

Product Information Packet

January 12, 2017

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

Model Number:	5KS513XAA328A
Catalog Number:	Q8002
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG2
Outline Drawing:	239C6C00FT

Accessory Connection Diagrams			
Bearing Thermocouple:	None	Heater:	3027JE-1
RTD:	235A3027WN	Thermistor:	None
Thermostat:	None	Winding Thermocouple:	None
Bearing RTD:	235A3027NA		

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Marks:

MODEL NUMBER:	5KS513XAA328A	Estimated Weight:	7150 Lbs
Outline Drawing:	239C6C00FT	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG2	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	841
Design Code:	50BD3209E	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	5013S	Insulation Class:	F
Phases:	3	NEMA Design:	--
Poles:	6	Nominal Efficiency:	96.2 %
Output Power:	500HP 370KW	Guaranteed Efficiency:	95.4
RPM:	1190	3/4 Load Efficiency:	96.6
Voltage:	2300/4000	KVA Code:	G
Hertz:	60	Max KVAR:	143.2
Amps - FL:	115.1/66.2	Power Factor:	84.5
Service Factor:	1.15	Bearing - DE:	6320ZC3
Alt Service Factor:	--	Bearing - ODE:	6320ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

EXCEPTION TO IEEE-STD-841-2009: SOUND POWER 93 DBA
 EXCEPTION TO NEMA DESIGN '--'
 TSTAT HTR LDS H 115V 200W
 DE BRG 100BC03XP3, ODE BRG 100BC03XP3
 MAXIMUM EXPOSED INTERNAL AND EXTERNAL SURFACE
 TEMPERATURES DO NOT EXCEED 200C UNDER USUAL
 SERVICE CONDITIONS AT 1.0SF
 MAXIMUM SPACE HEATER SURFACE TEMPERATURE FOR
 NORMAL OPERATION AT RATED CONDITIONS 160C
 STAMP NP249A5499AP AS BELOW:
 MODEL:5KS513XAA328A S/N: XXX
 EX NA IIC T3 GC CSA.09.2216219
 CLASS I, ZONE 2, AEX NA IIC T3
 CLASS I, DIV 2, GROUPS A, B, C, D T3
 -25C <= TAMB <= 40C
 FOR DIRECT COUPLED LOAD ONLY
 CUSTOM POLYSEAL

Additional Information:

6P - S EXTN
 PAINTED FRAME ID & SHAFT, FAN COVER INSIDE &
 ODE E/S OUTSIDE
 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.
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: 50BD3209E

Marks:

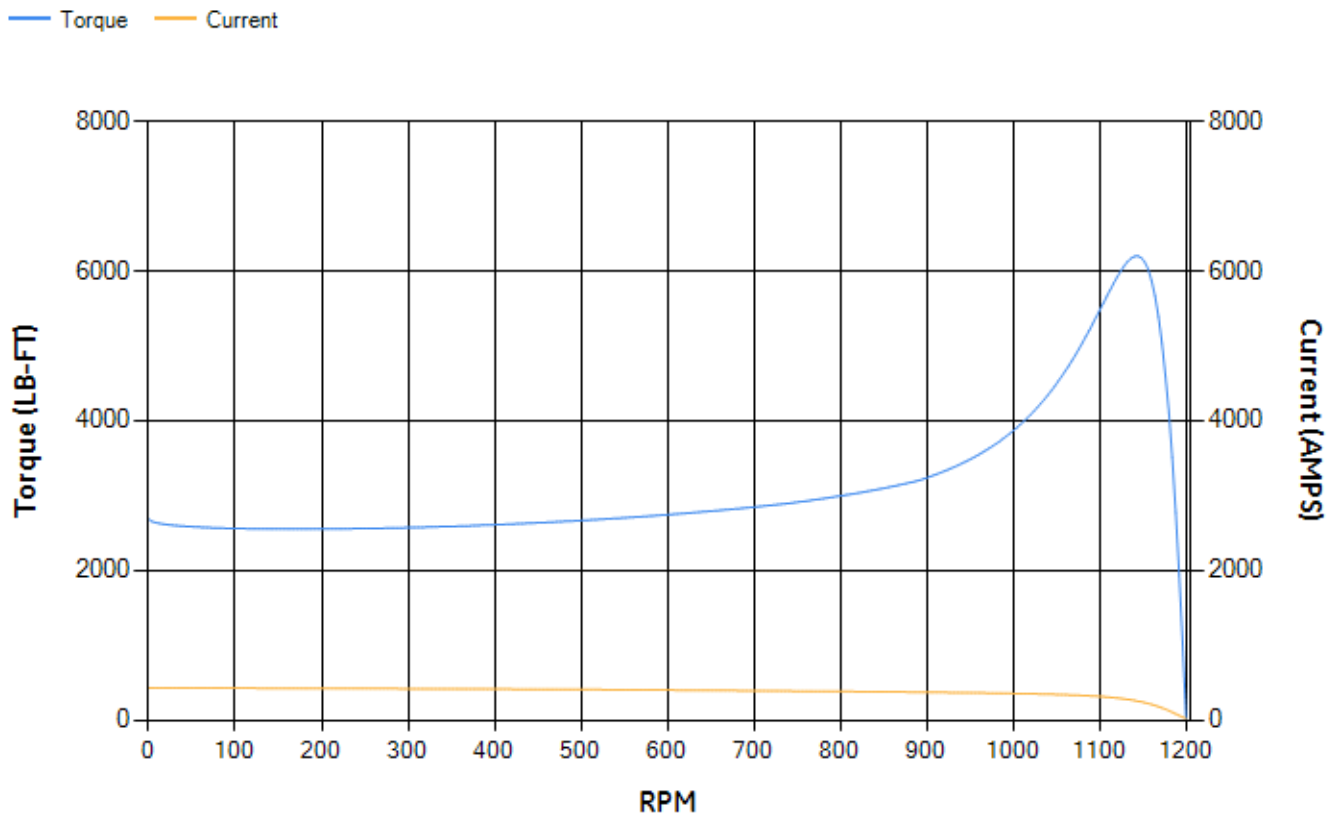
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	96.05	96.21	96.61	96.56	96.28	94.4	0.00
% PF	85.91	85.64	84.77	81.37	72.88	51.09	3.01
AMPS	81.52	75.11	65.74	51.37	38.35	27.89	22.89

