: | G |
| Hertz: | 60 | Max KVAR: | 113.3 |
| Amps - FL: | 92.9/53.4 | Power Factor: | 84.5 |
| Service Factor: | 1.15 | Bearing - DE: | 6320ZC3 |
| Alt Service Factor: | -- | Bearing - ODE: | 6315ZC3 |

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

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

Additional Information:

6P - LL 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: 50BD3205EC

Marks:

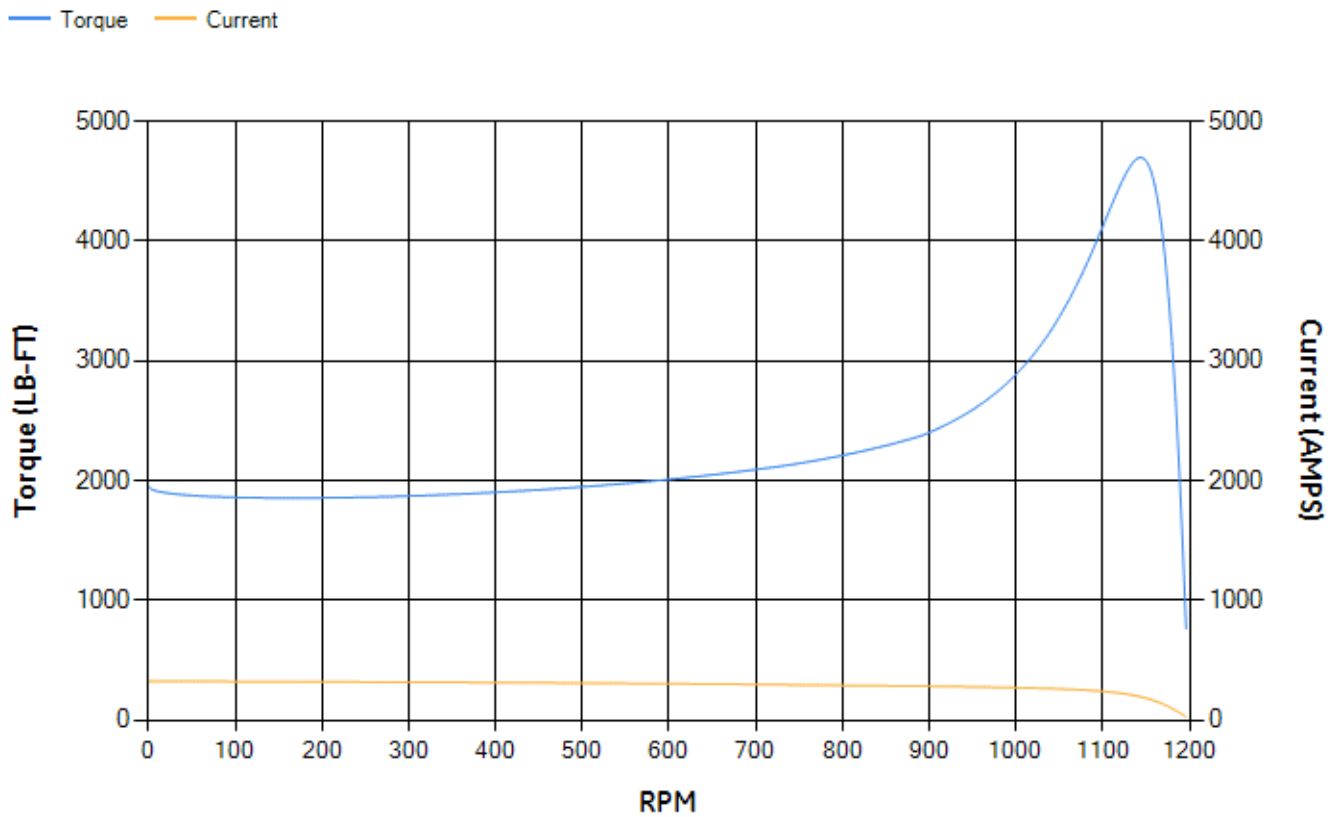
| LOAD % | 125.0 | 115.0 | 100.0 | 75.0 | 50.0 | 25.0 | 0.0 |
|--------|-------|-------|-------|-------|-------|-------|-------|
| % EFF | 95.76 | 95.94 | 96.36 | 96.34 | 96.05 | 94.09 | 0.00 |
| % PF | 85.57 | 85.36 | 84.59 | 81.35 | 73.05 | 51.47 | 3.21 |
| AMPS | 65.68 | 60.45 | 52.84 | 41.2 | 30.68 | 22.23 | 18.18 |

