

# Product Information Packet

January 12, 2017

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

<b>Model Number:</b>	<b>5KS449SAG222B</b>
<b>Catalog Number:</b>	<b>E9525</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG2
<b>Outline Drawing:</b>	225B6500FW

Accessory Connection Diagrams			
<b>Bearing Thermocouple:</b>	None	<b>Heater:</b>	3027JE-1
<b>RTD:</b>	235A3027WN	<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>5KS449SAG222B</b>	<b>Estimated Weight:</b>	2720 Lbs
<b>Outline Drawing:</b>	225B6500FW	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG2	<b>Enclosure:</b>	TEFC
<b>Instruction Book:</b>	GEI-56128	<b>Encl Construction:</b>	X\$D
<b>Design Code:</b>	49ED1022F	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	XX
<b>Frame:</b>	449T	<b>Insulation Class:</b>	F
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	4	<b>Nominal Efficiency:</b>	95.0 %
<b>Output Power:</b>	200HP 148KW	<b>Guaranteed Efficiency:</b>	94.5
<b>RPM:</b>	1785	<b>3/4 Load Efficiency:</b>	95.1
<b>Voltage:</b>	2300/4000	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	48.1
<b>Amps - FL:</b>	45.0/25.9	<b>Power Factor:</b>	87.5
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6318ZC3
<b>Alt Service Factor:</b>	XX	<b>Bearing - ODE:</b>	6318ZC3

**Enclosure is Totally Enclosed Fan-Cooled**

**Stamped Nameplate Notes:**

GE SELF DECLARED CLASS I DIV 2 MOTOR  
 MAX EXPOSED INTERNAL AND EXTERNAL SURFACE  
 TEMPERATURES UNDER USUAL SERVICE CONDITION  
 AT 1.00 S.F. DO NOT EXCEED 215 DEG C  
 VIBRATION LIMIT = 0.055 IN/SEC  
 GREASE POLYREX EM  
 TEMP CONT HTR LDS H 115V 125W  
 OFFSET CORE - DO NOT ASSEMBLE F2  
 MAXIMUM SPACE HEATER SURFACE  
 TEMPERATURE 172 DEG C

**Additional Information:**

SUGGESTED WINDING RTD SETTINGS  
 ALARM 165C TRIP 175C  
 SUGGESTED BEARING RTD SETTINGS  
 ALARM 115C TRIP 125C  
 4 POLE, T SHAFT EXTN  
 FORMED COIL  
 TEMP CONTRL 115V HEATER LEADS TO ACC BOX  
 100 OHM WINDING RTD LEADS TO ACC BOX  
 2500 Cu. In. CBOX

