

Product Information Packet

March 4, 2014

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

Model Number:	5KAF444SAA321
Catalog Number:	M9336
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG9
Outline Drawing:	239C5600AJ

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:	5KAF444SAA321	Estimated Weight:	1850 Lbs
Outline Drawing:	239C5600AJ	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG9	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	A\$D
Design Code:	44BD3046A	Ambient Max(°C):	40
Type:	KAF	Alt Ambient Max(°C):	--
Frame:	444T	Insulation Class:	H
Phases:	3	NEMA Design:	-
Poles:	6	Nominal Efficiency:	95.0 %
Output Power:	100HP 74KW	Guaranteed Efficiency:	95.2
RPM:	1785	3/4 Load Efficiency:	95.2
Voltage:	230/460	KVA Code:	H
Hertz:	60	Max KVAR:	29.9
Amps - FL:	226.2/113.1	Power Factor:	85.5
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 INVERTER DUTY 1.0 SF 40C AMBIENT
 SUITABLE FOR CONSTANT TORQUE;PWM OPERATION;0-60HZ
 THERMOSTAT LEADS PC-PC TRIP
 IP 55
 CLASS H INS WITH CLASS F RISE AT 1.0SF

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: 44BD3046A

Marks:

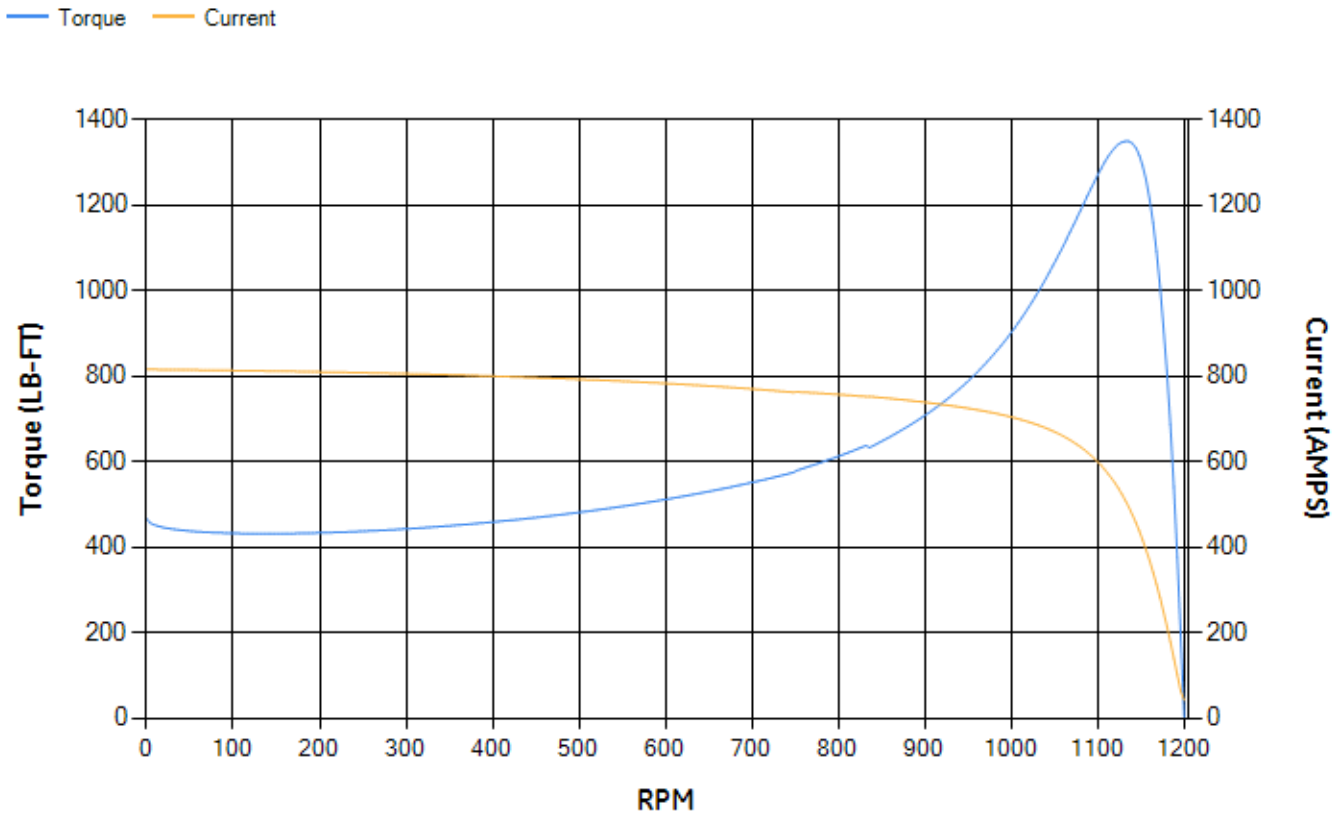
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	94.64	94.84	95.28	95.24	94.77	92.06	0.00
% PF	86.86	86.43	85.33	81.52	72.55	50.58	4.19
AMPS	142.32	131.3	115.12	90.41	68.06	50.25	41.64

TORQ(FL)#FT	441.15	TORQ(LR)%FL	105.67	TORQ(BD)%FL	304.94
AMPS(LR)	815.14	PF AT START	0.24		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 7995 Lb-Ft Sq (336.59 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 133 seconds cold, 82 seconds hot. Rotor inertia is 73.82 Lb-Ft Sq (3.11 Kg-meter Sq).

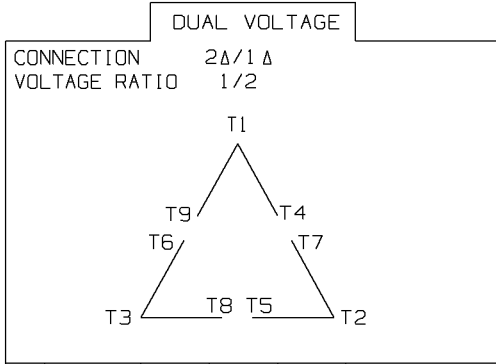
Open Circuit A-C:	0.856	Short Circuit D-C:	0.023
Short Circuit A-C:	0.041	X/R Ratio:	8.603
Stator Slots:	72	Rotor Slots:	58

Speed Torque Current Curve (First Connection, First Speed)



Marks:

Connection Diagram
GEM2034E-FIG9



	VOLTS	L1	L2	L3	TOGETHER
2Δ	LOW	T1-T6 T7	T2-T4 T8	T3-T5 T9	
1Δ	HIGH	T1	T2	T3	T4-T7, T5-T8, T6-T9