

Product Information Packet

January 12, 2017

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

Model Number:	5KS509SAA257A
Catalog Number:	Q575
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG20
Outline Drawing:	239C6A00HG

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

Table of Contents	
Specification	01
Performance Characteristics	02
Outline Drawing	03
Connection Drawing(s)	04



Marks:

MODEL NUMBER:	5KS509SAA257A	Estimated Weight:	4301 Lbs
Outline Drawing:	239C6A00HG	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG20	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	SD
Design Code:	50BD1242A	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	509LL	Insulation Class:	F
Phases:	3	NEMA Design:	B
Poles:	4	Nominal Efficiency:	96.2 %
Output Power:	300HP 222KW	Guaranteed Efficiency:	95.4
RPM:	1785	3/4 Load Efficiency:	96.5
Voltage:	460	KVA Code:	G
Hertz:	60	Max KVAR:	65.4
Amps - FL:	328.0	Power Factor:	89.0
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
 INVERTER DUTY PER NEMA MG1 PART 31
 ALTERNATE RATING FOR PWM CONTROL:1.0SF 40C AMBIENT
 VAR TORQUE RANGE 0-60 HZ
 FOR DIRECT COUPLED LOAD ONLY

Additional Information:

4P - LL EXTN - SPLIT LEAD
 1260 CU IN - 2(4.00" NPT)
 C/B GRD PLATE
 115V HTR LDS TO AUX BOX OPP MAIN CONDUIT BOX
 SPACE HEATER CAUTION NAMEPLATE
 NEMA TYPE GRD PAD
 F1 MOUNTING
 PROVISION FOR BTD ON BOTH ENDS PLUGGED

Performance Characteristics

1st Winding 1st Connection

Design: 50BD1242A

Marks:

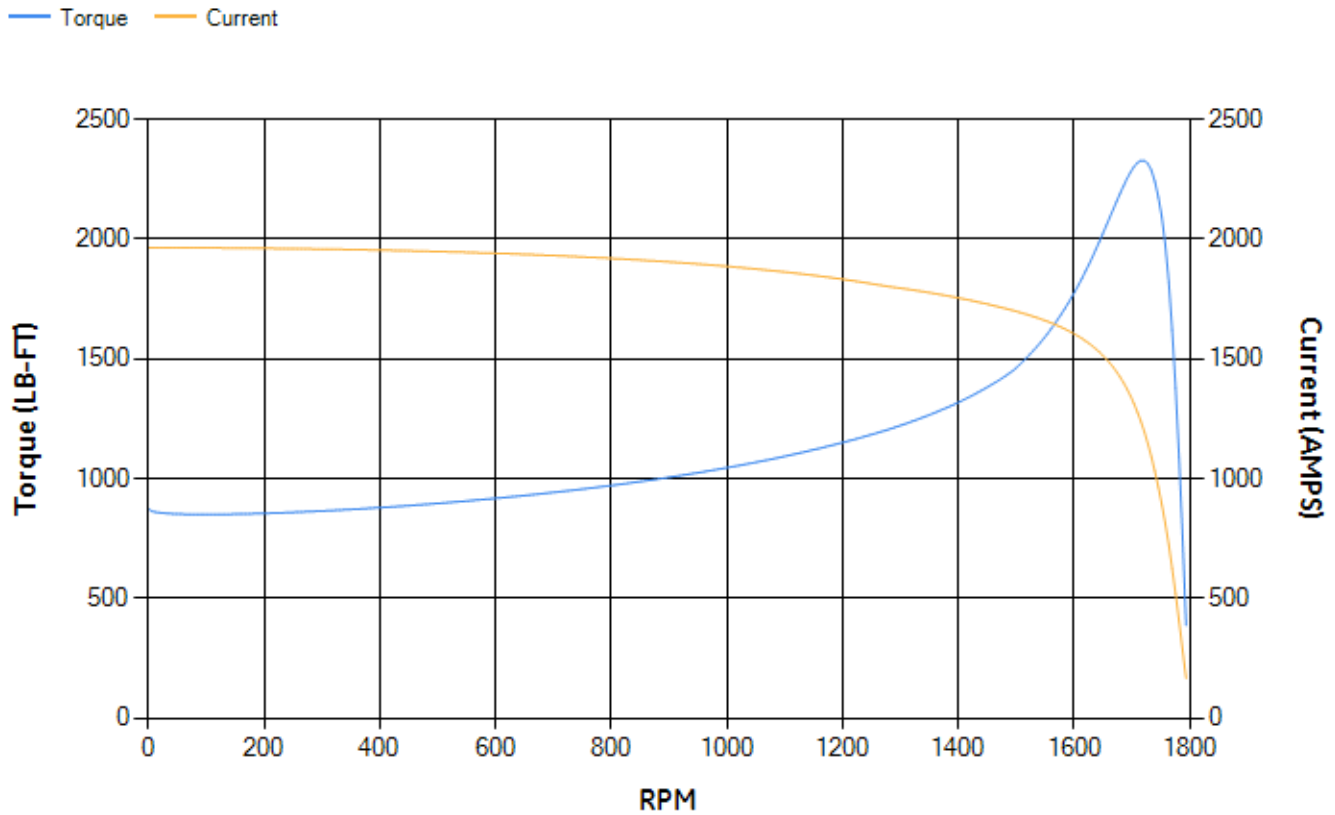
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	96.05	96.2	96.58	96.5	96.16	94.17	0.00
% PF	89.19	89.17	88.79	86.72	80.58	61.29	4.21
AMPS	409.71	376.42	327.64	251.63	181.17	121.62	91.22

