

Product Information Packet

November 9, 2016

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

| | |
|----------------------------|-----------------------|
| Model Number: | 5KS145SAA204D2 |
| Catalog Number: | M489 |
| Instruction Manual: | GEI-56128 |
| Connection Diagram: | GEM2034E-FIG1 |
| Outline Drawing: | 4002B5814PAP5201 |

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: | 5KS145SAA204D2 | Estimated Weight: | 50 Lbs |
| Outline Drawing: | 4002B5814PAP5201 | Time Rating: | CONT |
| Connection Diagram: | GEM2034E-FIG1 | Enclosure: | TEFC |
| Instruction Book: | GEI-56128 | Encl Construction: | X\$D |
| Design Code: | 14BD1093B | Ambient Max(°C): | 40 |
| Type: | KS | Alt Ambient Max(°C): | 65 |
| Frame: | 145T | Insulation Class: | H |
| Phases: | 3 | NEMA Design: | B |
| Poles: | 4 | Nominal Efficiency: | 86.5 % |
| Output Power: | 2HP 1.5KW | Guaranteed Efficiency: | 85.5 |
| RPM: | 1735 | 3/4 Load Efficiency: | 87.0 |
| Voltage: | 575 | KVA Code: | L |
| Hertz: | 60 | Max KVAR: | 1.0 |
| Amps - FL: | 2.2 | Power Factor: | 79.0 |
| Service Factor: | 1.25 | Bearing - DE: | 6205ZC3 |
| Alt Service Factor: | 1.00 | Bearing - ODE: | 6205ZC3 |

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

SF AMPS 2.6
 STAMP NP249A5564P051 AS BELOW:
 MODEL:5KS145SAA204D2 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 -40C <= AMB <= 40C, 1.0 SF ON SINE-WAVE PWR
 SURF TEMP 200C AT 1.25SF ON SINE-WAVE PWR
 OR 200C VT OR 200C CT OR 200C 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:

4P - T EXTN
 STANDARD FLOOR MOUNT
 C/BOX 30 CU IN-0.75 NPT
 F1 CONDUIT BOX MOUNTING
 OIL RESISTANT SLEEVING ON LEADS

Performance Characteristics

1st Winding 1st Connection

Design: 14BD1093B

Marks:

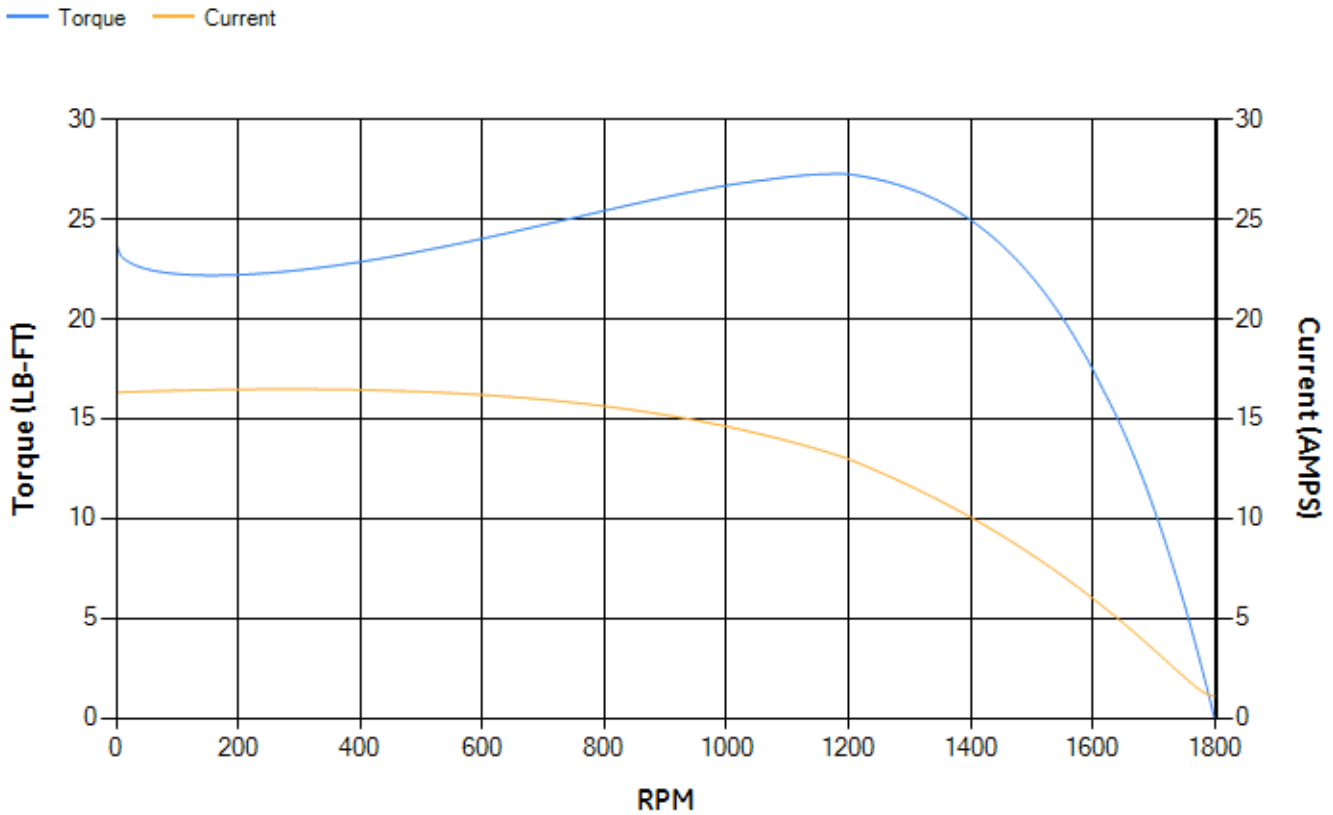
| LOAD % | 125.0 | 115.0 | 100.0 | 75.0 | 50.0 | 25.0 | 0.0 |
|--------|-------|-------|-------|-------|-------|-------|------|
| % EFF | 85.02 | 85.64 | 86.6 | 86.99 | 85.98 | 79.75 | 0.00 |
| % PF | 83.46 | 81.94 | 80.41 | 71.43 | 58.5 | 37.22 | 7.25 |
| AMPS | 2.64 | 2.45 | 2.14 | 1.81 | 1.49 | 1.26 | 1.09 |

