

# Product Information Packet

January 12, 2017

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

<b>Model Number:</b>	<b>5KS513SAA174A</b>
<b>Catalog Number:</b>	<b>Q564</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG20
<b>Outline Drawing:</b>	239C6C00HD

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>	235A3027NA		

Table of Contents	
Specification	01
Performance Characteristics	02
Outline Drawing	03
Connection Drawing(s)	04



**Marks:**

<b>MODEL NUMBER:</b>	<b>5KS513SAA174A</b>	<b>Estimated Weight:</b>	6917 Lbs
<b>Outline Drawing:</b>	239C6C00HD	<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>	50BD0169A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	5013ST	<b>Insulation Class:</b>	F
<b>Phases:</b>	3	<b>NEMA Design:</b>	--
<b>Poles:</b>	2	<b>Nominal Efficiency:</b>	96.2 %
<b>Output Power:</b>	700HP 518KW	<b>Guaranteed Efficiency:</b>	95.4
<b>RPM:</b>	3570	<b>3/4 Load Efficiency:</b>	96.8
<b>Voltage:</b>	460	<b>KVA Code:</b>	H
<b>Hertz:</b>	60	<b>Max KVAR:</b>	78.4
<b>Amps - FL:</b>	717.0	<b>Power Factor:</b>	95.0
<b>Service Factor:</b>	1.00	<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 - ST EXTN - SPLIT LEAD  
 5700 CU IN - 3(3.00" NPT)  
 C/B GRD PLATE  
 115V HTR LDS TO AUX BOX OPP MAIN CONDUIT BOX  
 SPACE HEATER CAUTION NAMEPLATE  
 BEARING RTD PROVISION ON BOTH ENDS PLUGGED  
 NEMA TYPE GRD PAD  
 F1 MOUNTING

**Performance Characteristics**

1st Winding 1st Connection

**Design: 50BD0169A**

**Marks:**

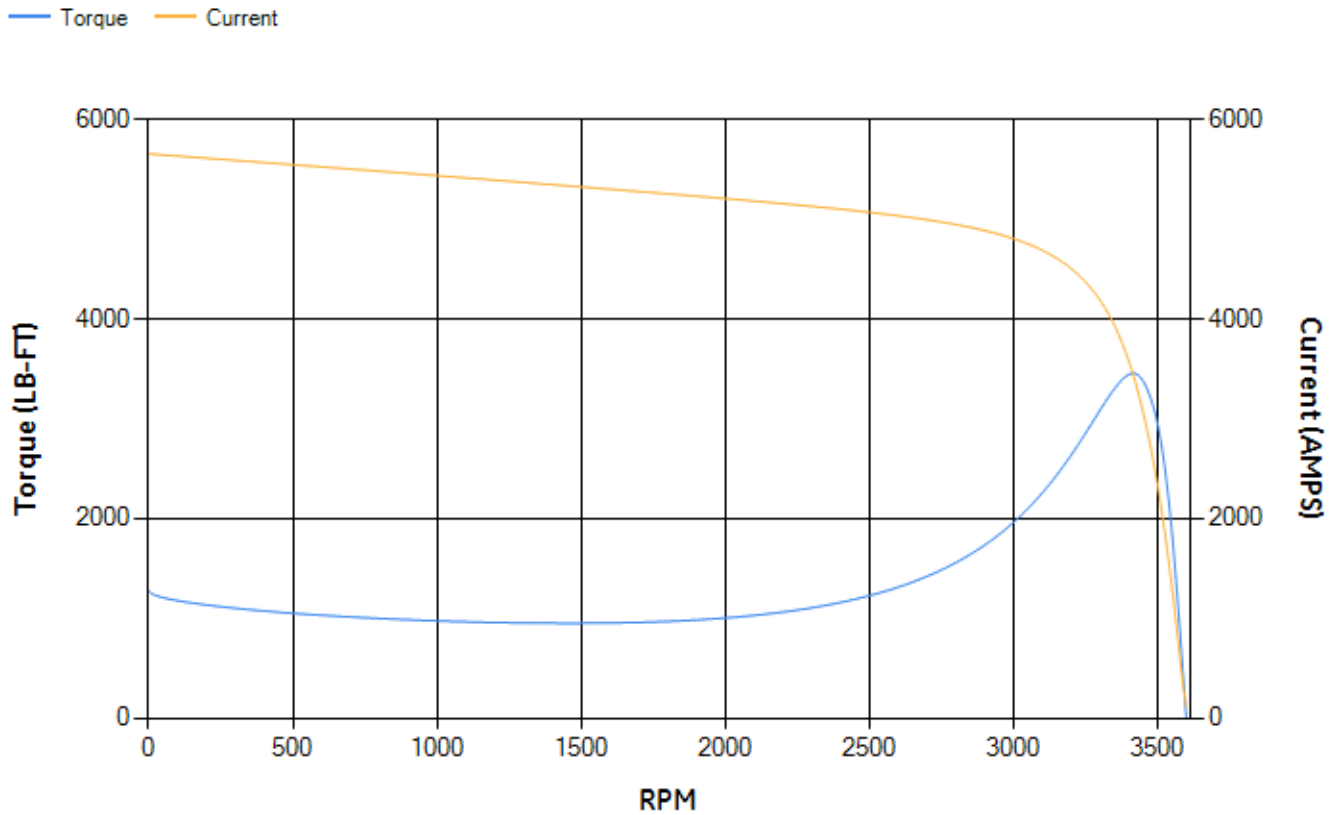
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	96.14	96.31	96.73	96.76	96.62	95.12	0.00
% PF	94.73	94.88	94.96	94.51	92.33	82.17	6.23
AMPS	899.23	824.53	712.38	537.35	367.24	209.55	109.33

