



GE INDUSTRIAL MOTORS
a **WOLONG** company

Product Technical Information

April 1, 2021

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

| | |
|----------------------------|-----------------------|
| Model Number: | 5KS184SAA205D2 |
| Catalog Number: | M242 |
| Instruction Manual: | GEI-56128 |
| Connection Diagram: | GEM2034E-FIG3 |
| Outline Drawing: | 4002B5818PAP5933 |

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: | 5KS184SAA205D2 | Estimated Weight: | 101 Lbs |
| Outline Drawing: | 4002B5818PAP5933 | Time Rating: | CONT |
| Connection Diagram: | GEM2034E-FIG3 | Enclosure: | TEFC |
| Instruction Book: | GEI-56128 | Encl Construction: | 841 |
| Design Code: | 18BD1247A | Ambient Max(°C): | 40 |
| Type: | KS | Alt Ambient Max(°C): | -- |
| Frame: | 184T | Insulation Class: | H |
| Phases: | 3 | NEMA Design: | B |
| Poles: | 4 | Nominal Efficiency: | 89.5 % |
| Output Power: | 5HP 3.7KW | Guaranteed Efficiency: | 88.5 % |
| RPM: | 1755 | 3/4 Load Efficiency: | -- |
| Voltage: | 230/460 | KVA Code: | J |
| Hertz: | 60 | Max KVAR: | 2.1 |
| Amps - FL: | 13.4/6.7 | Power Factor: | 78.5 |
| Service Factor: | 1.15 | Bearing - DE: | 6206ZC3 |
| Alt Service Factor: | -- | Bearing - ODE: | 6206ZC3 |

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

DE BRG 30BC02JP30 ODE BRG 30BC02JP30
 EXCEPTION TO IEEE-STD-841-2009: DUAL VOLTAGE
 STAMP NP249A5564P051 AS BELOW:
 MODEL:5KS184SAA205D2 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 215C AT 1.15SF ON SINE-WAVE PWR
 OR 200C VT OR 215C 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 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
GROUND SCREW ON FRAME
SHAFT RUNOUT LIMIT .001" TIR
OIL RESISTANT SLEEVING ON LEADS



Performance Characteristics

1st Winding 1st Connection

Design: 18BD1247A

Marks:

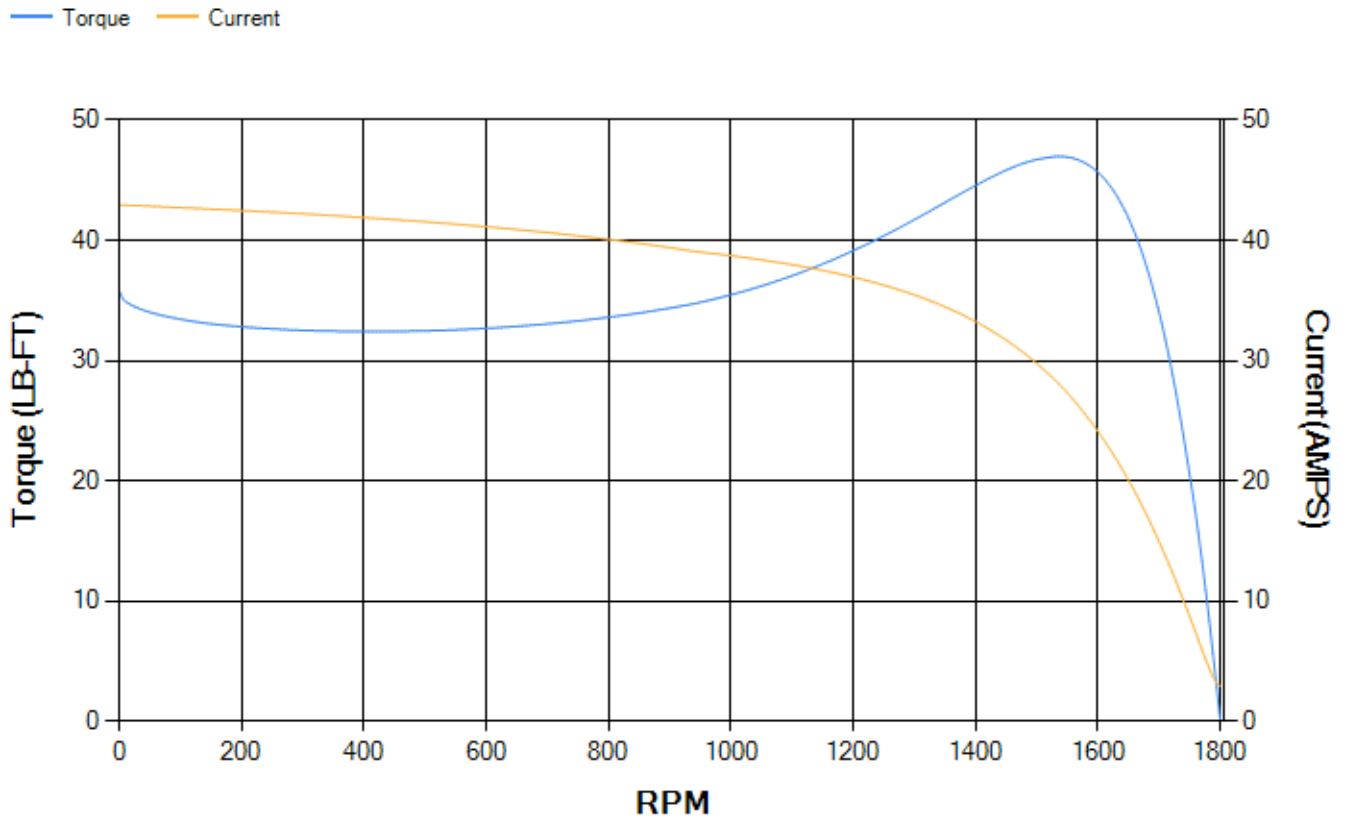
| LOAD % | 125.0 | 115.0 | 100.0 | 75.0 | 50.0 | 25.0 | 0.0 |
|--------|-------|-------|-------|-------|-------|-------|------|
| % EFF | 88.41 | 89.01 | 89.94 | 90.43 | 89.92 | 85.48 | 0.00 |
| % PF | 80.89 | 80.12 | 79.74 | 72.64 | 61.3 | 39.72 | 5.7 |
| AMPS | 8.18 | 7.55 | 6.53 | 5.34 | 4.25 | 3.45 | 2.93 |

