

Product Information Packet

January 13, 2017

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

Model Number:	5KS513XAA127A
Catalog Number:	Q841
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG2
Outline Drawing:	239C6C00FW

Accessory Connection Diagrams			
Bearing Thermocouple:	None	Heater:	3027JE-1C
RTD:	235A3027WN	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:	5KS513XAA127A	Estimated Weight:	6626 Lbs
Outline Drawing:	239C6C00FW	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG2	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	841
Design Code:	50BD0082F	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	5013ST	Insulation Class:	F
Phases:	3	NEMA Design:	B
Poles:	2	Nominal Efficiency:	95.4 %
Output Power:	500HP 370KW	Guaranteed Efficiency:	94.5
RPM:	3565	3/4 Load Efficiency:	96.0
Voltage:	2300/4000	KVA Code:	G
Hertz:	60	Max KVAR:	52.0
Amps - FL:	103.8/59.7	Power Factor:	94.5
Service Factor:	1.15	Bearing - DE:	6315ZC3S0
Alt Service Factor:	--	Bearing - ODE:	6315ZC3S0

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

EXCEPTION TO IEEE-STD-841-2009:
 SOUND POWER EXCEEDS 90 DBA & TEMP CODE T2D ;
 TSTAT HTR LDS HE1-HE2 115V 200W
 DE BRG 75BC03JP3026, ODE BRG 75BC03JP3026
 ROT CCW FACING ODE LEAD/PH SEQUENCE 3-2-1/1-2-3
 MAXIMUM EXPOSED INTERNAL AND EXTERNAL SURFACE
 TEMPERATURES DO NOT EXCEED 215C UNDER USUAL
 SERVICE CONDITIONS AT 1.0SF
 MAXIMUM SPACE HEATER SURFACE TEMPERATURE FOR
 NORMAL OPERATION AT RATED CONDITIONS 172C
 GREASE MOBILITH SHC 100
 STAMP NP249A5499AP AS BELOW:
 MODEL:5KS513XAA127A S/N: XXX
 EX NA IIC -- GC CSA.09.2216219
 CLASS I, ZONE 2, AEX NA IIC --
 CLASS I, DIV 2, GROUPS A, B, C, D T2D
 -25C <= TAMB <= 40C
 FOR DIRECT COUPLED LOAD ONLY
 CUSTOM POLYSEAL

Additional Information:

2P - ST EXTN
 PAINTED FRAME ID & SHAFT, FAN COVER INSIDE &
 ODE E/S OUTSIDE
 CCW ROTATION FACING OPPOSITE DRIVE END
 2500 CU IN - 2(4.00" NPT)
 INPRO SEAL BOTH ENDS

OIL RESISTANT SLEEVING ON LEADS
.0015" TIR SHAFT RUNOUT
ROUTINE TEST REPORT AND 5 POINT VIBRATION TEST
REPORT INCLUDED IN C/B
COPPER WASHER UNDER HEADS OF BEARING CAP BOLTS,
APPLY TITE-SEAL (A50CD427A) ON BEARING CAP SCREWS,
RABBETS AND PLUG THREADS.
HEAT STABILIZED BEARINGS
100 OHM WINDING RTD LEADS TO AUX C/BOX OPP MAIN C/BOX
SUGGESTED WINDING RTD SETTINGS
ALARM 165C TRIP 175C
115V TSTAT CTRLD 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: 50BD0082F

Marks:

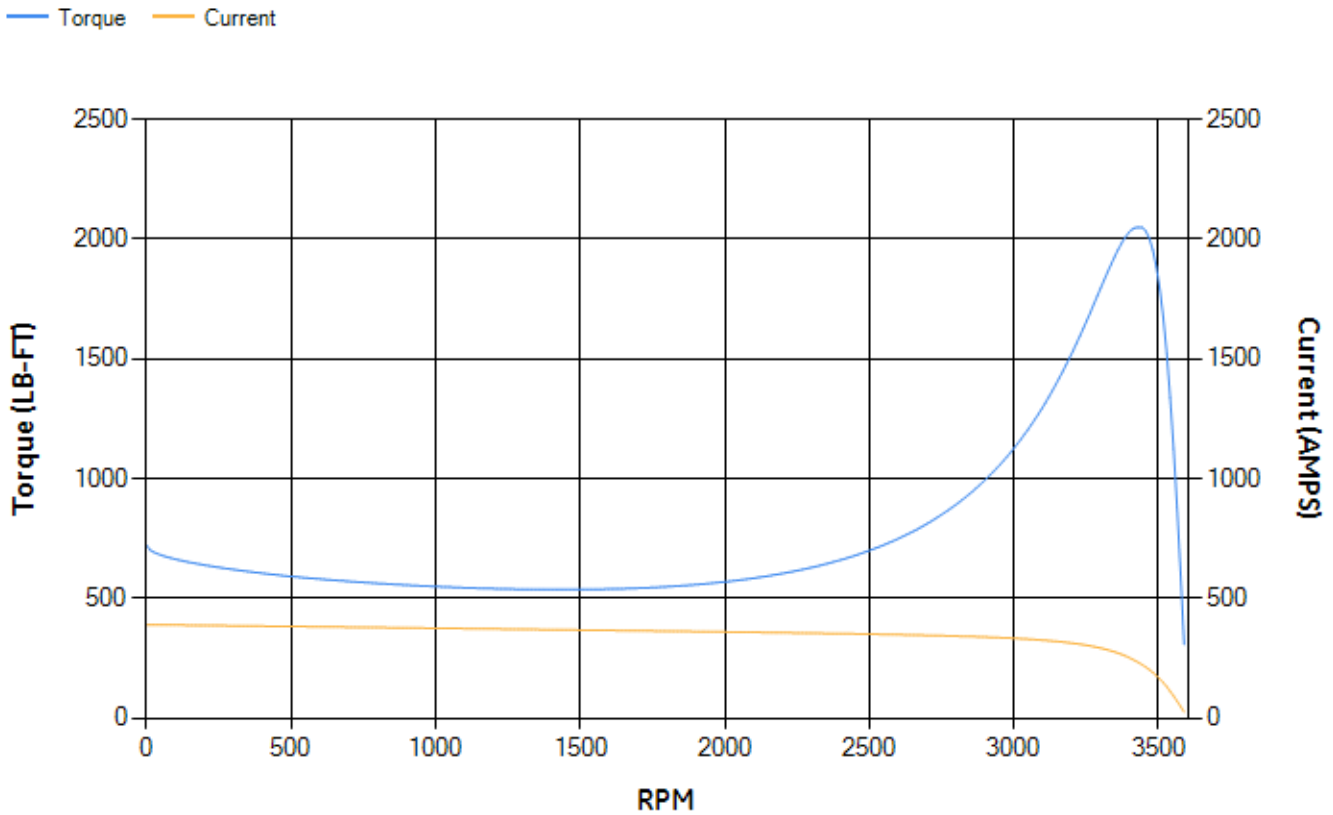
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.2	95.43	95.92	96.02	95.87	94.06	0.00
% PF	93.92	94.21	94.49	94.37	92.65	83.8	8.3
AMPS	75.24	68.84	59.29	44.54	30.29	17.07	8.34

