

Product Information Packet

January 12, 2017

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

Model Number:	5KS509SAA270A
Catalog Number:	Q5032
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG2
Outline Drawing:	239C6A00HC

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:	5KS509SAA270A	Estimated Weight:	4272 Lbs
Outline Drawing:	239C6A00HC	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG2	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	SD
Design Code:	50BD1224E	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	509L	Insulation Class:	F
Phases:	3	NEMA Design:	B
Poles:	4	Nominal Efficiency:	95.0 %
Output Power:	300HP 222KW	Guaranteed Efficiency:	94.1
RPM:	1785	3/4 Load Efficiency:	95.8
Voltage:	2300/4000	KVA Code:	G
Hertz:	60	Max KVAR:	69.0
Amps - FL:	66.8/38.4	Power Factor:	88.5
Service Factor:	1.15	Bearing - DE:	NU 320
Alt Service Factor:	--	Bearing - ODE:	6315ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

HTR LDS HE1-HE2 115V 350W
 ROLLER BEARING - FOR BELTED LOAD ONLY

Additional Information:

4P - L EXTN
 2500 CU IN - 2(4.00" NPT)
 B5F4C4 HIGH STRENGTH STEEL AISI 4142 SHAFT MATERIAL
 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 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
 SHAFT BLOCKING FOR SHIPMENT

Performance Characteristics

1st Winding 1st Connection

Design: 50BD1224E

Marks:

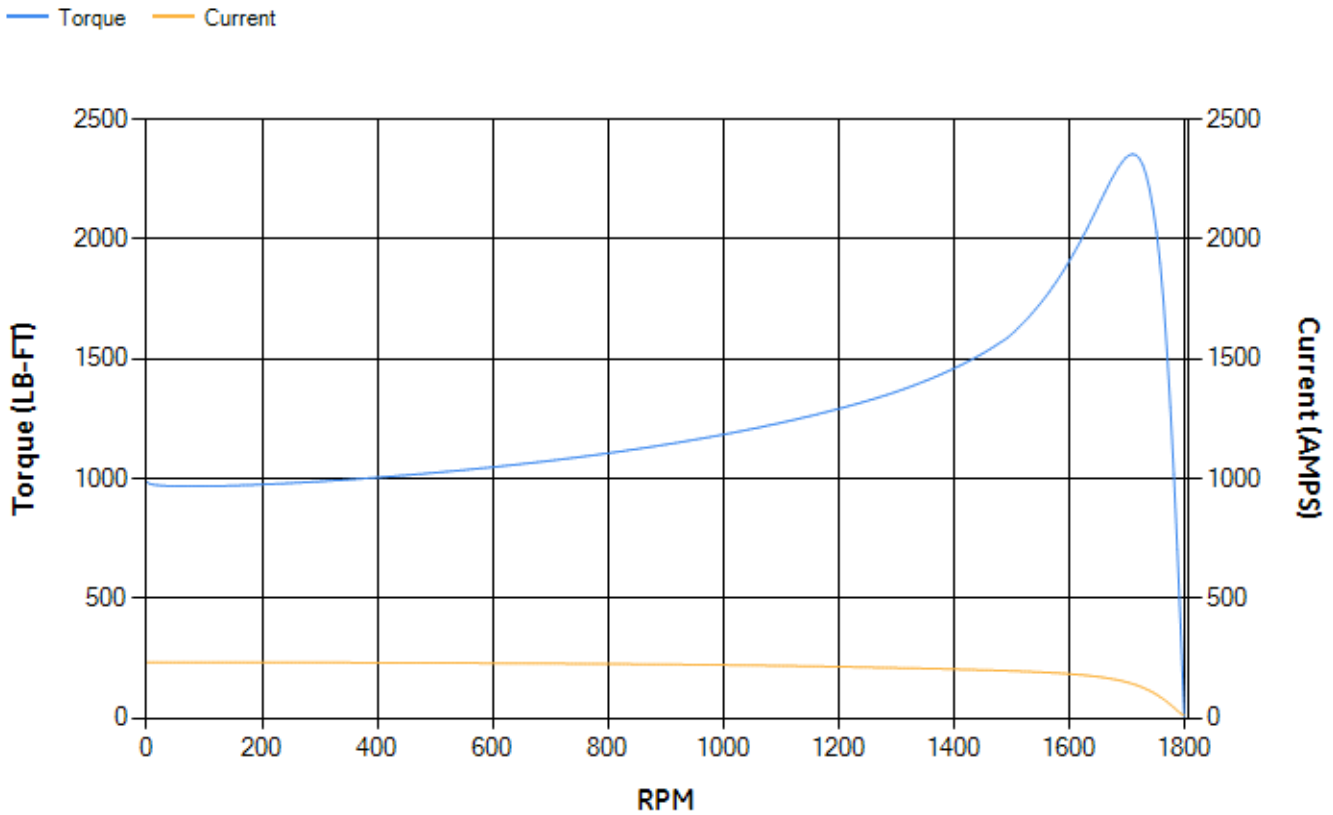
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.3	95.48	95.88	95.79	95.35	92.88	0.00
% PF	88.98	88.91	88.44	86.13	79.6	59.9	4.97
AMPS	47.6	43.74	38.12	29.35	21.27	14.51	11.07

TORQ(FL)#FT	882.9	TORQ(LR)%FL	111.64	TORQ(BD)%FL	266.48
AMPS(LR)	232.53	PF AT START	0.26		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 6454 Lb-Ft Sq (271.71 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 39 seconds. Safe stall time at 100% voltage is 91 seconds cold, 55 seconds hot. Rotor inertia is 111.78 Lb-Ft Sq (4.71 Kg-meter Sq).

