

# Product Information Packet

January 12, 2017

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

<b>Model Number:</b>	<b>5KS511SAA2003A</b>
<b>Catalog Number:</b>	<b>Q5002</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG25
<b>Outline Drawing:</b>	239C6B00MM

## 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>5KS511SAA2003A</b>	<b>Estimated Weight:</b>	5102 Lbs
<b>Outline Drawing:</b>	239C6B00MM	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG25	<b>Enclosure:</b>	TEFC
<b>Instruction Book:</b>	GEI-56128	<b>Encl Construction:</b>	SD
<b>Design Code:</b>	50BD1246B	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	5011L	<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>	450HP 333KW	<b>Guaranteed Efficiency:</b>	95.4
<b>RPM:</b>	1785	<b>3/4 Load Efficiency:</b>	96.7
<b>Voltage:</b>	575	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	93.0
<b>Amps - FL:</b>	394.0	<b>Power Factor:</b>	89.0
<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  
 1260 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: 50BD1246B**

**Marks:**

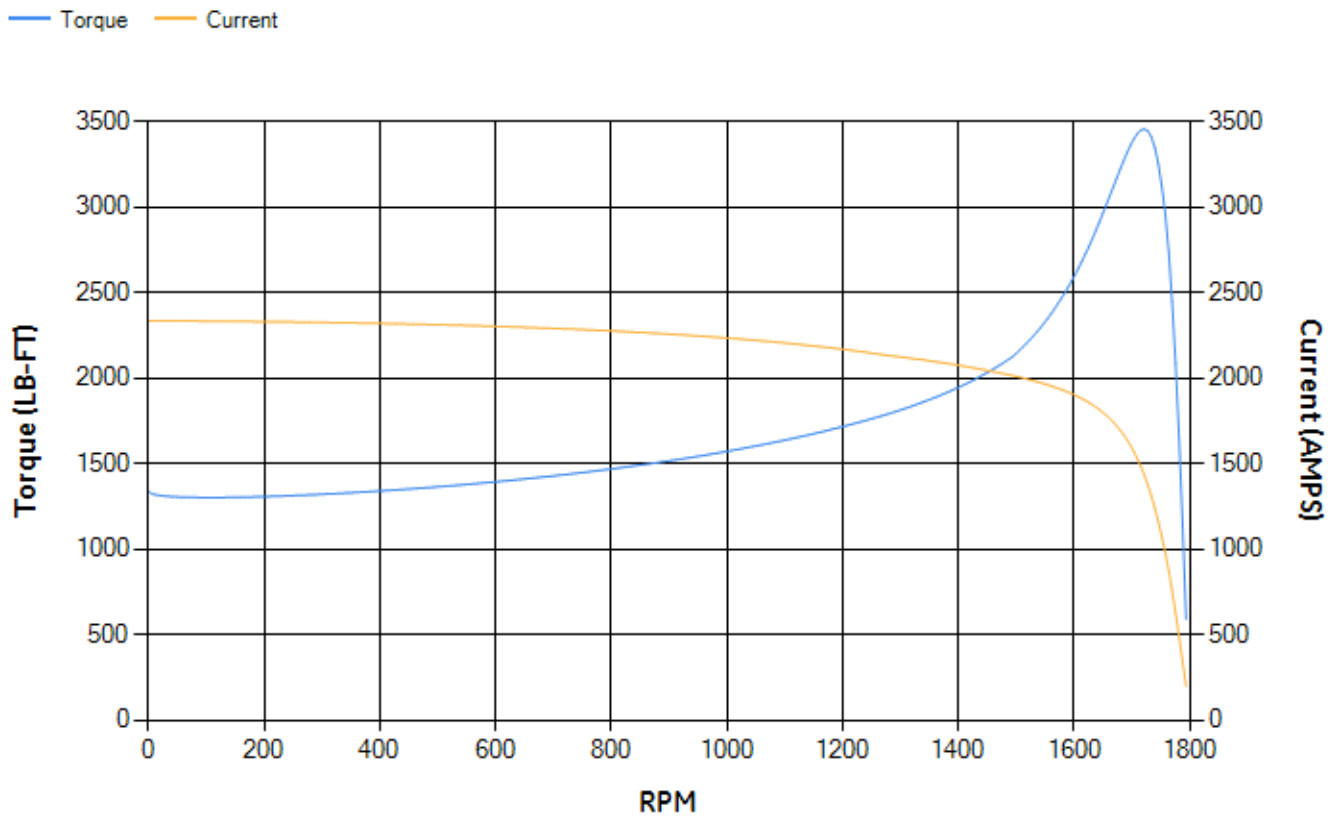
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	96.19	96.35	96.74	96.69	96.41	94.61	0.00
% PF	89.39	89.44	89.17	87.36	81.68	63.01	4.05
AMPS	489.82	449.66	390.87	299.17	213.94	141.3	103.75

<b>TORQ(FL)#FT</b>	1323.25	<b>TORQ(LR)%FL</b>	100.94	<b>TORQ(BD)%FL</b>	260.85
<b>AMPS(LR)</b>	2333.63	<b>PF AT START</b>	0.22		

