

Product Information Packet

January 12, 2017

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

Model Number:	5KS509SAA124B
Catalog Number:	Q532
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG20
Outline Drawing:	239C6A00HP

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:	5KS509SAA124B	Estimated Weight:	4563 Lbs
Outline Drawing:	239C6A00HP	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG20	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	SD
Design Code:	50BD0233A	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	509LS	Insulation Class:	F
Phases:	3	NEMA Design:	B
Poles:	2	Nominal Efficiency:	95.8 %
Output Power:	300HP 222KW	Guaranteed Efficiency:	95.0
RPM:	3565	3/4 Load Efficiency:	95.9
Voltage:	460	KVA Code:	G
Hertz:	60	Max KVAR:	42.1
Amps - FL:	313.0	Power Factor:	93.5
Service Factor:	1.15	Bearing - DE:	6315ZC3
Alt Service Factor:	--	Bearing - ODE:	6315ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

HTR LDS HE1-HE2 115V 350W
 ROT CW FACING ODE LEAD/PH SEQUENCE 1-2-3/1-2-3
 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:

2P - LS 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: 50BD0233A

Marks:

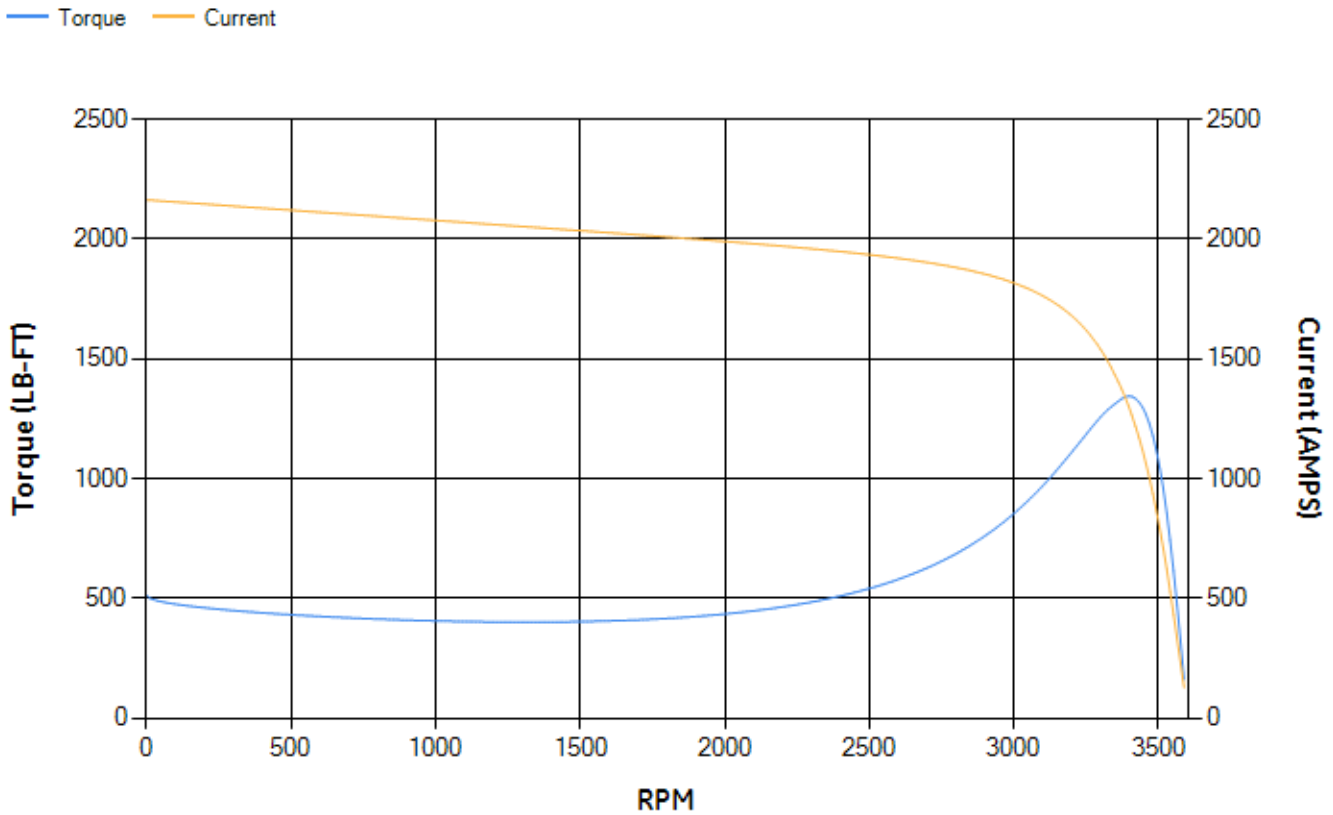
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.36	95.54	95.96	95.92	95.56	93.31	0.00
% PF	93.34	93.46	93.46	92.66	89.5	76.5	7.18
AMPS	394.31	361.59	312.61	236.94	164.14	98.34	58.74

