

Product Information Packet

January 12, 2017

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

Model Number:	5KS509SAA335B
Catalog Number:	Q534
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG2
Outline Drawing:	239C6A00GT

Accessory Connection Diagrams

Bearing Thermocouple:	None	Heater:	3027JE-1C
RTD:	235A3027XY	Thermistor:	None
Thermostat:	None	Winding Thermocouple:	None
Bearing RTD:	235A3027NA		

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Marks:

MODEL NUMBER:	5KS509SAA335B	Estimated Weight:	4446 Lbs
Outline Drawing:	239C6A00GT	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG2	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	SD
Design Code:	50BD3126F	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	509LL	Insulation Class:	F
Phases:	3	NEMA Design:	B
Poles:	6	Nominal Efficiency:	95.0 %
Output Power:	200HP 148KW	Guaranteed Efficiency:	94.1
RPM:	1185	3/4 Load Efficiency:	95.4
Voltage:	2300/4000	KVA Code:	G
Hertz:	60	Max KVAR:	56.9
Amps - FL:	46.6/26.8	Power Factor:	84.5
Service Factor:	1.15	Bearing - DE:	6320ZC3
Alt Service Factor:	--	Bearing - ODE:	6315ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

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

Additional Information:

6P - LL 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: 50BD3126F

Marks:

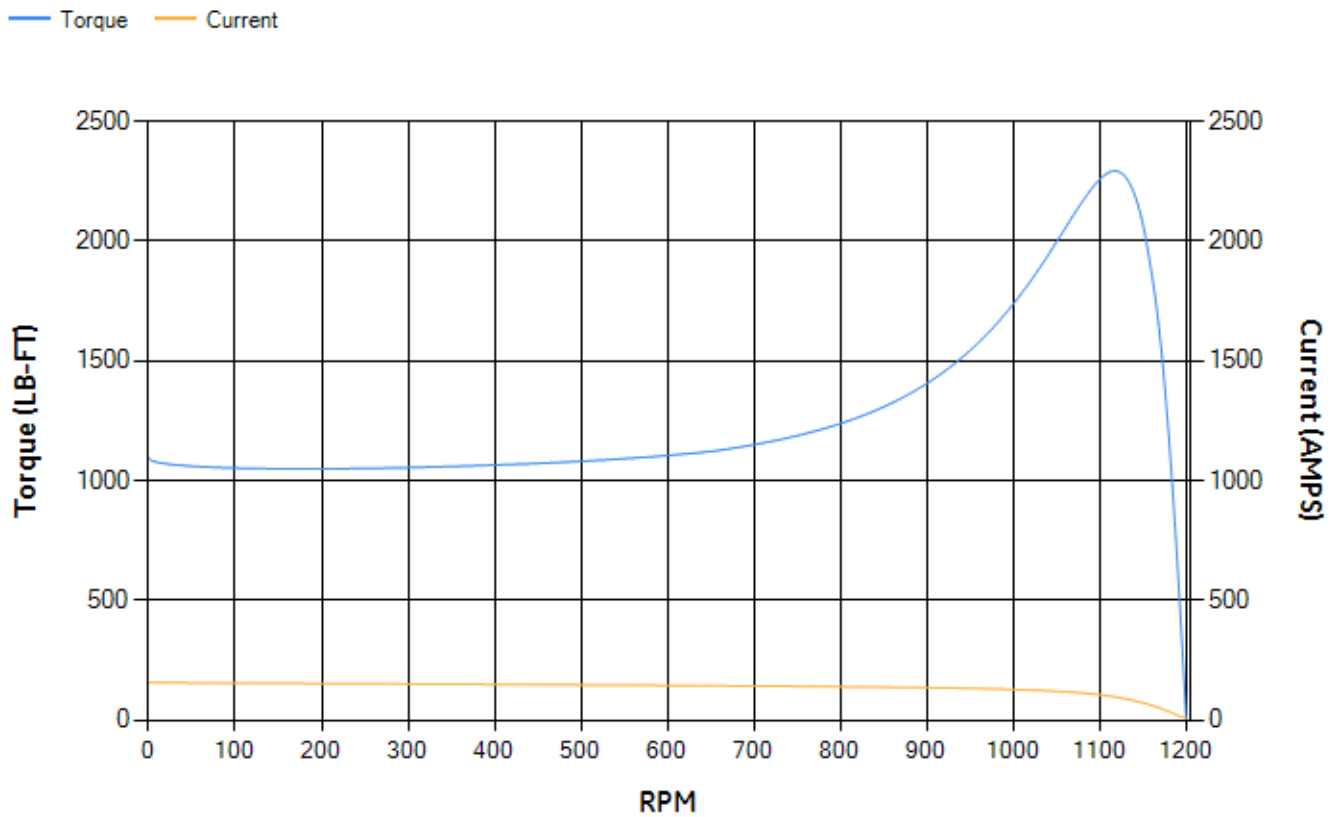
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	94.42	94.7	95.24	95.37	95.13	92.92	0.00
% PF	85.6	85.38	84.59	81.32	73.03	51.63	3.81
AMPS	33.29	30.62	26.73	20.82	15.49	11.22	9.12

