GE
Power Conversion

Product Information Packet

March 18, 2015

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

Model Number:	**5KAF449SAA221C**
Catalog Number:	**M9324**
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		

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imagination at work

Marks:

MODEL NUMBER:	**5KAF449SAA221C**	**Estimated Weight:**	2630 Lbs
Outline Drawing:	239C5800AE	**Time Rating:**	CONT
Connection Diagram:	GEM2034E-FIG20	**Enclosure:**	TEFC
Instruction Book:	GEI-56128	**Encl Construction:**	A$D
Design Code:	49BD1078A	**Ambient Max(°C):**	40
Type:	KAF	**Alt Ambient Max(°C):**	--
Frame:	449T	**Insulation Class:**	H
Phases:	3	**NEMA Design:**	-
Poles:	4	**Nominal Efficiency:**	96.2 %
Output Power:	250HP 185KW	**Guaranteed Efficiency:**	96.0
RPM:	2685	**3/4 Load Efficiency:**	96.0
Voltage:	460	**KVA Code:**	K
Hertz:	60	**Max KVAR:**	76.2
Amps - FL:	267	**Power Factor:**	86.5
Service Factor:	1.15	**Bearing - DE:**	6318ZC3
Alt Service Factor:	--	**Bearing - ODE:**	6318ZC3-VL0241

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:
ALTERNATE RATING FOR PWM CONTROL: 1.0SF 40C AMB
INVERTER DUTY CONSTANT TORQUE RANGE: 0-60HZ
FOR DIRECT COUPLED LOAD ONLY
THERMOSTAT LEADS TB1-TB2 TRIP
IP 55, PWM OPERATION, INVERTER DUTY
CLASS H INS WITH CLASS F RISE AT 1.00 SF

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 GROUNDING RING MOUNTED ON DE BRG CAP
INSULATED BEARING AT ODE

Performance Characteristics 1st Winding 1st Connection **Design: 49BD1078A**

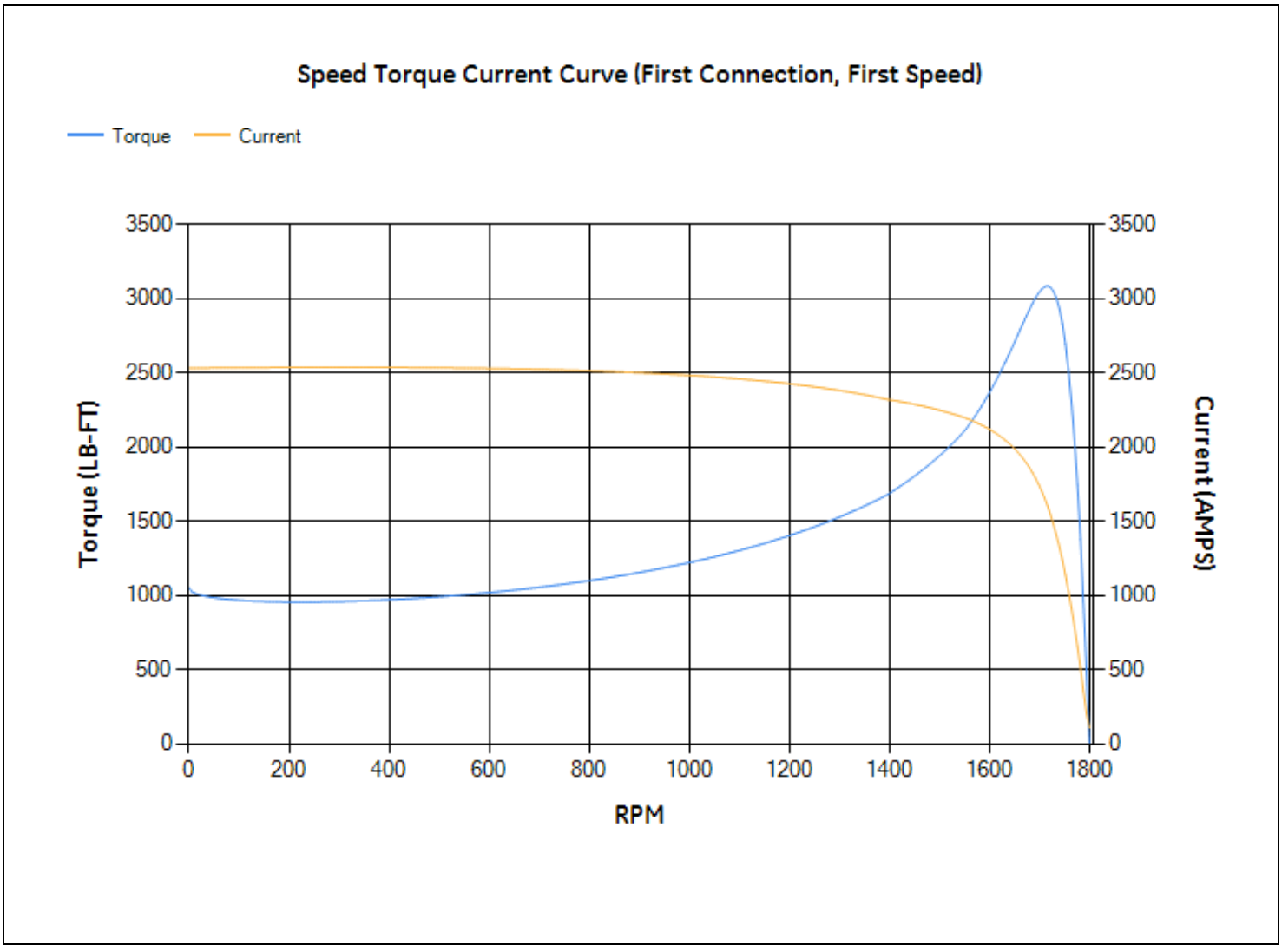
Marks:

LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.98	96.04	96.3	95.96	95.22	92.23	0.00
% PF	88.8	88.14	86.71	82.33	72.71	50.1	4.18
AMPS	343.18	317.85	280.25	222.12	168.99	126.59	106.27

TORQ(FL)#FT	733.15	**TORQ(LR)%FL**	143.33	**TORQ(BD)%FL**	420.02
AMPS(LR)	2530.24	**PF AT START**	0.21		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 8396 Lb-Ft Sq (353.47 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 44 seconds. Safe stall time at 100% voltage is 92 seconds cold, 53 seconds hot. Rotor inertia is 92.42 Lb-Ft Sq (3.89 Kg-meter Sq).

Open Circuit A-C:	1.214	**Short Circuit D-C:**	0.03
Short Circuit A-C:	0.046	**X/R Ratio:**	11.469
Stator Slots:	72	**Rotor Slots:**	58



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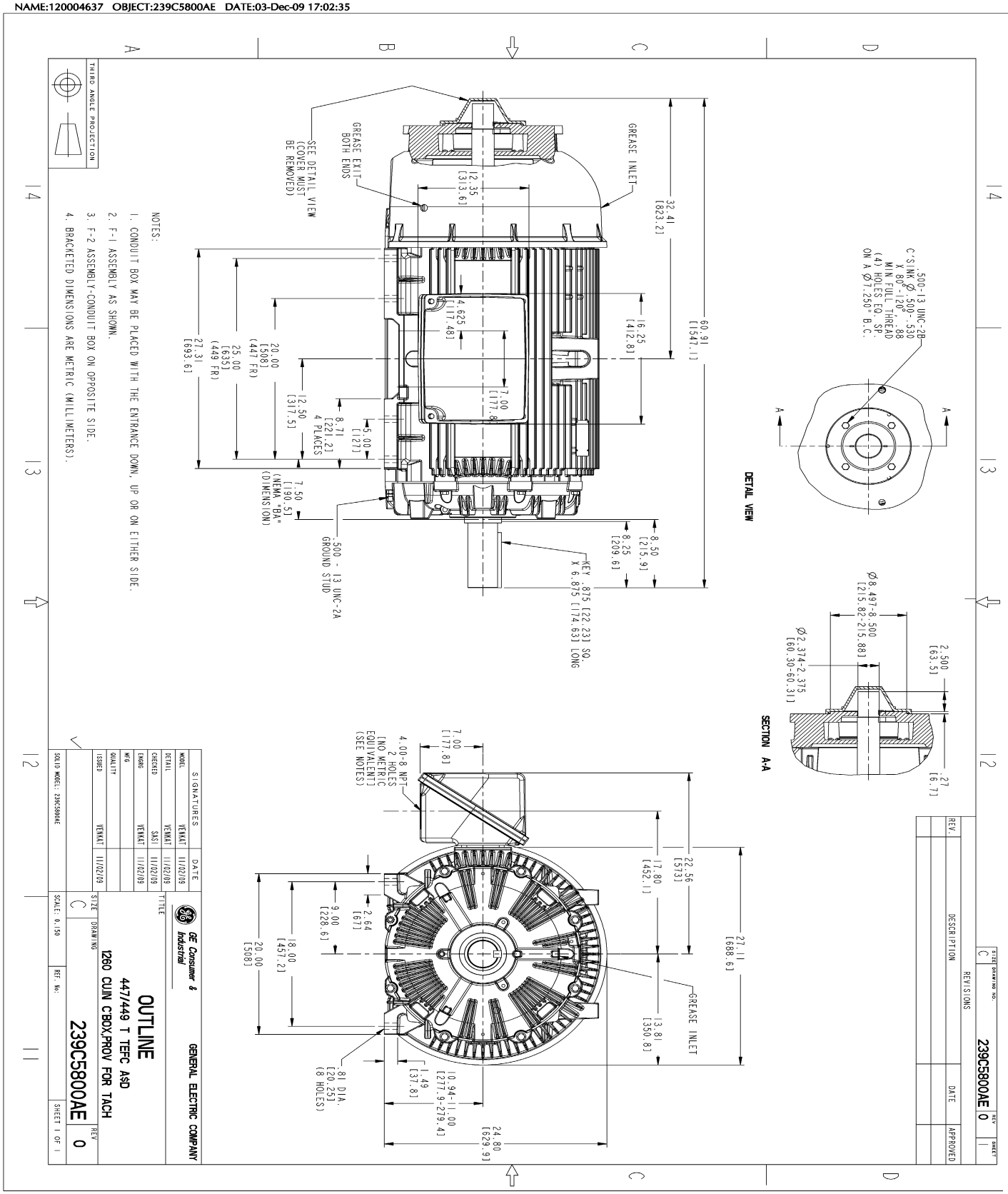


THIRD ANGLE PROJECTION

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).

SIGNATURES		DATE
MODEL	VENKAT	11/02/09
DETAIL	VENKAT	11/02/09
CHECKED	SASI	11/02/09
ENGRG	VENKAT	11/02/09
MFG		
QUALITY		
ISSUED	VENKAT	11/02/09

SOLID MODEL: 239C5800AE

GE Consumer & Industrial — GENERAL ELECTRIC COMPANY

TITLE

OUTLINE

447/449 T TEFC ASD

I260 CUIN CBOX,PROV FOR TACH

SIZE	DRAWING	REV
C	239C5800AE	0

SCALE: 0.150 | REF. No: | SHEET 1 OF 1

REV.	DESCRIPTION	DATE	APPROVED

REVISIONS

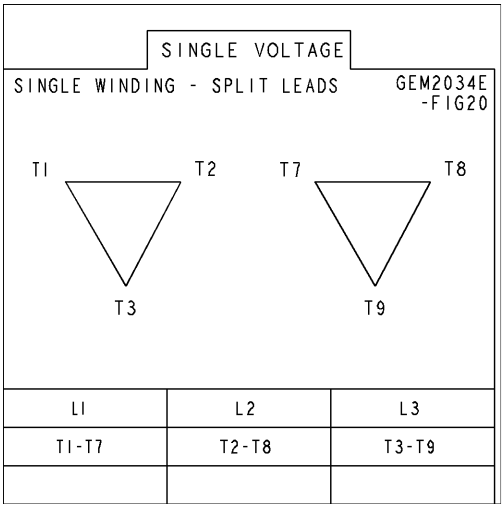
SIZE	DRAWING NO.	REV
C	239C5800AE	0

SHEET 1

Marks:

Connection Diagram

GEM2034E-FIG20



L1	L2	L3
T1-T7	T2-T8	T3-T9