



GE INDUSTRIAL MOTORS
a **WOLONG** company

Product Technical Information

June 23, 2020

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

| | |
|----------------------------|----------------------|
| Model Number: | 5KS143XAA140C |
| Catalog Number: | M9378 |
| Instruction Manual: | GEI-56128 |
| Connection Diagram: | GEM2034E-FIG1 |
| Outline Drawing: | 4002B5814PBP5311 |

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: | 5KS143XAA140C | Estimated Weight: | 43 Lbs |
| Outline Drawing: | 4002B5814PBP5311 | Time Rating: | CONT |
| Connection Diagram: | GEM2034E-FIG1 | Enclosure: | TEFC |
| Instruction Book: | GEI-56128 | Encl Construction: | 841 |
| Design Code: | 14BD0040A | Ambient Max(°C): | 40 |
| Type: | KS | Alt Ambient Max(°C): | -- |
| Frame: | 143TC | Insulation Class: | H |
| Phases: | 3 | NEMA Design: | B |
| Poles: | 2 | Nominal Efficiency: | 84 % |
| Output Power: | 1.5HP 1.1KW | Guaranteed Efficiency: | 82.5 % |
| RPM: | 3530 | 3/4 Load Efficiency: | 83.9 % |
| Voltage: | 460 | KVA Code: | M |
| Hertz: | 60 | Max KVAR: | 0.7 |
| Amps - FL: | 2.1 | Power Factor: | 79.0 |
| Service Factor: | 1.15 | Bearing - DE: | 6206ZC3 |
| Alt Service Factor: | -- | Bearing - ODE: | 6205ZC3 |

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

IEEE-STD-841-2009
 DE BRG 30BC02JP30 ODE BRG 25BC02JP30
 STAMP NP249A5564P051 AS BELOW:
 MODEL:5KS143XAA140C S/N: XXX
 CSA CERTIFIED CSA09.2216219 FOR EX NA IIC 200 C GC
 CL1 ZONE2 AEXNAIIC 200C FOR CL1DIV2 GRP ABCD 200C
 IN -25C <= AMB <= 40C, 1.0SF ON SINE-WAVE PWR
 SURF TEMP 200 C AT 1.15 SF 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:

2P - T EXTN
 STANDARD FLOOR MOUNT
 C/BOX 30 CU IN-0.75 NPT
 F1 CONDUIT BOX MOUNTING
 "C" FACE AT DE ENDSHIELD
 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: 14BD0040A

Marks:

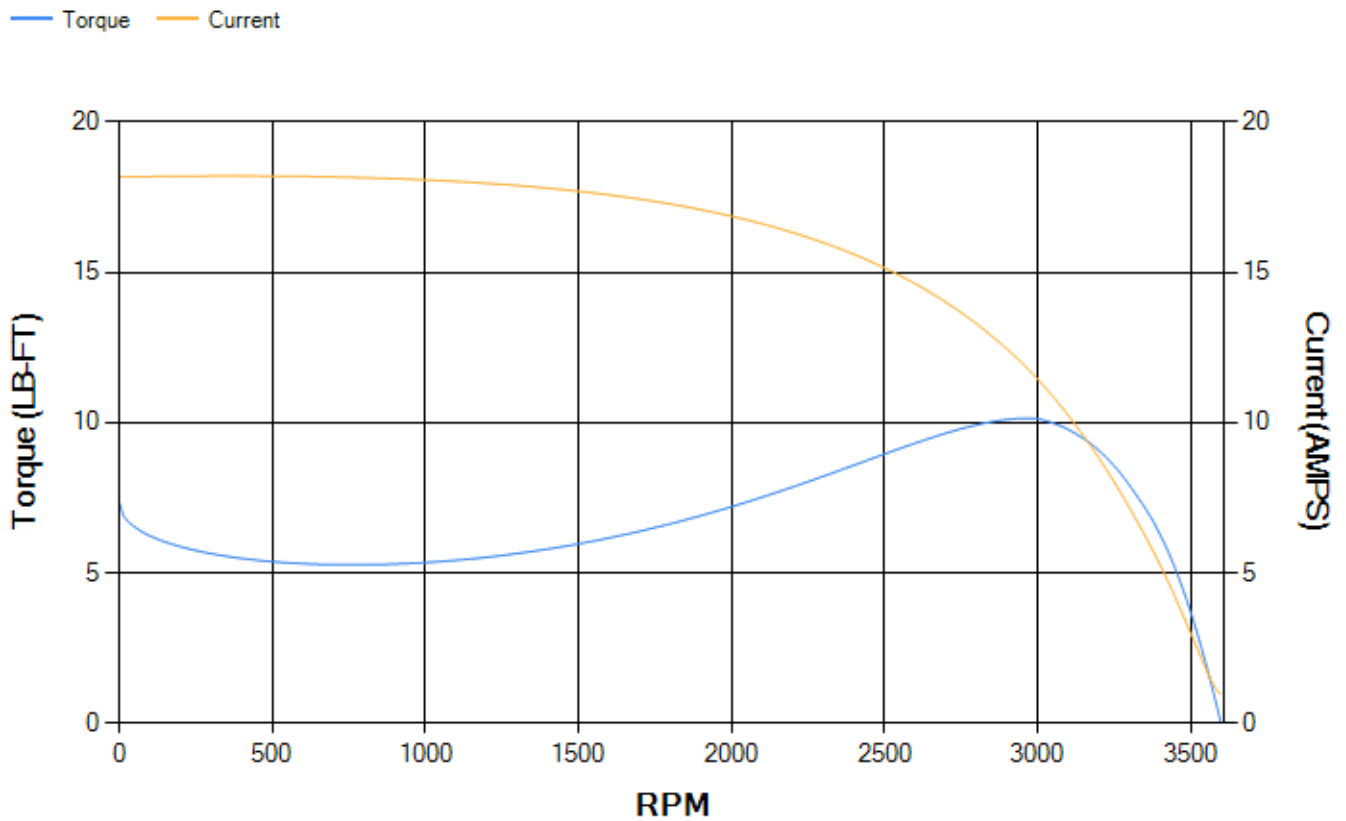
| LOAD % | 125.0 | 115.0 | 100.0 | 75.0 | 50.0 | 25.0 | 0.0 |
|--------|-------|-------|-------|-------|-------|-------|-------|
| % EFF | 84.06 | 84.32 | 84.67 | 83.83 | 80.98 | 71.27 | 0.00 |
| % PF | 83 | 81.57 | 82.69 | 71.62 | 59.46 | 39.52 | 12.53 |
| AMPS | 2.52 | 2.35 | 1.99 | 1.75 | 1.46 | 1.25 | 0.96 |

| | | | | | |
|--------------------|-------|--------------------|--------|--------------------|--------|
| TORQ(FL)#FT | 2.23 | TORQ(LR)%FL | 328.14 | TORQ(BD)%FL | 443.62 |
| AMPS(LR) | 18.18 | PF AT START | 0.57 | | |

