

Product Information Packet

January 12, 2017

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

Model Number:	5KS509SAA259A
Catalog Number:	Q577
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		

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Marks:

MODEL NUMBER:	5KS509SAA259A	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:	50BD1242B	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:	575	KVA Code:	G
Hertz:	60	Max KVAR:	65.4
Amps - FL:	262.0	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: 50BD1242B

Marks:

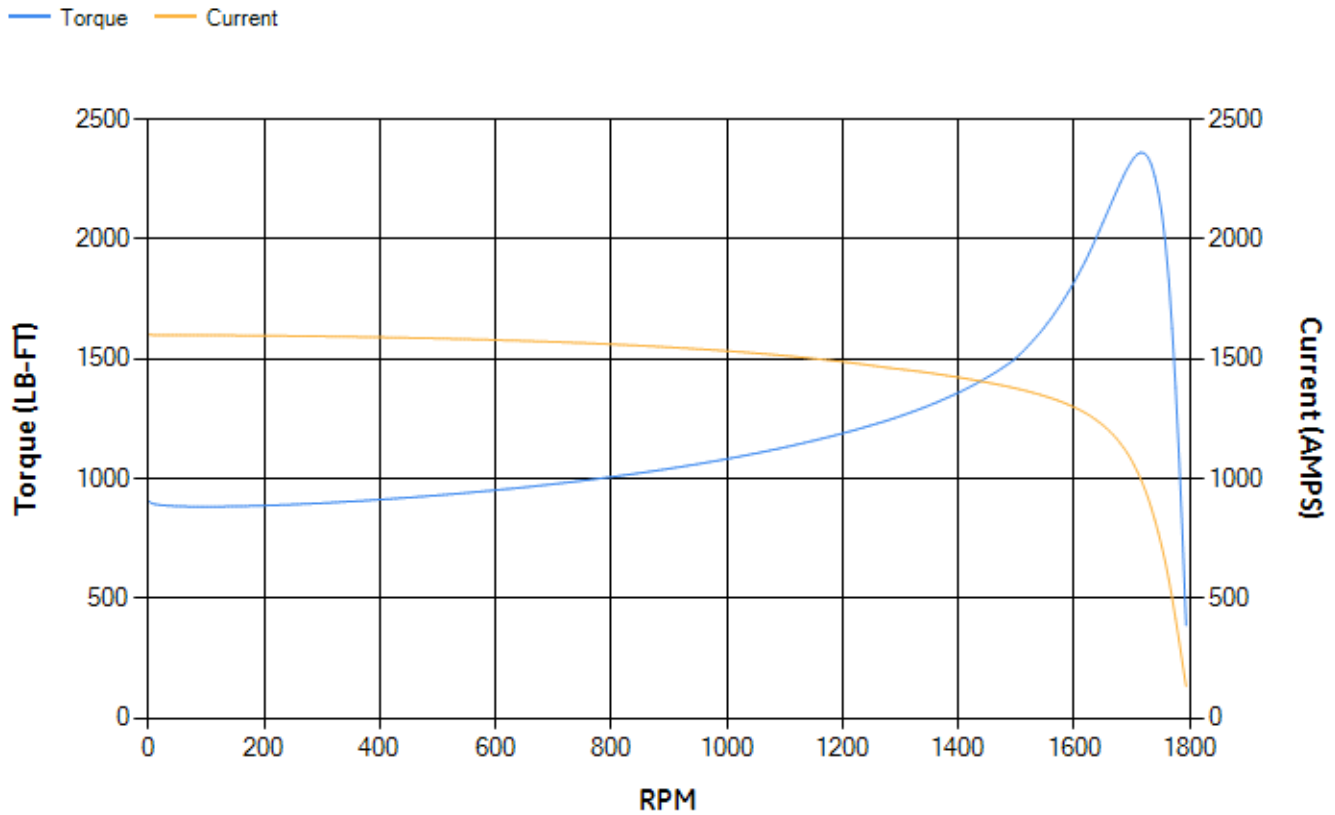
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	96.03	96.18	96.57	96.49	96.15	94.16	0.00
% PF	89.34	89.3	88.91	86.82	80.65	61.33	4.22
AMPS	327.27	300.73	261.81	201.12	144.83	97.24	72.94

TORQ(FL)#FT	882.01	TORQ(LR)%FL	102.64	TORQ(BD)%FL	267.47
AMPS(LR)	1599.55	PF AT START	0.23		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 8323 Lb-Ft Sq (350.4 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 56 seconds. Safe stall time at 100% voltage is 99 seconds cold, 67 seconds hot. Rotor inertia is 113.98 Lb-Ft Sq (4.8 Kg-meter Sq).

Open Circuit A-C:	1.187	Short Circuit D-C:	0.039
Short Circuit A-C:	0.049	X/R Ratio:	14.812
Stator Slots:	72	Rotor Slots:	58

Speed Torque Current Curve (First Connection, First Speed)



Marks:

14

13

12

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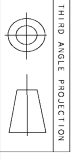
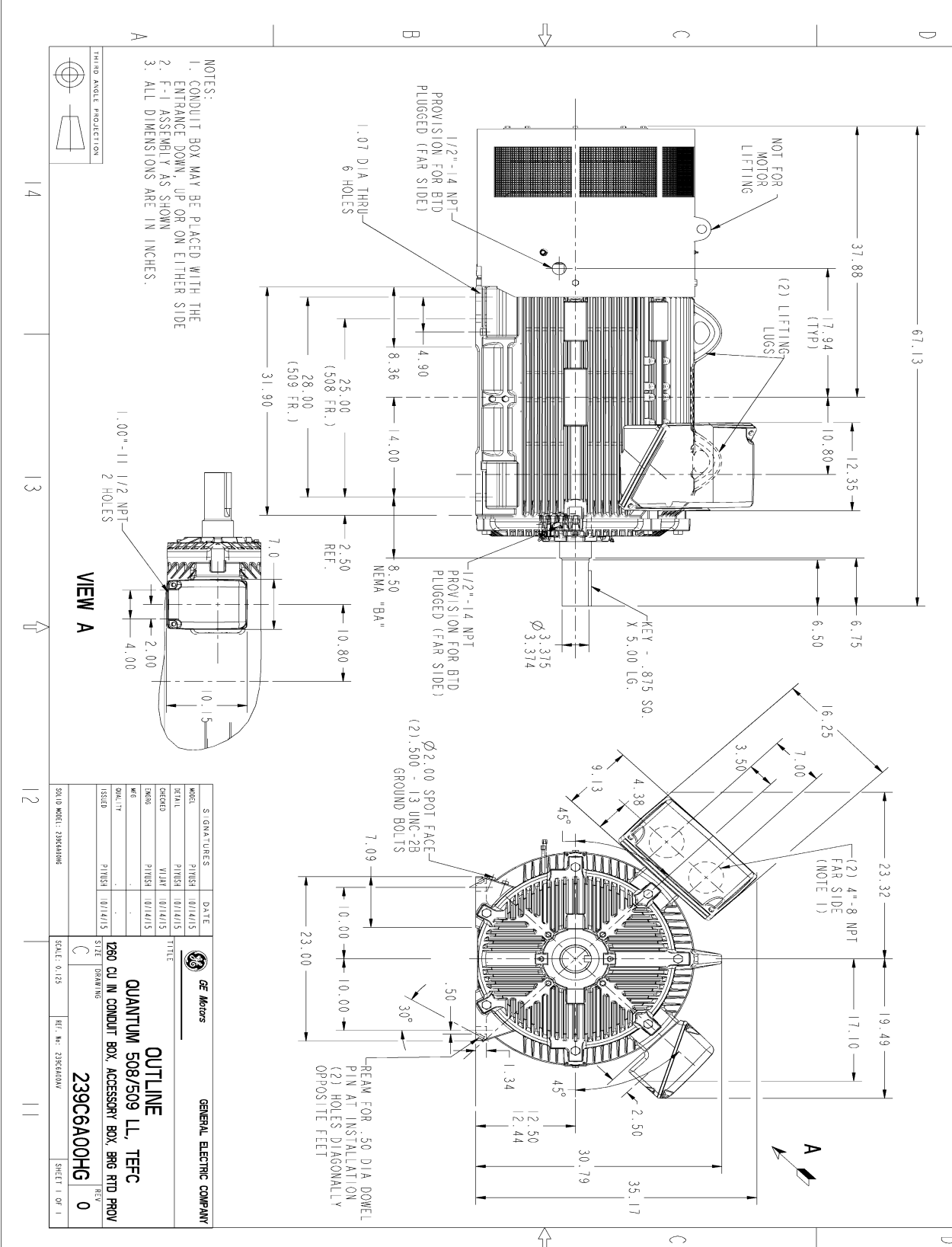
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239C6A00HG

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REV.	DESCRIPTION	DATE	APPROVED



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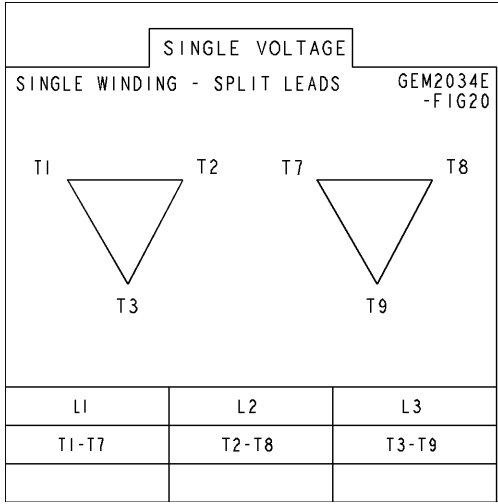
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Marks:

Connection Diagram
GEM2034E-FIG20



Heater Connection
3027JE-1C



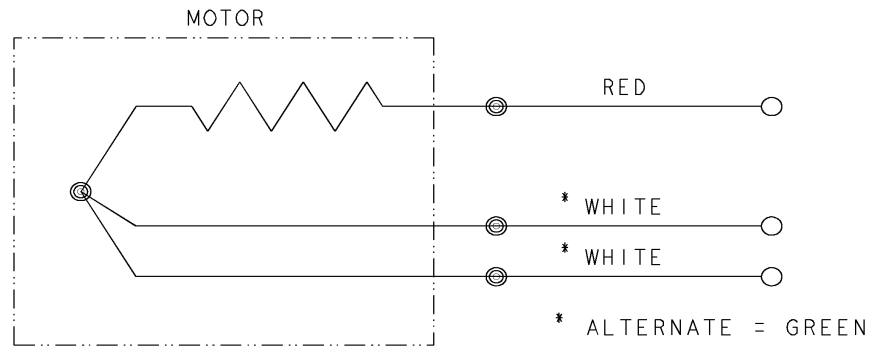


REV SH 1 1	THIRD ANGLE PROJECTION		REVISIONS		
		REV	DESCRIPTION	DATE	APPROVED
	1	ISAAC #12-1124	HARI	11/19/12	KARTHIK

SIZE A
 DWG NO 235A3027NA

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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			CONNECTION DIAGRAM BEARING RTDS	
	CHECKED D.E. BAIR	12/16/92	SIZE	FSCM NO		
	ENGRG K. DESAI	12/16/92	A		DWG NO	235A3027NA
	ISSUED D.E. BAIR	12/16/92	SCALE	1 / 1	SHEET	1 OF 1

DISTR TO

