

Product Information Packet

January 12, 2017

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

Model Number:	5KS511SAA2001A
Catalog Number:	Q5000
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG20
Outline Drawing:	239C6B00ML

Accessory Connection Diagrams			
Bearing Thermocouple:	None	Heater:	3027JE-1C
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:	5KS511SAA2001A	Estimated Weight:	5073 Lbs
Outline Drawing:	239C6B00ML	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG20	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	SD
Design Code:	50BD1169A	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	5011L	Insulation Class:	F
Phases:	3	NEMA Design:	B
Poles:	4	Nominal Efficiency:	96.2 %
Output Power:	450HP 333KW	Guaranteed Efficiency:	95.4
RPM:	1785	3/4 Load Efficiency:	96.7
Voltage:	460	KVA Code:	G
Hertz:	60	Max KVAR:	90.7
Amps - FL:	489.0	Power Factor:	89.5
Service Factor:	1.15	Bearing - DE:	NU 320
Alt Service Factor:	--	Bearing - ODE:	6315ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

HTR LDS HE1-HE2 115V 350W
 INVERTER DUTY PER NEMA MG1 PART 31
 ALTERNATE RATING FOR PWM CONTROL:1.0SF 40C AMBIENT
 VAR TORQUE RANGE 0-60 HZ
 ROLLER BEARING - FOR BELTED LOAD ONLY

Additional Information:

4P - L EXTN - SPLIT LEAD
 2500 CU IN - 2(4.00" NPT)
 C/B GRD PLATE
 B5F4C4 HIGH STRENGTH STEEL AISI 4142 SHAFT MATERIAL
 115V HTR LDS TO AUX BOX OPP MAIN CONDUIT BOX
 SPACE HEATER CAUTION NAMEPLATE
 NEMA TYPE GRD PAD
 F1 MOUNTING
 SHAFT BLOCKING FOR SHIPMENT
 PROVISION FOR BTD ON BOTH ENDS PLUGGED

Performance Characteristics

1st Winding 1st Connection

Design: 50BD1169A

Marks:

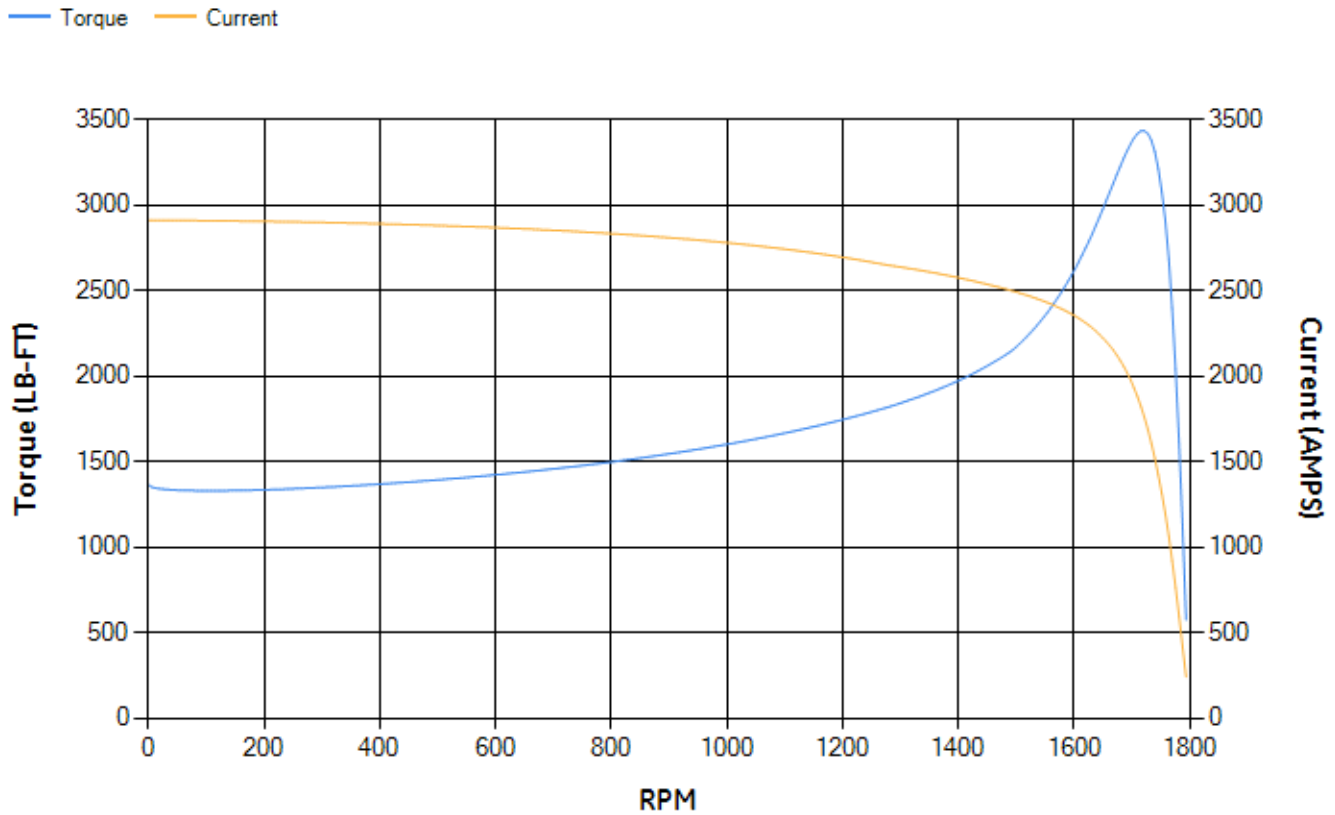
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	96.13	96.3	96.7	96.66	96.41	94.65	0.00
% PF	89.53	89.6	89.39	87.69	82.22	63.89	4.11
AMPS	611.69	561.32	487.62	372.63	265.66	174.13	126.46

TORQ(FL)#FT	1323.6	TORQ(LR)%FL	103.01	TORQ(BD)%FL	259.23
AMPS(LR)	2910.26	PF AT START	0.22		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 9791 Lb-Ft Sq (412.2 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 45 seconds. Safe stall time at 100% voltage is 87 seconds cold, 54 seconds hot. Rotor inertia is 155.62 Lb-Ft Sq (6.55 Kg-meter Sq).

Open Circuit A-C:	1.218	Short Circuit D-C:	0.043
Short Circuit A-C:	0.048	X/R Ratio:	16.262
Stator Slots:	72	Rotor Slots:	58

Speed Torque Current Curve (First Connection, First Speed)



Marks:

Connection Diagram
GEM2034E-FIG20



Heater Connection
3027JE-1C