TORQ(FL)#FT	735.86	TORQ(LR)%FL	97.88	TORQ(BD)%FL	278.24
AMPS(LR)	389.55	PF AT START	0.17		

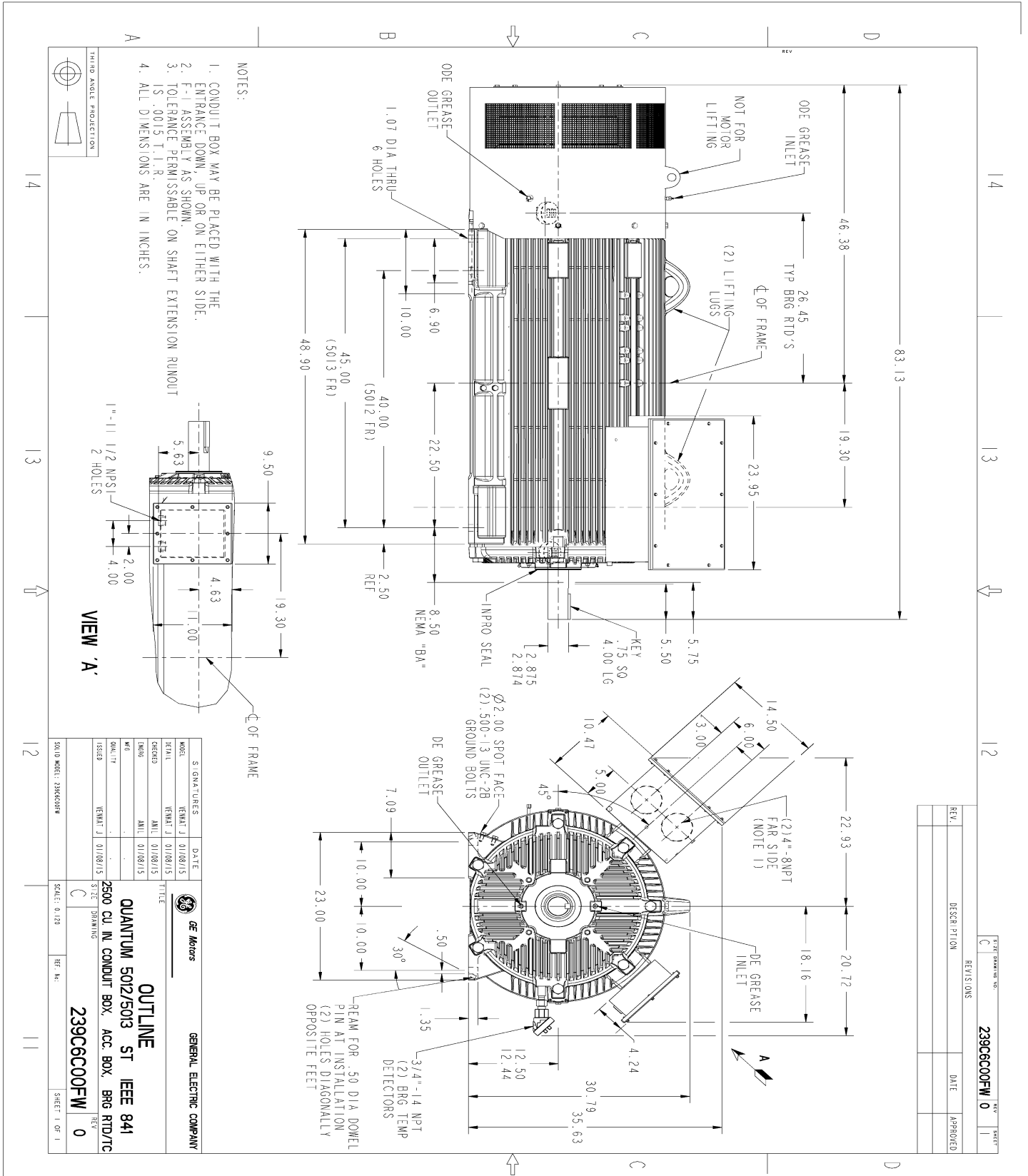
This motor is capable of two cold or one hot start with a maximum connected load inertia of 1230 Lb-Ft Sq (51.78 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 30 seconds. Safe stall time at 100% voltage is 64 seconds cold, 36 seconds hot. Rotor inertia is 145.08 Lb-Ft Sq (6.11 Kg-meter Sq).

