



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: | 5KGS449SAA208B |
| Catalog Number: | M8805 |
| Instruction Manual: | GEI-56128 |
| Connection Diagram: | GEM2034E-FIG25 |
| Outline Drawing: | 239C6800FR |

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: | 5KGS449SAA208B | Estimated Weight: | 3050 Lbs |
| Outline Drawing: | 239C6800FR | Time Rating: | CONT |
| Connection Diagram: | GEM2034E-FIG25 | Enclosure: | TEFC |
| Instruction Book: | GEI-56128 | Encl Construction: | X\$D |
| Design Code: | 49BD1266A | Ambient Max(°C): | 40 |
| Type: | KGS | Alt Ambient Max(°C): | -- |
| Frame: | 449T | Insulation Class: | H |
| Phases: | 3 | NEMA Design: | B |
| Poles: | 4 | Nominal Efficiency: | 96.2 % |
| Output Power: | 250HP 185KW | Guaranteed Efficiency: | 95.8 % |
| RPM: | 1780 | 3/4 Load Efficiency: | -- |
| Voltage: | 460 | KVA Code: | G |
| Hertz: | 60 | Max KVAR: | 64.4 |
| Amps - FL: | 278.0 | Power Factor: | 87.5 |
| Service Factor: | 1.15 | Bearing - DE: | 6318ZC3S0 |
| Alt Service Factor: | -- | Bearing - ODE: | 6318ZC3S0 |

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

FOR DIRECT COUPLED LOAD ONLY
 STAMP NP249A5564P051 AS BELOW:
 MODEL:5KGS449SAA208B S/N: XXX
 CSA CERTIFIED CSA09.2216219 FOR EX NA IIC 215 C GC
 CL 1 ZONE2 AEX NA IIC ---C;CL 1 DIV2 GRP ABCD 215C
 IN -40C <= AMB <= 40C, 1.0 SF ON SINE-WAVE PWR
 SURF TEMP 280C AT 1.15SF ON SINE-WAVE PWR
 OR 260C VT OR -- C CT OR -- C CHP PWM CONTROL
 ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB
 VT 0 - 60 HZ, CT -- HZ, CHP -- HZ.



Additional Information:

4P - T EXTN - SPLIT LEAD
C/BOX 1260 CU IN - 2(4.00" NPT)
C/B GRD PLATE
OIL RESISTANT SLEEVING ON LEADS
HEAT STABILIZED BEARINGS
F1 MOUNTING
CLASS F TEMP RISE AT 1.0 SF



Performance Characteristics

1st Winding 1st Connection

Design: 49BD1266A

Marks:

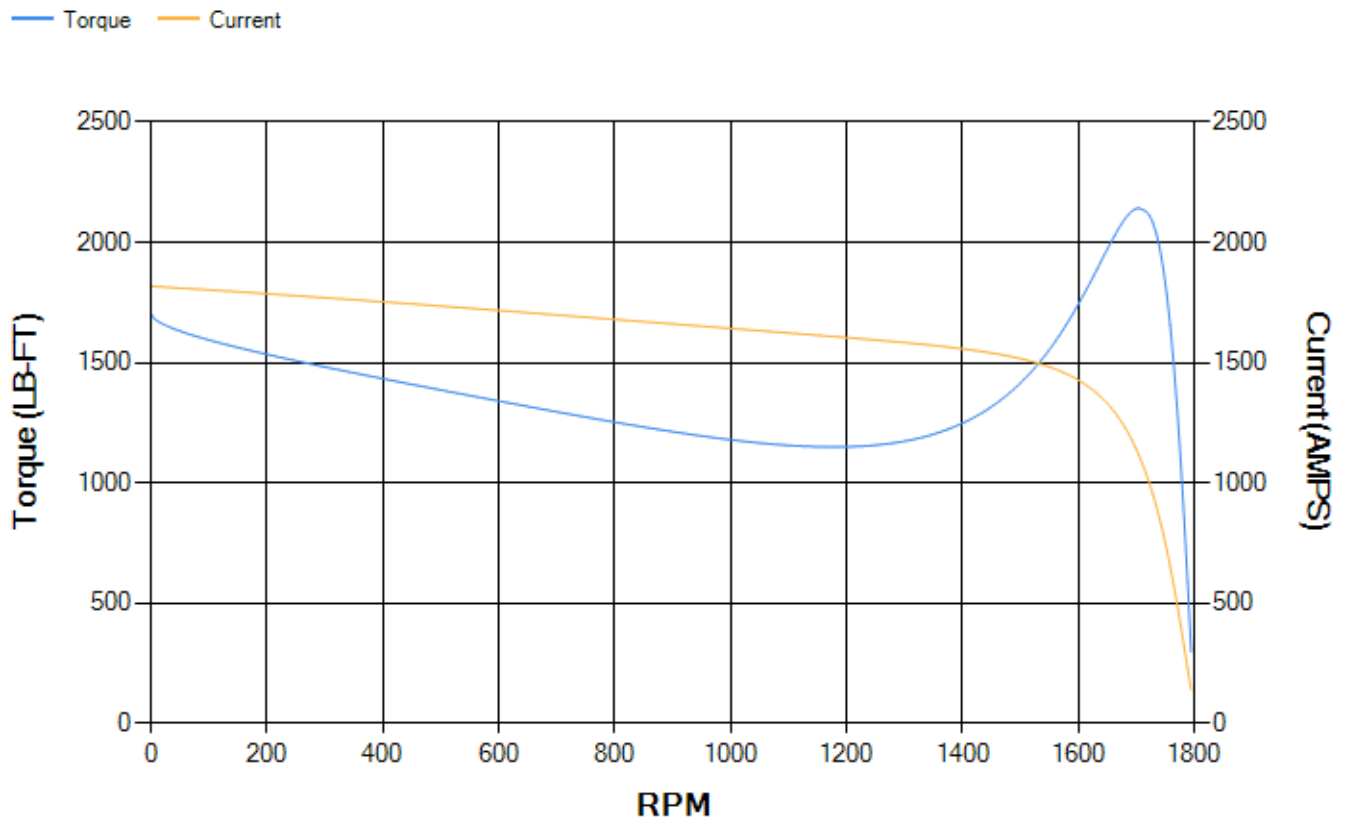
| LOAD % | 125.0 | 115.0 | 100.0 | 75.0 | 50.0 | 25.0 | 0.0 |
|--------|--------|--------|-------|--------|--------|--------|-------|
| % EFF | 95.67 | 95.87 | 96.33 | 96.4 | 96.24 | 94.59 | 0.00 |
| % PF | 88.42 | 88.15 | 87.34 | 84.26 | 76.43 | 55.01 | 3.13 |
| AMPS | 345.75 | 318.41 | 278.1 | 216.05 | 159.05 | 112.42 | 89.76 |