TORQ(FL)#FT	882.01	TORQ(LR)%FL	98.92	TORQ(BD)%FL	263.84
AMPS(LR)	1964.38	PF AT START	0.22		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 8306 Lb-Ft Sq (349.68 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 58 seconds. Safe stall time at 100% voltage is 103 seconds cold, 69 seconds hot. Rotor inertia is 113.98 Lb-Ft Sq (4.8 Kg-meter Sq).

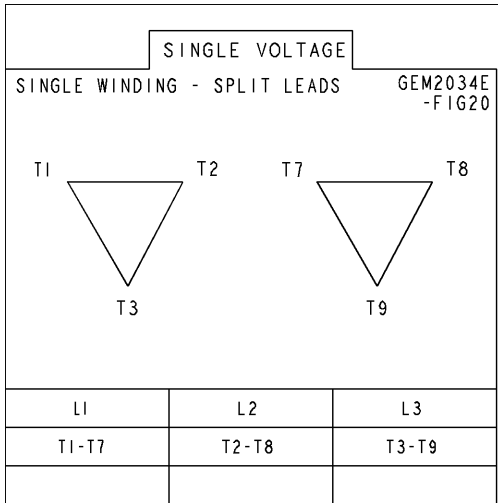
Open Circuit A-C:	1.189	Short Circuit D-C:	0.041
Short Circuit A-C:	0.05	X/R Ratio:	15.434
Stator Slots:	72	Rotor Slots:	58

Speed Torque Current Curve (First Connection, First Speed)



Marks:

Connection Diagram
GEM2034E-FIG20



Heater Connection
3027JE-1C



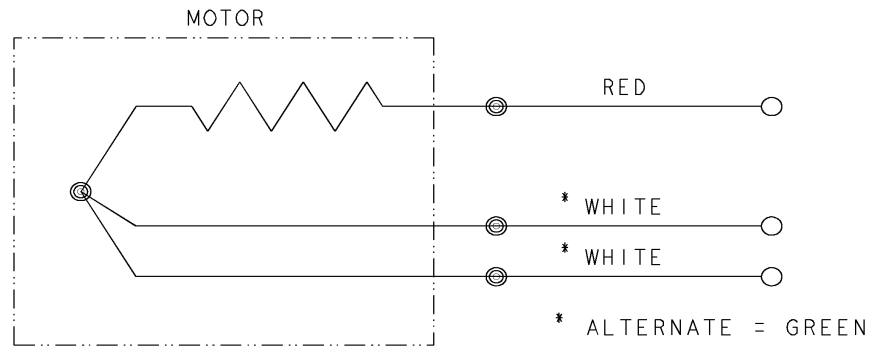


REV SH 1 1	THIRD ANGLE PROJECTION	REVISIONS			
		REV	DESCRIPTION	DATE	APPROVED
		1	ISAAC #12-1124	HARI	11/19/12

SIZE DWG NO 235A3027NA
 A

CONFIDENTIAL AND PROPRIETARY
 This document is the property of General Electric Company and contains proprietary and confidential information of the Motor Business Group (MBG). The document is loaned on the express conditions that neither it nor the information contained therein shall be disclosed to others without the express consent of MBG and that the information shall be used by the recipient only as approved expressly by MBG. Also, the document shall be returned to MBG upon its request.

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