



GE INDUSTRIAL MOTORS
a **WOLONG** company

Product Technical Information

February 17, 2023

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

| | |
|----------------------------|----------------------|
| Model Number: | 5KS405DAJ6059 |
| Catalog Number: | V4476 |
| Instruction Manual: | GEI-M1045 |
| Connection Diagram: | GEM2034E-FIG273 |
| Outline Drawing: | 148CB40VMHKCCAA0001 |

Accessory Connection Diagrams

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

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Marks:

| | | | |
|----------------------------|----------------------|-------------------------------|--------------|
| MODEL NUMBER: | 5KS405DAJ6059 | Estimated Weight: | 1190 Lbs |
| Outline Drawing: | 148CB40VMHKCCAA0001 | Time Rating: | CONT |
| Connection Diagram: | GEM2034E-FIG273 | Enclosure: | WPI |
| Instruction Book: | GEI-M1045 | Encl Construction: | OPEN |
| Design Code: | 40BD1258B | Ambient Max(°C): | 40 |
| Type: | KS | Alt Ambient Max(°C): | -- |
| Frame: | L405TP16 | Insulation Class: | H |
| Phases: | 3 | NEMA Design: | B |
| Poles: | 4 | Nominal Efficiency: | 94.5 % |
| Output Power: | 125HP 92.5KW | Guaranteed Efficiency: | 93.6 % |
| RPM: | 1785 | 3/4 Load Efficiency: | -- |
| Voltage: | 460/575 | KVA Code: | G |
| Hertz: | 60 | Max KVAR: | 43.0 |
| Amps - FL: | 145.0/118.0 | Power Factor: | 83.5 |
| Service Factor: | 1.15 | Bearing - DE: | 6215C3 |
| Alt Service Factor: | -- | Bearing - ODE: | 235A2532AA01 |

Enclosure is Weather Protected One

Stamped Nameplate Notes:

NEMA ENCLOSURE WP-I, CSA ENCL DP
HTR LDS HE1-HE2 115V 100W
ROT CCW FACING ODE LEAD/PH SEQ 1-2-3/1-2-3
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: 6 QTS
AMB 0 TO 40 DEG C : ISO 32(MINERAL OR SYNTHETIC)
AMB -15 TO 0 DEG C : ISO 32 SYNTHETIC



Additional Information:

4P, VERT HOLLOW SHAFT HIGH THRUST (2D)
C/BOX 700 CU IN - 3.00" NPT
OIL RESISTANT SLEEVING ON LEADS
115V HTR LDS TO MAIN CONDUIT BOX
BEARING LIFE 8760 HRS AT 14600 LB THRUST
BEARING LIFE 10339 HRS AT 14000 LB THRUST
CG:18.50 IN FROM P-BASE FACE, STAT DEF:0.0032 IN
RCF:3240 CPM AT C/BOX SIDE, 3360 CPM AT
90 DEG FROM C/ BOX SIDE
NON-REVERSE BALL CARRIER,
BOLTED COUPLING, BX = 1.688 IN, EW= 0.375 IN
FIRE PUMP MOTOR
ESTIMATED SOUND PRESSURE < 85 DBA@ 1 METER



Performance Characteristics

1st Winding 1st Connection

Design: 40BD1258B

Marks:

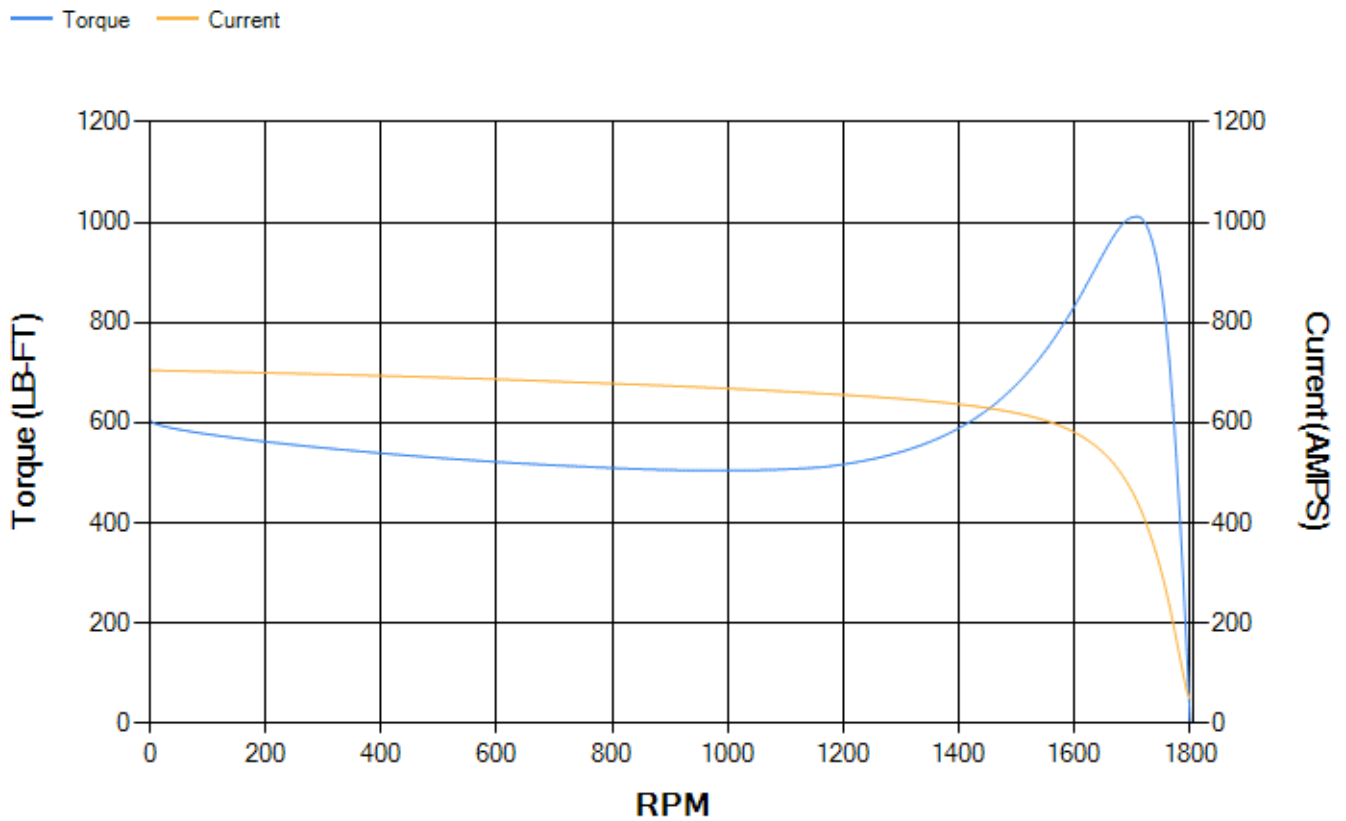
| LOAD % | 125.0 | 115.0 | 100.0 | 75.0 | 50.0 | 25.0 | 0.0 |
|--------|--------|--------|--------|-------|-------|-------|-------|
| % EFF | 94.68 | 94.87 | 95.3 | 95.22 | 94.7 | 91.9 | 0.00 |
| % PF | 85.44 | 84.82 | 83.37 | 78.71 | 68.48 | 45.8 | 3.7 |
| AMPS | 144.62 | 133.75 | 117.81 | 93.66 | 72.16 | 55.59 | 48.02 |

| | | | | | |
|--------------------|--------|--------------------|--------|--------------------|--------|
| TORQ(FL)#FT | 367.95 | TORQ(LR)%FL | 164.48 | TORQ(BD)%FL | 274.34 |
| AMPS(LR) | 704.48 | PF AT START | 0.32 | | |

This motor is capable of two cold or one hot start with a maximum connected load inertia of 2453 Lb-Ft Sq (103.27 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 31 seconds. Safe stall time at 100% voltage is 64 seconds cold, 37 seconds hot. Rotor inertia is 24.72 Lb-Ft Sq (1.04 Kg-meter Sq).

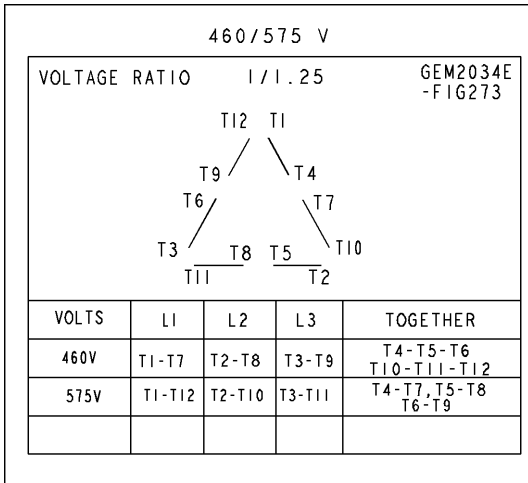
| | | | |
|---------------------------|-------|---------------------------|-------|
| Open Circuit A-C: | 0.673 | Short Circuit D-C: | 0.025 |
| Short Circuit A-C: | 0.042 | X/R Ratio: | 9.547 |
| Stator Slots: | 72 | Rotor Slots: | 58 |

Speed Torque Current Curve (First Connection, First Speed)

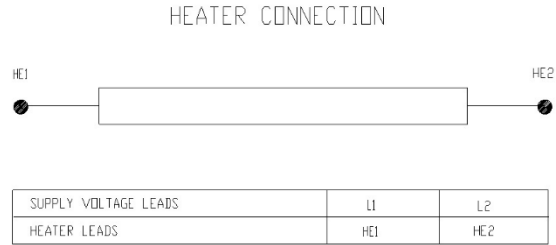


Marks:

Connection Diagram
GEM2034E-FIG273



Heater Connection
3027JE-1C



| End shield Assembly | | |
|---------------------|---------------|----------------|
| Part Description | DE Side Part# | ODE Side Part# |
| End Shield | 115E7306AC1 | 115E7310LK-G01 |
| Bearing | 235A2513AL01 | 235A2532AA01 |
| Slinger/Inproseal | 235A2300HW1 | |

| Fan & Fan Cover Assembly | |
|--------------------------|-------------|
| Part Description | Part# |
| Fan | |
| Fan Cover | 161C1054AA1 |

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

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