| | | | | | |
|-------------|-------|-------------|--------|-------------|--------|
| TORQ(FL)#FT | 14.95 | TORQ(LR)%FL | 239.03 | TORQ(BD)%FL | 311.31 |
| AMPS(LR) | 42.95 | PF AT START | 0.51 | | |

This motor is capable of two cold or one hot start with a maximum connected load inertia of 185 Lb-Ft Sq (7.79 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 34 seconds. Safe stall time at 100% voltage is 76 seconds cold, 49 seconds hot. Rotor inertia is 0.34 Lb-Ft Sq (0.01 Kg-meter Sq).

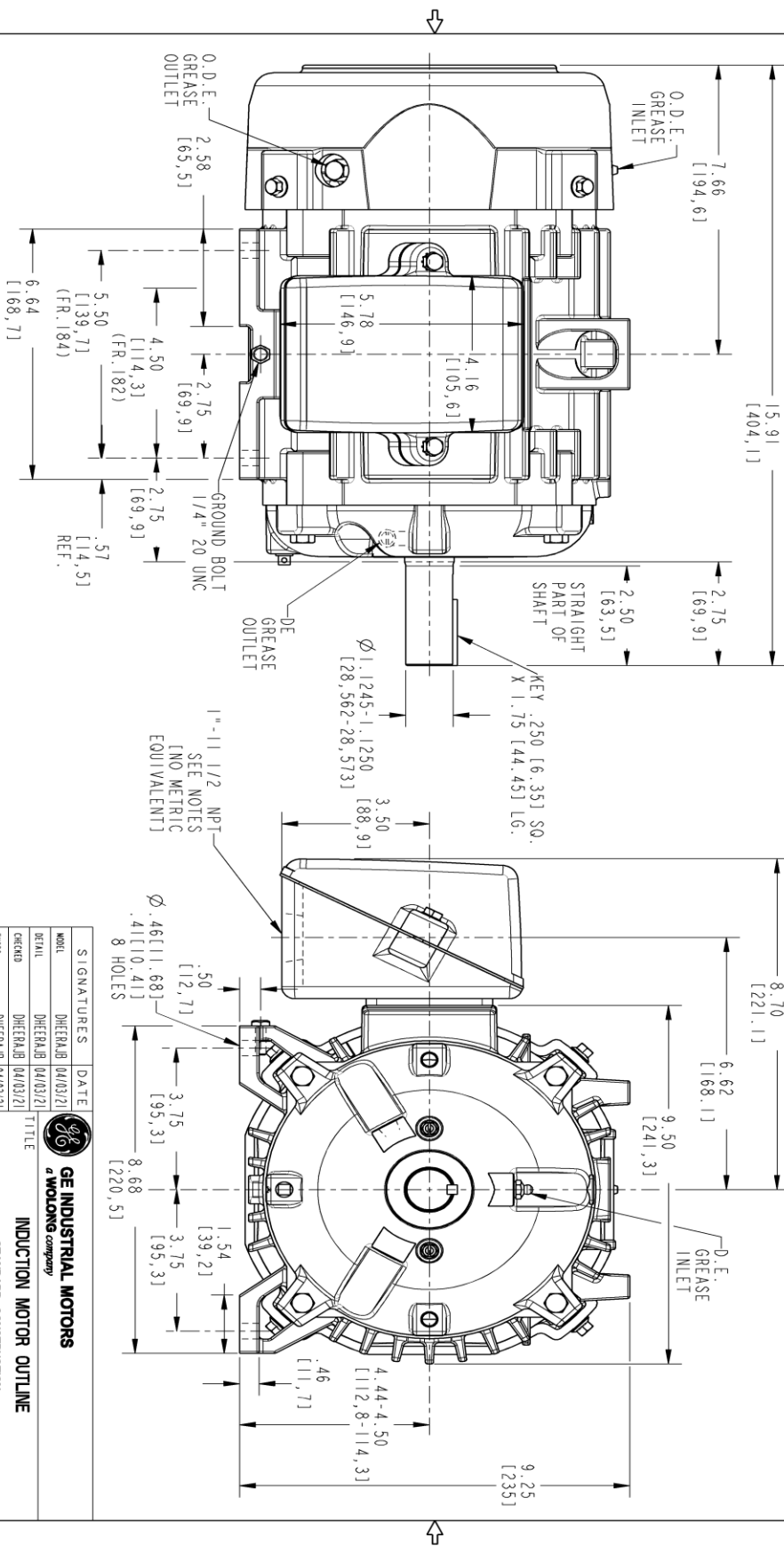
| | | | |
|--------------------|-------|--------------------|-------|
| Open Circuit A-C: | 0.231 | Short Circuit D-C: | 0.008 |
| Short Circuit A-C: | 0.012 | X/R Ratio: | 3.155 |
| Stator Slots: | 36 | Rotor Slots: | 28 |

Speed Torque Current Curve (First Connection, First Speed)



Marks:

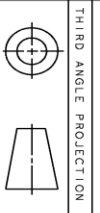
NOTE 1: CONDUIT BOX MAY BE ASSEMBLED WITH ENTRANCE UP, DOWN OR TO EITHER SIDE.
 NOTE 2: F1 ASSEMBLY AS SHOWN.
 NOTE 3: SHAFT RUNOUT WILL NOT EXCEED .001 T.I.R.
 NOTE 4: ALL DIMENSIONS ARE IN INCHES, BRACKETED DIMENSIONS ARE IN METRIC (MILLIMETERS).



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

| | | | | | |
|-------------------------|---|-----|-----------|-------|---|
| SIZE DRAWING NO. | B | REV | 0 | SHEET | 1 |
