



GE INDUSTRIAL MOTORS
a **WOLONG** company

Product Technical Information

July 14, 2020

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

| | |
|----------------------------|-----------------------|
| Model Number: | 5KS445SAJ6008B |
| Catalog Number: | V4717 |
| Instruction Manual: | GEI-M1045 |
| Connection Diagram: | GEM2034E-FIG1 |
| Outline Drawing: | 148CB44TMHKCCAA0001 |

Accessory Connection Diagrams

| | | | |
|------------------------------|-----------|------------------------------|-----------|
| Bearing Thermocouple: | None | Heater: | 3027JE-1C |
| RTD: | None | Thermistor: | None |
| Thermostat: | 3027JE-2A | Winding Thermocouple: | None |
| Bearing RTD: | None | | |

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Marks:

| | | | |
|----------------------------|-----------------------|-------------------------------|--------------|
| MODEL NUMBER: | 5KS445SAJ6008B | Estimated Weight: | 2640 Lbs |
| Outline Drawing: | 148CB44TMHKCCAA0001 | Time Rating: | CONT |
| Connection Diagram: | GEM2034E-FIG1 | Enclosure: | TEFC |
| Instruction Book: | GEI-M1045 | Encl Construction: | X\$D |
| Design Code: | 44BD1119AB | Ambient Max(°C): | 40 |
| Type: | KS | Alt Ambient Max(°C): | -- |
| Frame: | L445TP16 | Insulation Class: | H |
| Phases: | 3 | NEMA Design: | B |
| Poles: | 4 | Nominal Efficiency: | 95.8 % |
| Output Power: | 150HP 111KW | Guaranteed Efficiency: | 95.0 % |
| RPM: | 1780 | 3/4 Load Efficiency: | -- |
| Voltage: | 460 | KVA Code: | G |
| Hertz: | 60 | Max KVAR: | 38.5 |
| Amps - FL: | 170.0 | Power Factor: | 87.0 |
| Service Factor: | 1.15 | Bearing - DE: | 6217C3 |
| Alt Service Factor: | -- | Bearing - ODE: | 235A2536AB01 |

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

HTR LDS HE1-HE2 115V 145W
 ROT CCW FACING TOP LEAD/PH SEQ 1-2-3/1-2-3
 THERMOSTAT LEADS TB1-TB2 TRIP
 INVERTER DUTY PER NEMA MG1 PART 31
 ALTERNATE RATING FOR PWM CONTROL:1.0SF 40C AMBIENT
 VAR TORQUE RANGE 5-60 HZ
 UPPER BRG LUBE OIL: 17 QTS
 0 DEG C TO 40 DEG C : ISO 32(MINERAL OR SYNTHETIC)
 -15 DEG C TO 0 DEG C : ISO 32 SYNTHETIC
 SUITABLE FOR 125 HP, 380V, 50 HZ WITH
 170.0 AMPS AND 1480 RPM AT 1.00 SF



Additional Information:

4P, VERT HOLLOW SHAFT HIGH THRUST (1D)
C/BOX 700 CU IN - 3.00" NPT
OIL RESISTANT SLEEVING ON LEADS
N.C. TRIP TSTAT LDS TO MAIN CONDUIT BOX
115V HTR LDS TO MAIN CONDUIT BOX
INSULATED UPPER BEARING CARRIER
SHAFT GROUNDING RING MOUNTED ON LOWER END BRG CAP
BEARING LIFE 8760 HRS AT 14462 LB THRUST
CG:24.00 IN FROM P-BASE FACE, STAT DEF:= 0.006 IN
RCF: 2518 CPM (+/- 10%)
NON-REVERSE BALL CARRIER,
BOLTED COUPLING, BX = 1.501", EW = .375"



Performance Characteristics

1st Winding 1st Connection

Design: 44BD1119AB

Marks:

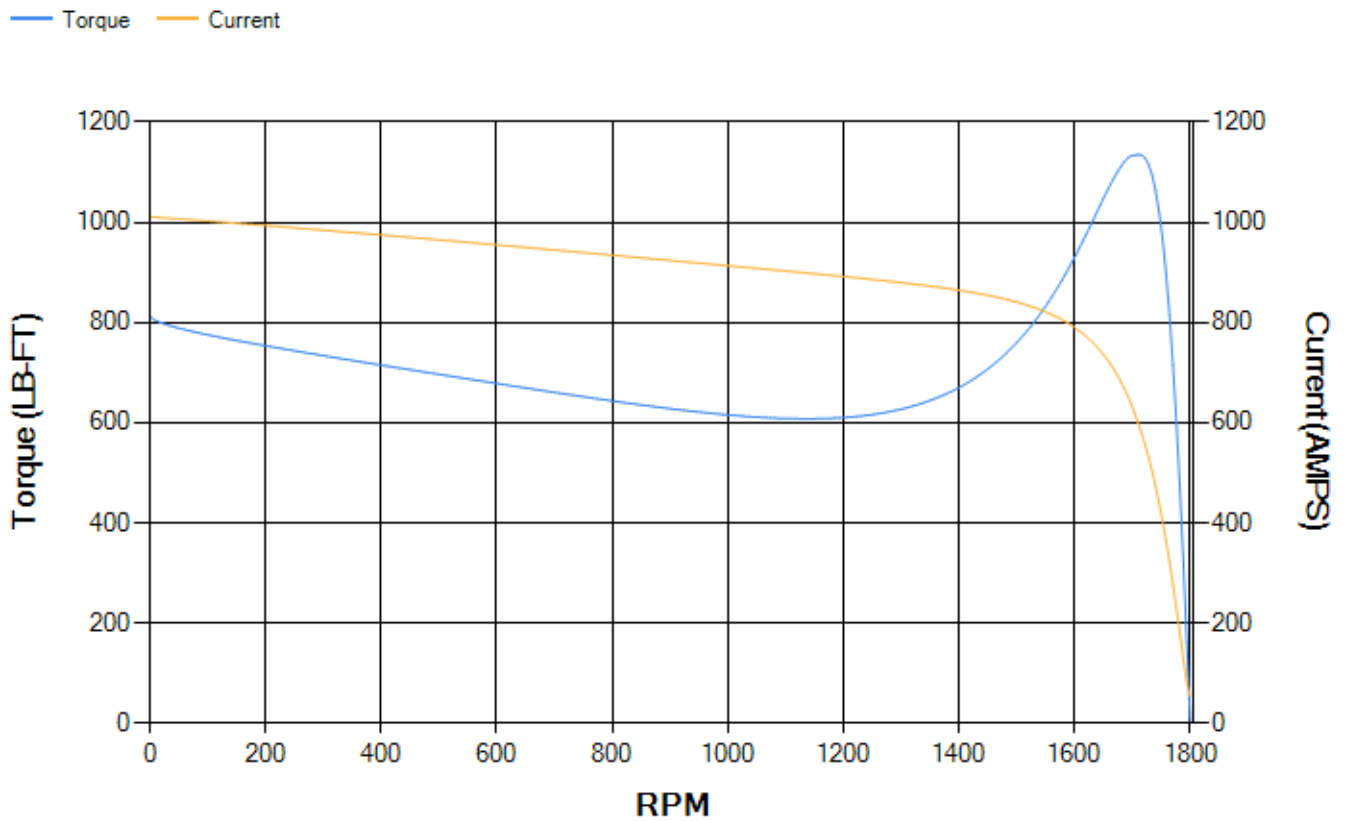
| LOAD % | 125.0 | 115.0 | 100.0 | 75.0 | 50.0 | 25.0 | 0.0 |
|--------|-------|--------|--------|--------|-------|-------|-------|
| % EFF | 94.69 | 94.9 | 95.33 | 95.27 | 94.79 | 92.06 | 0.00 |
| % PF | 88.04 | 87.85 | 87.17 | 84.34 | 76.85 | 56.12 | 4.9 |
| AMPS | 210.5 | 193.65 | 168.95 | 131.05 | 96.36 | 67.93 | 53.76 |

| | | | | | |
|--------------------|---------|--------------------|--------|--------------------|-------|
| TORQ(FL)#FT | 442.23 | TORQ(LR)%FL | 184.07 | TORQ(BD)%FL | 256.2 |
| AMPS(LR) | 1011.12 | PF AT START | 0.33 | | |