| | | | | | |
|--------------------|---------|--------------------|--------|--------------------|--------|
| TORQ(FL)#FT | 1765.25 | TORQ(LR)%FL | 110.49 | TORQ(BD)%FL | 265.83 |
| AMPS(LR) | 323.53 | PF AT START | 0.22 | | |

This motor is capable of two cold or one hot start with a maximum connected load inertia of 24536 Lb-Ft Sq (1032.97 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 56 seconds. Safe stall time at 100% voltage is 114 seconds cold, 67 seconds hot. Rotor inertia is 277.14 Lb-Ft Sq (11.67 Kg-meter Sq).

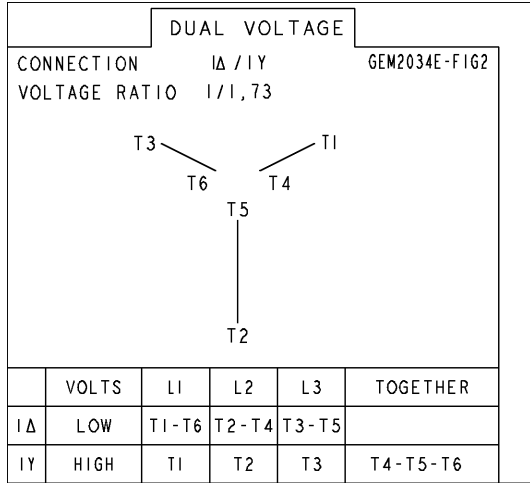
| | | | |
|---------------------------|-------|---------------------------|--------|
| Open Circuit A-C: | 0.87 | Short Circuit D-C: | 0.041 |
| Short Circuit A-C: | 0.047 | X/R Ratio: | 15.499 |
| Stator Slots: | 72 | Rotor Slots: | 58 |

Speed Torque Current Curve (First Connection, First Speed)



Marks:

Connection Diagram
GEM2034E-FIG2



Heater Connection
3027JE-1C



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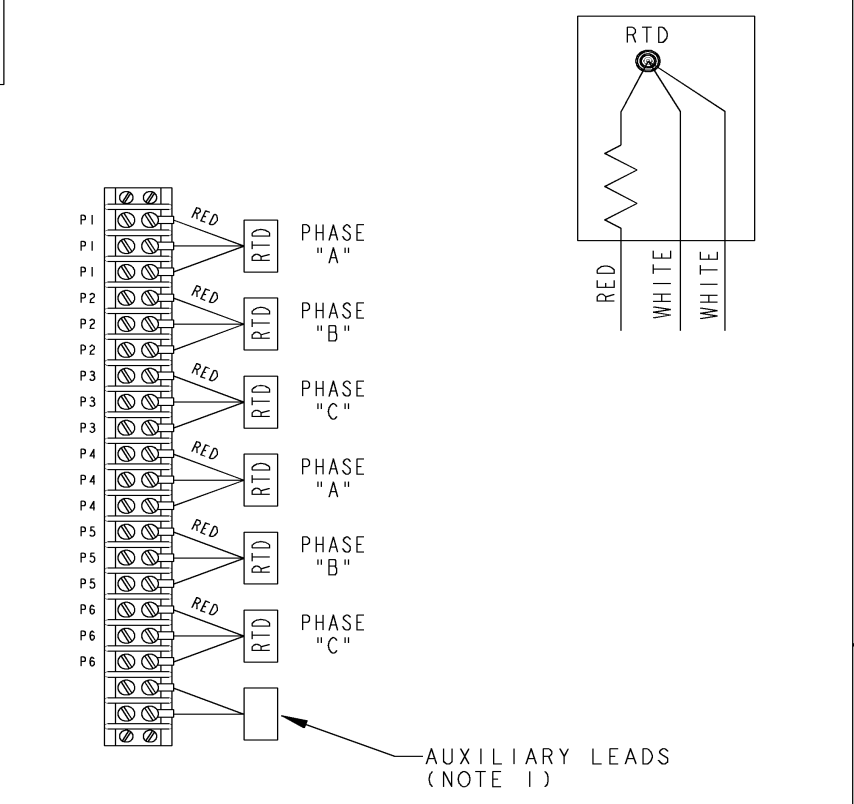
THIRD ANGLE PROJECTION