| 4002B5818PAP5933 | | | | | |
| REVOLUTIONS | | | REVISIONS | | |



| | | | |
|--------------|------------------|----------|--|
| SIGNATURES | | DATE | |
| MODEL | DHEERABJ | 04/03/21 | |
| DETAIL | DHEERABJ | 04/03/21 | |
| CREATED | DHEERABJ | 04/03/21 | |
| ENGR | DHEERABJ | 04/03/21 | |
| WEG | | | |
| QUALITY | | | |
| ISSUED | DHEERABJ | 04/03/21 | |
| SOLID MODEL: | 4002B5818PAP5933 | | |



INDUCTION MOTOR OUTLINE
 STANDARD CONSTRUCTION
 FR182/94 T TFC

| | | | |
|------------------|-------|-----------|------------------|
| SCALE: | 0.400 | REF. NO.: | 4002B5818PAP5933 |
| SHEET DRAWING | | REV | |
| 4002B5818PAP5933 | | 0 | |
| SHEET 1 | | 1 | |

Marks:

Connection Diagram
GEM2034E-FIG3



| End shield Assembly | | |
|---------------------|---------------|----------------|
| Part Description | DE Side Part# | ODE Side Part# |
| End Shield | 4004D5281PB1 | 4004D5281SG1 |
| Bearing | 235A2502AM01 | 235A2502AM01 |
| Slinger/Inproseal | 149C4399G16 | 149C4399G16 |

| Fan & Fan Cover Assembly | |
|--------------------------|-----------------|
| Part Description | Part# |
| Fan | 4001A5914AM-G01 |
| Fan Cover | 4003C5786PA1 |

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

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