| | | | | | |
|--------------------|---------|--------------------|--------|--------------------|-------|
| TORQ(FL)#FT | 736.74 | TORQ(LR)%FL | 231.55 | TORQ(BD)%FL | 290.2 |
| AMPS(LR) | 1817.62 | PF AT START | 0.33 | | |

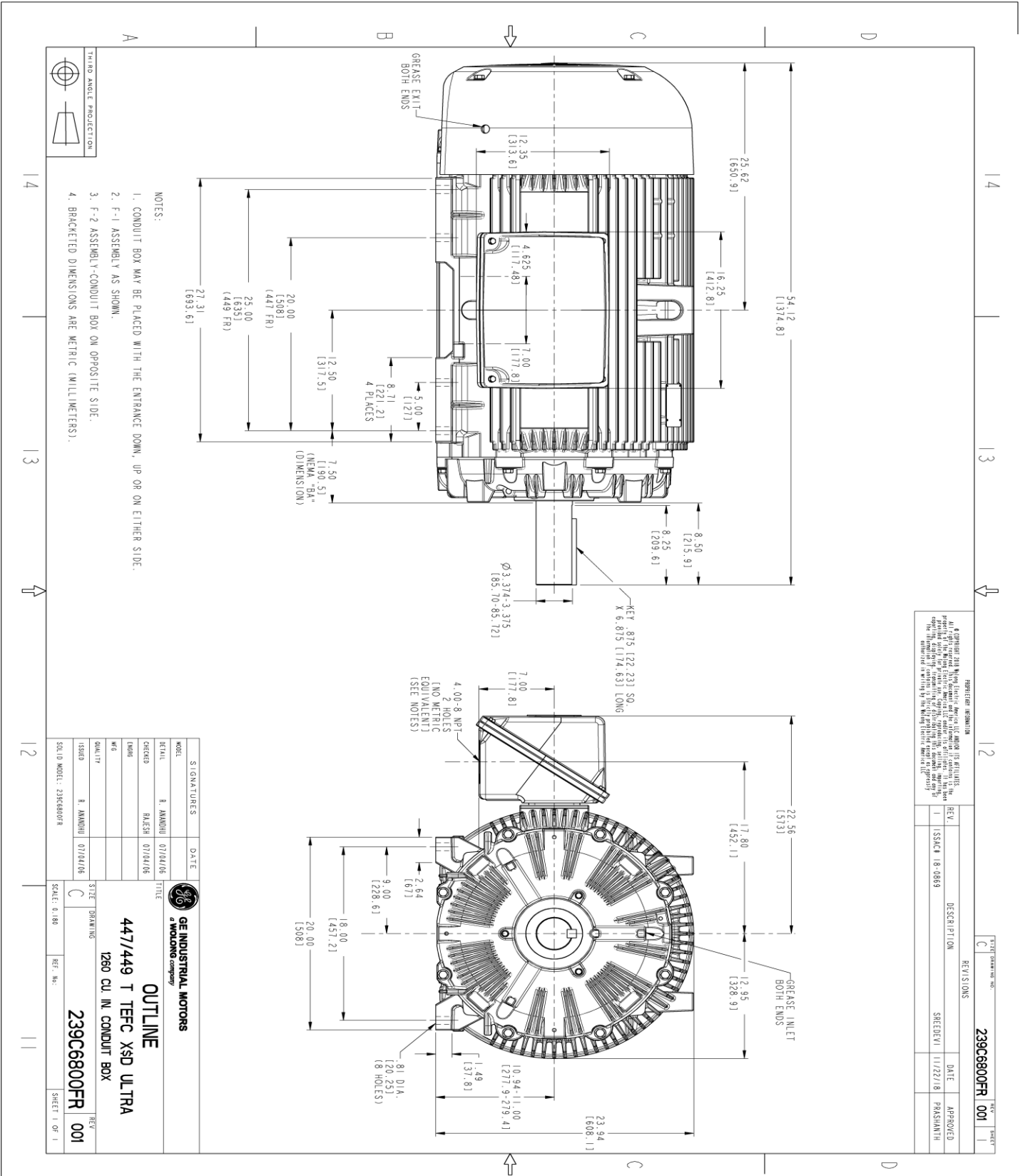
This motor is capable of two cold or one hot start with a maximum connected load inertia of 4072 Lb-Ft Sq (171.43 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 21 seconds. Safe stall time at 100% voltage is 58 seconds cold, 25 seconds hot. Rotor inertia is 132.16 Lb-Ft Sq (5.56 Kg-meter Sq).

