

# Product Information Packet

January 12, 2017

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

<b>Model Number:</b>	<b>5KS513SAA227C</b>
<b>Catalog Number:</b>	<b>Q513</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG2
<b>Outline Drawing:</b>	239C6C00GS

Accessory Connection Diagrams			
<b>Bearing Thermocouple:</b>	None	<b>Heater:</b>	3027JE-1C
<b>RTD:</b>	235A3027XY	<b>Thermistor:</b>	None
<b>Thermostat:</b>	None	<b>Winding Thermocouple:</b>	None
<b>Bearing RTD:</b>	235A3027NA		

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**Marks:**

<b>MODEL NUMBER:</b>	<b>5KS513SAA227C</b>	<b>Estimated Weight:</b>	7150 Lbs
<b>Outline Drawing:</b>	239C6C00GS	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG2	<b>Enclosure:</b>	TEFC
<b>Instruction Book:</b>	GEI-56128	<b>Encl Construction:</b>	SD
<b>Design Code:</b>	50BD1053F	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	5013S	<b>Insulation Class:</b>	F
<b>Phases:</b>	3	<b>NEMA Design:</b>	--
<b>Poles:</b>	4	<b>Nominal Efficiency:</b>	96.2 %
<b>Output Power:</b>	600HP 444KW	<b>Guaranteed Efficiency:</b>	95.4
<b>RPM:</b>	1785	<b>3/4 Load Efficiency:</b>	96.9
<b>Voltage:</b>	2300/4000	<b>KVA Code:</b>	H
<b>Hertz:</b>	60	<b>Max KVAR:</b>	137.5
<b>Amps - FL:</b>	130.4/75.0	<b>Power Factor:</b>	89.5
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6320ZC3
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	6320ZC3

**Enclosure is Totally Enclosed Fan-Cooled**

**Stamped Nameplate Notes:**

HTR LDS HE1-HE2 115V 350W  
FOR DIRECT COUPLED LOAD ONLY

**Additional Information:**

4P - S EXTN  
2500 CU IN - 2(4.00" NPT)  
100 OHM WINDING RTD LEADS TO AUX C/BOX OPP MAIN C/BOX  
SUGGESTED WINDING RTD SETTINGS  
ALARM 165C TRIP 175C  
115V HTR LDS TO AUX BOX OPP MAIN CONDUIT BOX  
SPACE HEATER CAUTION NAMEPLATE  
BEARING RTD 100 OHM ON BOTH ENDS  
SUGGESTED BEARING RTD SETTINGS  
ALARM 115C TRIP 125C  
NEMA TYPE GRD PAD  
F1 MOUNTING

