

# Product Information Packet

January 12, 2017

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

<b>Model Number:</b>	<b>5KS449SAG122A</b>
<b>Catalog Number:</b>	<b>E9521</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG1
<b>Outline Drawing:</b>	225B6500KL

Accessory Connection Diagrams			
<b>Bearing Thermocouple:</b>	None	<b>Heater:</b>	None
<b>RTD:</b>	235A3027RY	<b>Thermistor:</b>	None
<b>Thermostat:</b>	None	<b>Winding Thermocouple:</b>	None
<b>Bearing RTD:</b>	None		

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**Marks:**

<b>MODEL NUMBER:</b>	<b>5KS449SAG122A</b>	<b>Estimated Weight:</b>	2610 Lbs
<b>Outline Drawing:</b>	225B6500KL	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG1	<b>Enclosure:</b>	TEFC
<b>Instruction Book:</b>	GEI-56128	<b>Encl Construction:</b>	X\$D
<b>Design Code:</b>	49ED0008E	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	XX
<b>Frame:</b>	449TS	<b>Insulation Class:</b>	F
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	2	<b>Nominal Efficiency:</b>	93.0 %
<b>Output Power:</b>	150HP 111KW	<b>Guaranteed Efficiency:</b>	92.4
<b>RPM:</b>	3565	<b>3/4 Load Efficiency:</b>	93.6
<b>Voltage:</b>	2300	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	16.5
<b>Amps - FL:</b>	32.3	<b>Power Factor:</b>	93.5
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6314ZC3
<b>Alt Service Factor:</b>	XX	<b>Bearing - ODE:</b>	6314ZC3

**Enclosure is Totally Enclosed Fan-Cooled**

**Stamped Nameplate Notes:**

MAX INT AND EXT SURFACE TEMP FOR NORM OPER  
 AT RATED COND 215 DEG C  
 VIBRATION LIMIT = 0.055 IPS  
 GREASE POLYREX EM  
 TEMP CONT HTR LDS H 115V 125W  
 OFFSET CORE - DO NOT ASSEMBLE F2  
 STAMP NP249A5564P009 AS FOLLOWS:  
 MAXIMUM SPACE HEATER SURFACE  
 TEMPERATURE FOR NORMAL OPERATION  
 AT RATED CONDITIONS 172 DEG C

**Additional Information:**

2 POLE, TS SHAFT EXTN  
 FORMED COIL  
 TEMP CONTRL 115V HEATER LEADS TO ACC BOX  
 100 OHM WINDING RTD LEADS TO ACC BOX  
 700 Cu. In. CBOX

**Performance Characteristics**

1st Winding 1st Connection

**Design: 49ED0008E**

**Marks:**

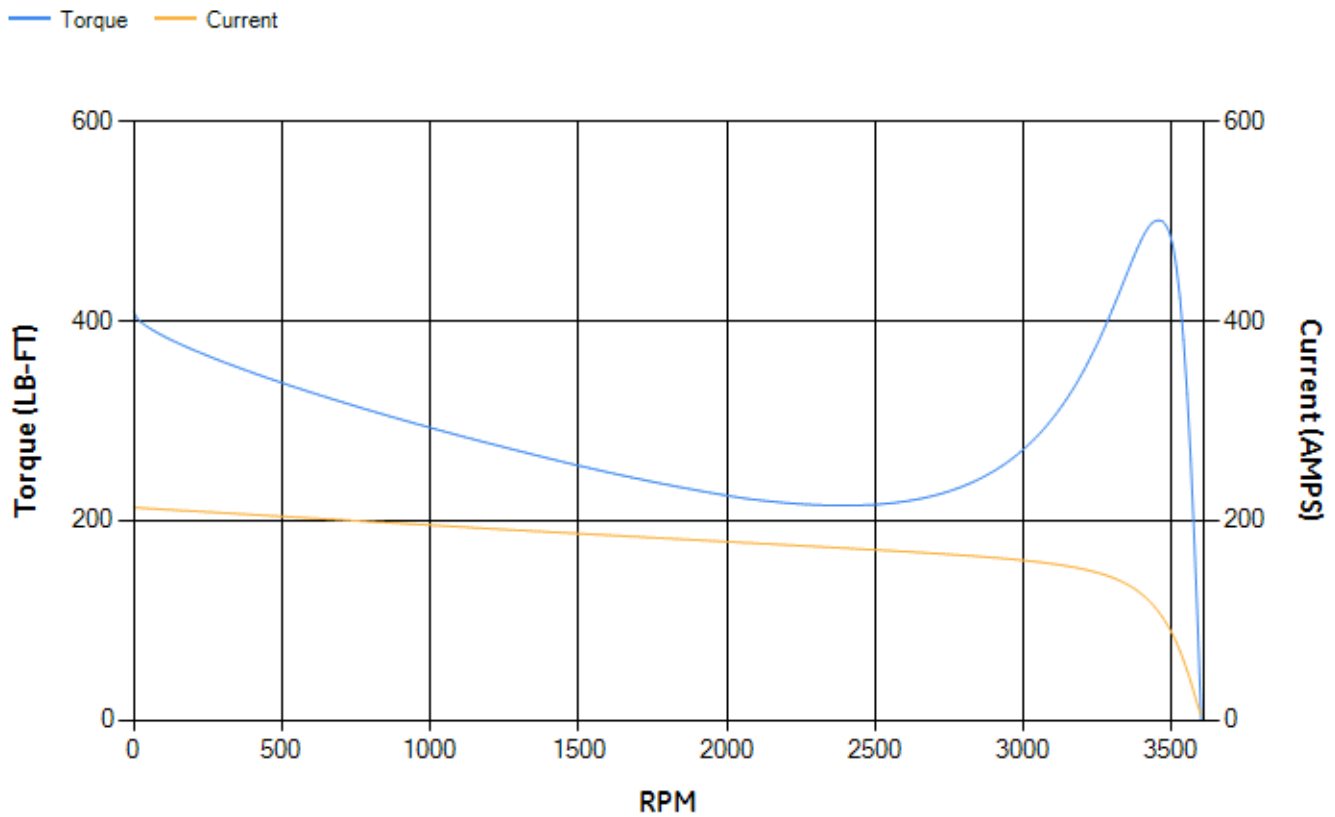
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	93.16	93.38	93.81	93.62	92.7	88.58	0.00
% PF	92.93	93.34	93.76	93.81	92.23	83.95	17.85
AMPS	40.54	37.04	31.92	23.98	16.42	9.44	4.58