TORQ(FL)#FT	2205.53	TORQ(LR)%FL	121.73	TORQ(BD)%FL	280.83
AMPS(LR)	428.56	PF AT START	0.22		

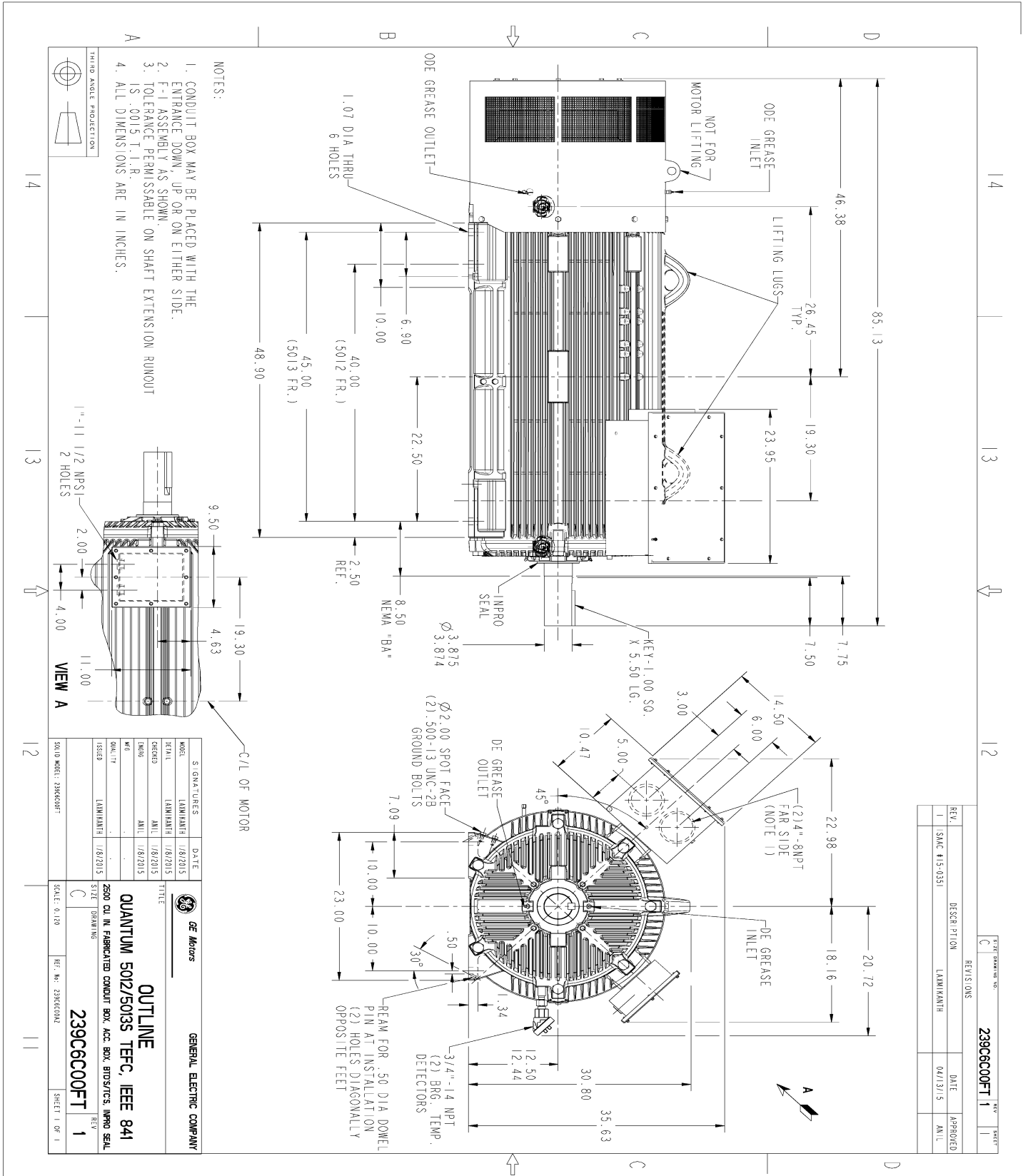
This motor is capable of two cold or one hot start with a maximum connected load inertia of 33253 Lb-Ft Sq (1399.95 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 55 seconds. Safe stall time at 100% voltage is 110 seconds cold, 65 seconds hot. Rotor inertia is 369.52 Lb-Ft Sq (15.56 Kg-meter Sq).

