



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: | 5KS447DAJ6066 |
| Catalog Number: | V4490 |
| Instruction Manual: | GEI-M1045 |
| Connection Diagram: | GEM2034E-FIG273 |
| Outline Drawing: | 148CB49VMJKLGAA0001 |

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: | 5KS447DAJ6066 | Estimated Weight: | 3050 Lbs |
| Outline Drawing: | 148CB49VMJKLGAA0001 | Time Rating: | CONT |
| Connection Diagram: | GEM2034E-FIG273 | Enclosure: | WPI |
| Instruction Book: | GEI-M1045 | Encl Construction: | OPEN |
| Design Code: | 49BD1521A | Ambient Max(°C): | 40 |
| Type: | KS | Alt Ambient Max(°C): | -- |
| Frame: | L447TP20 | Insulation Class: | H |
| Phases: | 3 | NEMA Design: | B |
| Poles: | 4 | Nominal Efficiency: | 95.8 % |
| Output Power: | 350HP 259KW | Guaranteed Efficiency: | 95.0 % |
| RPM: | 1790 | 3/4 Load Efficiency: | -- |
| Voltage: | 460/575 | KVA Code: | G |
| Hertz: | 60 | Max KVAR: | 73.6 |
| Amps - FL: | 392/322 | Power Factor: | 87.5 |
| Service Factor: | 1.15 | Bearing - DE: | 6217C3 |
| Alt Service Factor: | -- | Bearing - ODE: | 235A2536AB01 |

Enclosure is Weather Protected One

Stamped Nameplate Notes:

NEMA ENCLOSURE WP-I, CSA ENCL DP
HTR LDS HE1-HE2 115V 145W
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: 10.2 QTS
AMB 0 TO 40 DEG C : ISO 32(MINERAL OR SYNTHETIC)
AMB -15 TO 0 DEG C : ISO 32 SYNTHETIC
SUITABLE FOR 300 HP, 380V, 50 HZ WITH
407.0 AMPS AND 1490 RPM AT 1.00 SF



Additional Information:

4P, VERT HOLLOW SHAFT HIGH THRUST (2D)
C/BOX 1260 CU IN - 2(4.00" NPT)
C/B GRD PLATE
OIL RESISTANT SLEEVING ON LEADS
115V HTR LDS TO MAIN CONDUIT BOX
BEARING LIFE 8760 HRS AT 22276 LB THRUST
BEARING LIFE 9198 HRS AT 22000 LB THRUST
CG:25.10 IN FROM P-BASE FACE, STAT DEF:= 0.005 IN
RCF: 2567 CPM
NON-REVERSE BALL CARRIER,
BOLTED COUPLING, BX = 1.938 IN, EW= 0.500 IN
FIRE PUMP MOTOR
ESTIMATED SOUND PRESSURE 90.8 DBA AT 1 METER



Performance Characteristics

1st Winding 1st Connection

Design: 49BD1521A

Marks:

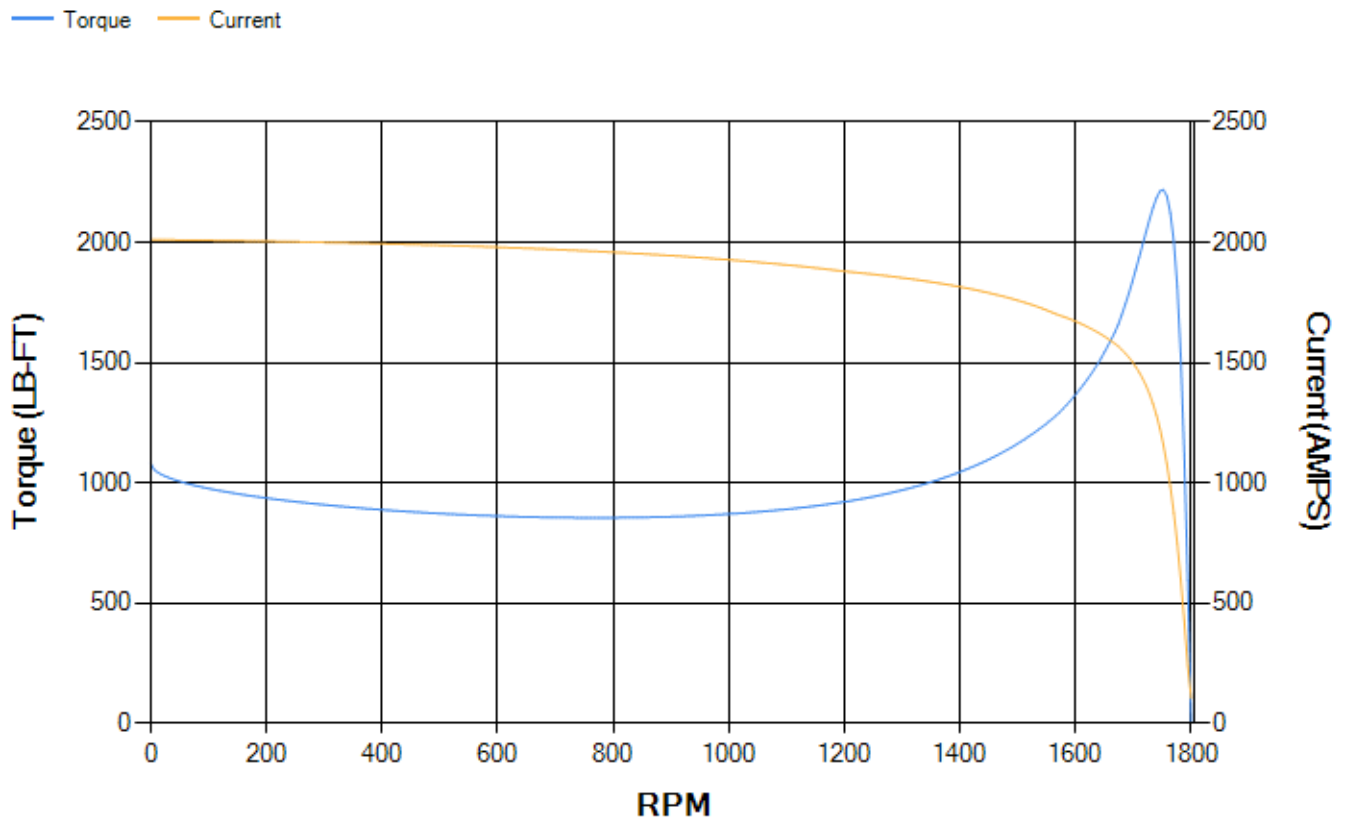
| LOAD % | 125.0 | 115.0 | 100.0 | 75.0 | 50.0 | 25.0 | 0.0 |
|--------|--------|--------|--------|--------|--------|--------|--------|
| % EFF | 94.92 | 95.18 | 95.7 | 95.79 | 95.54 | 93.44 | 0.00 |
| % PF | 87.05 | 87.36 | 87.43 | 86.02 | 80.63 | 62.4 | 4.79 |
| AMPS | 495.56 | 453.02 | 391.52 | 298.18 | 212.61 | 140.44 | 102.67 |

| | | | | | |
|--------------------|---------|--------------------|--------|--------------------|--------|
| TORQ(FL)#FT | 1027.38 | TORQ(LR)%FL | 105.18 | TORQ(BD)%FL | 215.91 |
| AMPS(LR) | 2011.18 | PF AT START | 0.22 | | |

