

# Product Information Packet

January 12, 2017

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

<b>Model Number:</b>	<b>5KS513SAA226B</b>
<b>Catalog Number:</b>	<b>Q512</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>5KS513SAA226B</b>	<b>Estimated Weight:</b>	6917 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>	50BD1203F	<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
<b>Poles:</b>	4	<b>Nominal Efficiency:</b>	95.8 %
<b>Output Power:</b>	500HP 370KW	<b>Guaranteed Efficiency:</b>	95.0
<b>RPM:</b>	1785	<b>3/4 Load Efficiency:</b>	96.6
<b>Voltage:</b>	2300/4000	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	94.1
<b>Amps - FL:</b>	109.2/62.8	<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**

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**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: 50BD1203F**

**Marks:**

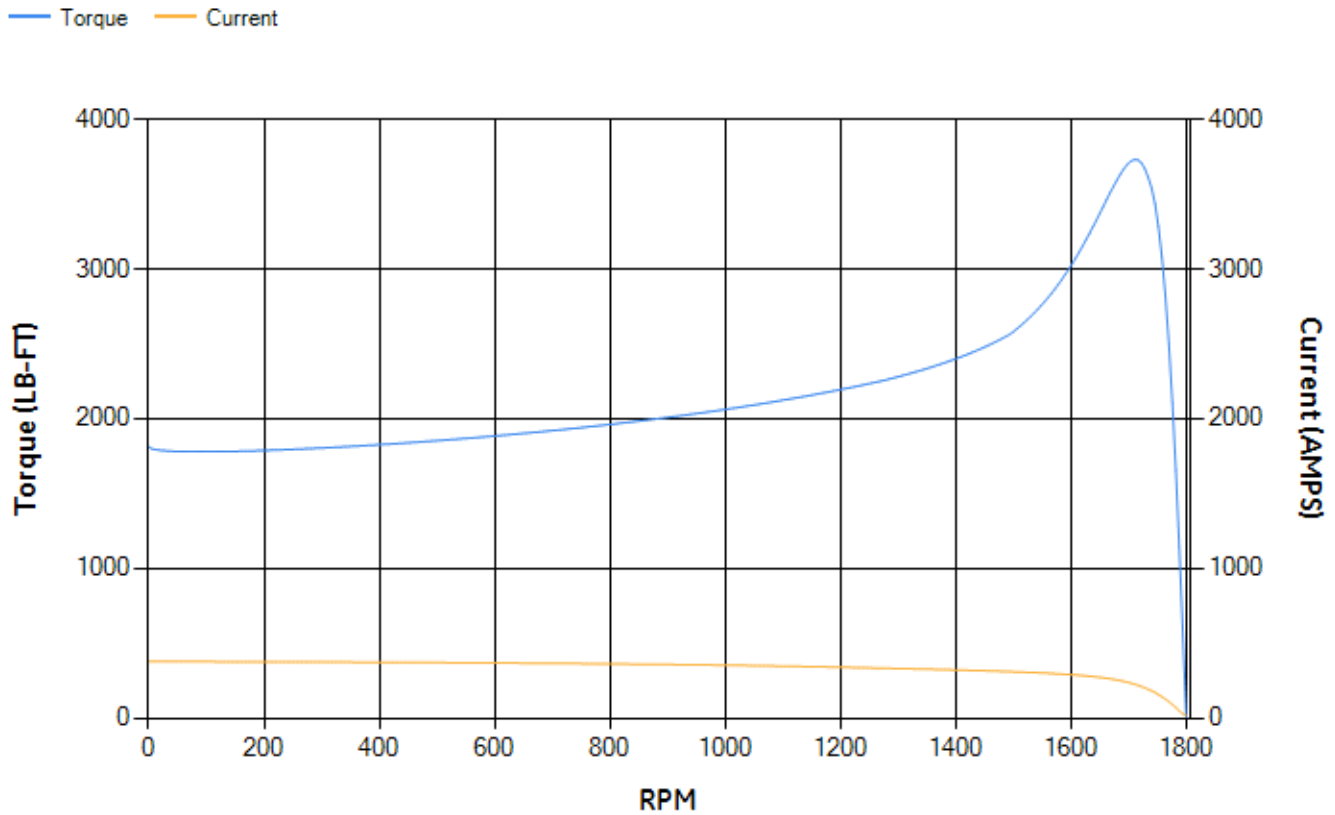
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	96.14	96.3	96.69	96.64	96.36	94.52	0.00
% PF	89.7	89.83	89.72	88.3	83.36	66.08	4.55
AMPS	78.01	71.54	62.08	47.3	33.5	21.54	15.09

