

Product Information Packet

April 27, 2017

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

| | |
|----------------------------|-----------------------|
| Model Number: | 5KS449DAJ6023A |
| Catalog Number: | V4533 |
| Instruction Manual: | GEK-95352 |
| Connection Diagram: | GEM2034E-FIG19 |
| Outline Drawing: | 148CB49VMJKFGLA0001 |

| 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: | 5KS449DAJ6023A | Estimated Weight: | 3600 Lbs |
| Outline Drawing: | 148CB49VMJKFGLA0001 | Time Rating: | CONT |
| Connection Diagram: | GEM2034E-FIG19 | Enclosure: | WPI |
| Instruction Book: | GEK-95352 | Encl Construction: | OPEN |
| Design Code: | 49BD1253AC | Ambient Max(°C): | 40 |
| Type: | KS | Alt Ambient Max(°C): | -- |
| Frame: | L449TP20 | Insulation Class: | H |
| Phases: | 3 | NEMA Design: | B |
| Poles: | 4 | Nominal Efficiency: | 95.8 % |
| Output Power: | 400HP 296KW | Guaranteed Efficiency: | 95.0 |
| RPM: | 1790 | 3/4 Load Efficiency: | 96.6 |
| Voltage: | 460 | KVA Code: | G |
| Hertz: | 60 | Max KVAR: | 79.8 |
| Amps - FL: | 439.0 | Power Factor: | 89.0 |
| Service Factor: | 1.15 | Bearing - DE: | 6217C3 |
| Alt Service Factor: | -- | Bearing - ODE: | 235A2536AA01 |

Enclosure is Weather Protected One

Stamped Nameplate Notes:

HTR LDS HE1-HE2 115V 145W
 ROT CCW FACING ODE 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
 SUITABLE FOR 350 HP, 380V, 50 HZ WITH
 465.0 AMPS AND 1485 RPM AT 1.0 SF

Additional Information:

4 POLE, VERT HOLLOW SHAFT HIGH THRUST
 SPECIAL BALANCE
 2500 CU IN - 2(4.00" NPT)
 BEARING LIFE 8760 HRS AT 30000 LB THRUST
 C/B GRD PLATE
 OIL RESISTANT SLEEVING ON LEADS
 N.C. TRIP TSTAT LDS TO MAIN CONDUIT BOX
 115V HTR LDS TO MAIN CONDUIT BOX
 COUPLING NOT INCLUDED IN BOM, WILL BE
 ORDERED SEPERATELY
 PART WINDING START
 SPHERICAL ROLLER BEARING
 AEGIS GROUNDING RING MOUNTED ON LOWER END BEARING CAP
 GROUND PAD ON FRAME
 INSULATED LOWER HALF COUPLING

Performance Characteristics

1st Winding 1st Connection

Design: 49BD1253AC

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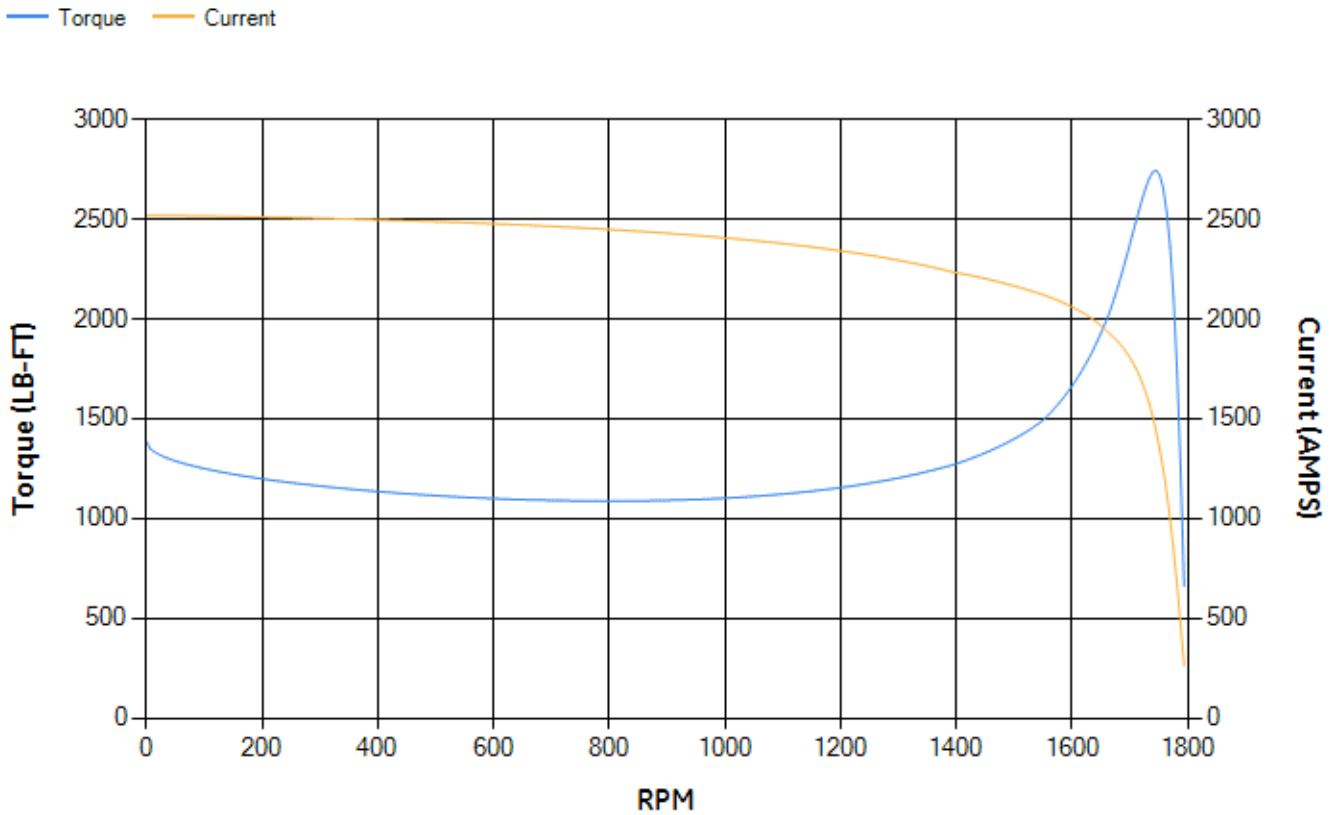
| LOAD % | 125.0 | 115.0 | 100.0 | 75.0 | 50.0 | 25.0 | 0.0 |
|--------|--------|--------|--------|--------|-------|-------|--------|
| % EFF | 94.64 | 94.92 | 95.48 | 95.65 | 95.51 | 93.58 | 0.00 |
| % PF | 88.74 | 88.95 | 88.9 | 87.46 | 82.28 | 64.44 | 4.84 |
| AMPS | 557.23 | 509.93 | 441.04 | 335.64 | 238.2 | 155.2 | 111.26 |