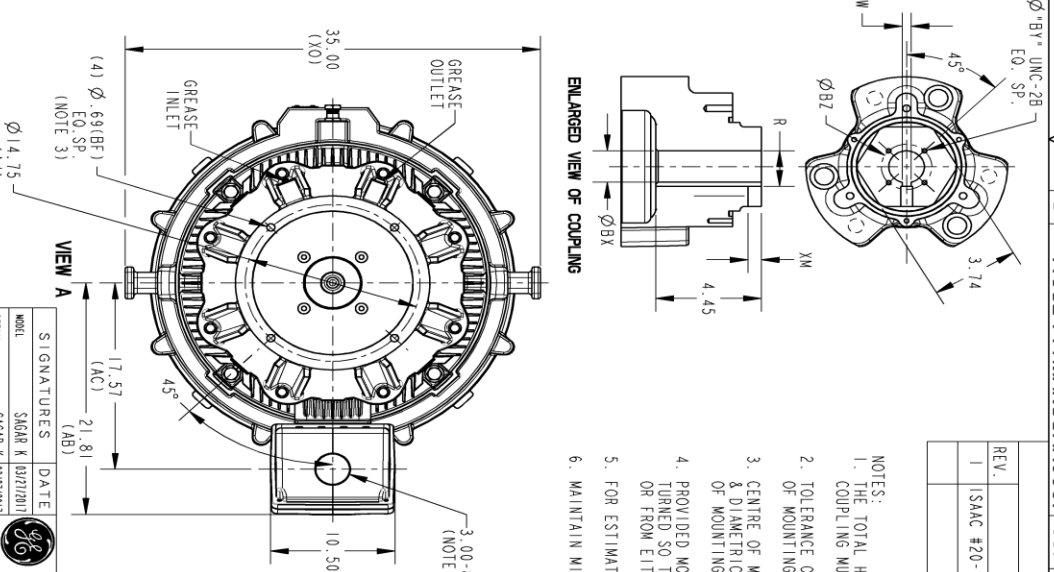
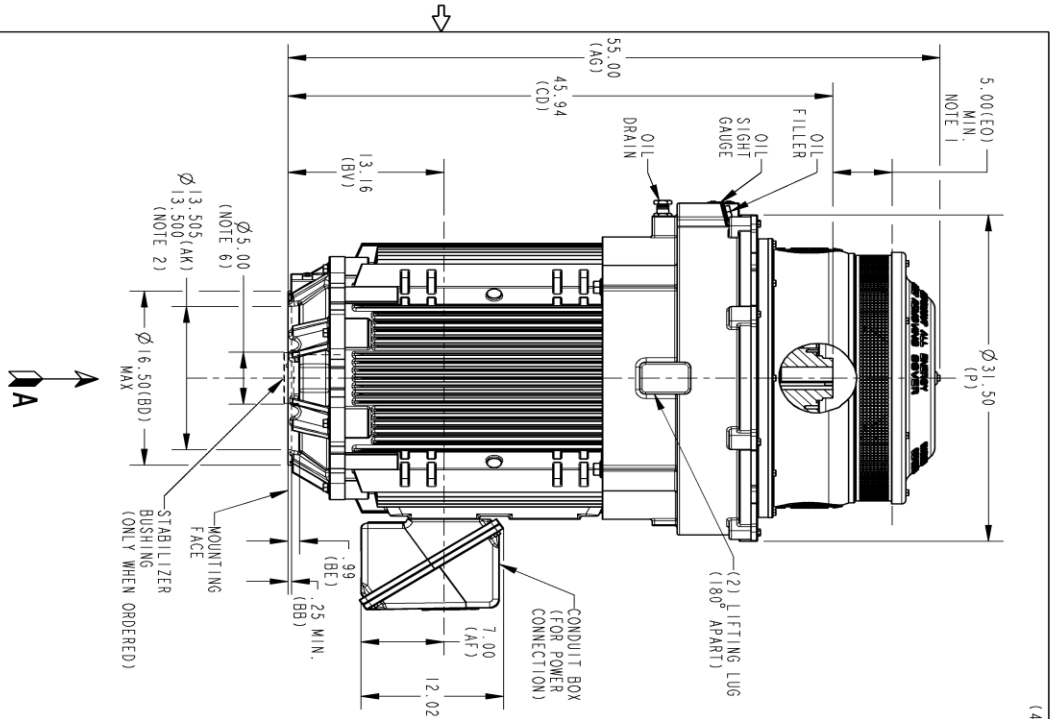
This motor is capable of two cold or one hot start with a maximum connected load inertia of 2303 Lb-Ft Sq (96.96 Kg-meter Sq) at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 24 seconds. Safe stall time at 100% voltage is 58 seconds cold, 29 seconds hot. Rotor inertia is 66.08 Lb-Ft Sq (2.78 Kg-meter Sq).

| | | | |
|---------------------------|-------|---------------------------|-------|
| Open Circuit A-C: | 0.766 | Short Circuit D-C: | 0.03 |
| Short Circuit A-C: | 0.037 | X/R Ratio: | 11.28 |
| Stator Slots: | 72 | Rotor Slots: | 58 |

Speed Torque Current Curve (First Connection, First Speed)



Marks:



SIZE DRAWING NO. **B**

148CB44TMHKCCAA0001

REV. **001**

SHEET **1**

| REV. | DESCRIPTION | DATE | APPROVED |
|------|---------------|----------|----------|
| 1 | ISAC #20-0405 | 04/20/20 | NARAYANA |

- NOTES:
1. THE TOTAL HEIGHT OF PUMP SHAFT AND LOCKING NUT ABOVE COUPLING MUST NOT EXCEED THIS DIMENSION.
 2. TOLERANCE ON FACE ROUNDT AND PERMISSIBLE ECCENTRICITY OF MOUNTING RABBIT ARE .007 T.I.R
 3. CENTRE OF MOUNTING BOLTS WITHIN 0.025 OF ANGULAR & DIAMETRICAL LOCATION WITHIN REFERENCE TO THE CENTRILINE OF MOUNTING RABBIT.
 4. PROVIDED MONTING CONDITIONS PERMIT, CONDUIT BOX MAY BE TURNED SO THAT ENTRANCE CAN BE MADE UPWARD, DOWNWARD OR FROM EITHER SIDE.
 5. FOR ESTIMATING ONLY UNLESS ENDORSED FOR CONSTRUCTION.
 6. MAINTAIN MINIMUM CLEARANCE FOR SHAFT SLINGER.

