

Product Information Packet

November 8, 2016

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

| | |
|----------------------------|-----------------------|
| Model Number: | 5KS215XAA304D2 |
| Catalog Number: | M9494 |
| Instruction Manual: | GEI-56128 |
| Connection Diagram: | GEM2034E-FIG1 |
| Outline Drawing: | 4002B5821PAP5311 |

| Accessory Connection Diagrams | | | |
|-------------------------------|------|------------------------------|------|
| Bearing Thermocouple: | None | Heater: | None |
| RTD: | None | Thermistor: | None |
| Thermostat: | None | Winding Thermocouple: | None |
| Bearing RTD: | None | | |

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Marks:

| | | | |
|----------------------------|-----------------------|-------------------------------|---------|
| MODEL NUMBER: | 5KS215XAA304D2 | Estimated Weight: | 220 Lbs |
| Outline Drawing: | 4002B5821PAP5311 | Time Rating: | CONT |
| Connection Diagram: | GEM2034E-FIG1 | Enclosure: | TEFC |
| Instruction Book: | GEI-56128 | Encl Construction: | 841 |
| Design Code: | 21BD3000B | Ambient Max(°C): | 40 |
| Type: | KS | Alt Ambient Max(°C): | -- |
| Frame: | 215T | Insulation Class: | H |
| Phases: | 3 | NEMA Design: | B |
| Poles: | 6 | Nominal Efficiency: | 89.5 % |
| Output Power: | 5HP 3.7KW | Guaranteed Efficiency: | 88.5 |
| RPM: | 1170 | 3/4 Load Efficiency: | 90.5 |
| Voltage: | 575 | KVA Code: | J |
| Hertz: | 60 | Max KVAR: | 2.2 |
| Amps - FL: | 5.5 | Power Factor: | 76.5 |
| Service Factor: | 1.15 | Bearing - DE: | 6208ZC3 |
| Alt Service Factor: | -- | Bearing - ODE: | 6208ZC3 |

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

IEEE-STD-841-2009
 DE BRG 40BC02JP30 ODE BRG 40BC02JP30
 STAMP NP249A5564P051 AS BELOW:
 MODEL:5KS215XAA304D2 S/N: XXX
 CSA CERTIFIED CSA09.2216219 FOR EX NA IIC 200C 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 200C AT 1.15SF ON SINE-WAVE PWR
 OR 200 C VT OR 200 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:

6P - T EXTN
 STANDARD FLOOR MOUNT
 C/BOX 55 CU IN-1.00 NPT
 F1 CONDUIT BOX MOUNTING
 PAINTED FRAME ID & SHAFT,
 FAN COVER INSIDE & ODE E/S OUTSIDE
 ROUTINE AND 5 POINT VIBRATION TESTS INCL IN C/BOX
 INPRO SEAL BOTH ENDS
 GROUND SCREW ON FRAME
 SHAFT RUNOUT LIMIT .001" TIR
 COPPER WASHER UNDER HEADS OF BEARING CAP BOLTS
 APPLY TITE-SEAL (A50CD427A) ON BEARING CAP SCREWS, RABBETS,
 AND PLUG THREADS
 OIL RESISTANT SLEEVING ON LEADS

Performance Characteristics

1st Winding 1st Connection

Design: 21BD3000B

Marks:

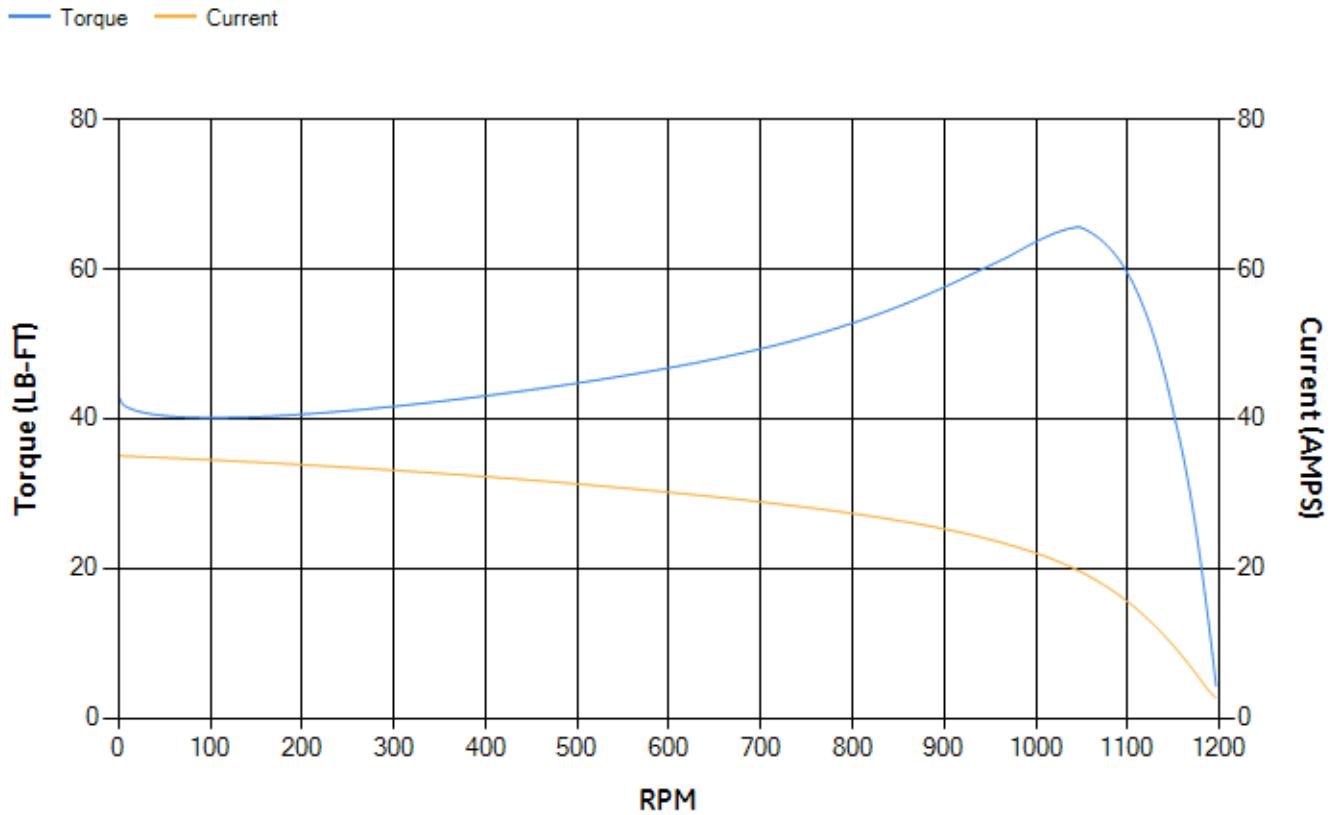
| LOAD % | 125.0 | 115.0 | 100.0 | 75.0 | 50.0 | 25.0 | 0.0 |
|--------|-------|-------|-------|-------|-------|-------|------|
| % EFF | 88.1 | 88.79 | 89.84 | 90.48 | 90.15 | 86.04 | 0.00 |
| % PF | 79.06 | 78.37 | 76.63 | 71.08 | 59.9 | 38.72 | 5.07 |
| AMPS | 6.72 | 6.19 | 5.44 | 4.37 | 3.47 | 2.81 | 2.49 |

| | | | | | |
|--------------------|-------|--------------------|--------|--------------------|--------|
| TORQ(FL)#FT | 22.4 | TORQ(LR)%FL | 191.85 | TORQ(BD)%FL | 289.99 |
| AMPS(LR) | 35.04 | PF AT START | 0.46 | | |

This motor is capable of two cold or one hot start with a maximum connected load inertia of 541 Lb-Ft Sq (22.78 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 51 seconds. Safe stall time at 100% voltage is 114 seconds cold, 82 seconds hot. Rotor inertia is 0.91 Lb-Ft Sq (0.04 Kg-meter Sq).

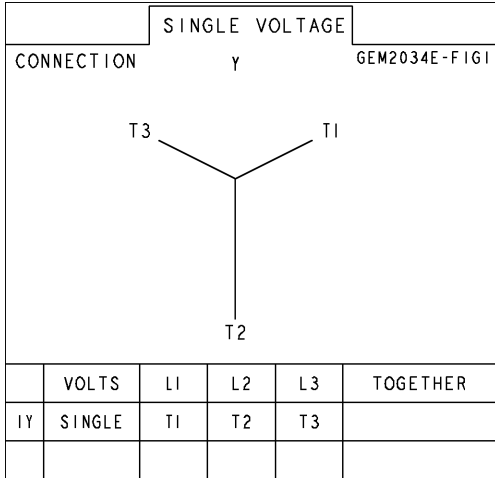
| | | | |
|---------------------------|-------|---------------------------|-------|
| Open Circuit A-C: | 0.237 | Short Circuit D-C: | 0.009 |
| Short Circuit A-C: | 0.014 | X/R Ratio: | 3.578 |
| Stator Slots: | 36 | Rotor Slots: | 44 |

Speed Torque Current Curve (First Connection, First Speed)



Marks:

Connection Diagram
GEM2034E-FIG1



| End shield Assembly | | |
|---------------------|---------------|----------------|
| Part Description | DE Side Part# | ODE Side Part# |
| End Shield | 4004D5282PB1 | 4004D5282SJ1 |
| Bearing | 235A2603AA01 | 235A2603AA01 |
| Slinger/Inproseal | 4002B5914AF3 | 4002B5914AG3 |

| Fan & Fan Cover Assembly | |
|--------------------------|--------------|
| Part Description | Part# |
| Fan | 159C6700G01 |
| Fan Cover | 4003C5787PA1 |

| Conduit & Accessories Box Assembly | |
|------------------------------------|-----------------|
| Part Description | Part# |
| Conduit Box | 4002B5721PA-G01 |

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