**Performance Characteristics**

1st Winding 1st Connection

**Design: 50BD1053F**

**Marks:**

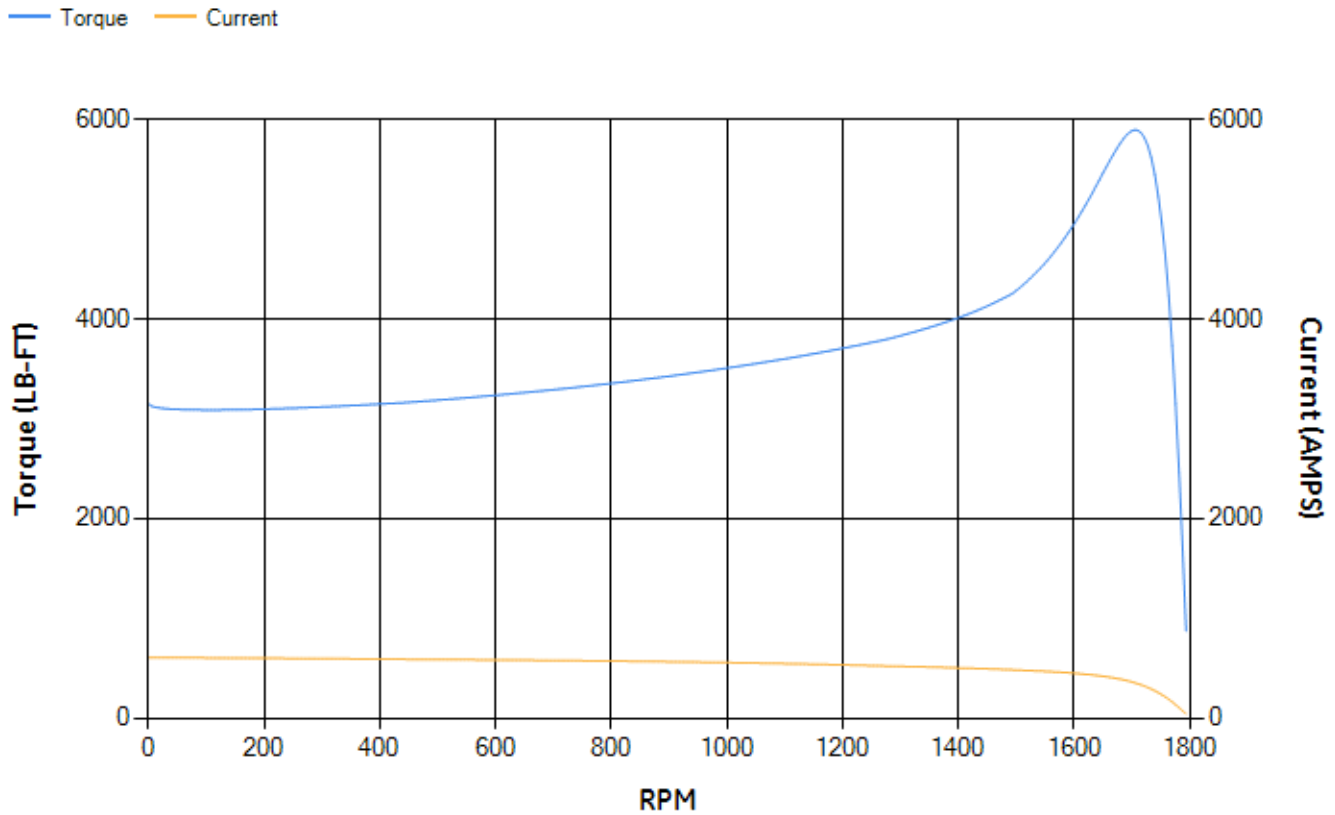
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	96.62	96.74	97.07	96.94	96.62	94.83	0.00
% PF	90.36	90.11	89.4	86.73	79.77	59.35	3.52
AMPS	92.46	85.2	74.46	57.6	41.89	28.68	22.06

<b>TORQ(FL)#FT</b>	1762.82	<b>TORQ(LR)%FL</b>	178.56	<b>TORQ(BD)%FL</b>	334.04
<b>AMPS(LR)</b>	605.4	<b>PF AT START</b>	0.28		

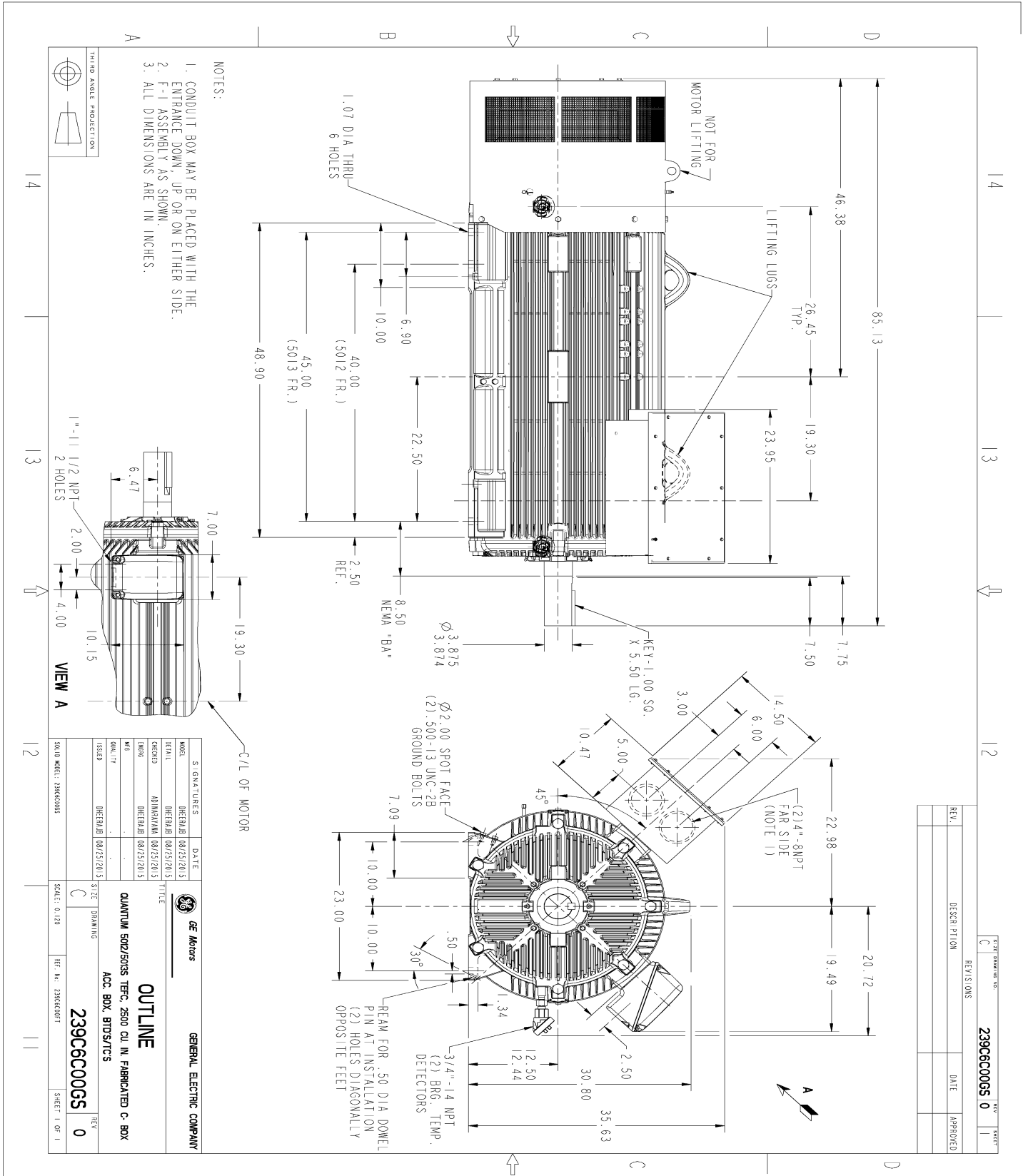
This motor is capable of two cold or one hot start with a maximum connected load inertia of 15134 Lb-Ft Sq (637.14 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 29 seconds. Safe stall time at 100% voltage is 69 seconds cold, 42 seconds hot. Rotor inertia is 280.56 Lb-Ft Sq (11.81 Kg-meter Sq).

