GE
Power Conversion

Product Information Packet

January 12, 2017

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

Model Number:	**5KS449SAG320A**
Catalog Number:	**E9527**
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG1
Outline Drawing:	225B6500HW

Accessory Connection Diagrams

Bearing Thermocouple:	None	**Heater:**	None
RTD:	235A3027RY	**Thermistor:**	None
Thermostat:	None	**Winding Thermocouple:**	None
Bearing RTD:	None		

Table of Contents

Specification	01
Performance Characteristics	02
Outline Drawing	03
Connection Drawing(s)	04

imagination at work

Marks:

MODEL NUMBER:	**5KS449SAG320A**	**Estimated Weight:**	2750 Lbs
Outline Drawing:	225B6500HW	**Time Rating:**	CONT
Connection Diagram:	GEM2034E-FIG1	**Enclosure:**	TEFC
Instruction Book:	GEI-56128	**Encl Construction:**	X$D
Design Code:	49ED3007E	**Ambient Max(°C):**	40
Type:	KS	**Alt Ambient Max(°C):**	XX
Frame:	449T	**Insulation Class:**	F
Phases:	3	**NEMA Design:**	B
Poles:	6	**Nominal Efficiency:**	94.1 %
Output Power:	150HP 111KW	**Guaranteed Efficiency:**	93.6
RPM:	1185	**3/4 Load Efficiency:**	94.5
Voltage:	2300	**KVA Code:**	G
Hertz:	60	**Max KVAR:**	58.0
Amps - FL:	38.3	**Power Factor:**	78.0
Service Factor:	1.15	**Bearing - DE:**	NU 318
Alt Service Factor:	XX	**Bearing - ODE:**	6318ZC3

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 = 0.0005 INCHES
GREASE POLYREX EM
TEMP CONT HTR LDS H 115V 125W
ROLLER BRG - FOR BELTED LOAD ONLY
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:

6 POLE, T SHAFT EXTN
AISI 4140 SHAFT MATERIAL
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: 49ED3007E**

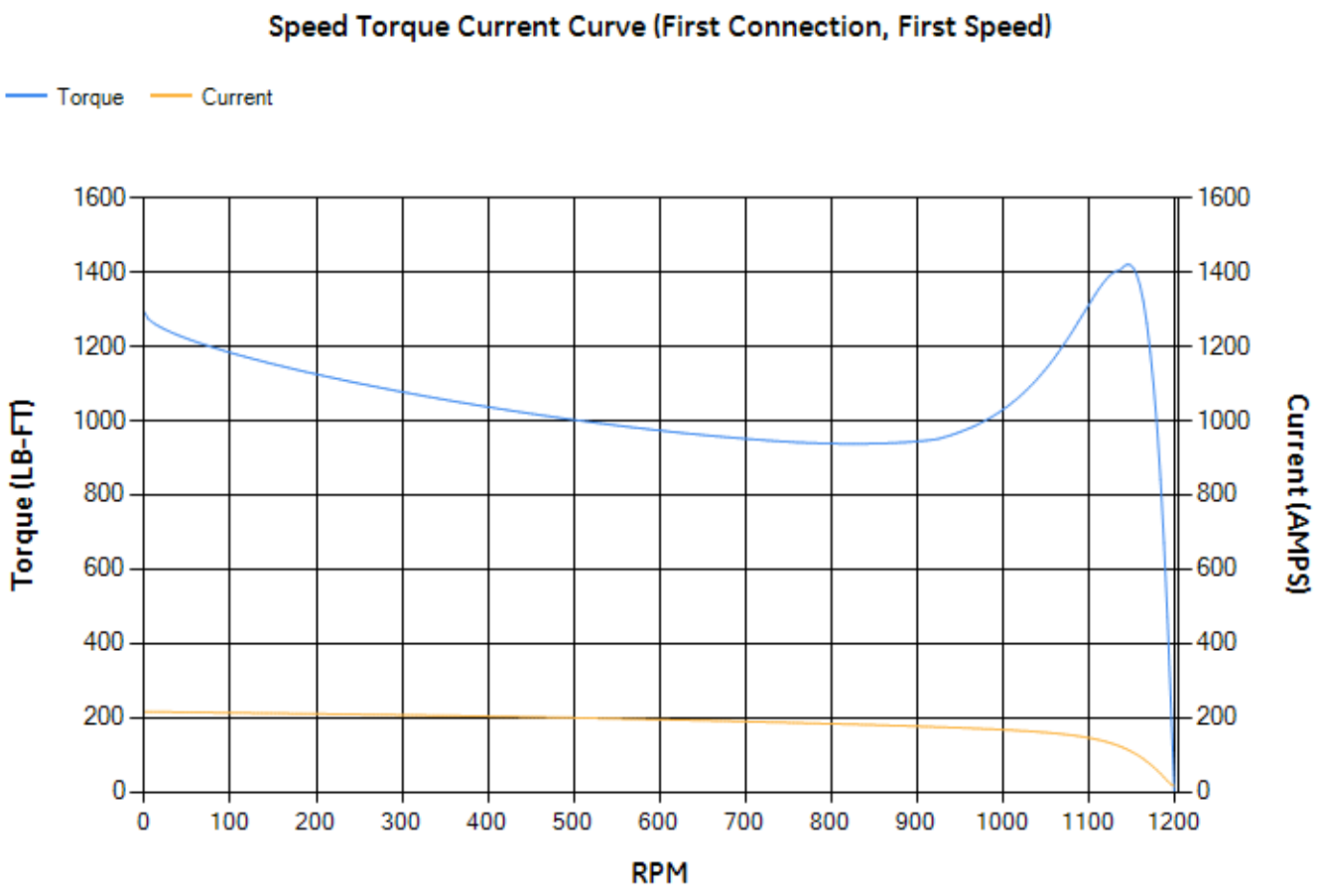
Marks:

LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	93.77	94.03	94.53	94.5	93.92	90.7	0.00
% PF	80.01	79.57	78.28	73.65	63.39	41.76	3.84
AMPS	46.78	43.15	37.94	30.26	23.58	18.53	16.14

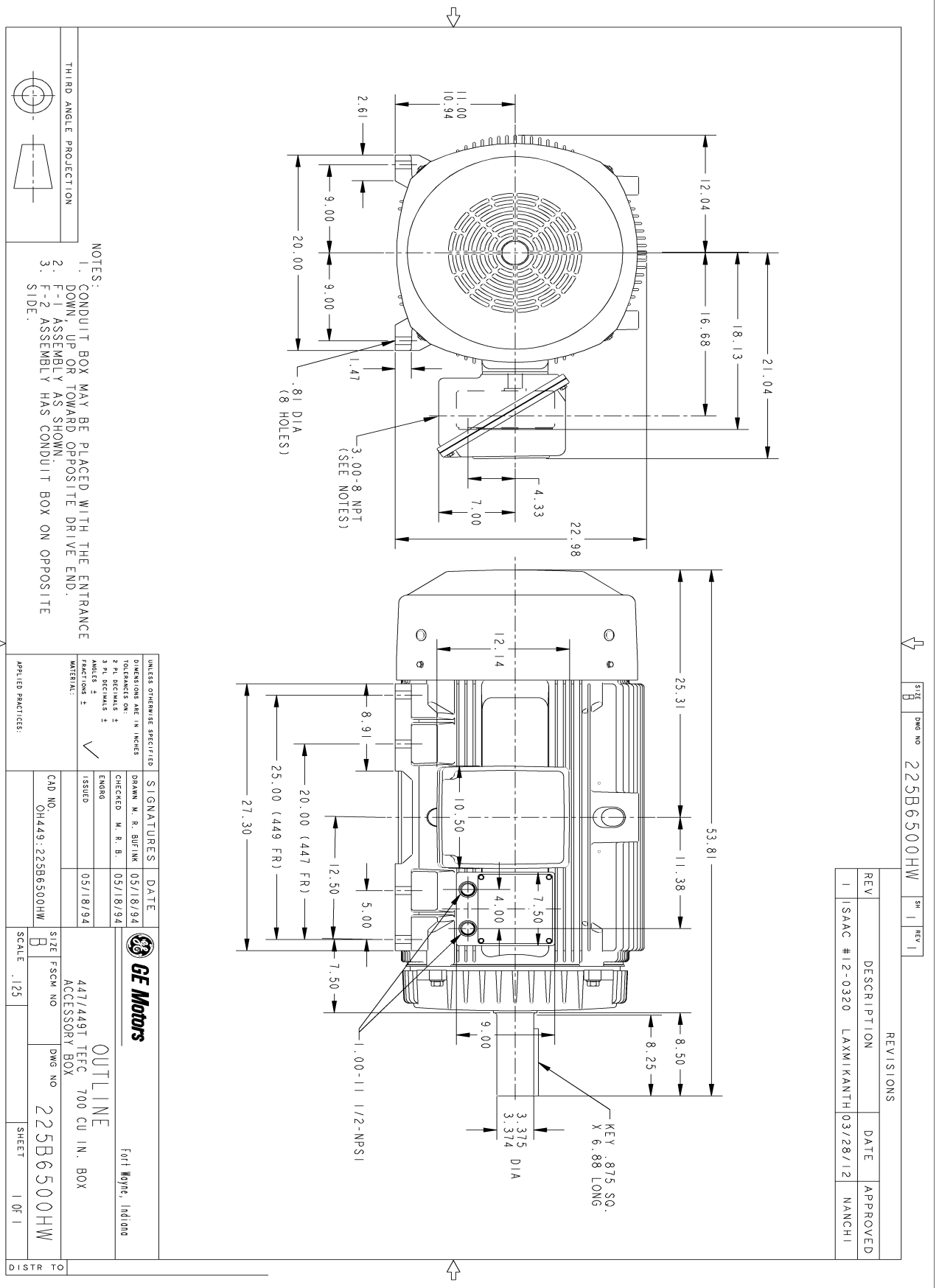
TORQ(FL)#FT	663.82	**TORQ(LR)%FL**	194.57	**TORQ(BD)%FL**	211.14
AMPS(LR)	215.49	**PF AT START**	0.31		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 7883 Lb-Ft Sq (331.87 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 37 seconds. Safe stall time at 100% voltage is 139 seconds cold, 68 seconds hot. Rotor inertia is 90.18 Lb-Ft Sq (3.8 Kg-meter Sq).