| REVISIONS | | | | |
|-----------|--------------------------|------------|-------------|--|
| REV. | DESCRIPTION | DATE | APPROVED | |
| 1 | ISAAC# 15-0790 HARIKIRAN | 07/28/15 | DHEERAJ | |
| 2 | ISAAC# 16-0422 SAGAR K | 05/04/2016 | ADINARAYANA | |

REV 2

SIZE DRAWING NO. A

235A3027XY



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 | | TITLE | |
| DIMENSIONS ARE IN INCHES | DETAIL | VIVEK 06/26/15 | CONNECTION DIAGRAM WINDING RTD & AUXILIARY LEADS | |
| TOLERANCE ON: | CHECKED | KARTHIK 06/26/15 | SIZE | DRAWING |
| 1 PL DECIMALS ± 0.1 | ENGRG | | A | 235A3027XY |
| 2 PL DECIMALS ± 0.02 | MFG | | | REV 2 |
| 3 PL DECIMALS ± 0.005 | QUALITY | | | |
| ANGLES ± 0.5 | ISSUED | VIVEK 06/26/15 | SCALE: N.T.S. | REF: - 235A4594X |
| FRACTIONS ± | | | | SHEET 1 of 1 |
| FINISH ✓ | SOLID MODEL: MODEL NAME | | | |

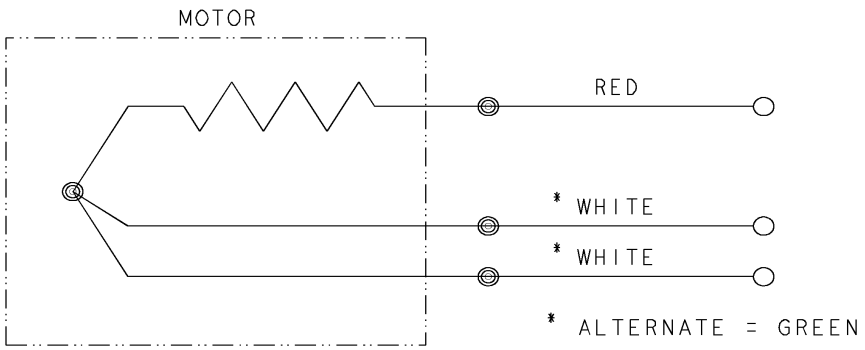


| | | | | | |
|---------------------|------------------------|-----|----------------|------|----------|
| REV SH 1 1 | THIRD ANGLE PROJECTION | | REVISIONS | | |
| | | REV | DESCRIPTION | DATE | APPROVED |
| | | 1 | ISAAC #12-1124 | HARI | 11/19/12 |

SIZE DWG NO 235A3027NA
 A

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BEARING RTDS



| | | |
|----------------------------|----------------------------|----------|
| UNLESS OTHERWISE SPECIFIED | SIGNATURES | DATE |
| DIMENSIONS ARE IN INCHES | DRAWN D.E. BAIR | 12/16/92 |
| TOLERANCES ON: | CHECKED D.E. BAIR | 12/16/92 |
| 2 PL DECIMALS ± | ENGRG K. DESAI | 12/16/92 |
| 3 PL DECIMALS ± | ISSUED D.E. BAIR | 12/16/92 |
| ANGLES ± | | |
| FRACTIONS ± | | |
| MATERIAL: | | |
| APPLIED PRACTICES: | CAD NO. F500:235A3027NA | |

GE Motors

Fort Wayne, Indiana

CONNECTION DIAGRAM

BEARING RTDS

| | | |
|--------------|-----------------|----------------------|
| SIZE A | FSCM NO | DWG NO 235A3027NA |
| SCALE 1/1 | SHEET 1 OF 1 | |

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