

# Product Information Packet

January 12, 2017

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

<b>Model Number:</b>	<b>5KS509SAA266A</b>
<b>Catalog Number:</b>	<b>Q592</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG20
<b>Outline Drawing:</b>	239C6A00HH

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>5KS509SAA266A</b>	<b>Estimated Weight:</b>	4534 Lbs
<b>Outline Drawing:</b>	239C6A00HH	<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>	50BD1162A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	509L	<b>Insulation Class:</b>	F
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	4	<b>Nominal Efficiency:</b>	96.2 %
<b>Output Power:</b>	400HP 296KW	<b>Guaranteed Efficiency:</b>	95.4
<b>RPM:</b>	1785	<b>3/4 Load Efficiency:</b>	96.5
<b>Voltage:</b>	460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	89.3
<b>Amps - FL:</b>	440.0	<b>Power Factor:</b>	88.5
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	NU 320
<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  
 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: 50BD1162A**

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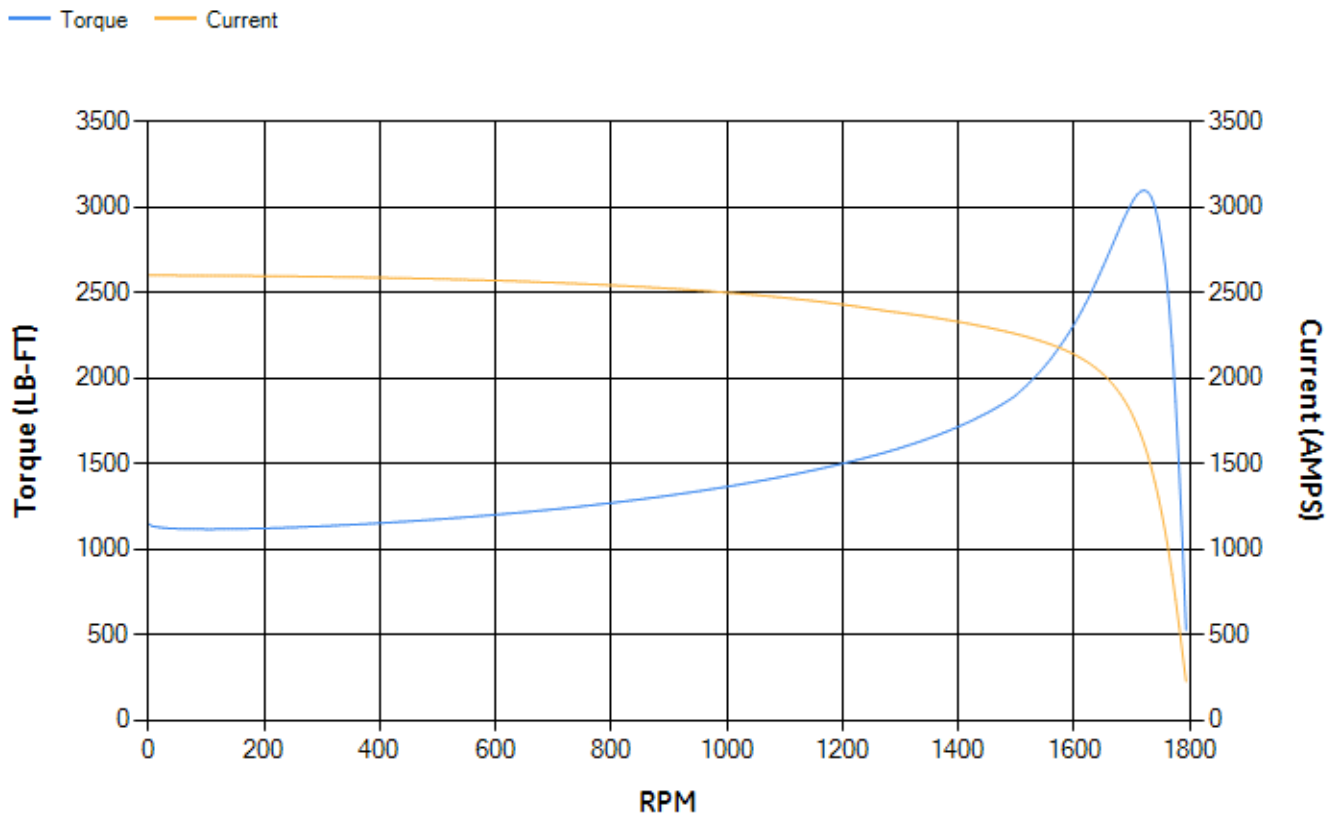
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	96.07	96.22	96.6	96.51	96.17	94.16	0.00
% PF	88.86	88.84	88.45	86.31	79.99	60.43	4.12
AMPS	548.16	503.65	438.52	337.1	243.34	164.48	124.6

TORQ(FL)#FT	1176.13	TORQ(LR)%FL	97.44	TORQ(BD)%FL	263.11
AMPS(LR)	2599.39	PF AT START	0.21		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 8764 Lb-Ft Sq (368.96 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 47 seconds. Safe stall time at 100% voltage is 90 seconds cold, 56 seconds hot. Rotor inertia is 131.51 Lb-Ft Sq (5.54 Kg-meter Sq).

Open Circuit A-C:	1.149	Short Circuit D-C:	0.043
Short Circuit A-C:	0.05	X/R Ratio:	16.228
Stator Slots:	72	Rotor Slots:	58

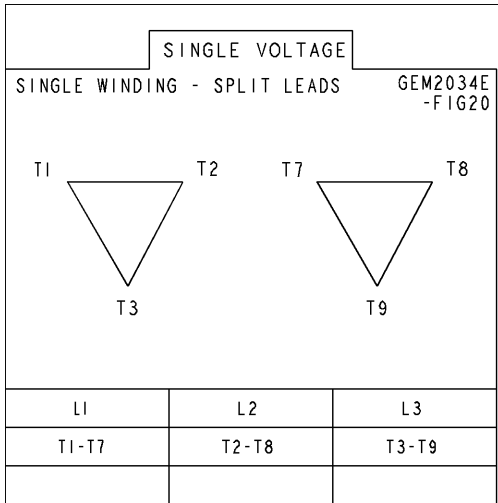
**Speed Torque Current Curve (First Connection, First Speed)**





Marks:

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



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

