

# Product Information Packet

January 12, 2017

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

<b>Model Number:</b>	<b>5KS511SAA145B</b>
<b>Catalog Number:</b>	<b>Q529</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG20
<b>Outline Drawing:</b>	239C6B00MR

Accessory Connection Diagrams			
<b>Bearing Thermocouple:</b>	None	<b>Heater:</b>	3027JE-1C
<b>RTD:</b>	None	<b>Thermistor:</b>	None
<b>Thermostat:</b>	None	<b>Winding Thermocouple:</b>	None
<b>Bearing RTD:</b>	None		

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**Marks:**

<b>MODEL NUMBER:</b>	<b>5KS511SAA145B</b>	<b>Estimated Weight:</b>	5393 Lbs
<b>Outline Drawing:</b>	239C6B00MR	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG20	<b>Enclosure:</b>	TEFC
<b>Instruction Book:</b>	GEI-56128	<b>Encl Construction:</b>	SD
<b>Design Code:</b>	50BD0171A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	5011LS	<b>Insulation Class:</b>	F
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	2	<b>Nominal Efficiency:</b>	95.8 %
<b>Output Power:</b>	450HP 333KW	<b>Guaranteed Efficiency:</b>	95.0
<b>RPM:</b>	3570	<b>3/4 Load Efficiency:</b>	96.0
<b>Voltage:</b>	460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	49.2
<b>Amps - FL:</b>	468.0	<b>Power Factor:</b>	94.0
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6315ZC3
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	6315ZC3

**Enclosure is Totally Enclosed Fan-Cooled**

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**Stamped Nameplate Notes:**

HTR LDS HE1-HE2 115V 350W  
 ROT CCW FACING ODE LEAD/PH SEQUENCE 3-2-1/1-2-3  
 INVERTER DUTY PER NEMA MG1 PART 31  
 ALTERNATE RATING FOR PWM CONTROL:1.0SF 40C AMBIENT  
 VAR TORQUE RANGE 0-60 HZ  
 FOR DIRECT COUPLED LOAD ONLY

**Additional Information:**

2P - LS EXTN - SPLIT LEAD  
 2500 CU IN - 2(4.00" NPT)  
 C/B GRD PLATE  
 115V HTR LDS TO AUX BOX OPP MAIN CONDUIT BOX  
 SPACE HEATER CAUTION NAMEPLATE  
 NEMA TYPE GRD PAD  
 F1 MOUNTING  
 PROVISION FOR BTD ON BOTH ENDS PLUGGED

**Performance Characteristics**

1st Winding 1st Connection

**Design: 50BD0171A**

Marks:

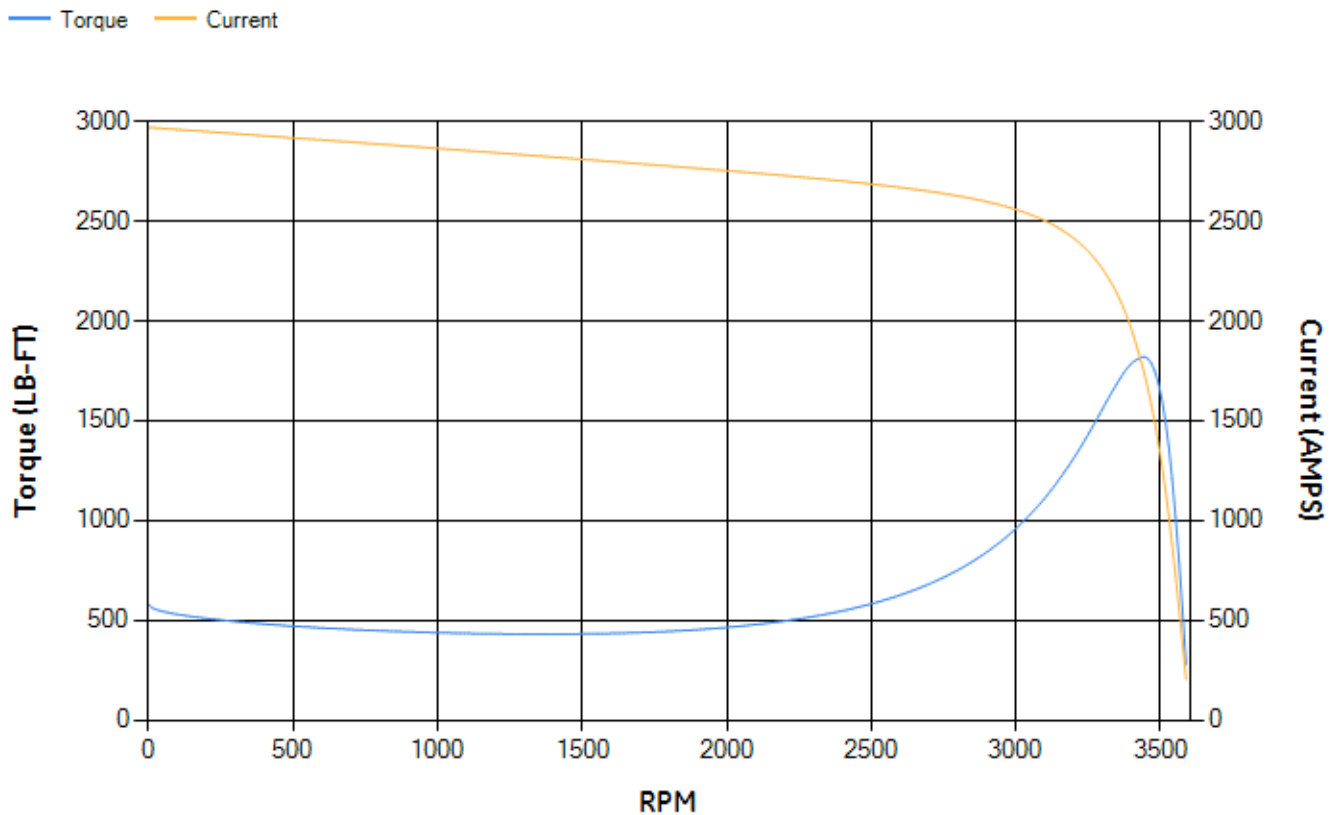
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.33	95.54	96	96.04	95.79	93.82	0.00
% PF	93.66	93.96	94.23	94.06	92.19	82.76	8.35
AMPS	589.63	539.58	464.93	349.69	238.46	135.61	68.67

TORQ(FL)#FT	662.01	TORQ(LR)%FL	87.38	TORQ(BD)%FL	274.65
AMPS(LR)	2969.37	PF AT START	0.15		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 1069 Lb-Ft Sq (45 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 32 seconds. Safe stall time at 100% voltage is 62 seconds cold, 38 seconds hot. Rotor inertia is 108.15 Lb-Ft Sq (4.55 Kg-meter Sq).

Open Circuit A-C:	2.112	Short Circuit D-C:	0.043
Short Circuit A-C:	0.052	X/R Ratio:	16.148
Stator Slots:	48	Rotor Slots:	40

**Speed Torque Current Curve (First Connection, First Speed)**





Marks:

**Connection Diagram**  
**GEM2034E-FIG20**



**Heater Connection**  
**3027JE-1C**

