

Product Information Packet

November 8, 2016

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

| | |
|----------------------------|----------------------|
| Model Number: | 5KS145XAA295D |
| Catalog Number: | M495 |
| Instruction Manual: | GEI-56128 |
| Connection Diagram: | GEM2034E-FIG1 |
| Outline Drawing: | 4002B5814PBP5401 |

| 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: | 5KS145XAA295D | Estimated Weight: | 50 Lbs |
| Outline Drawing: | 4002B5814PBP5401 | Time Rating: | CONT |
| Connection Diagram: | GEM2034E-FIG1 | Enclosure: | TEFC |
| Instruction Book: | GEI-56128 | Encl Construction: | 841 |
| Design Code: | 14BD1093A | Ambient Max(°C): | 40 |
| Type: | KS | Alt Ambient Max(°C): | -- |
| Frame: | 145TCZ | Insulation Class: | H |
| Phases: | 3 | NEMA Design: | B |
| Poles: | 4 | Nominal Efficiency: | 86.5 % |
| Output Power: | 2HP 1.5KW | Guaranteed Efficiency: | 85.5 |
| RPM: | 1735/1755 | 3/4 Load Efficiency: | 87.0 |
| Voltage: | 460 | KVA Code: | L/M |
| Hertz: | 60 | Max KVAR: | 1.0 |
| Amps - FL: | 2.7/2.3 | 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:5KS145XAA295D 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, 1.0 SF 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 1.0 SF 40 C AMB
 VT 0-60 HZ, CT 3-60 HZ, CHP 60-90 HZ.

Additional Information:

4P - TZ EXTN
 STANDARD FLOOR MOUNT WITH DRIP COVER
 SUITABLE FOR SHAFT DOWN VERTICAL MOUNTING
 C/BOX 30 CU IN-0.75 NPT
 F1 CONDUIT BOX MOUNTING
 "C" FACE AT DE ENDSHIELD AK=4 1/2"
 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
SHAFT EXTENSION AND C-FACE ENDSHIELD-
-MOUNTING SAME AS 56C FRAME
U=0.625" DIA, AH=2.06"

Performance Characteristics

1st Winding 1st Connection

Design: 14BD1093A

Marks:

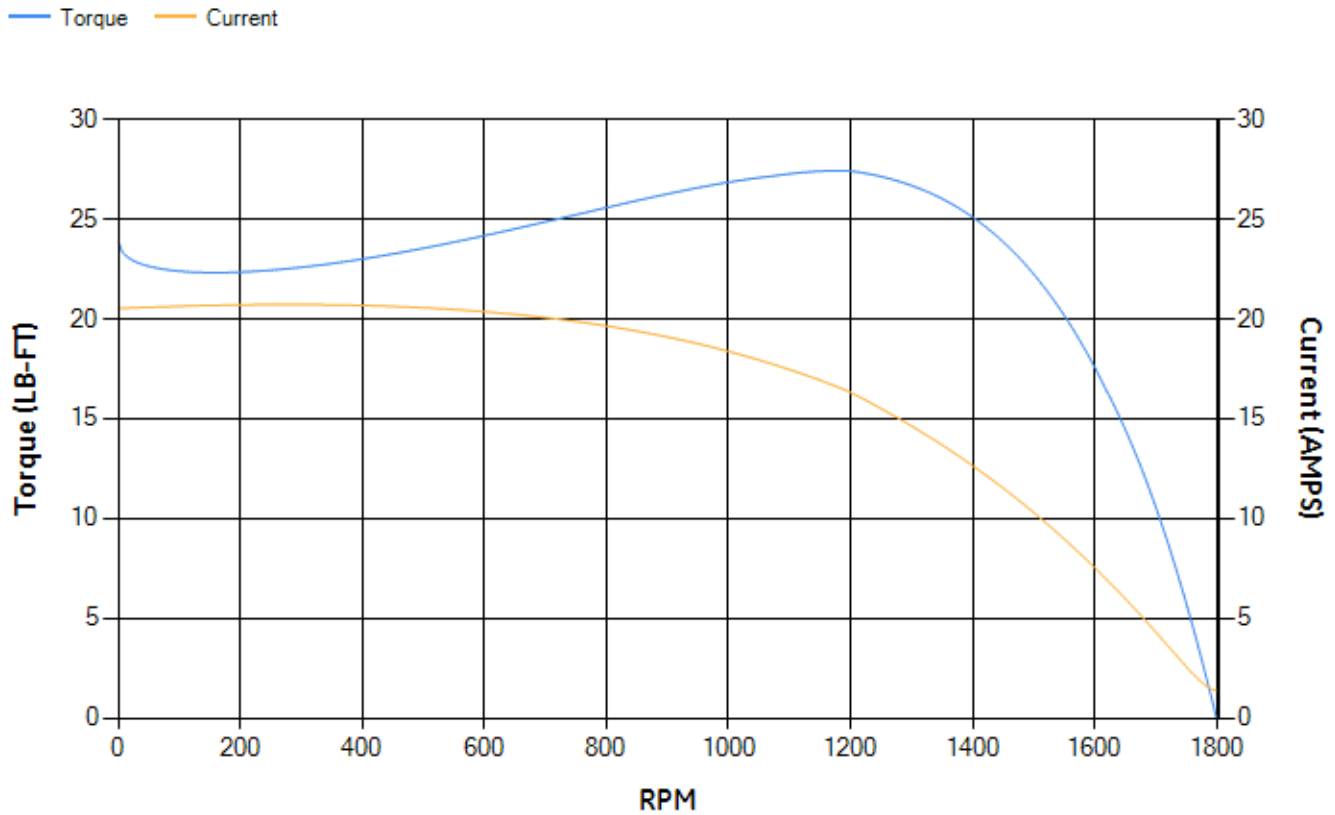
| LOAD % | 125.0 | 115.0 | 100.0 | 75.0 | 50.0 | 25.0 | 0.0 |
|--------|-------|-------|-------|------|-------|-------|------|
| % EFF | 85.07 | 85.68 | 86.62 | 87 | 85.96 | 79.68 | 0.00 |
| % PF | 83.32 | 81.79 | 80.24 | 71.2 | 58.24 | 37.01 | 7.23 |
| AMPS | 3.3 | 3.07 | 2.68 | 2.27 | 1.87 | 1.59 | 1.37 |