TORQ(FL)#FT	886.12	TORQ(LR)%FL	123.41	TORQ(BD)%FL	258.33
AMPS(LR)	155.37	PF AT START	0.28		

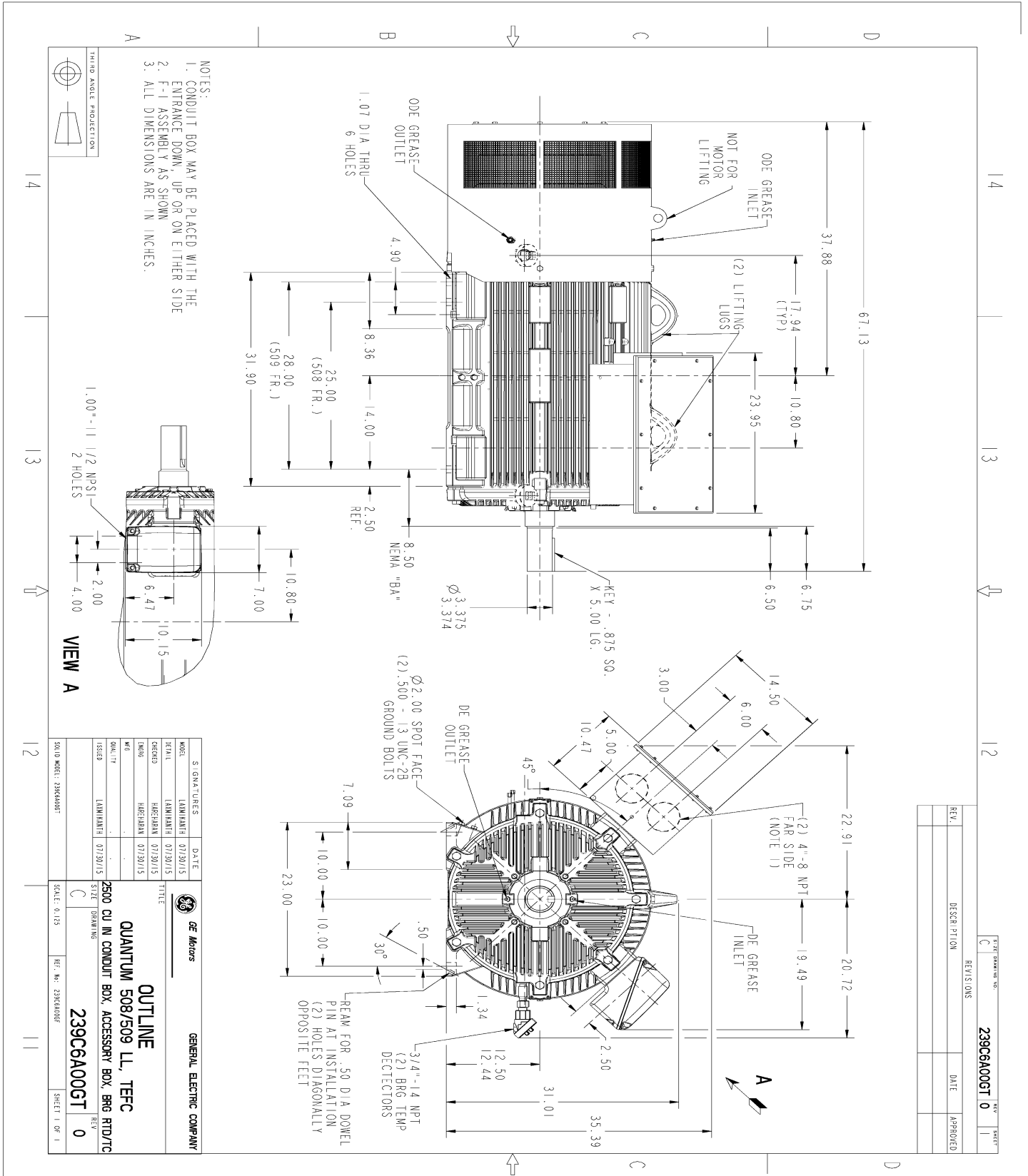
This motor is capable of two cold or one hot start with a maximum connected load inertia of 10488 Lb-Ft Sq (441.54 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 42 seconds. Safe stall time at 100% voltage is 106 seconds cold, 64 seconds hot. Rotor inertia is 164.55 Lb-Ft Sq (6.93 Kg-meter Sq).