TORQ(FL)#FT	441.91	TORQ(LR)%FL	115.7	TORQ(BD)%FL	303.57
AMPS(LR)	2163.44	PF AT START	0.17		

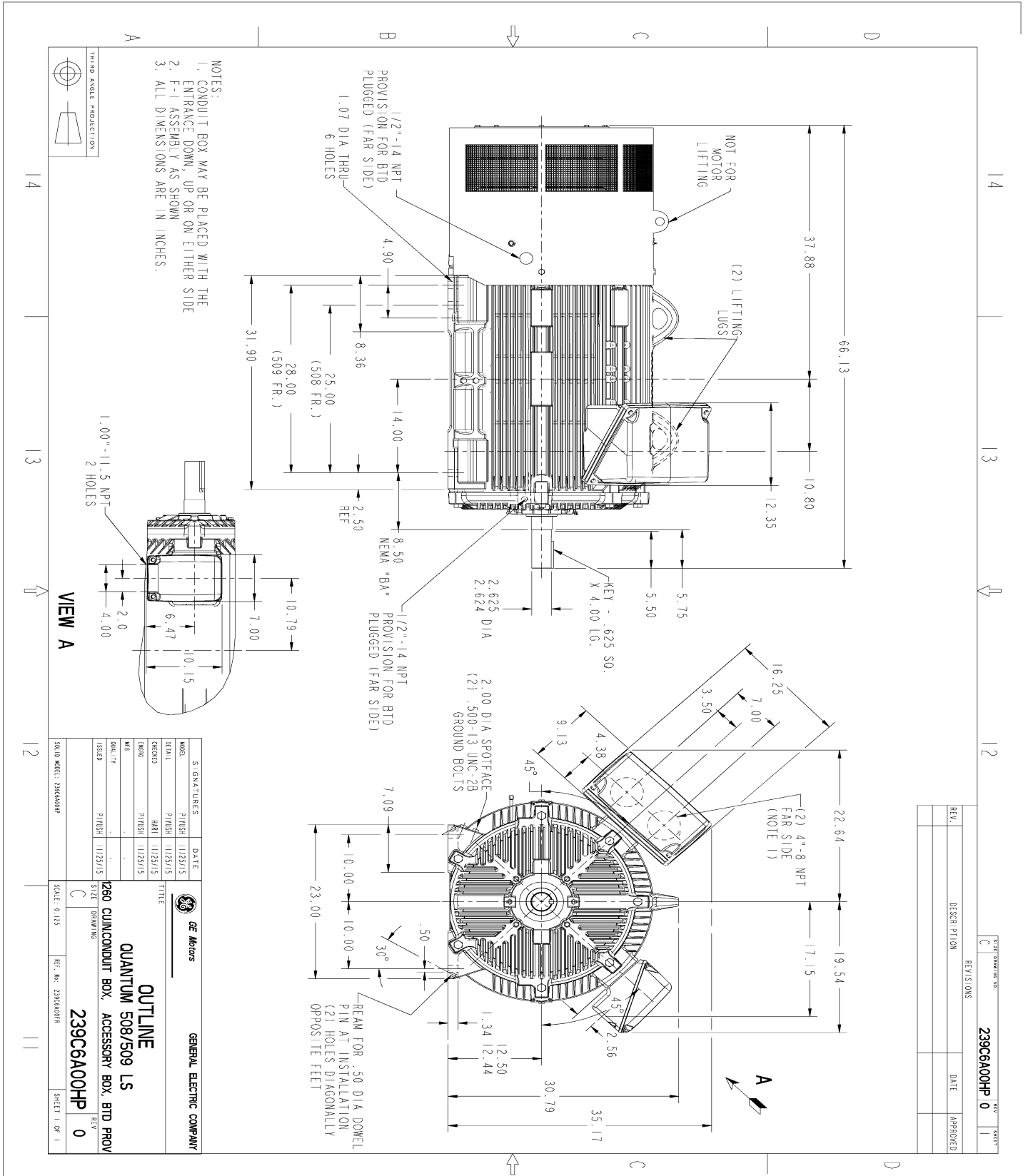
This motor is capable of two cold or one hot start with a maximum connected load inertia of 745 Lb-Ft Sq (31.36 Kg-meter Sq) at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 23 seconds. Safe stall time at 100% voltage is 46 seconds cold, 27 seconds hot. Rotor inertia is 80.45 Lb-Ft Sq (3.39 Kg-meter Sq).