| | | | | | |
|--------------------|-------|--------------------|--------|--------------------|--------|
| TORQ(FL)#FT | 6.05 | TORQ(LR)%FL | 394.29 | TORQ(BD)%FL | 436.54 |
| AMPS(LR) | 20.52 | PF AT START | 0.68 | | |

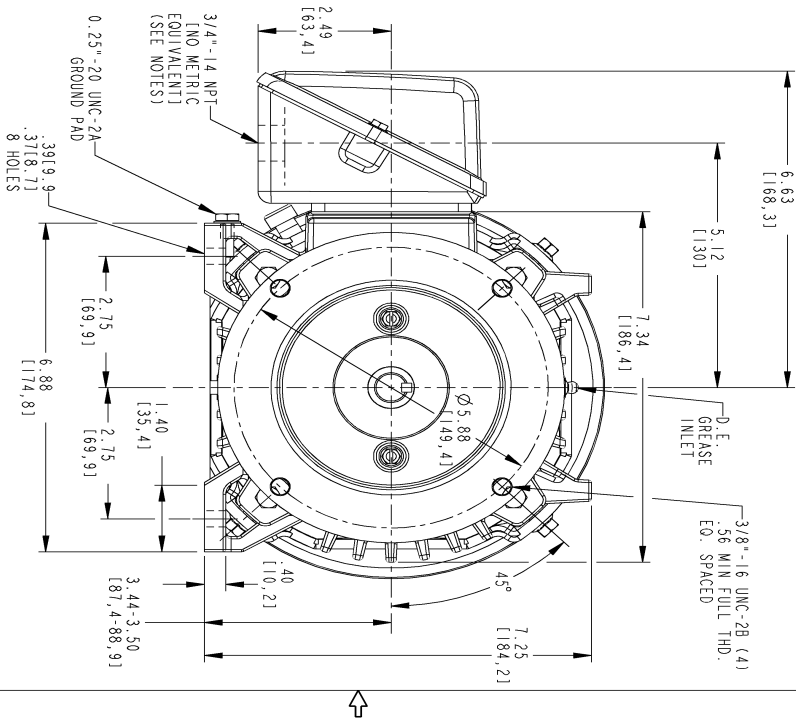
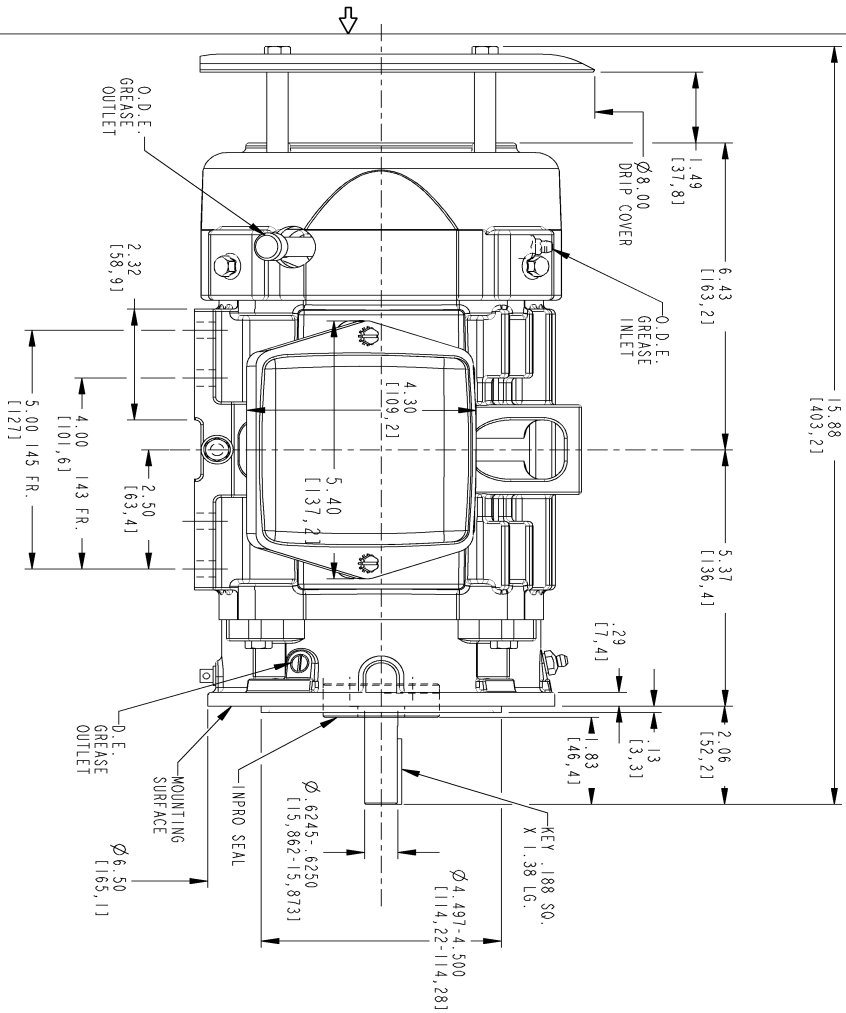
This motor is capable of two cold or one hot start with a maximum connected load inertia of 105 Lb-Ft Sq (4.42 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 28 seconds. Safe stall time at 100% 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: | 1.753 |
| Stator Slots: | 36 | Rotor Slots: | 48 |