Open Circuit A-C:	1.011	Short Circuit D-C:	0.03
Short Circuit A-C:	0.043	X/R Ratio:	11.221
Stator Slots:	72	Rotor Slots:	58

Speed Torque Current Curve (First Connection, First Speed)



Marks:

Connection Diagram
GEM2034E-FIG2



Heater Connection
3027JE-1C



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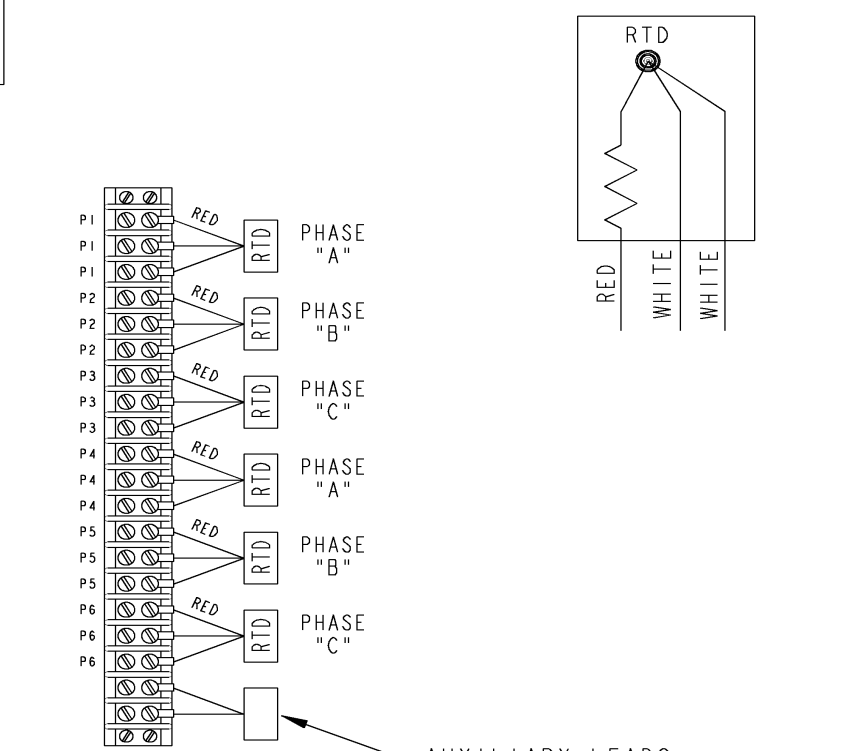
THIRD ANGLE PROJECTION

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 ✓		
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

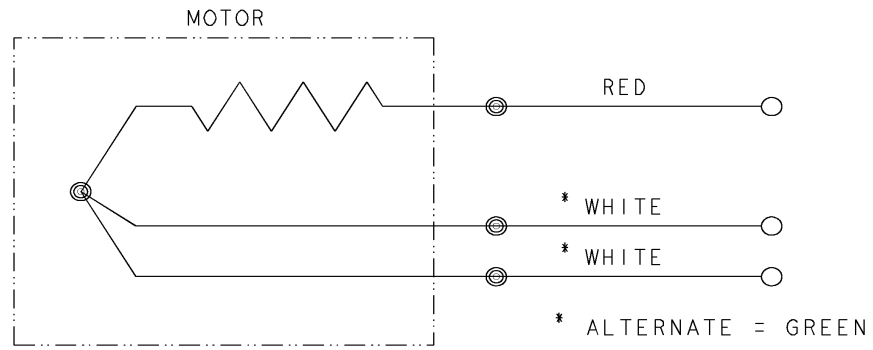


REV SH	THIRD ANGLE PROJECTION	REVISIONS			
		REV	DESCRIPTION	DATE	APPROVED
		1	ISAAC #12-1124	HARI	11/19/12

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	GE Motors Fort Wayne, Indiana	
	DRAWN D.E. BAIR	12/16/92		
	CHECKED D.E. BAIR	12/16/92		
	ENGRG K. DESAI	12/16/92		
	ISSUED D.E. BAIR	12/16/92	CONNECTION DIAGRAM BEARING RTDS	
	CAD NO. F500:235A3027NA	SIZE A	FSCM NO	DWG NO 235A3027NA
		SCALE 1/1		SHEET 1 OF 1

DISTR TO

