

Product Information Packet

January 12, 2017

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

Model Number:	5KS509SAA327C
Catalog Number:	Q515
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:	5KS509SAA327C	Estimated Weight:	4563 Lbs
Outline Drawing:	239C6A00HC	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG2	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	SD
Design Code:	50BD3127F	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	509L	Insulation Class:	F
Phases:	3	NEMA Design:	B
Poles:	6	Nominal Efficiency:	95.0 %
Output Power:	250HP 185KW	Guaranteed Efficiency:	94.1
RPM:	1185	3/4 Load Efficiency:	95.5
Voltage:	2300/4000	KVA Code:	G
Hertz:	60	Max KVAR:	73.5
Amps - FL:	58.6/33.7	Power Factor:	84.0
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:

6P - 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 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
SHAFT BLOCKING FOR SHIPMENT

Performance Characteristics

1st Winding 1st Connection

Design: 50BD3127F

Marks:

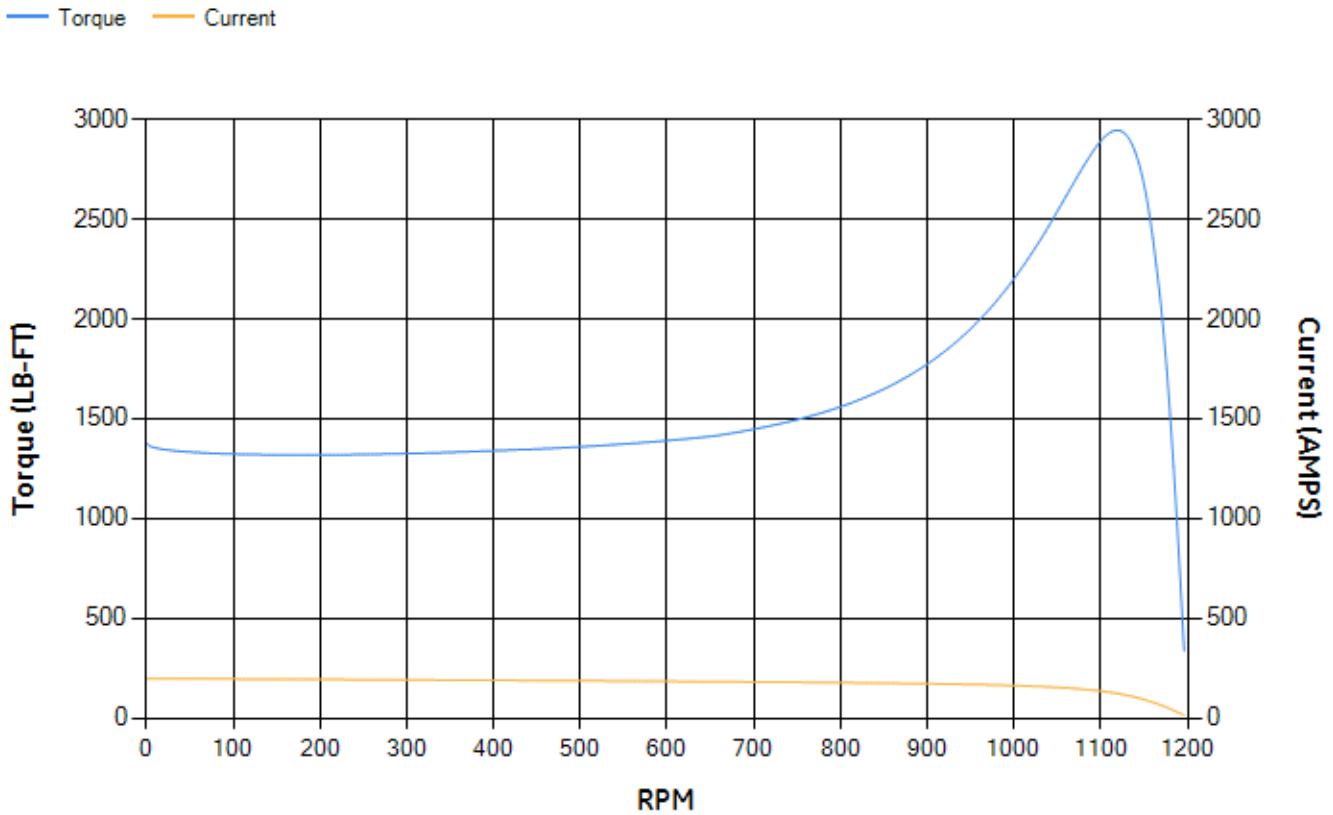
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	94.62	94.87	95.38	95.46	95.18	92.91	0.00
% PF	85.36	85.09	84.21	80.75	72.16	50.51	3.71
AMPS	41.65	38.33	33.52	26.18	19.59	14.33	11.79

TORQ(FL)#FT	1107.53	TORQ(LR)%FL	124.24	TORQ(BD)%FL	265.49
AMPS(LR)	197.14	PF AT START	0.27		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 11974 Lb-Ft Sq (504.11 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 38 seconds. Safe stall time at 100% voltage is 91 seconds cold, 52 seconds hot. Rotor inertia is 176.1 Lb-Ft Sq (7.41 Kg-meter Sq).