| | | | |
|---------------------------|-------|---------------------------|--------|
| Open Circuit A-C: | 0.779 | Short Circuit D-C: | 0.042 |
| Short Circuit A-C: | 0.034 | X/R Ratio: | 15.862 |
| Stator Slots: | 72 | Rotor Slots: | 58 |

Speed Torque Current Curve (First Connection, First Speed)



Marks:



| REVISION INFORMATION | | SHEET DRAWING NO. | |
|----------------------|----------------|-------------------|-----------|
| REV. | DESCRIPTION | REV. NO. | SHEET NO. |
| 1 | ISSUE# 18-0869 | 1 | 1 |
| DATE | | APPROVED | |
| 11/22/18 | | PRAASHANTH | |
| 239C6800FR 001 | | | |

THIRD ANGLE PROJECTION

NOTES:

- CONDUIT BOX MAY BE PLACED WITH THE ENTRANCE DOWN, UP OR ON EITHER SIDE.
- F-1 ASSEMBLY AS SHOWN.
- F-2 ASSEMBLY-CONDUIT BOX ON OPPOSITE SIDE.
- BRACKETED DIMENSIONS ARE METRIC (MILLIMETERS).

| SIGNATURES | DATE |
|-----------------|----------|
| MODEL: R. AMODI | 07/04/06 |
| CHECKED: RAJESH | 07/04/06 |
| DATE: | |
| ISSUED: | 07/04/06 |

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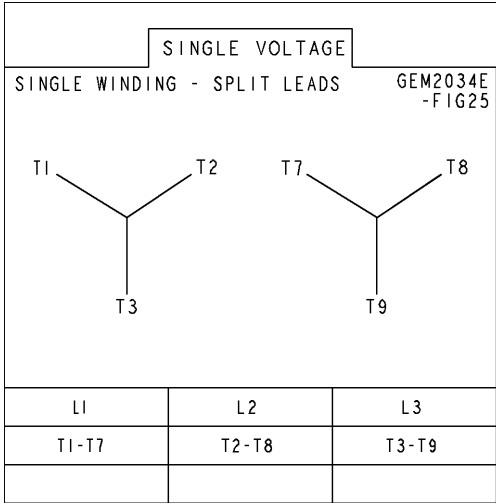
OUTLINE
447/449 T TEFC XSD ULTRA
1260 CU. IN. CONDUIT BOX

239C6800FR 001

SCALE: 0.180 REF. NO. SHEET 1 OF 1

Marks:

Connection Diagram
GEM2034E-FIG25



| End shield Assembly | | |
|---------------------|---------------|----------------|
| Part Description | DE Side Part# | ODE Side Part# |
| End Shield | 115E4355AA1 | 115E4355LM1 |
| Bearing | 235A2514AG03 | 235A2514AG03 |
| Slinger/Inproseal | 149C4399G07 | 149C4399G07 |

| Fan & Fan Cover Assembly | |
|--------------------------|-------------|
| Part Description | Part# |
| Fan | 159C7100AA2 |
| Fan Cover | 128D6841AA1 |

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

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

