

Product Information Packet

May 26, 2017

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

Model Number:	5KAF445SAA321
Catalog Number:	M9338
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG7
Outline Drawing:	239C5600AJ

Accessory Connection Diagrams			
Bearing Thermocouple:	None	Heater:	None
RTD:	None	Thermistor:	None
Thermostat:	3027JE-2A	Winding Thermocouple:	None
Bearing RTD:	None		

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Marks:

MODEL NUMBER:	5KAF445SAA321		
Outline Drawing:	239C5600AJ	Service Factor:	1.15
Connection Diagram:	GEM2034E-FIG7	Alt Service Factor:	--
Instruction Book:	GEI-56128	ASD Type:	PWM
Design Code:	44BD3047A	Time Rating:	CONT
Type:	KAF	Enclosure:	TEFC
Frame:	445T	Encl Construction:	A\$D
Phases:	3	Ambient Max (°C):	40
Poles:	6	Alt Ambient Max(°C):	--
Output Power:	125HP 92.5KW	Insulation Class:	H
Output Power (2):	125HP 92.5KW	NEMA Design:	--
Output Power (3):		Nominal Efficiency:	95.4 %
RPM:	1787	Guaranteed Efficiency:	94.5 %
RPM (2):	1190	3/4 Load Efficiency:	95.7 %
RPM (3):	-	KVA Code:	J
Voltage:	460	Max KVAR:	41.4
Voltage (2):	460	Power Factor:	84.5
Voltage (3):	8	Service Factor SINE:	1.15
Hertz:	90	Service Factor ASD:	1
Hertz – 2:	60	Min Supply Wires:	75 C
Hertz – 3:	0.4	IP:	55
Amps – FL:	139.2	Vibration Limit:	--
Amps – FL- 2:	145.0	Bearing Lubrication:	MOBIL POLYREX EM
Amps - FL- 3:	145.0	Bearing - DE:	6318ZC3
Speed Range RPM:	1-1190	Bearing - ODE:	6318ZC3-VL0241
Const HP RPM:	1190-1787	Estimated Weight:	2020 Lbs

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

THERMOSTAT LEADS TB1-TB2 TRIP
 IP 55
 CLASS H INS WITH CLASS F RISE AT 1.00 SF,
 PWM OPERATION
 INVERTER DUTY

Additional Information:

6P - T EXTN
 700 CU IN - 3.00" NPT
 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
 F1 MOUNTING

PAINTED ODE ACCESSORY RABBET
SGR #235A4970AG8 MOUNTED ON DE BRG CAP
INSULATED BEARING AT ODE

Performance Characteristics

1st Winding 1st Connection

Design: 44BD3047A

Marks:

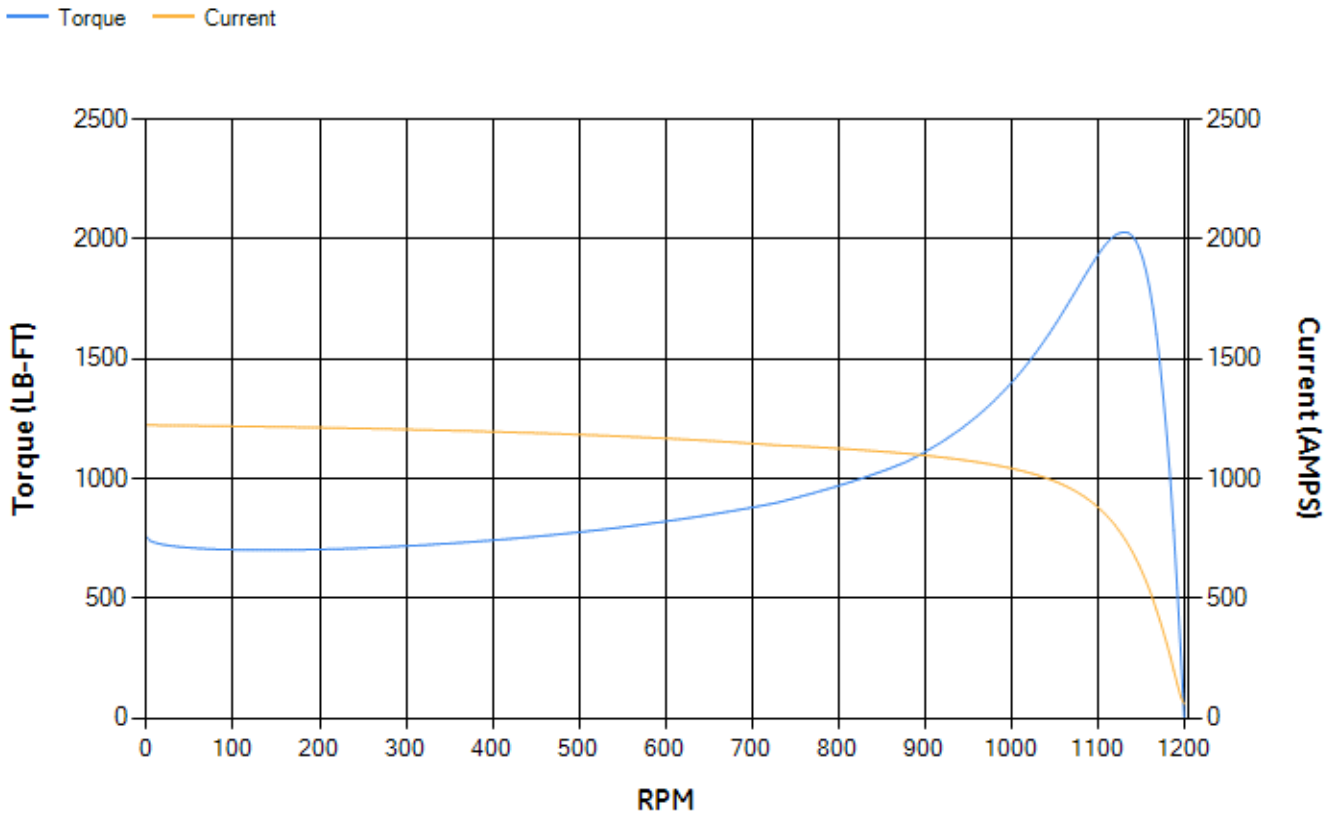
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.43	95.56	95.91	95.73	95.17	92.46	0.00
% PF	86.6	85.92	84.4	79.72	69.6	46.9	3.63
AMPS	176.96	163.86	144.53	114.96	88.31	67.44	57.58