| | | | | | |
|--------------------|-------|--------------------|--------|--------------------|--------|
| TORQ(FL)#FT | 6.06 | TORQ(LR)%FL | 391.71 | TORQ(BD)%FL | 433.87 |
| AMPS(LR) | 16.32 | PF AT START | 0.67 | | |

This motor is capable of two cold or one hot start with a maximum connected load inertia of 105 Lb-Ft Sq (4.42 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 28 seconds. Safe stall time at 100% voltage is 59 seconds cold, 44 seconds hot. Rotor inertia is 0.12 Lb-Ft Sq (0.01 Kg-meter Sq).

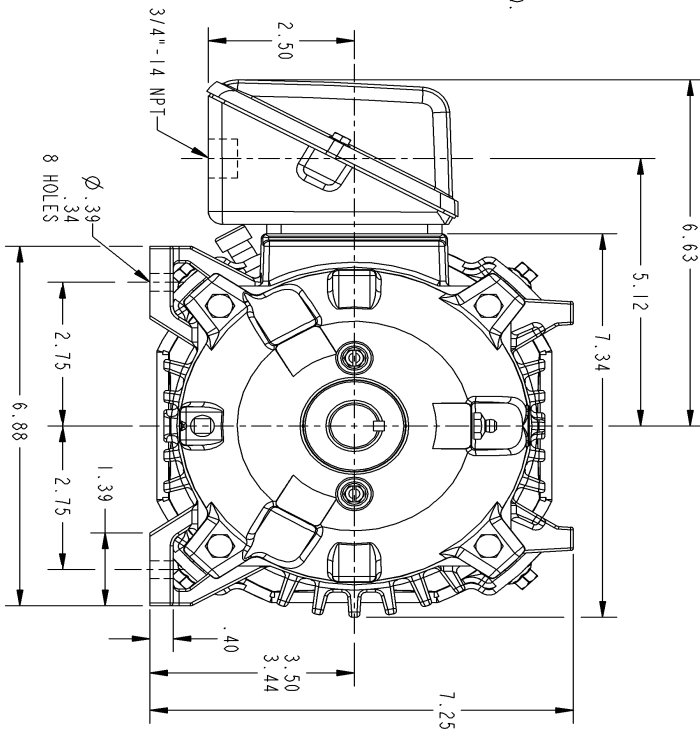
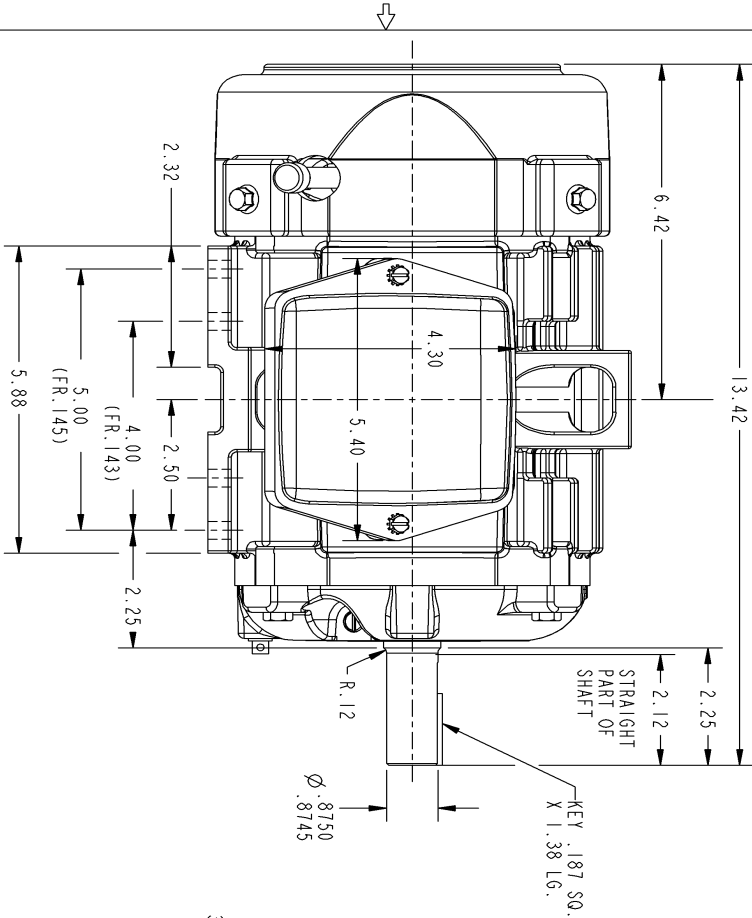
| | | | |
|---------------------------|-------|---------------------------|-------|
| Open Circuit A-C: | 0.129 | Short Circuit D-C: | 0.005 |
| Short Circuit A-C: | 0.005 | X/R Ratio: | 1.754 |
| Stator Slots: | 36 | Rotor Slots: | 48 |

Speed Torque Current Curve (First Connection, First Speed)



Marks:

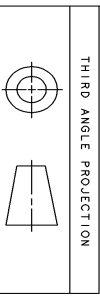
NOTE 1: CONDUIT BOX MAY BE ASSEMBLED WITH ENTRANCE UP, DOWN OR TO EITHER SIDE.
 NOTE 2: F1 ASSEMBLY AS SHOWN. F2 ASSEMBLY CONDUIT BOX ON OPPOSITE SIDE FROM SHOWN LOCATION.



SIZE DRAWING NO.
B 4002B5814PAP5201

SM REV
1 1

| REV. | DESCRIPTION | DATE | APPROVED |