Open Circuit A-C:	0.609	Short Circuit D-C:	0.028
Short Circuit A-C:	0.034	X/R Ratio:	10.735
Stator Slots:	72	Rotor Slots:	58

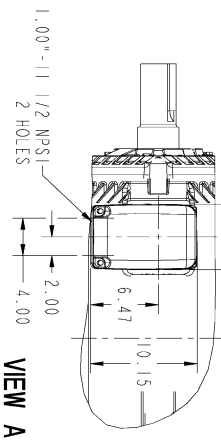
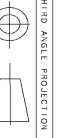
Speed Torque Current Curve (First Connection, First Speed)



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

SIGNATURES		DATE	
MODEL	LAMWANTH	07/30/15	
SERIAL	LAMWANTH	07/30/15	
ORDER	HAEHRMAN	07/30/15	
DESIGN	HAEHRMAN	07/30/15	
W/E			
QUALITY	LAMWANTH	07/30/15	
ISSUED			
SIZE	C	DRAWING	
SCALE: 0.125 REF. NO. Z39C6A00GT			
SHEET 1 OF 1			

GENERAL ELECTRIC COMPANY

OUTLINE

QUANTUM 508/509 LL, TEFC

Z500 CU IN CONDUIT BOX, ACCESSORY BOX, BRG RTD/TC

239C6A00GT

Marks:

Connection Diagram
GEM2034E-FIG2



Heater Connection
3027JE-1C



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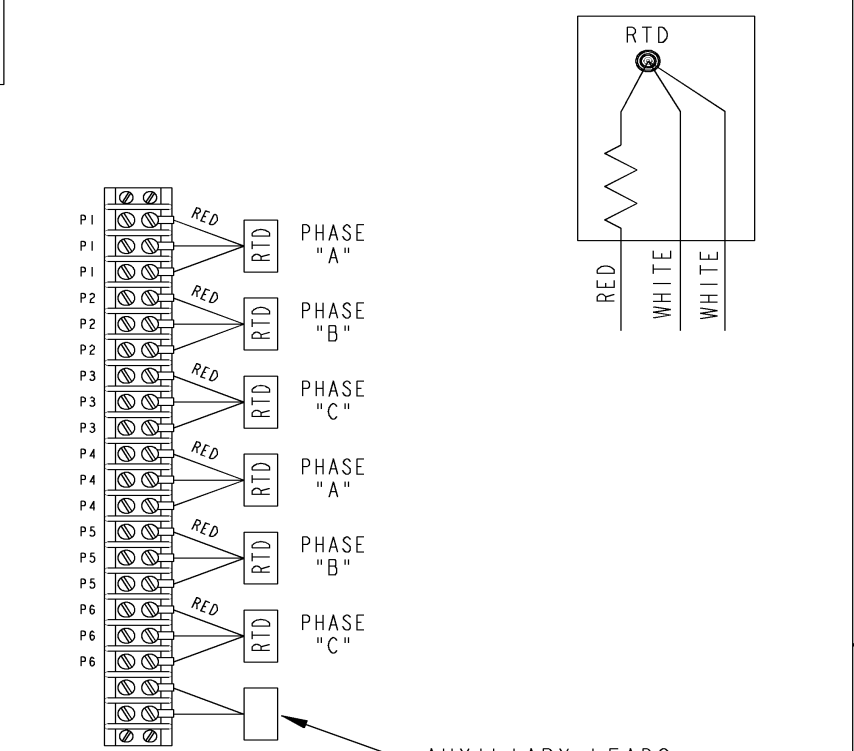
THIRD ANGLE PROJECTION

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
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 ✓	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



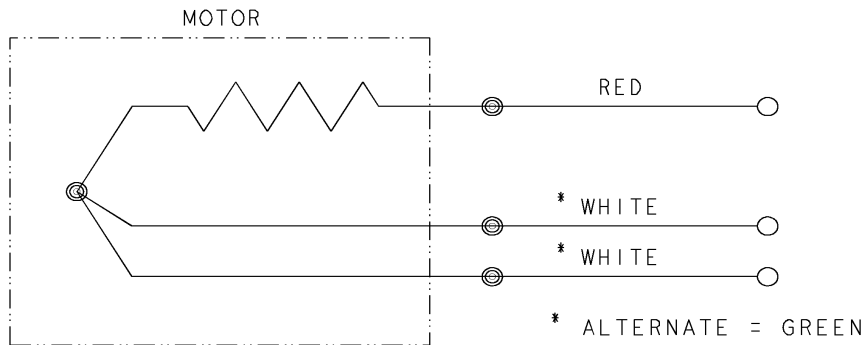
REV SH 1	THIRD ANGLE PROJECTION		REVISIONS		
		REV	DESCRIPTION	DATE	APPROVED
	1	ISAAC #12-1124	HARI	11/19/12	KARTHIK

DWG NO 235A3027NA
 SIZE A

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BEARING RTDS



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: 2 PL DECIMALS ± 3 PL DECIMALS ± ANGLES ± FRACTIONS ± MATERIAL: APPLIED PRACTICES:	SIGNATURES	DATE	Fort Wayne, Indiana <h2>CONNECTION DIAGRAM</h2>		
	DRAWN D.E. BAIR	12/16/92			
	CHECKED D.E. BAIR	12/16/92	SIZE	FSCM NO	DWG NO
	ENGRG K. DESAI	12/16/92	A		235A3027NA
	ISSUED D.E. BAIR	12/16/92	SCALE	1 / 1	SHEET 1 OF 1

DISTR TO