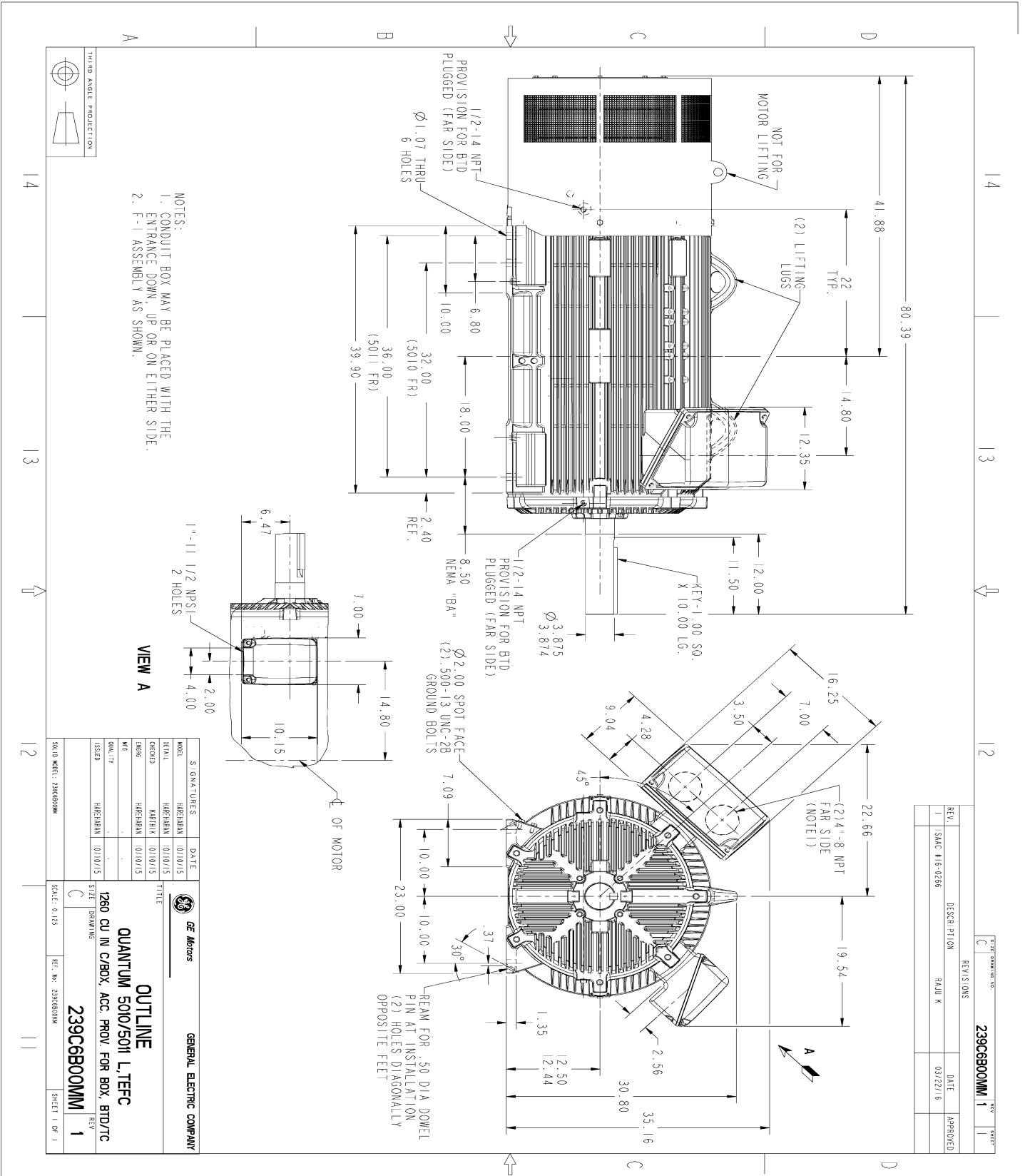
This motor is capable of two cold or one hot start with a maximum connected load inertia of 10090 Lb-Ft Sq (424.79 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 47 seconds. Safe stall time at 100% voltage is 91 seconds cold, 56 seconds hot. Rotor inertia is 157.81 Lb-Ft Sq (6.64 Kg-meter Sq).

<b>Open Circuit A-C:</b>	1.225	<b>Short Circuit D-C:</b>	0.044
<b>Short Circuit A-C:</b>	0.049	<b>X/R Ratio:</b>	16.742
<b>Stator Slots:</b>	72	<b>Rotor Slots:</b>	58

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



Marks:

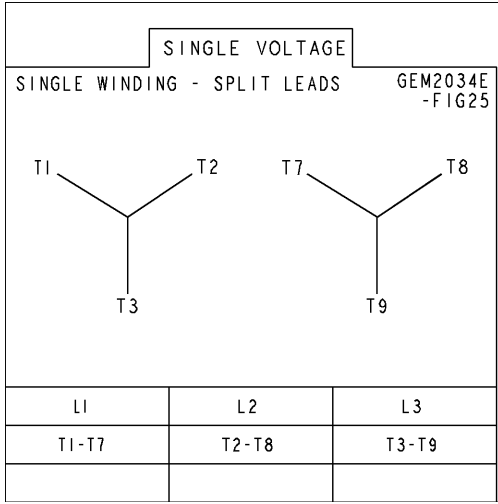


REV. 1		DATE 03/22/16		APPROVED	
REV. 1		DESCRIPTION RAJU K		DESIGNER	
REV. 1		DATE 03/22/16		APPROVED	
REV. 1		DESCRIPTION RAJU K		DESIGNER	

SIGNATURES		DATE	
HAEHRMAN		01/10/15	
HAEHRMAN		01/10/15	
HAEHRMAN		01/10/15	
HAEHRMAN		01/10/15	
<p><b>GENERAL ELECTRIC COMPANY</b></p> <p><b>OUTLINE</b></p> <p><b>QUANTUM 5010/5011 L, TEFC</b></p> <p><b>1260 CU IN C/BOX, ACC. PROV. FOR BOX, BTID/TC</b></p> <p><b>239C6B00MM</b></p>			
SCALE: 0.125		REF. NO: 239C6B00MM	
SHEET 1 OF 1		REV. 1	

Marks:

**Connection Diagram**  
GEM2034E-FIG25



**Heater Connection**  
3027JE-1C