**Performance Characteristics**

1st Winding 1st Connection

**Design: 49ED1022F**

**Marks:**

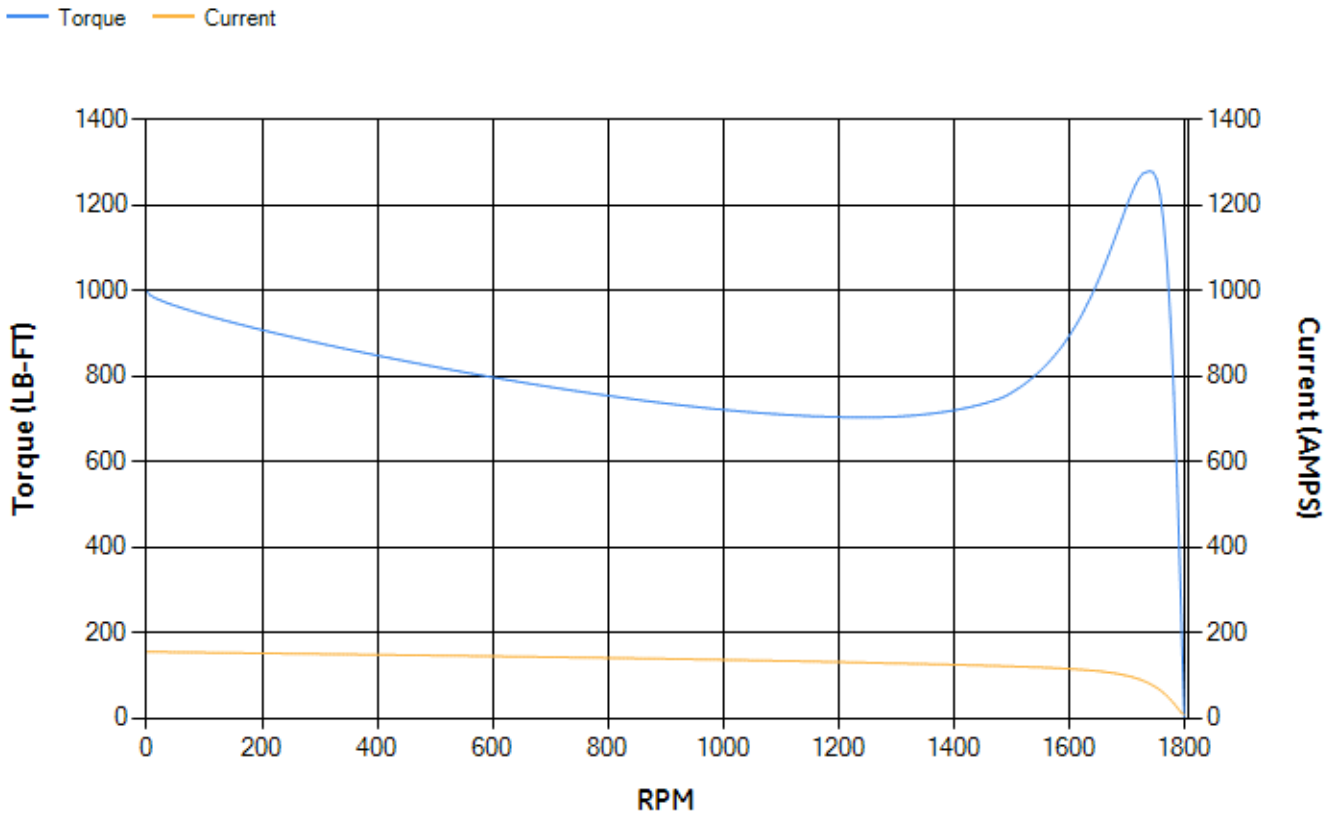
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	94.29	94.55	95.06	95.1	94.71	92.1	0.00
% PF	87.6	87.64	87.29	85.08	78.45	58.6	5.14
AMPS	32.58	29.88	25.94	19.95	14.49	9.97	7.71

<b>TORQ(FL)#FT</b>	588.4	<b>TORQ(LR)%FL</b>	169.7	<b>TORQ(BD)%FL</b>	216.72
<b>AMPS(LR)</b>	154.78	<b>PF AT START</b>	0.32		