<b>TORQ(FL)#FT</b>	1471.77	<b>TORQ(LR)%FL</b>	123.16	<b>TORQ(BD)%FL</b>	253.34
<b>AMPS(LR)</b>	377.09	<b>PF AT START</b>	0.25		

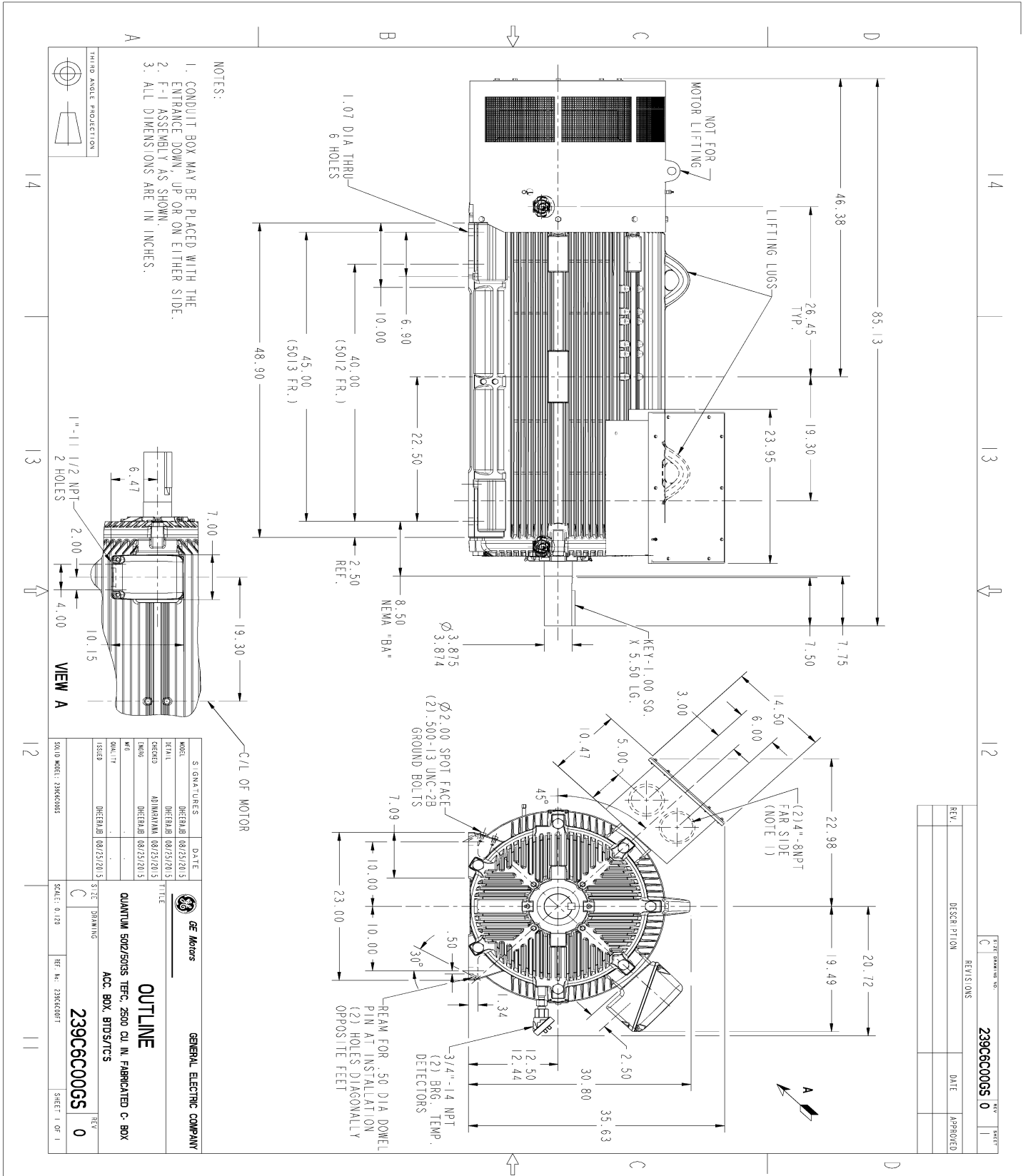
This motor is capable of two cold or one hot start with a maximum connected load inertia of 15889 Lb-Ft Sq (668.93 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 56 seconds. Safe stall time at 100% voltage is 108 seconds cold, 67 seconds hot. Rotor inertia is 263.02 Lb-Ft Sq (11.07 Kg-meter Sq).