<b>TORQ(FL)#FT</b>	220.79	<b>TORQ(LR)%FL</b>	185.37	<b>TORQ(BD)%FL</b>	226.24
<b>AMPS(LR)</b>	212.91	<b>PF AT START</b>	0.32		

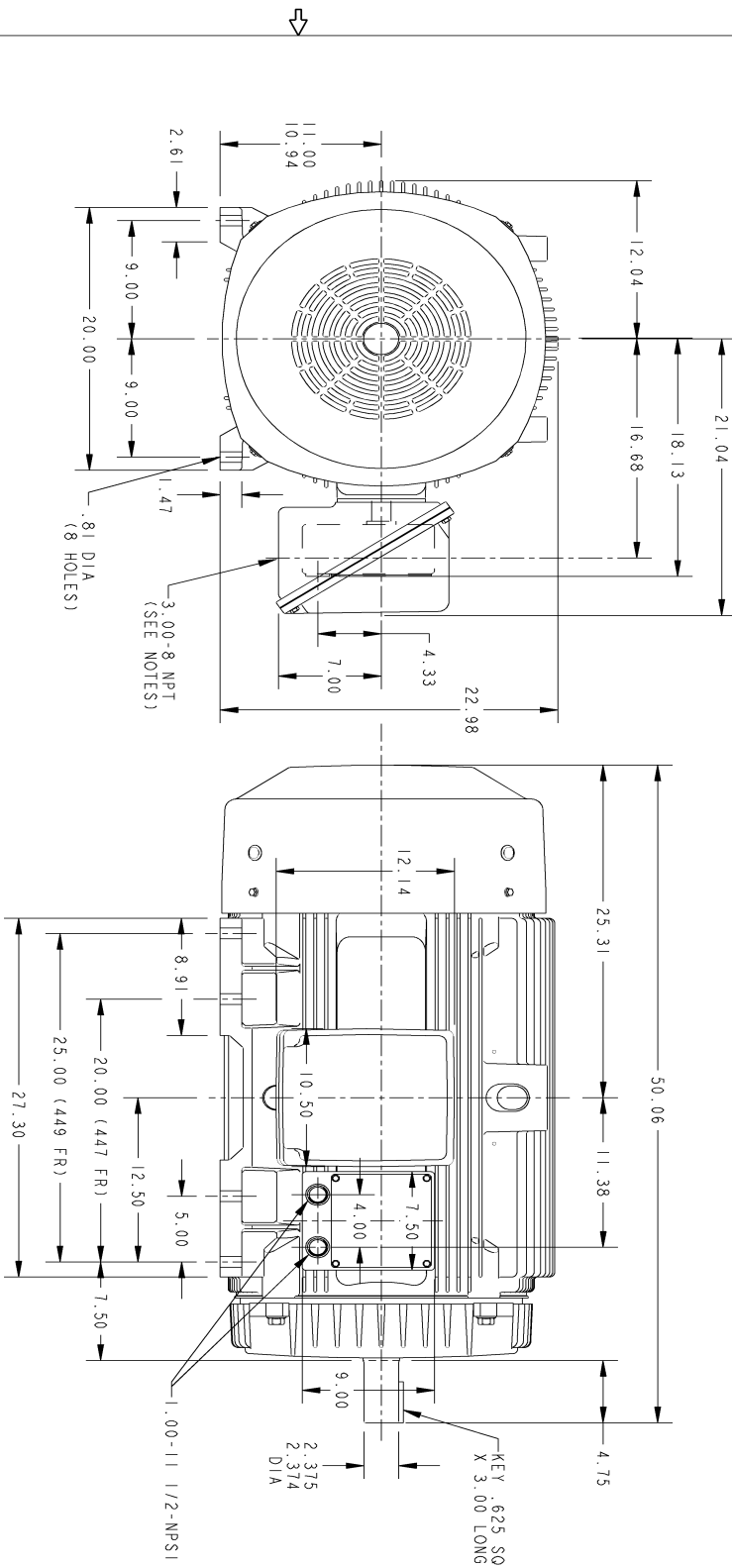
This motor is capable of two cold or one hot start with a maximum connected load inertia of 458 Lb-Ft Sq (19.28 Kg-meter Sq) at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 27 seconds. Safe stall time at 100% voltage is 68 seconds cold, 32 seconds hot. Rotor inertia is 46.83 Lb-Ft Sq (1.97 Kg-meter Sq).

