

Product Information Packet

May 26, 2017

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

| | |
|----------------------------|-----------------------|
| Model Number: | 5KAF449SAA223A |
| Catalog Number: | M9326 |
| Instruction Manual: | GEI-56128 |
| Connection Diagram: | GEM2034E-FIG20 |
| Outline Drawing: | 239C5800AE |

Accessory Connection Diagrams

| | | | |
|------------------------------|------|------------------------------|------|
| Bearing Thermocouple: | None | Heater: | None |
| RTD: | None | Thermistor: | None |
| Thermostat: | None | Winding Thermocouple: | None |
| Bearing RTD: | None | | |

Table of Contents

| | |
|-----------------------------|----|
| Specification | 01 |
| Performance Characteristics | 02 |
| Outline Drawing | 03 |
| Connection Drawing(s) | 04 |



Marks:

| | | | |
|----------------------------|-----------------------|-------------------------------|------------------|
| MODEL NUMBER: | 5KAF449SAA223A | Service Factor: | 1.15 |
| Outline Drawing: | 239C5800AE | Alt Service Factor: | 1.00 |
| Connection Diagram: | GEM2034E-FIG20 | ASD Type: | |
| Instruction Book: | GEI-56128 | Time Rating: | CONT |
| Design Code: | 49BD1079A | Enclosure: | TEFC |
| Type: | KAF | Encl Construction: | A\$D |
| Frame: | 449T | Ambient Max (°C): | 40 |
| Phases: | 3 | Alt Ambient Max(°C): | 65 |
| Poles: | 4 | Insulation Class: | H |
| Output Power: | 300HP 222KW | NEMA Design: | -- |
| Output Power (2): | | Nominal Efficiency: | 96.2 % |
| Output Power (3): | | Guaranteed Efficiency: | 95.4 % |
| RPM: | 1795 | 3/4 Load Efficiency: | 96.1 % |
| RPM (2): | | KVA Code: | M |
| RPM (3): | | Max KVAR: | 114.1 |
| Voltage: | 460 | Power Factor: | 83.5 |
| Voltage (2): | | Service Factor SINE: | |
| Voltage (3): | | Service Factor ASD: | |
| Hertz: | 60 | Min Supply Wires: | 75 C |
| Hertz – 2: | | IP: | 55 |
| Hertz – 3: | | Vibration Limit: | -- |
| Amps – FL: | 350.0 | Bearing Lubrication: | MOBIL POLYREX EM |
| Amps – FL- 2: | | Bearing - DE: | 6318ZC3 |
| Amps - FL- 3: | | Bearing - ODE: | 6318ZC3-VL0241 |
| Speed Range RPM: | - | Estimated Weight: | 2890 Lbs |
| Const HP RPM: | - | | |

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

ALTERNATE RATING INVERTER DUTY 1.0 SF 40C AMBIENT
 SUITABLE FOR CONSTANT TORQUE;PWM OPERATION;0-60HZ
 FOR DIRECT COUPLED LOAD ONLY
 THERMOSTAT LEADS PC-PC TRIP

Additional Information:

4P - T EXTN - SPLIT LEAD
 1260 CU IN - 2(4.00" NPT)
 C/B GRD PLATE
 E/S GROUND BOLT MTD ON DE C/BOX SIDE NEAR FOOT
 OIL RESISTANT SLEEVING ON LEADS
 TACH PROVISION MOTOR
 N.C. TRIP TSTAT LDS TO MAIN CONDUIT BOX
 PAINTED ODE ACCESSORY RABBET

SHAFT GROUND RING #235A4970AG8 MOUNTED ON
DE BEARING CAP

Performance Characteristics

1st Winding 1st Connection

Design: 49BD1079A

Marks:

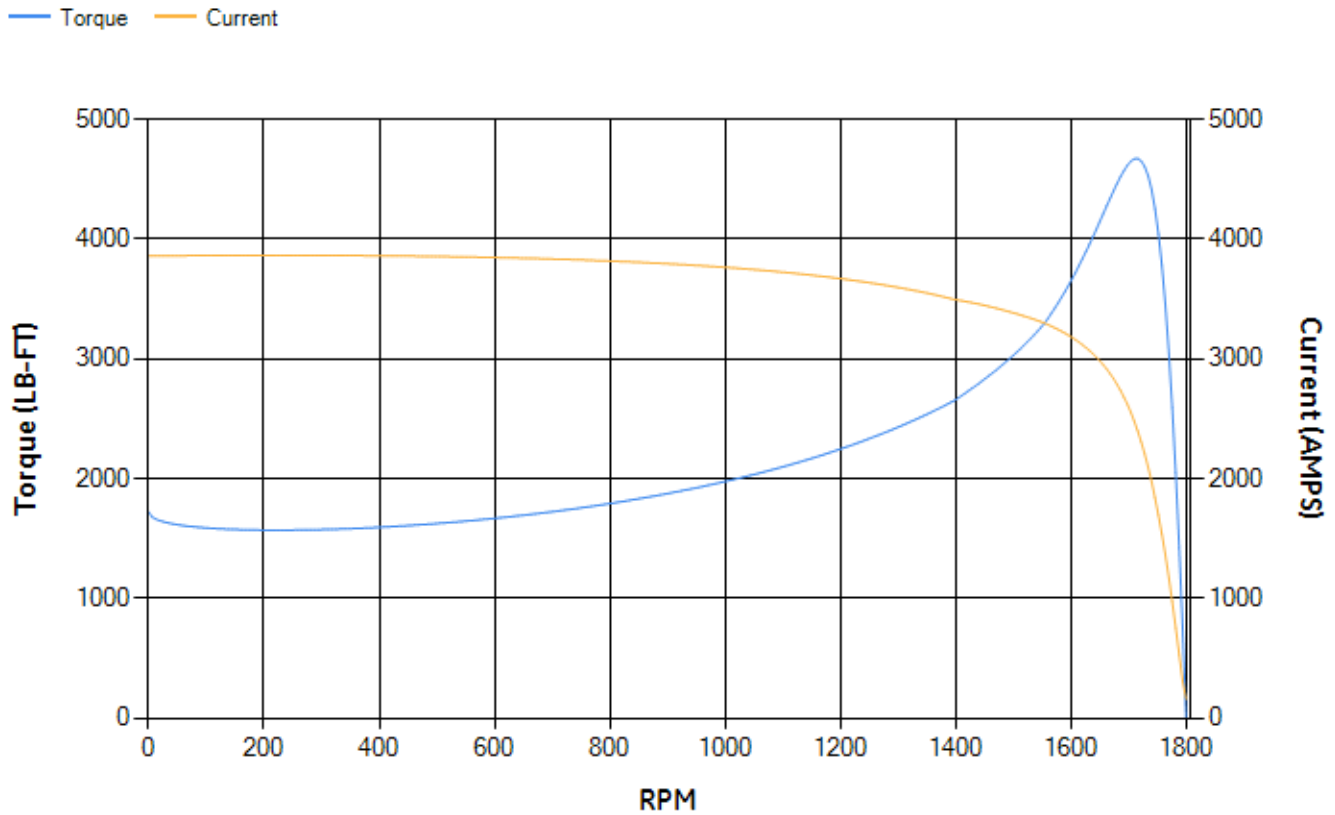
| LOAD % | 125.0 | 115.0 | 100.0 | 75.0 | 50.0 | 25.0 | 0.0 |
|--------|--------|--------|-------|--------|--------|--------|--------|
| % EFF | 96.38 | 96.4 | 96.57 | 96.09 | 95.18 | 91.9 | 0.00 |
| % PF | 86.74 | 85.68 | 83.53 | 77.56 | 65.87 | 42.64 | 3.57 |
| AMPS | 419.83 | 390.96 | 348.1 | 282.57 | 223.94 | 179.15 | 158.57 |

| | | | | | |
|--------------------|---------|--------------------|--------|--------------------|-------|
| TORQ(FL)#FT | 878.85 | TORQ(LR)%FL | 195.68 | TORQ(BD)%FL | 531.1 |
| AMPS(LR) | 3859.12 | PF AT START | 0.22 | | |

This motor is capable of two cold or one hot start with a maximum connected load inertia of 11512 Lb-Ft Sq (484.66 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 36 seconds. Safe stall time at 100% voltage is 77 seconds cold, 43 seconds hot. Rotor inertia is 118.09 Lb-Ft Sq (4.97 Kg-meter Sq).