<b>Open Circuit A-C:</b>	1.199	<b>Short Circuit D-C:</b>	0.045
<b>Short Circuit A-C:</b>	0.043	<b>X/R Ratio:</b>	17.108
<b>Stator Slots:</b>	72	<b>Rotor Slots:</b>	58

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

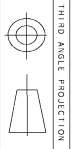


Marks:



NOTES:

1. CONDUIT BOX MAY BE PLACED WITH THE ENTRANCE DOWN, UP OR ON EITHER SIDE.
2. F-I ASSEMBLY AS SHOWN.
3. ALL DIMENSIONS ARE IN INCHES.

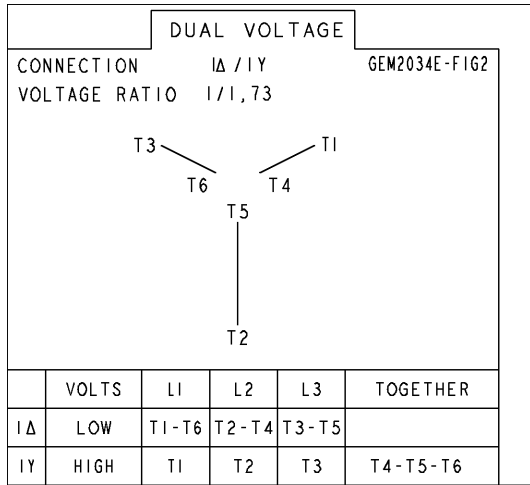


REV.	DESCRIPTION	DATE	APPROVED

MODEL	5KS513SAA226B	DATE	08/25/2015
SCALE	1:1	DESIGNED BY	DHERABD
CHECKED	ADHAKAN	DATE	08/25/2015
DATE	08/25/2015	DESIGNED BY	DHERABD
WKS		DATE	08/25/2015
QUALITY		DESIGNED BY	DHERABD
ISSUES		DATE	08/25/2015
GENERAL ELECTRIC COMPANY GE Motors QUANTUM 50W/250GS TERC 2500 CU IN. FABRICATED C-BOX ACC. BOX. BTDS/STCS 239C6C00G5 SCALE: 0.120 REF. NO. 239C6C00FT SHEET 1 OF 1			

Marks:

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



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



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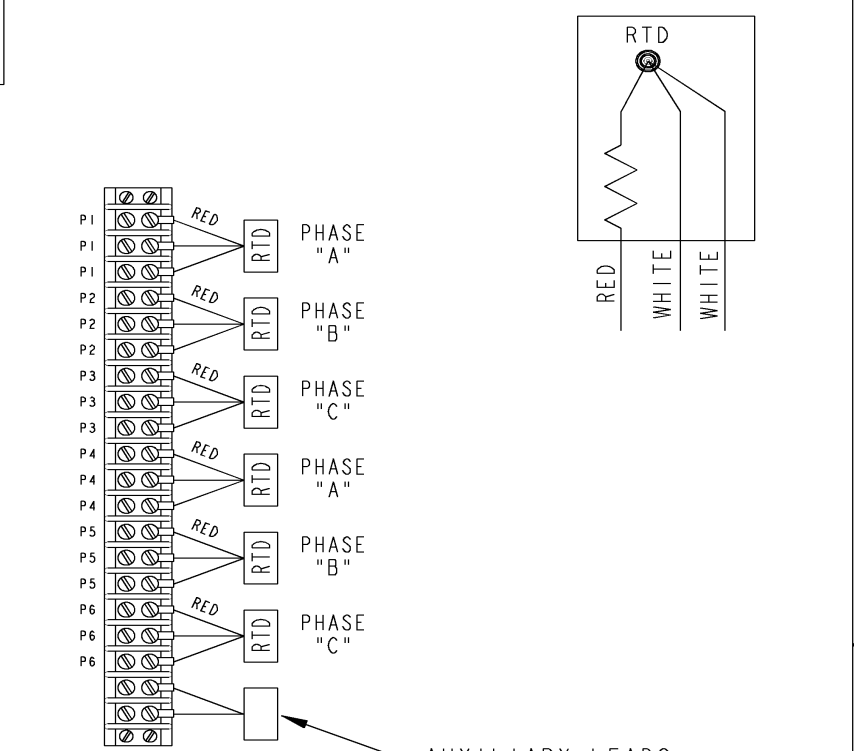
THIRD ANGLE PROJECTION

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

SHEET 2

REV 235A3027XY

SIZE DRAWING NO. A



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
APPLIED PRACTICES	MODEL	
DIMENSIONS ARE IN INCHES	DETAIL VIVEK	06/26/15
TOLERANCE ON:	CHECKED KARTHIK	06/26/15
1 PL DECIMALS ± 0.1	ENGRG	
2 PL DECIMALS ± 0.02	MFG	
3 PL DECIMALS ± 0.005	QUALITY	
ANGLES ± 0.5	ISSUED VIVEK	06/26/15
FRACTIONS ±		
FINISH ✓		
MATERIAL	SOLID MODEL: MODEL NAME	

**GE Motors** GENERAL ELECTRIC COMPANY

TITLE **CONNECTION DIAGRAM**  
**WINDING RTD & AUXILIARY LEADS**

SIZE DRAWING **A** **235A3027XY** REV **2**

SCALE: N.T.S. REF: - 235A4594X SHEET 1 of 1

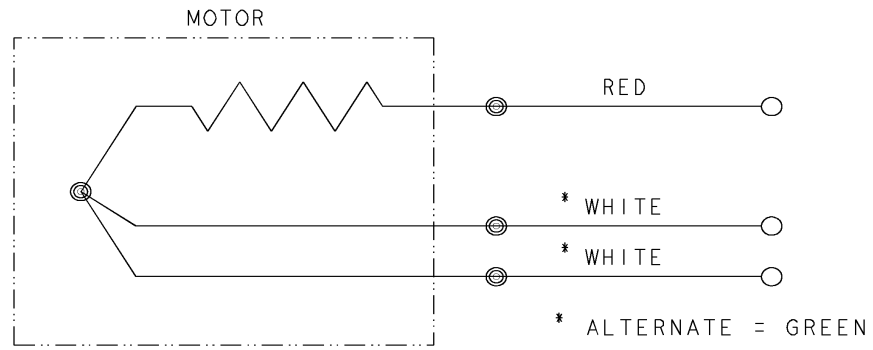


REV SH 1	THIRD ANGLE PROJECTION		REVISIONS		
		REV	DESCRIPTION	DATE	APPROVED
	1	ISAAC #12-1124	HARI	11/19/12	KARTHIK

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