<b>TORQ(FL)#FT</b>	1028.8	<b>TORQ(LR)%FL</b>	124.05	<b>TORQ(BD)%FL</b>	335.19
<b>AMPS(LR)</b>	5653.65	<b>PF AT START</b>	0.17		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 1455 Lb-Ft Sq (61.26 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 19 seconds. Safe stall time at 100% voltage is 39 seconds cold, 22 seconds hot. Rotor inertia is 158.26 Lb-Ft Sq (6.66 Kg-meter Sq).

<b>Open Circuit A-C:</b>	2.261	<b>Short Circuit D-C:</b>	0.043
<b>Short Circuit A-C:</b>	0.046	<b>X/R Ratio:</b>	16.033
<b>Stator Slots:</b>	48	<b>Rotor Slots:</b>	40

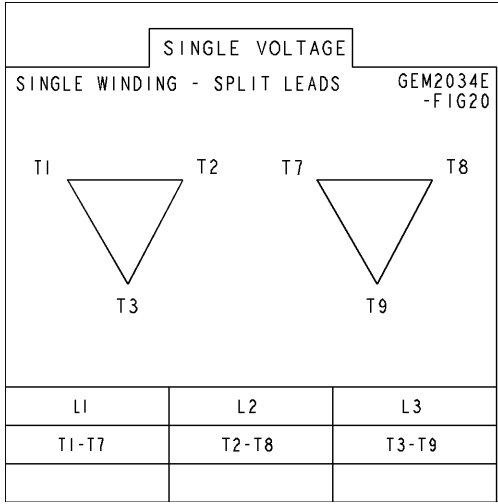
**Speed Torque Current Curve (First Connection, First Speed)**





Marks:

**Connection Diagram**  
GEM2034E-FIG20



**Heater Connection**  
3027JE-1C

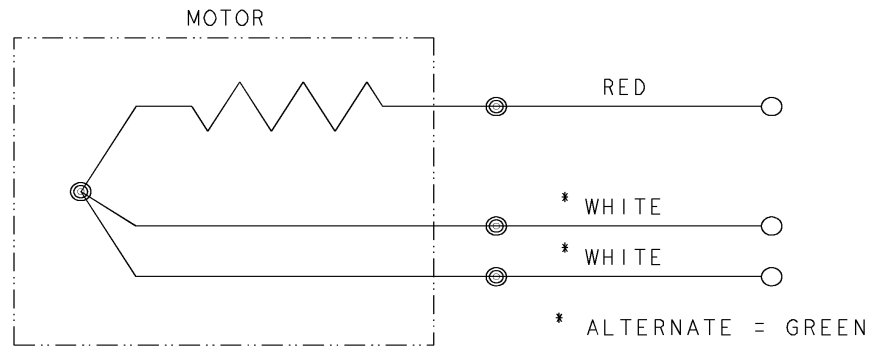


REV SH 1 1	THIRD ANGLE PROJECTION		REVISIONS			
			REV	DESCRIPTION	DATE	APPROVED
			1	ISAAC #12-1124	HARI	11/19/12

SIZE DWG NO 235A3027NA  
 A

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## BEARING RTDS



UNLESS OTHERWISE SPECIFIED	SIGNATURES	DATE
DIMENSIONS ARE IN INCHES	DRAWN D.E. BAIR	12/16/92
TOLERANCES ON:	CHECKED D.E. BAIR	12/16/92
2 PL DECIMALS ±	ENGRG K. DESAI	12/16/92
3 PL DECIMALS ±	ISSUED D.E. BAIR	12/16/92
ANGLES ±		
FRACTIONS ±		
MATERIAL:		
APPLIED PRACTICES:	CAD NO. F500:235A3027NA	

**GE Motors**

Fort Wayne, Indiana

## CONNECTION DIAGRAM

### BEARING RTDS

SIZE A	FSCM NO	DWG NO 235A3027NA
SCALE 1/1	SHEET 1 OF 1	

DISTR TO