| | | | | | |
|--------------------|---------|--------------------|--------|--------------------|--------|
| TORQ(FL)#FT | 1174.6 | TORQ(LR)%FL | 117.72 | TORQ(BD)%FL | 233.42 |
| AMPS(LR) | 2518.98 | PF AT START | 0.25 | | |

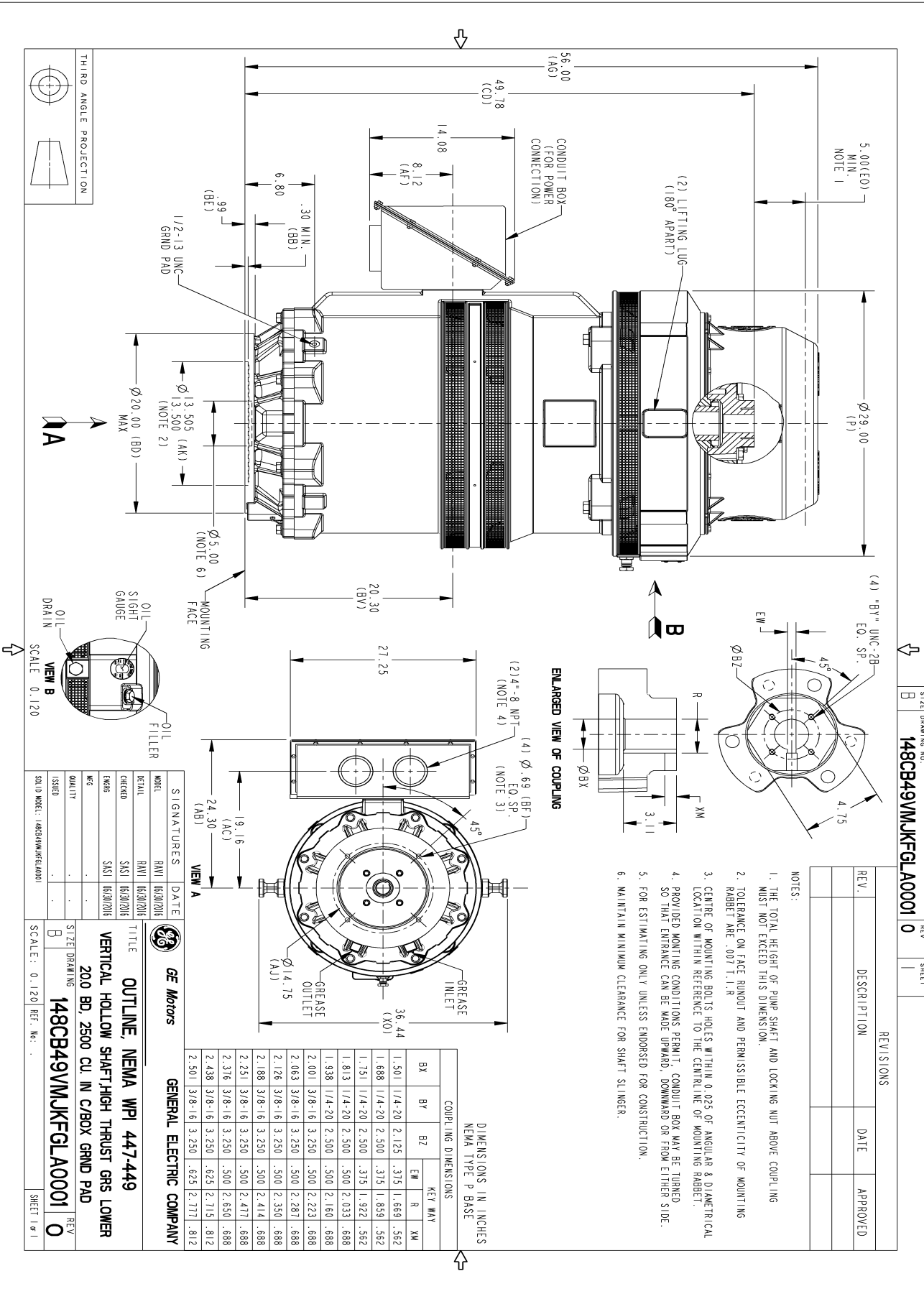
This motor is capable of two cold or one hot start with a maximum connected load inertia of 4716 Lb-Ft Sq (198.54 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 32 seconds. Safe stall time at 100% voltage is 85 seconds cold, 48 seconds hot. Rotor inertia is 130.07 Lb-Ft Sq (5.48 Kg-meter Sq).