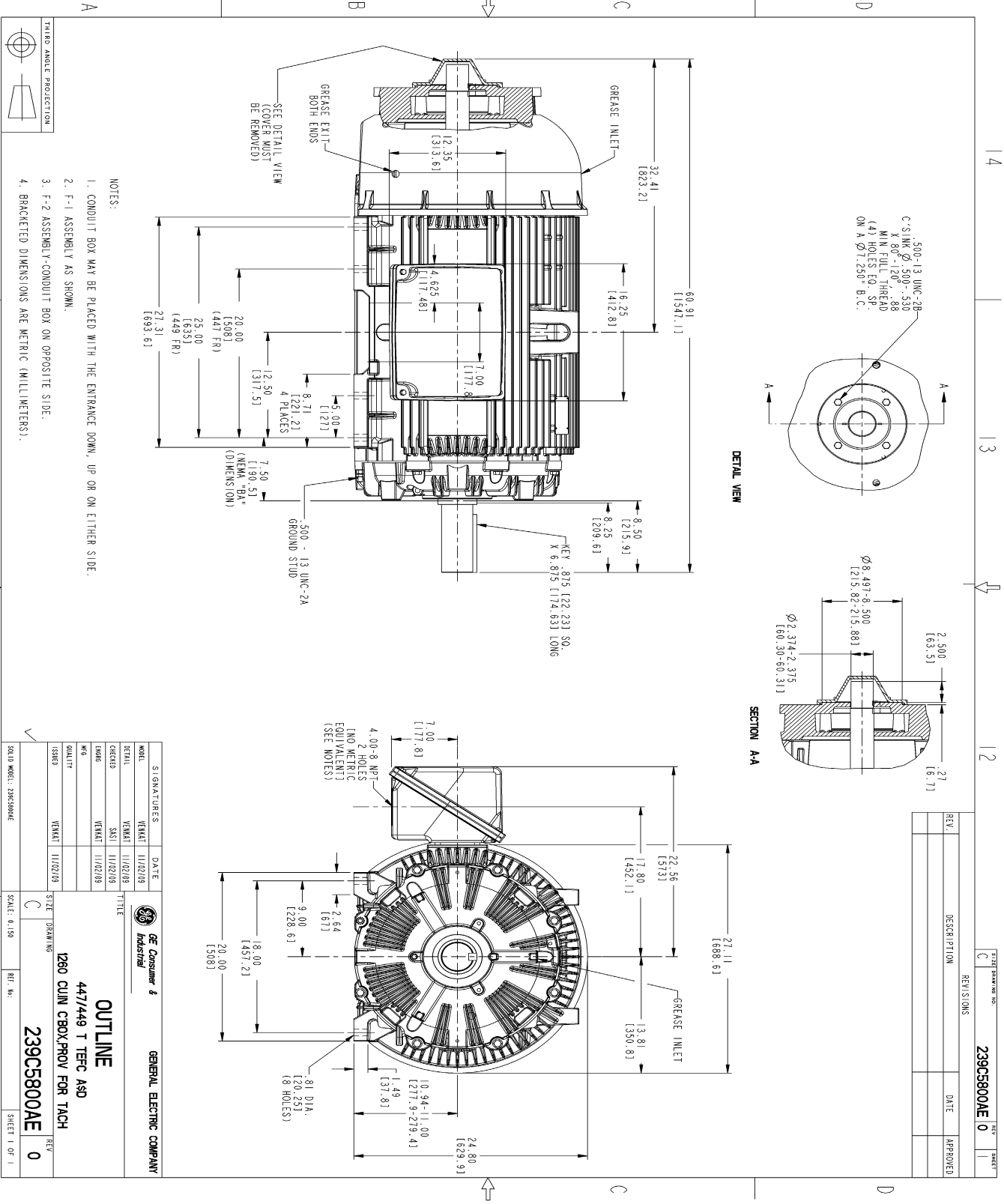
| | | | |
|---------------------------|-------|---------------------------|--------|
| Open Circuit A-C: | 1.197 | Short Circuit D-C: | 0.031 |
| Short Circuit A-C: | 0.044 | X/R Ratio: | 11.834 |
| Stator Slots: | 72 | Rotor Slots: | 58 |

Speed Torque Current Curve (First Connection, First Speed)



NAME:120004637 OBJECT:239C5800AE DATE:03-Dec-09 17:02:35

Marks:



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

| REV. | DESCRIPTION | DATE | APPROVED |
|------|-------------|------|----------|
| | | | |

| SIGNATURES | DATE | TITLE |
|------------|----------|-------|
| DESIGNER | 11/02/09 | |
| CHECKED | 11/02/09 | |
| DATE | 11/02/09 | |
| ISSUED | 11/02/09 | |

SCALE: 0.150

REF. NO.

SHEET 1 OF 1

GENERAL ELECTRIC COMPANY

OUTLINE

447/449 T TFFC ASD

1260 CUIN CBOX/PROV FOR TACH

239C5800AE

REV 0

Marks:

Connection Diagram
GEM2034E-FIG20