COUPLING DIMENSIONS

DIMENSIONS IN INCHES
NEMA TYPE P BASE

| BX | BY | | BZ | | EW | | R | | XM | |
|-------|--------|-------|------|-------|------|--|---|--|----|--|
| | BY | BZ | EW | R | XM | | | | | |
| 1.501 | 1/4-20 | 2.125 | .375 | 1.669 | .562 | | | | | |
| 1.688 | 1/4-20 | 2.500 | .375 | 1.859 | .562 | | | | | |
| 1.751 | 1/4-20 | 2.500 | .375 | 1.922 | .562 | | | | | |
| 1.813 | 1/4-20 | 2.500 | .500 | 2.033 | .688 | | | | | |
| 1.938 | 1/4-20 | 2.500 | .500 | 2.160 | .688 | | | | | |
| 2.001 | 3/8-16 | 3.250 | .500 | 2.223 | .688 | | | | | |
| 2.063 | 3/8-16 | 3.250 | .500 | 2.287 | .688 | | | | | |
| 2.126 | 3/8-16 | 3.250 | .500 | 2.350 | .688 | | | | | |
| 2.188 | 3/8-16 | 3.250 | .500 | 2.414 | .688 | | | | | |
| 2.251 | 3/8-16 | 3.250 | .500 | 2.477 | .688 | | | | | |
| 2.316 | 3/8-16 | 3.250 | .500 | 2.650 | .688 | | | | | |



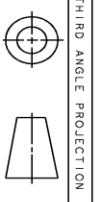
OUTLINE, NEMA TFC 444-445

VERTICAL HOLLOW SHAFT-HIGH THRUST GRS LOWER

165 BD 700 CU IN C/BOX

| SIGNATURES | DATE |
|---------------------------|------|
| MODEL SAGAR K (03272001) | |
| DETAIL SAGAR K (03272001) | |
| DESIGN VILAV (03272001) | |
| ENGR SAGAR K (03272001) | |
| WEG | |
| QUALITY | |
| ISSUED SAGAR K (03272001) | |
| SHEET 08/16 | |

SCALE: 0.100 REF. No.: 148CB44TMHKCCAA0001



PROPRIETARY INFORMATION

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Marks:

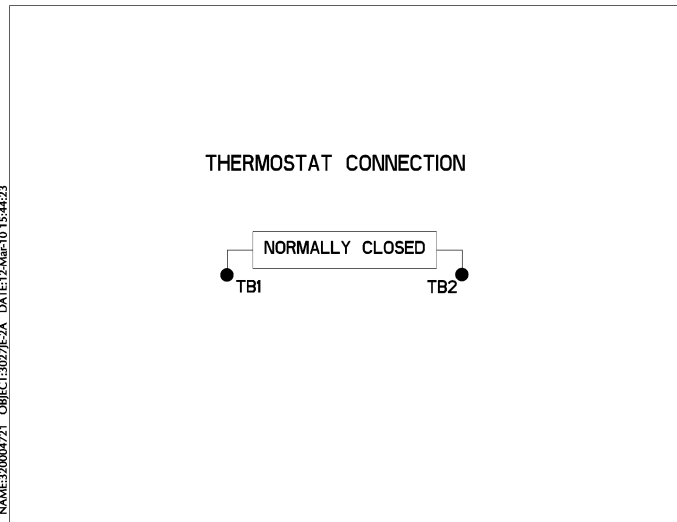
Connection Diagram
GEM2034E-FIG1



Heater Connection
3027JE-1C



Thermostat Connection
3027JE-2A



NAME:32000471 OBJECT:3027JE-2A DATE:12-Mar-10 15:44:23



| End shield Assembly | | |
|---------------------|---------------|----------------|
| Part Description | DE Side Part# | ODE Side Part# |
| End Shield | 115E8660AA1 | 115E8670LA1 |
| Bearing | 235A2522AJ01 | 235A2536AB01 |
| Slinger/Inproseal | 149C4399G06 | |

| Fan & Fan Cover Assembly | |
|--------------------------|-------------|
| Part Description | Part# |
| Fan | 153B1890G01 |
| Fan Cover | 128D6847AA1 |

| Conduit & Accessories Box Assembly | |
|------------------------------------|-------------|
| Part Description | Part# |
| Conduit Box | 118D4408AD2 |

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