|------|------------------------------------|----------|----------|
| 1. | REMOVED - ULTRA - FROM DESCRIPTION | 05/21/03 | DCMOHAN |



| SIGNATURES | DATE | GE Logo | GENERAL ELECTRIC COMPANY |
|-----------------------|-----------|---------|--------------------------|
| DRWN: GART WARRINE | OCT 24/01 | Systems | Fort Wayne, Indiana |
| CHECKED: GART WARRINE | MAY 22/02 | | |
| ISSUED: GART WARRINE | JUN 05/02 | | |

INDUCTION MOTOR OUTLINE
 STANDARD CONSTRUCTION
 FME: FR1AOT TEFC

SCALE: 0.500 REF. NO.: 4002B5814PAP5201 SHEET 1 OF 1

DISTRIBUTION: PMP-18K15

Marks:

Connection Diagram
GEM2034E-FIG1



| End shield Assembly | | |
|---------------------|---------------|----------------|
| Part Description | DE Side Part# | ODE Side Part# |
| End Shield | 4004D5280PB1 | 4004D5280SG1 |
| Bearing | 235A2600AA01 | 235A2600AA01 |
| Slinger/Inproseal | 149C4399G15 | 149C4399G15 |

| Fan & Fan Cover Assembly | |
|--------------------------|-----------------|
| Part Description | Part# |
| Fan | 4001A5914AM-G01 |
| Fan Cover | 4003C5785PA1 |

| Conduit & Accessories Box Assembly | |
|------------------------------------|-----------------|
| Part Description | Part# |
| Conduit Box | 4002B5718PA-G01 |

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