Open Circuit A-C:	0.904	Short Circuit D-C:	0.043
Short Circuit A-C:	0.046	X/R Ratio:	16.131
Stator Slots:	72	Rotor Slots:	58

Speed Torque Current Curve (First Connection, First Speed)



Marks:



REV.	DESCRIPTION	DATE	APPROVED
1	SMAC #15-0351	04/13/15	ANIL

SIGNATURES	DATE
MODEL LAMINANTH 1/8/2015	
SCALE LAMINANTH 1/8/2015	
ORDNO ANIL 1/8/2015	
DESIG ANIL 1/8/2015	
W/E	
QUALITY	
ISSUED LAMINANTH 1/8/2015	

GE Motors

GENERAL ELECTRIC COMPANY

TITLE

QUANTUM 5012/5013 TFFC, IEEE 841

2500 CU. IN. FABRICATED CONDUIT BOX ACC. BOX, BTD/S/T/S, IMPRO SEAL

SCALE: 0.120

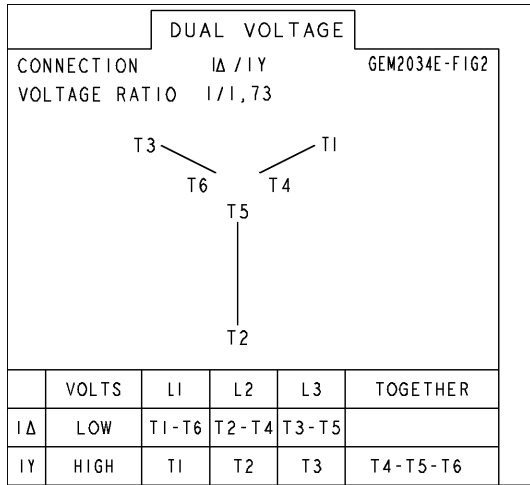
REF. NO. 239C6C00FT

239C6C00FT 1

SHEET 1 OF 1

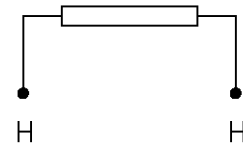
Marks:

Connection Diagram
GEM2034E-FIG2



Heater Connection
3027JE-1

FIG. 1
HEATER CONN.



CONTROL	L1	L2
VOLTAGE ONLY	H	H

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

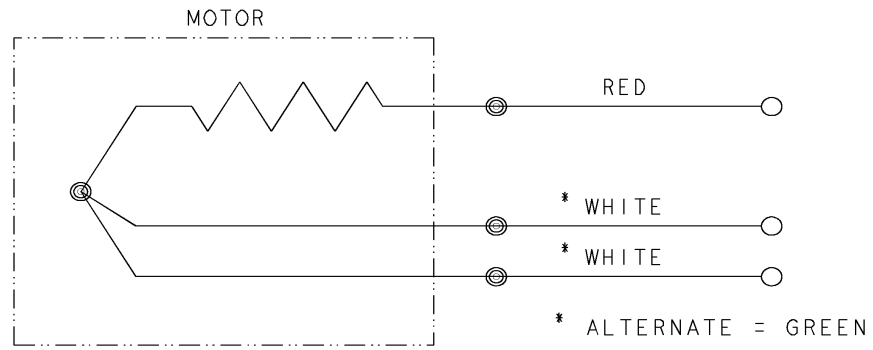


REV SH 1 1	THIRD ANGLE PROJECTION		REVISIONS		
		REV	DESCRIPTION	DATE	APPROVED
		1	ISAAC #12-1124	HARI	11/19/12

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	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				
	CAD NO. F500:235A3027NA	SIZE A	FSCM NO	DWG NO 235A3027NA	DISTR TO
		SCALE 1/1		SHEET 1 OF 1	