Open Circuit A-C:	1.428	Short Circuit D-C:	0.047
Short Circuit A-C:	0.041	X/R Ratio:	17.639
Stator Slots:	48	Rotor Slots:	40

Speed Torque Current Curve (First Connection, First Speed)

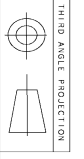


Marks:



REV.	DESCRIPTION	DATE	APPROVED

SIGNATURES	DATE	<p>GENERAL ELECTRIC COMPANY</p> <p>OUTLINE</p> <p>QUANTUM 508/509 LS</p> <p>1260 CONDUIT BOX, ACCESSORY BOX, BTD PROV</p> <p>239C6A00HP</p> <p>SCALE: 0.125 REF. NO. 239K400R</p>
DESIGNER	11/29/15	
CHECKED	11/29/15	
DATE	11/29/15	
SIZE	11/29/15	



SHEET 1 OF 1

Marks:

Connection Diagram
GEM2034E-FIG20



Heater Connection
3027JE-1C



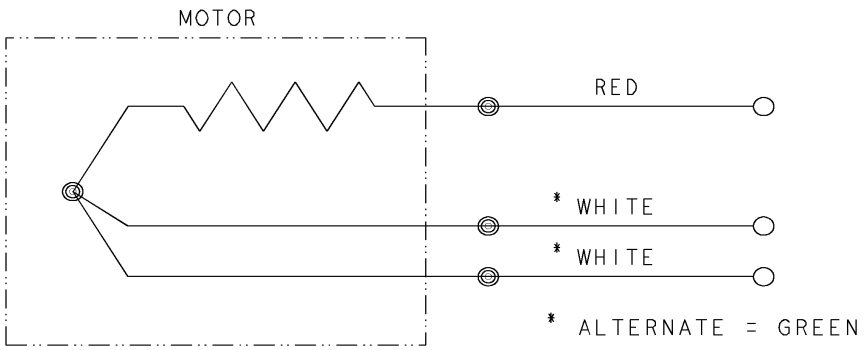


REV SH	THIRD ANGLE PROJECTION	REVISIONS			
		REV	DESCRIPTION	DATE	APPROVED
	1	ISAAC #12-1124	HARI	11/19/12	KARTHIK

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

End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E5200AE1	115E5200AD1
Bearing	235A2513AG01	235A2513AG01
Slinger/Inproseal	149C4399G10	149C4399G10

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	148C8070BA1
Fan Cover	119D3661AA4

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	179B9058G03

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	