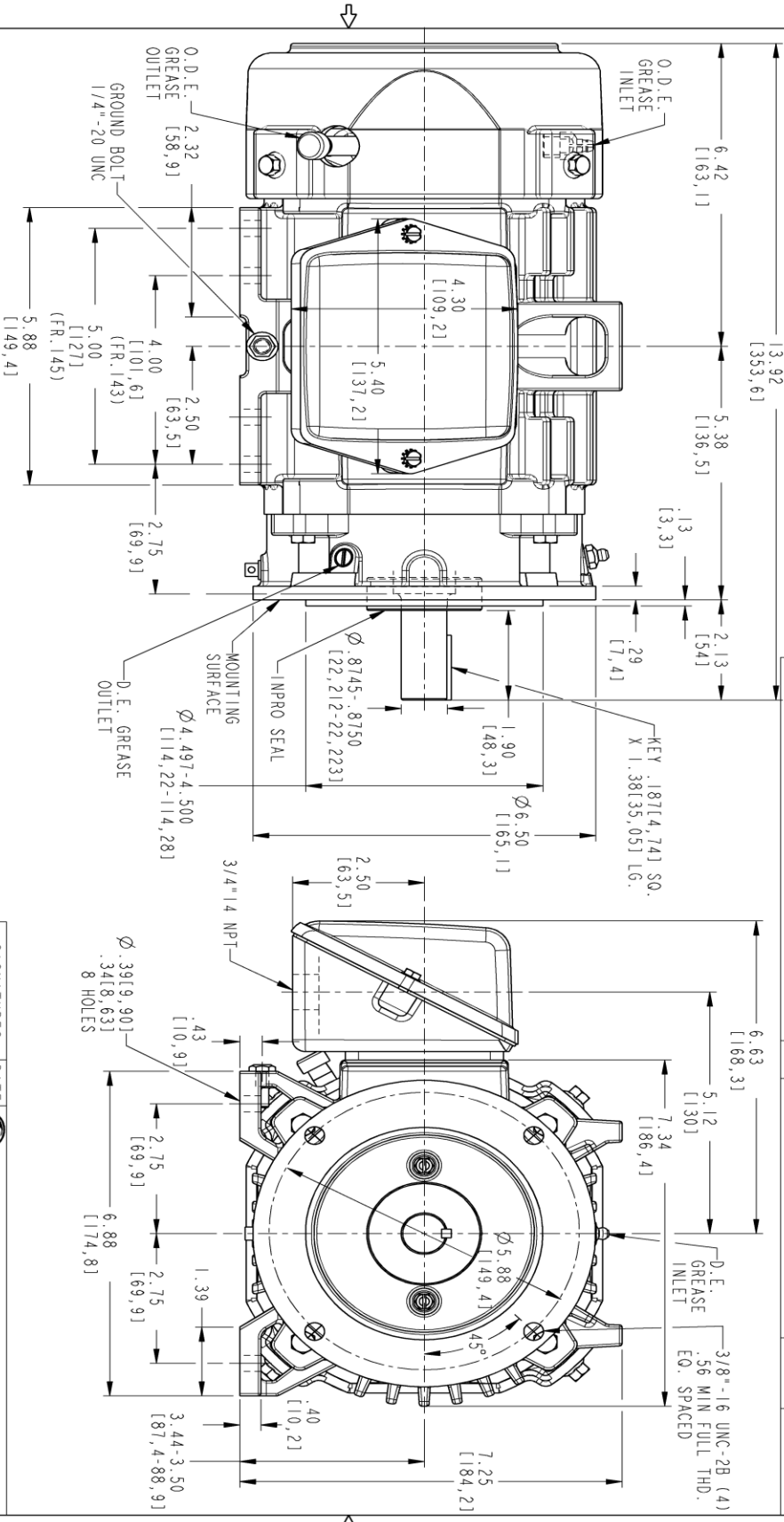
This motor is capable of two cold or one hot start with a maximum connected load inertia of 12 Lb-Ft Sq (0.51 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 23 seconds. Safe stall time at 100% voltage is 50 seconds cold, 37 seconds hot. Rotor inertia is 0.04 Lb-Ft Sq (0 Kg-meter Sq).

| | | | |
|---------------------------|-------|---------------------------|-------|
| Open Circuit A-C: | 0.254 | Short Circuit D-C: | 0.005 |
| Short Circuit A-C: | 0.01 | X/R Ratio: | 1.805 |
| Stator Slots: | 24 | Rotor Slots: | 34 |

Speed Torque Current Curve (First Connection, First Speed)



Marks:



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| REV. | DESCRIPTION | DATE | APPROVED |
|------|---------------|----------|-----------|
| 1 | ISAC# 18-0869 | 10/23/18 | PRASHANTH |

| | |
|------------------|-----|
| SIZE DRAWING NO. | B |
| REV | 001 |
| SHEET | 1 |
| REVISIONS | |



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.
 NOTE 3: MOUNTING SURFACES WILL BE SQUARE AND CONCENTRIC WITH SHAFT WITHIN .004 T.I.R.
 NOTE 4: SHAFT RUNOUT WILL NOT EXCEED .001 T.I.R.
 NOTE 5: ALL DIMENSIONS ARE IN INCHES, BRACKETED DIMENSIONS ARE IN METRIC (MILLIMETERS).

| SIGNATURES | DATE | GE INDUSTRIAL MOTORS a Wolog company |
|-------------------------------|----------|--|
| MODEL: TEJASNI | 06/08/15 | TITLE INDUCTION MOTOR OUTLINE IEEE-841 SPEC, "C" FACE AT DE 14.50" RABBIT) FR. 143/METC TERC |
| DETAIL: TEJASNI | 06/08/15 | |
| DESIGN: ADI | 06/08/15 | |
| ENGR: VENKAT | 06/08/15 | |
| QC: [blank] | [blank] | |
| ISSUED: TEJASNI | 06/08/15 | QUALITY SIZE DRAWING 4002B5814PBP5311 |
| SOLID MODEL: 4002B5814PBP5311 | B | SCALE: 0.500 REF. No.: 4002B5814PBP5301 |

Marks:

Connection Diagram
GEM2034E-FIG1



End shield Assembly

| Part Description | DE Side Part# | ODE Side Part# |
|-------------------|---------------|----------------|
| End Shield | 4004D5289PB1 | 4004D5280SG1 |
| Bearing | 235A2502AM01 | 235A2500AF01 |
| Slinger/Inproseal | 4002B5914AM1 | 4002B5914AG1 |

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 | |