TORQ(FL)#FT	550.73	TORQ(LR)%FL	137.28	TORQ(BD)%FL	367.25
AMPS(LR)	1222.85	PF AT START	0.25		

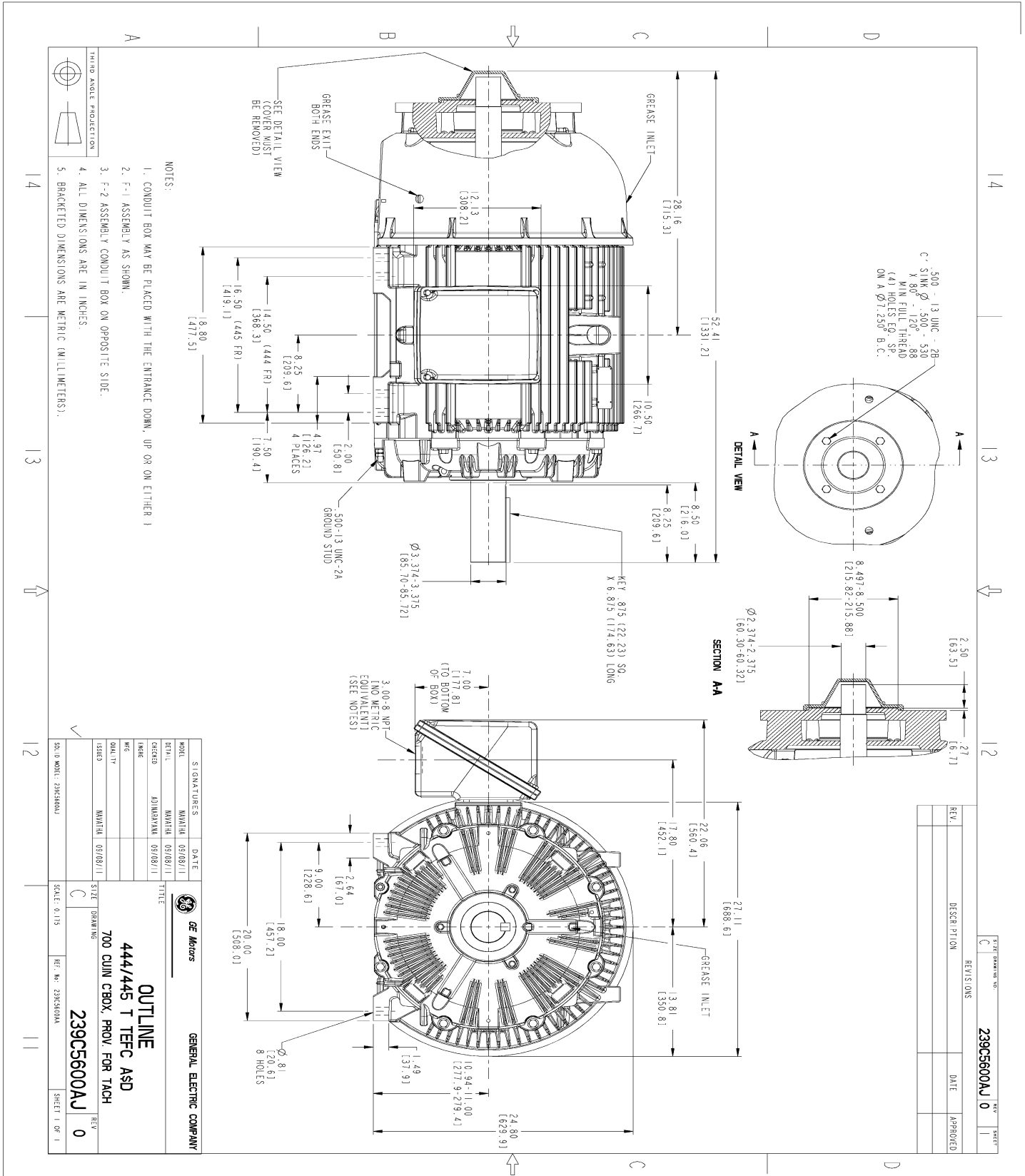
This motor is capable of two cold or one hot start with a maximum connected load inertia of 10898 Lb-Ft Sq (458.81 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 54 seconds. Safe stall time at 100% voltage is 111 seconds cold, 70 seconds hot. Rotor inertia is 98.42 Lb-Ft Sq (4.14 Kg-meter Sq).

Open Circuit A-C:	0.897	Short Circuit D-C:	0.024
Short Circuit A-C:	0.039	X/R Ratio:	9.152
Stator Slots:	72	Rotor Slots:	58

Speed Torque Current Curve (First Connection, First Speed)



Marks:

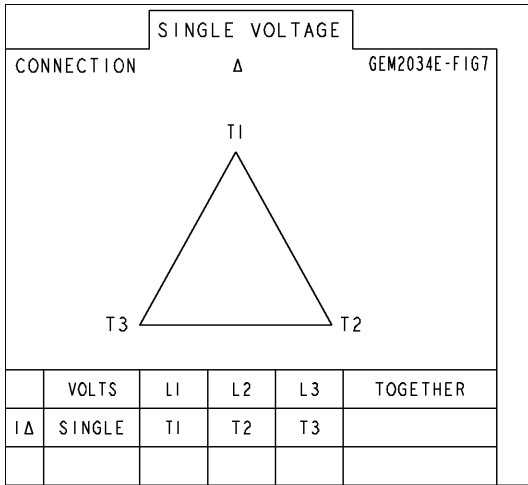


REV.	DESCRIPTION	DATE	APPROVED

SIGNATURES		DATE	
MODEL	MANUFACTURE	DATE	DATE
5KAF445SAA321	GENERAL ELECTRIC	03/08/11	03/08/11
CHECKED	DESIGNED	TITLE	
ADJAYAN	ADJAYAN	OUTLINE	
DATE	DATE	700 CUIN CBOX. PROV. FOR TACH	
03/08/11	03/08/11	239C5600AJ	
QUALITY	SIZE	DRAWING	
MANITIA	C	REV 0	
03/08/11	SCALE: 0.175	REF. NO: 239C5600AJ	
GENERAL ELECTRIC COMPANY		SHEET 1 OF 1	

Marks:

Connection Diagram
GEM2034E-FIG7



Thermostat Connection
3027JE-2A