| | | | |
|---------------------------|-------|---------------------------|-------|
| Open Circuit A-C: | 1.586 | Short Circuit D-C: | 0.026 |
| Short Circuit A-C: | 0.063 | X/R Ratio: | 9.862 |
| Stator Slots: | 72 | Rotor Slots: | 58 |

Speed Torque Current Curve (First Connection, First Speed)

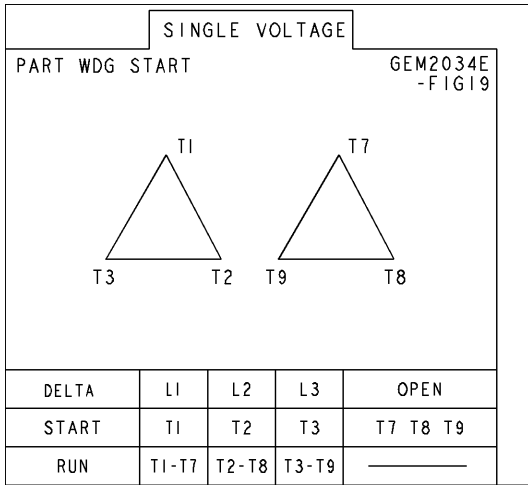


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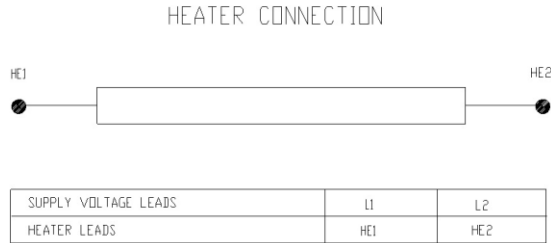


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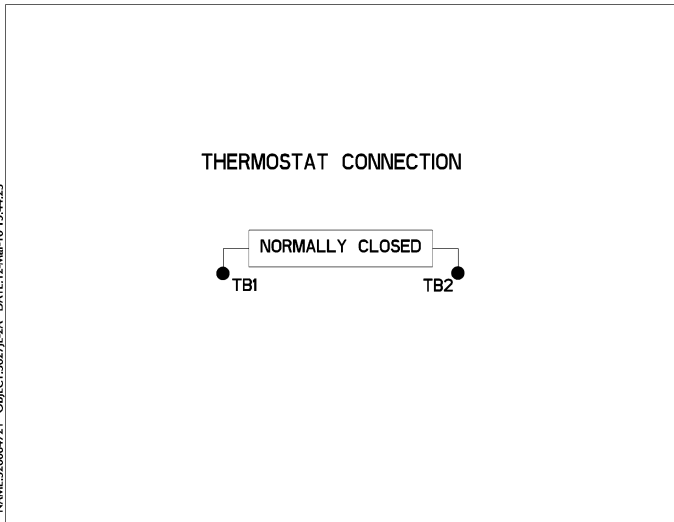
Connection Diagram
GEM2034E-FIG19



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 | 115E7661AA1 | 115E7670MA1 |
| Bearing | 235A2522AJ01 | 235A2536AA01 |
| Slinger/Inproseal | | |

| Fan & Fan Cover Assembly | |
|--------------------------|-------------|
| Part Description | Part# |
| Fan | |
| Fan Cover | 149C4050AA1 |

| Conduit & Accessories Box Assembly | |
|------------------------------------|-------------|
| Part Description | Part# |
| Conduit Box | 179B9052G01 |

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