Open Circuit A-C:	2.124	Short Circuit D-C:	0.037
Short Circuit A-C:	0.048	X/R Ratio:	14.046
Stator Slots:	48	Rotor Slots:	40

Speed Torque Current Curve (First Connection, First Speed)

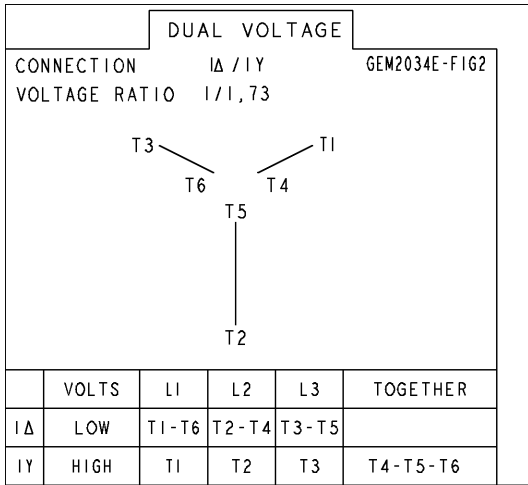


Marks:



Marks:

Connection Diagram
GEM2034E-FIG2



Heater Connection
3027JE-1C



SHEET

REV

235A3027WN

SIZE DRAWING NO. A

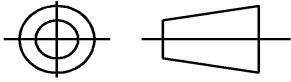
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REVISIONS

REV.	DESCRIPTION	DATE	APPROVED

THIRD ANGLE PROJECTION



- NOTE 1: TERMINAL LABELS ARE PROVIDED FOR ACCESSORIES THAT MAY OR MAY NOT BE INCLUDED WITH THE 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.
- NOTE 3: IT IS RECOMMENDED THAT RTDS BE GROUNDED AT EITHER THE MACHINE OR CONNECTED TO A GROUNDED CONTROL CIRCUIT. FOR PROPER OPERATION DO NOT GROUND AT THE MACHINE IF CONNECTED TO A GROUND CIRCUIT AT THE CONTROL.

Part must conform to SI 900000 Sect. 4, Toxicity Procedure

FOR ADDITIONAL INFO REFER TO:	SIGNATURES	DATE
APPLIED PRACTICES		
DIMENSIONS ARE IN INCHES		
TOLERANCE ON:		
1 PL DECIMALS ± 0.1		
2 PL DECIMALS ± 0.02		
3 PL DECIMALS ± 0.005		
ANGLES ± 0.5		
FRACTIONS ±		
FINISH ✓		
MATERIAL	SOLID MODEL: MODEL NAME	

GE Motors GENERAL ELECTRIC COMPANY

TITLE
CONNECTION DIAGRAM
WINDING RTD'S & T'STATS & HEATERS

SIZE DRAWING: **A** **235A3027WN** REV **0**

SCALE: NA SHEET 1 of 1

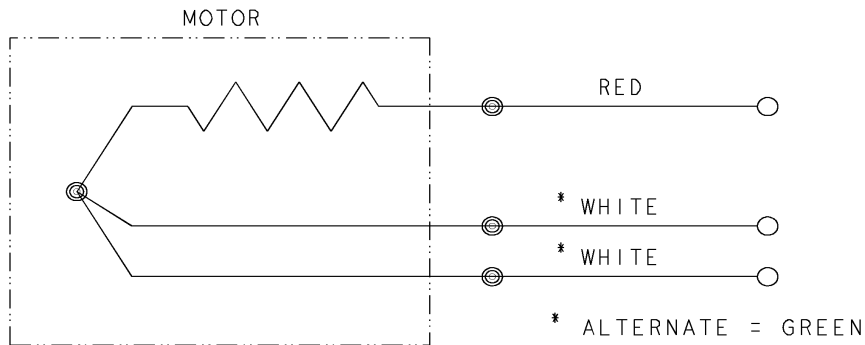


REV 1 SH SIZE A DWG NO 235A3027NA	THIRD ANGLE PROJECTION		REVISIONS			
			REV	DESCRIPTION	DATE	APPROVED
			1	ISAAC #12-1124	HARI	11/19/12

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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> BEARING RTDS
	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		
	CAD NO. F500:235A3027NA		SIZE A	FSCM NO	DWG NO 235A3027NA
			SCALE 1/1		SHEET 1 OF 1

DISTR TO