<b>Open Circuit A-C:</b>	1.202	<b>Short Circuit D-C:</b>	0.035
<b>Short Circuit A-C:</b>	0.039	<b>X/R Ratio:</b>	13.273
<b>Stator Slots:</b>	72	<b>Rotor Slots:</b>	58

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

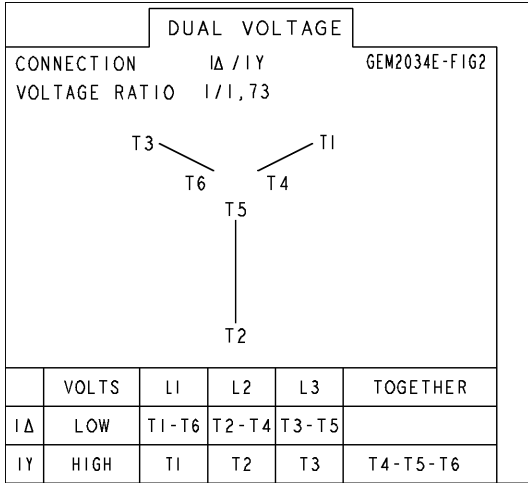


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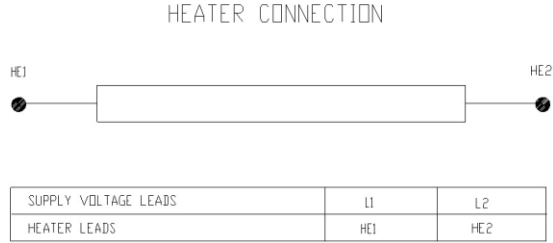


Marks:

**Connection Diagram**  
**GEM2034E-FIG2**



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



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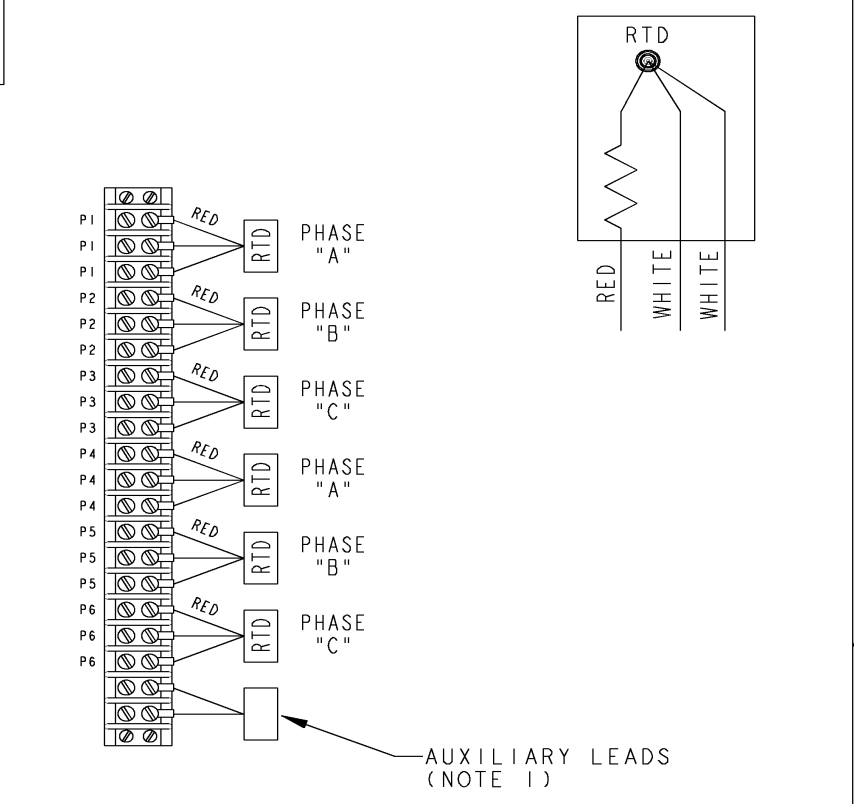
THIRD ANGLE PROJECTION

REVISIONS				
REV.	DESCRIPTION	DATE	APPROVED	
1	ISAAC# 15-0790 HARIKIRAN	07/28/15	DHEERAJ	
2	ISAAC# 16-0422 SAGAR K	05/04/2016	ADINARAYANA	

REV 2

SIZE DRAWING NO. A

235A3027XY



NOTE 1: AUXILIARY LEADS SHOWN MAY OR MAY NOT BE PROVIDED IN MOTOR.  
 NOTE 2: SPARE RTDS (P7 & P8) FURNISHED IN CASE OF FAILURE IN OTHER RTDS (P1-P6). PHASE LOCATION WILL DEPEND UPON NUMBER OF POLES WINDING CONFIGURATION.

Part must conform to SI 900000 Sect. 4, Toxicity Procedure

FOR ADDITIONAL INFO REFER TO:	SIGNATURES	DATE	<b>GE Motors</b> GENERAL ELECTRIC COMPANY	
APPLIED PRACTICES	MODEL		TITLE	
DIMENSIONS ARE IN INCHES	DETAIL	VIVEK 06/26/15	<b>CONNECTION DIAGRAM</b> <b>WINDING RTD &amp; AUXILIARY LEADS</b>	
TOLERANCE ON:	CHECKED	KARTHIK 06/26/15	SIZE	DRAWING
1 PL DECIMALS ± 0.1	ENGRG		A	235A3027XY
2 PL DECIMALS ± 0.02	MFG			REV 2
3 PL DECIMALS ± 0.005	QUALITY			
ANGLES ± 0.5	ISSUED	VIVEK 06/26/15	SCALE: N.T.S.	REF: - 235A4594X
FRACTIONS ±				SHEET 1 of 1
FINISH ✓	SOLID MODEL: MODEL NAME			

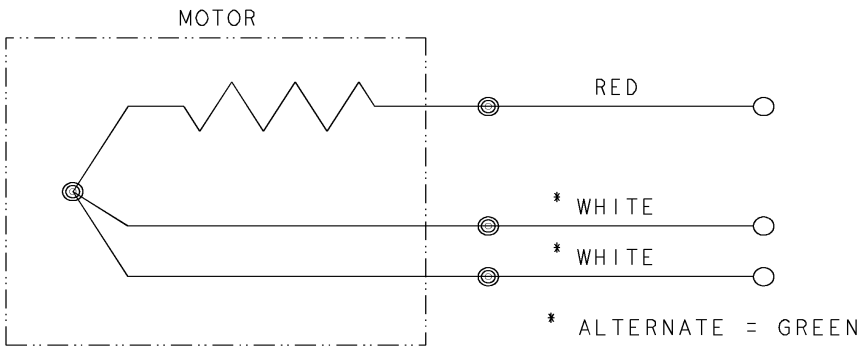


REV SH 1	THIRD ANGLE PROJECTION		REVISIONS		
		REV	DESCRIPTION	DATE	APPROVED
	1	ISAAC #12-1124	HARI	11/19/12	KARTHIK

SIZE A  
 DWG NO 235A3027NA

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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