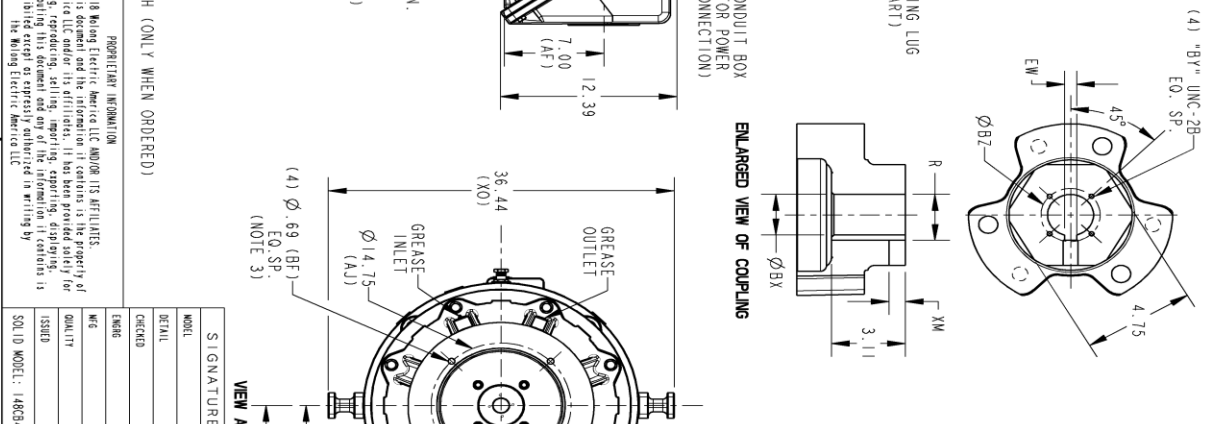
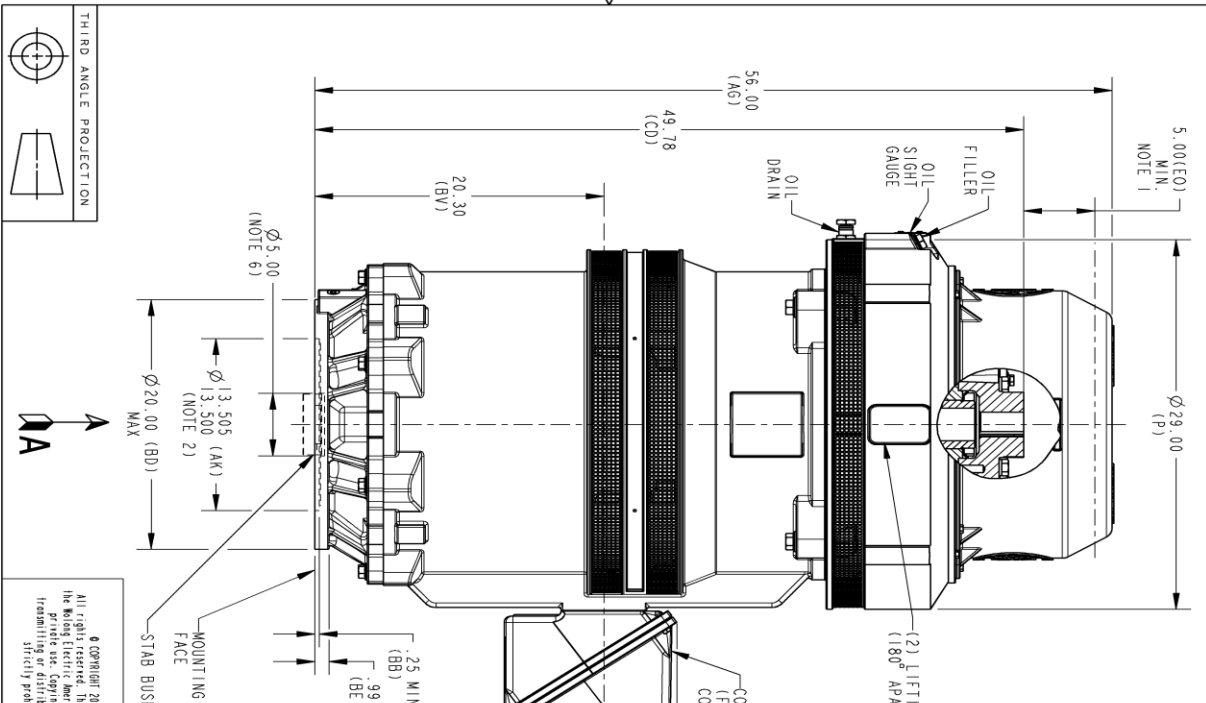
This motor is capable of two cold or one hot start with a maximum connected load inertia of 7758 Lb-Ft Sq (326.61 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 67 seconds. Safe stall time at 100% voltage is 129 seconds cold, 81 seconds hot. Rotor inertia is 108.44 Lb-Ft Sq (4.57 Kg-meter Sq).