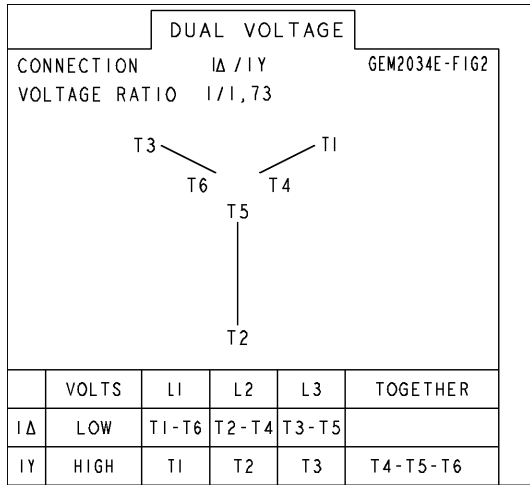
Open Circuit A-C:	0.592	Short Circuit D-C:	0.031
Short Circuit A-C:	0.033	X/R Ratio:	11.677
Stator Slots:	72	Rotor Slots:	58

Speed Torque Current Curve (First Connection, First Speed)



Marks:

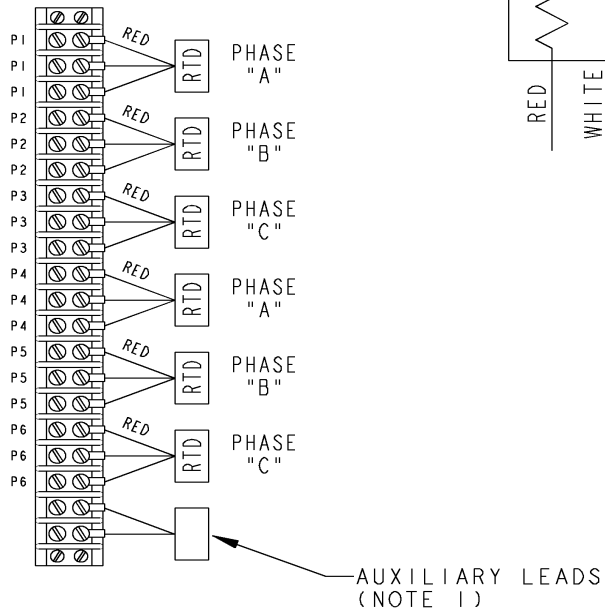
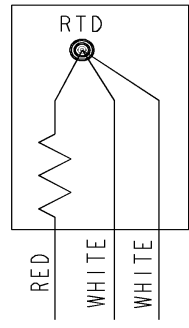
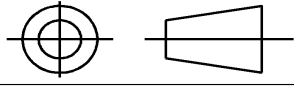
Connection Diagram
GEM2034E-FIG2



Heater Connection
3027JE-1C



SHEET 2 REV 235A3027XY SIZE A DRAWING NO.	GE PROPRIETARY INFORMATION <small>This document is the property of General Electric Company ("GE") and contains proprietary information of GE. This document is loaned on the express condition that neither it nor the information contained herein shall be disclosed to others without the express written consent of GE Industrial Systems, and that the information shall be used by the recipient only as approved expressly by GE Industrial Systems. This document shall be returned to GE upon its request. This document may be subject to certain restrictions under U.S. export control laws and regulations.</small>	REVISIONS			
	THIRD ANGLE PROJECTION	REV. 1	DESCRIPTION ISAAC# 15-0790 HARIKIRAN	DATE 07/28/15	APPROVED DHEERAJ
		REV. 2	DESCRIPTION ISAAC# 16-0422 SAGAR K	DATE 05/04/2016	APPROVED ADINARAYANA



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

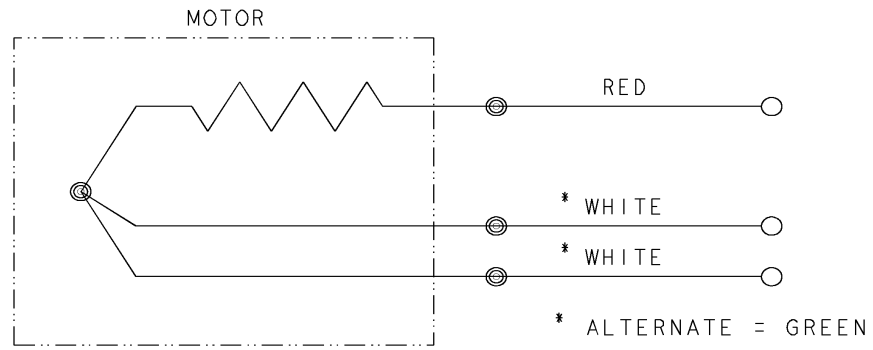


REV SH	THIRD ANGLE PROJECTION	REVISIONS			
		REV	DESCRIPTION	DATE	APPROVED
		1	ISAAC #12-1124	HARI	11/19/12

DWG NO 235A3027NA
 SIZE A

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BEARING RTDS



UNLESS OTHERWISE SPECIFIED	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