Speed Torque Current Curve (First Connection, First Speed)



Marks:



SIZE DRAWING NO. B

4002B5814PBP5401 0

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



NOTE 1: CONDUIT BOX MAY BE ASSEMBLED WITH ENTRANCE UP DOWN OR EITHER SIDE.
 NOTE 2: F1 ASSEMBLY AS SHOWN. F2 ASSEMBLY CONDUIT BOX ON OPPOSITE SIDE FROM SHOWN LOCATION.
 NOTE 3: MOUNTING SURFACE WILL BE SQUARE AND CONCENTRIC WITH SHAFT WITHIN .004 T.I.R.
 NOTE 4: SHAFT WILL NOT EXCEED .001 T.I.R.
 NOTE 5: BRACKETED DIMENSIONS ARE IN METRIC (MM)

| SIGNATURES | DATE | REV | SHEET |
|------------------------------|----------|-----|-------|
| MODEL: LAMUNATHI | 06/29/15 | 0 | 1 |
| DETAIL: LAMUNATHI | 06/29/15 | | |
| DESIGN: KARTHICK | 06/29/15 | | |
| ENGR: TRIPATI | 06/29/15 | | |
| ISSUED: LAMUNATHI | 06/29/15 | | |
| SOLD MODEL: 4002B5814PBP5401 | | | |

GE Motors GENERAL ELECTRIC COMPANY

TITLE: **143/145 FRAME, TEFC XSD ULTRA 841 OUTLINE**

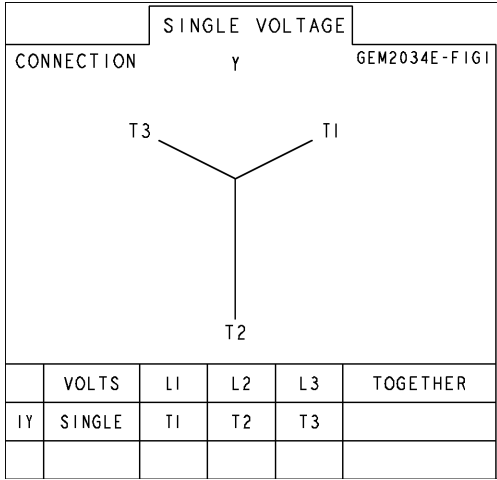
SCALE: 0.450 REF. No.: 4002B5814PBP5384

REV: 0

SHEET 1 of 1

Marks:

Connection Diagram
GEM2034E-FIG1



| End shield Assembly | | |
|---------------------|---------------|----------------|
| Part Description | DE Side Part# | ODE Side Part# |
| End Shield | 4004D5289PB1 | 4004D5280SG1 |
| Bearing | 235A2602AA01 | 235A2600AA01 |
| Slinger/Inproseal | 4002B5914AM2 | 4002B5914AG1 |

| Fan & Fan Cover Assembly | |
|--------------------------|-----------------|
| Part Description | Part# |
| Fan | 4001A5914AM-G01 |
| Fan Cover | 4003C5785PD1 |

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

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