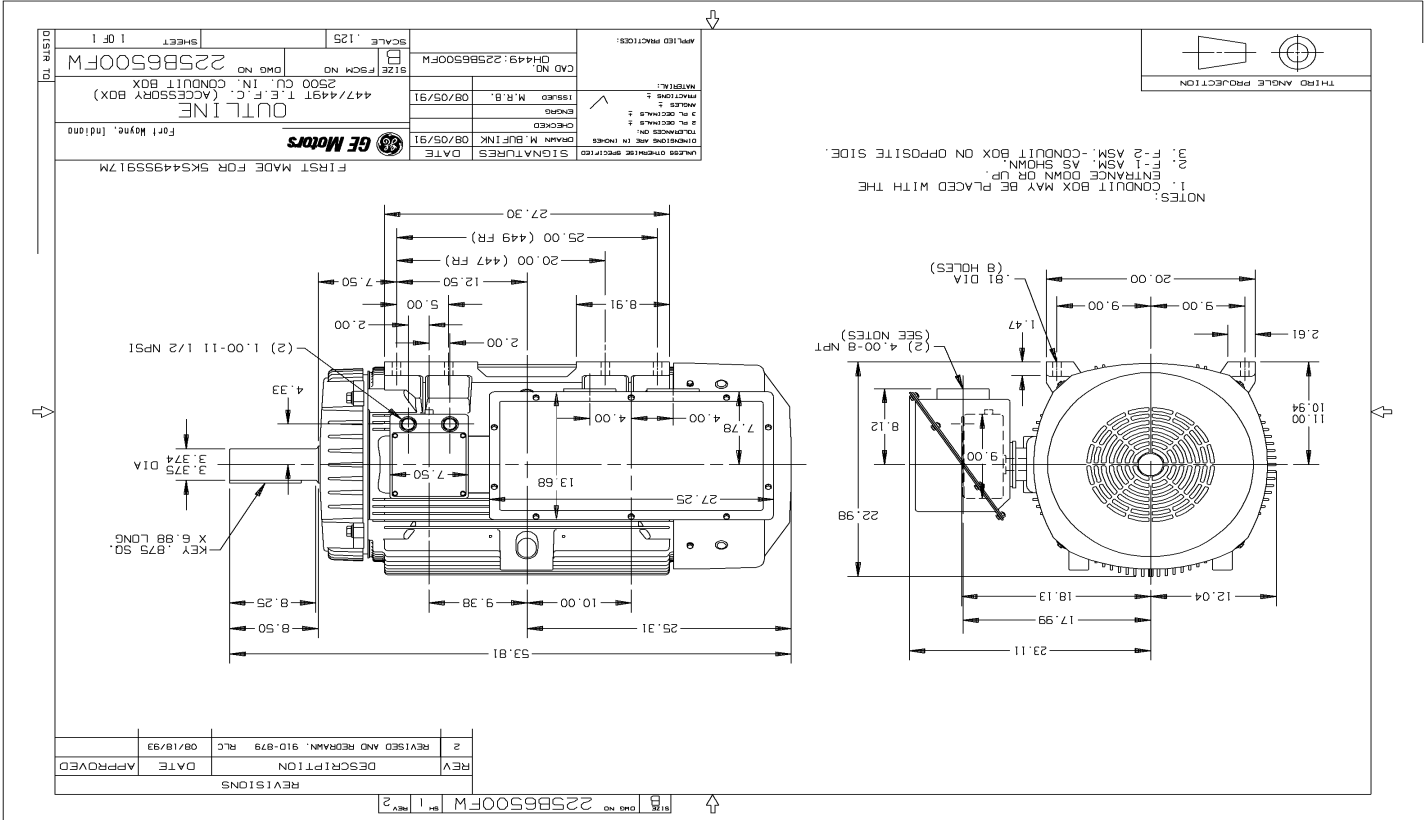
This motor is capable of two cold or one hot start with a maximum connected load inertia of 2198 Lb-Ft Sq (92.54 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 21 seconds. Safe stall time at 100% voltage is 83 seconds cold, 40 seconds hot. Rotor inertia is 86.8 Lb-Ft Sq (3.65 Kg-meter Sq).

<b>Open Circuit A-C:</b>	1.036	<b>Short Circuit D-C:</b>	0.024
<b>Short Circuit A-C:</b>	0.052	<b>X/R Ratio:</b>	9.184
<b>Stator Slots:</b>	60	<b>Rotor Slots:</b>	50

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



Marks:



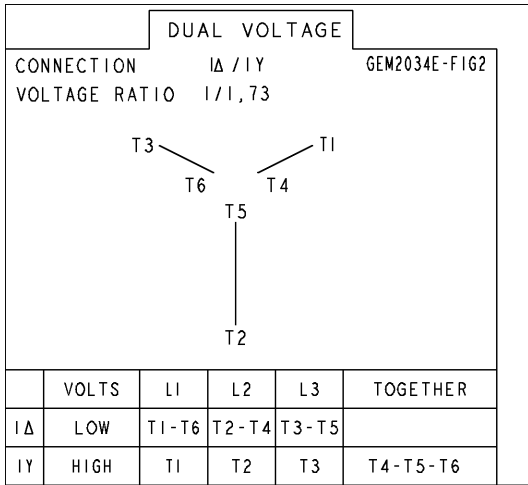
SHEET 1 OF 1		SCALE .125	DATE 08/05/91
225B6500FM		SIZE F3CM NO	CD NO DH449:225B6500FM
2500 CU. IN. CONDUIT BOX		ISSUED M.R.B.	REVISIONS
447/449T I.E.F.C. (ACCESSORY BOX)		08/05/91	
OUTLINE		ENGINEER	
Fort Wayne, Indiana		CHECKED	
GE Motors		DRAWN M. BAFINK	
FIRST MADE FOR SKS449S917M		SIGNATURES	

REV	DESCRIPTION	DATE	APPROVED
2	REVISED AND REORAMN. 910-879	08/18/93	

NOTES:  
 1. CONDUIT BOX MAY BE PLACED WITH THE ENTRANCE DOWN OR UP.  
 2. F-1 ASM AS SHOWN.  
 3. F-2 ASM--CONDUIT BOX ON OPPOSITE SIDE.