| | | | |
|---------------------------|-------|---------------------------|-------|
| Open Circuit A-C: | 1.615 | Short Circuit D-C: | 0.037 |
| Short Circuit A-C: | 0.075 | X/R Ratio: | 13.93 |
| Stator Slots: | 72 | Rotor Slots: | 58 |

Speed Torque Current Curve (First Connection, First Speed)



Marks:



| REV. | DESCRIPTION | DATE | APPROVED |
|------|-------------------------|----------|-------------------|
| 1 | ISAC #18-0869 | 12/11/18 | PRASHANTH SREDEVI |
| 2 | ISAC #19-0869 | 11/19/19 | BARATH HARI KRAN |
| 3 | ISAC #20-0136 | 02/17/20 | KI SHORE DEEPMANI |
| 4 | C/B HOLE DETAIL UPDATED | 10/07/20 | DEEPMANI |

| COUPLING DIMENSIONS | | KEY WAY | |
|---------------------|--------------|---------|------------|
| BY | BZ | EW | R |
| 1.501 | 1/4-20 2.125 | .315 | 1.659 .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 | 2.541 .688 |
| 2.438 | 3/8-16 3.250 | .625 | 2.715 .812 |
| 2.501 | 3/8-16 3.250 | .625 | 2.778 .812 |

NOTES:

1. THE TOTAL HEIGHT OF PUMP SHAFT AND LOCKING NUT ABOVE COUPLING MUST NOT EXCEED THIS DIMENSION.
2. TOLERANCE ON FACE RUNOUT AND PERMISSIBLE ECCENTRICITY OF MOUNTING RABBIT ARE .007 T. I. R
3. CENTRE OF MOUNTING BOLTS WITHIN 0.025 OF ANGULAR & DIMETRICAL LOCATION WITHIN REFERENCE TO THE CENTRELINE OF MOUNTING RABBIT.
4. PROVIDED MOUNTING 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 / STABILIZER BUSHING.

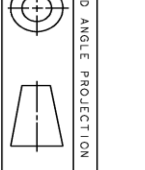
REVISIONS

GE INDUSTRIAL MOTORS
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OUTLINE, NEMA WP1 447-449
VERTICAL HOLLOW SHAFT-HIGH THRUST GRS LOWER
 200 BD1260 CU IN C/BOX

SCALE: 0.120 REF. No. ...

148CB49VMJKLGA0001 004



THIRD ANGLE PROJECTION

PROPRIETARY INFORMATION
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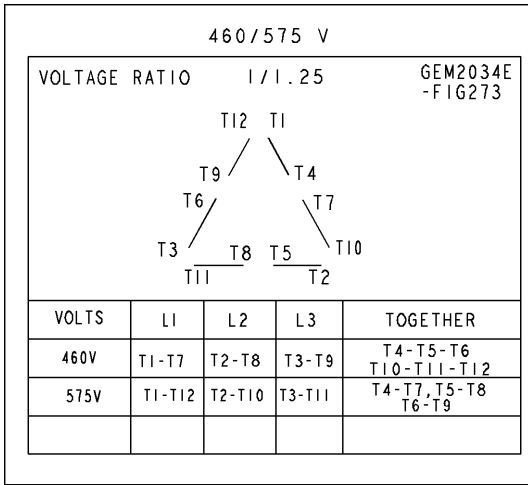
SIGNATURES DATE
 MODEL RAVI 06/30/16
 DETAIL RAVI 06/30/16
 CHECKED SASI 06/30/16
 ENG SASI 06/30/16

TITLE
148CB49VMJKLGA0001 004

SHEET 1 OF 1

Marks:

Connection Diagram
GEM2034E-FIG273



Heater Connection
3027JE-1C



| End shield Assembly | | |
|---------------------|---------------|----------------|
| Part Description | DE Side Part# | ODE Side Part# |
| End Shield | 115E7661AA1 | 115E7670LM1 |
| Bearing | 235A2622AA01 | 235A2536AB01 |
| Slinger/Inproseal | 149C4399G06 | |

| Fan & Fan Cover Assembly | |
|--------------------------|-------------|
| Part Description | Part# |
| Fan | |
| Fan Cover | 161C1050AA1 |

| Conduit & Accessories Box Assembly | |
|------------------------------------|-------------|
| Part Description | Part# |
| Conduit Box | 179B9058G03 |

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