<b>Open Circuit A-C:</b>	2.075	<b>Short Circuit D-C:</b>	0.025
<b>Short Circuit A-C:</b>	0.049	<b>X/R Ratio:</b>	9.35
<b>Stator Slots:</b>	48	<b>Rotor Slots:</b>	40

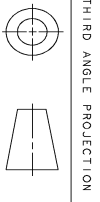
**Speed Torque Current Curve (First Connection, First Speed)**



Marks:



- NOTES:
1. CONDUIT BOX MAY BE PLACED WITH THE ENTRANCE DOWN, UP OR TOWARD OPPOSITE DRIVE END.
  2. F-1 ASSEMBLY AS SHOWN.
  3. F-2 ASSEMBLY HAS CONDUIT BOX ON OPPOSITE SIDE & ACC BOX DIAGONALLY OPPOSITE.



SIZE B DRAWING NO. 225B6500KL

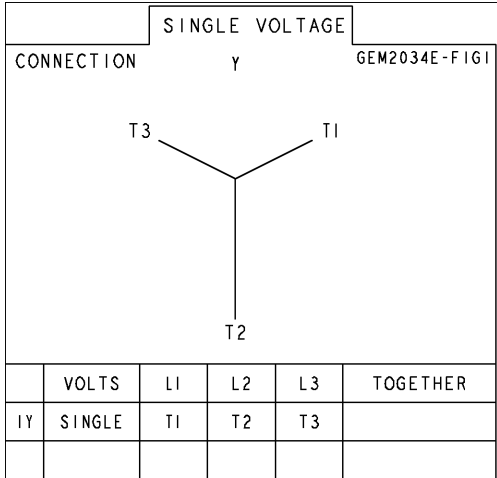
REV.	DESCRIPTION	DATE	APPROVED
1	ISAC #12-0301 SRANANTHI	03/22/2012	V JAY

SIGNATURES	DATE	GE Industrial Systems	GENERAL ELECTRIC COMPANY
DRWN M.R. BUIKIN	02/05/98		
CHKD M.R. B	02/05/98		
ENGR ENGR			
ISSD	02/05/98		
APPLIED PRACTICES			
SCALE: .125		700 CU. IN. BOX & ACC. BOX	
		447/449TS TERC	
		<b>225B6500KL</b>	
		Fort Wayne, Indiana	
		REV. 1	

DISTRIBUTION:

Marks:

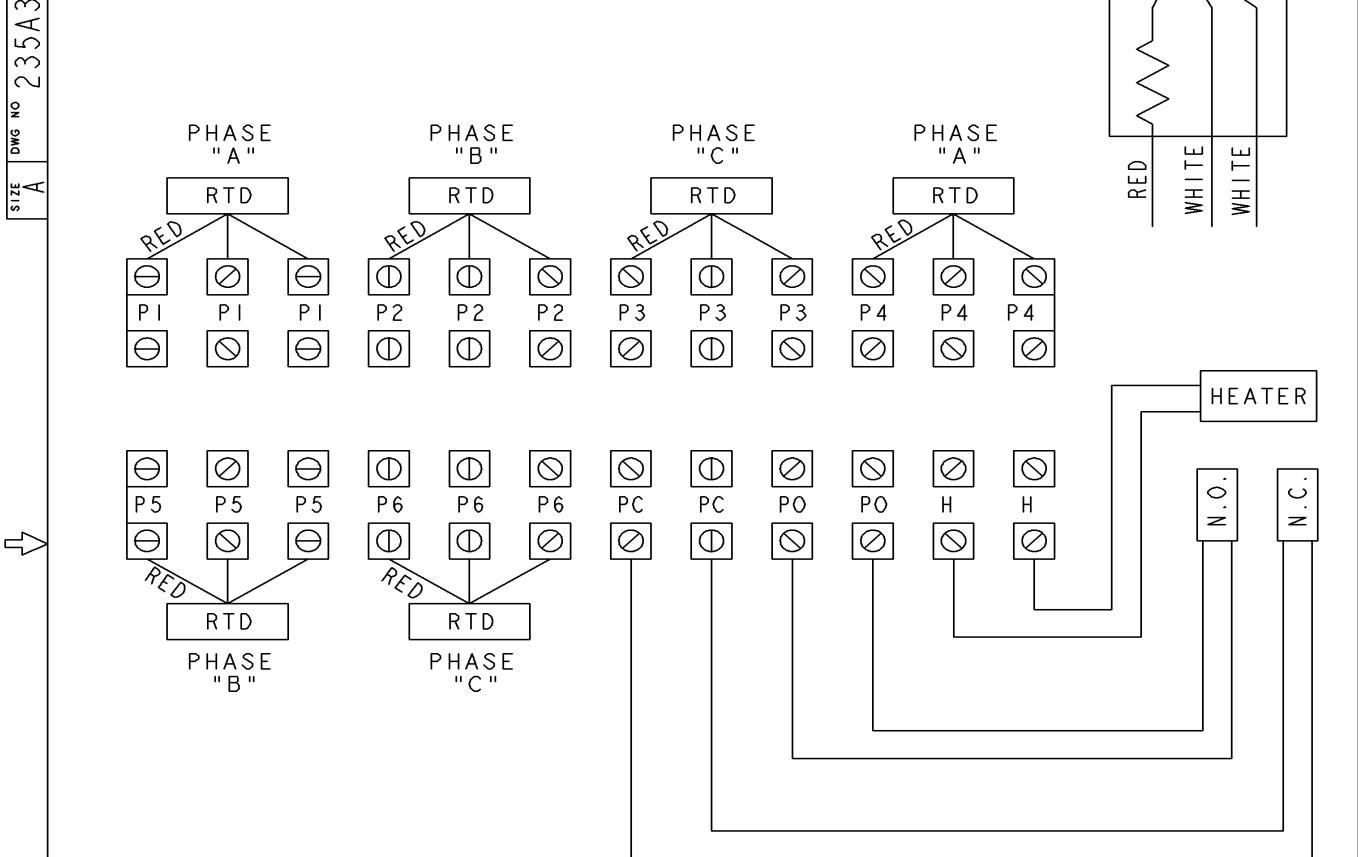
**Connection Diagram**  
**GEM2034E-FIG1**





SH 1 REV 3	THIRD ANGLE PROJECTION	REVISIONS			
		REV	DESCRIPTION	DATE	APPROVED
		2	ISAAC 02-3381 NRS	12/20/02	
		3	P6 CONNECTED NARAYANAN	05/30/06	BHASKAR

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- 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 GROUNDING AT EITHER THE MACHINE OR CONNECTED TO A GROUND CONTROL CIRCUIT. FOR PROPER OPERATION DO NOT GROUND AT THE MACHINE IF CONNECTED TO A GROUND CIRCUIT AT THE CONTROL.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: 2 PL DECIMALS ± 3 PL DECIMALS ± ANGLES ± FRACTIONS ± MATERIAL:  APPLIED PRACTICES:	SIGNATURES		DATE	GE Motors & Industrial Systems Fort Wayne, Indiana
	DRAWN R.D.COE		09/21/01	
	CHECKED R.D.C.		09/21/01	
	ENGRG			
		ISSUED	09/24/01	CONNECTION DIAGRAM WINDING RTD'S & T'STATS & HEATERS
CAD NO. 235A3027RY		SIZE A	FSCM NO	DWG NO 235A3027RY
		SCALE .95		SHEET 1 OF 1



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