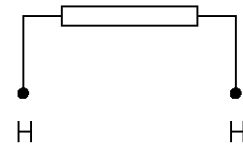
Marks:

**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

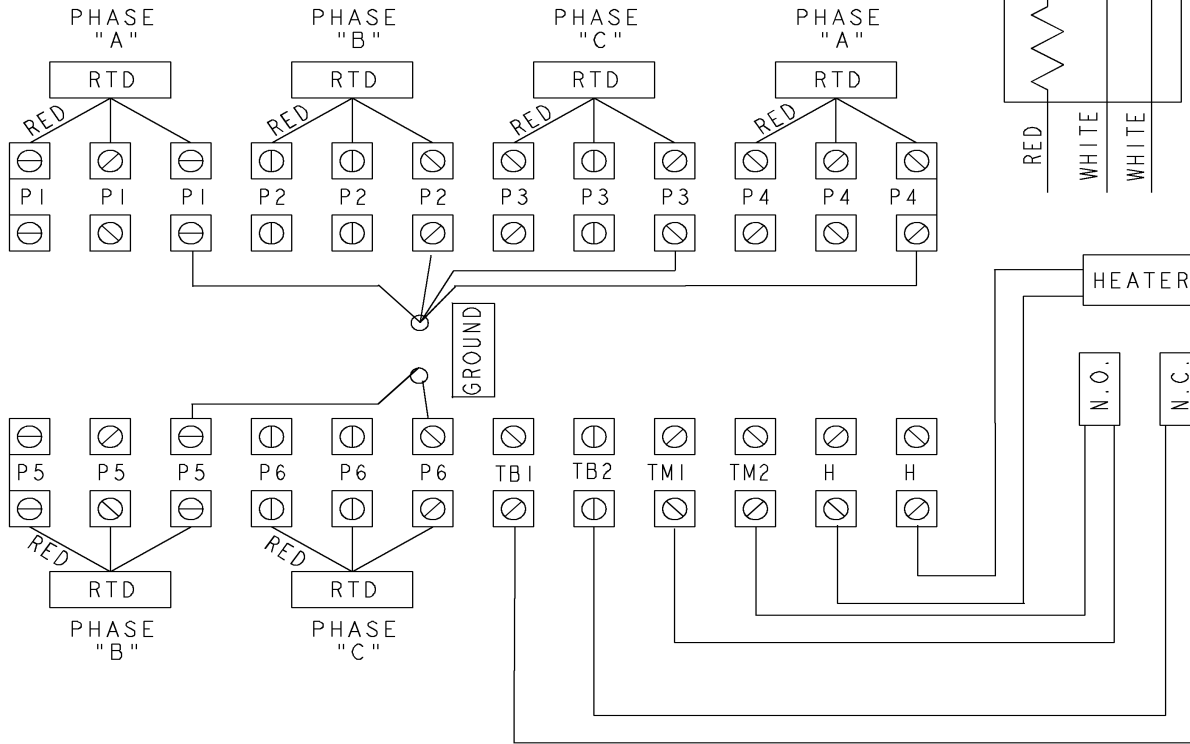
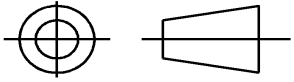
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REVISIONS

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	MODEL	
DIMENSIONS ARE IN INCHES	DETAIL VIVEK	07/19/13
TOLERANCE ON:	CHECKED VIJAY	07/19/13
1 PL DECIMALS ± 0.1	ENGRG	
2 PL DECIMALS ± 0.02	MFG	
3 PL DECIMALS ± 0.005	QUALITY	
ANGLES ± 0.5	ISSUED VIVEK	07/19/13
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