Open Circuit A-C:	0.523	**Short Circuit D-C:**	0.029
Short Circuit A-C:	0.037	**X/R Ratio:**	10.777
Stator Slots:	54	**Rotor Slots:**	42



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.

THIRD ANGLE PROJECTION

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
1	ISAAC #12-0320 LAXMIKANTH	03/28/12	NANCHI

SIZE B | DWG NO 225B6500HW | SH 1 | REV 1

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON:
2 PL. DECIMALS ±
3 PL. DECIMALS ±
ANGLES ±
FRACTIONS ±
MATERIAL:
APPLIED PRACTICES:

SIGNATURES		DATE
DRAWN M. R. BUFINK		05/18/94
CHECKED M. R. B.		05/18/94
ENGRG		
ISSUED		05/18/94

CAD NO. OH449:225B6500HW

GE Motors
Fort Wayne, Indiana

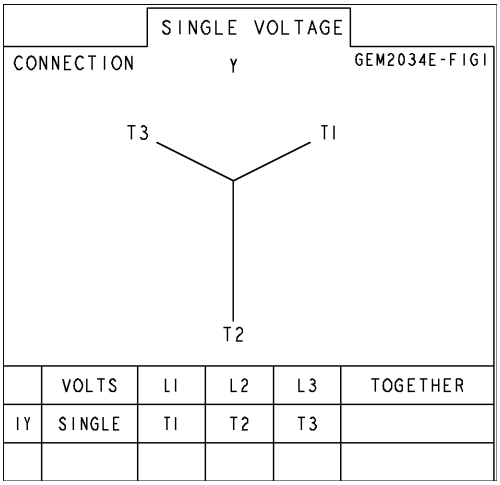
OUTLINE
447/449T TEFC 700 CU IN. BOX
ACCESSORY BOX

SIZE B | FSCM NO | DWG NO 225B6500HW
SCALE .125 | SHEET 1 OF 1

DISTR TO

Connection Diagram

GEM2034E-FIG1

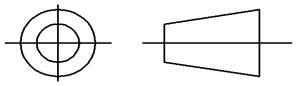


	VOLTS	LI	L2	L3	TOGETHER
IY	SINGLE	TI	T2	T3	

NAME:500903578 OBJECT:235A3027RY DATE:30-May-06 19:09:39

SIZE A | DWG NO 235A3027RY | SH 1 | REV 3

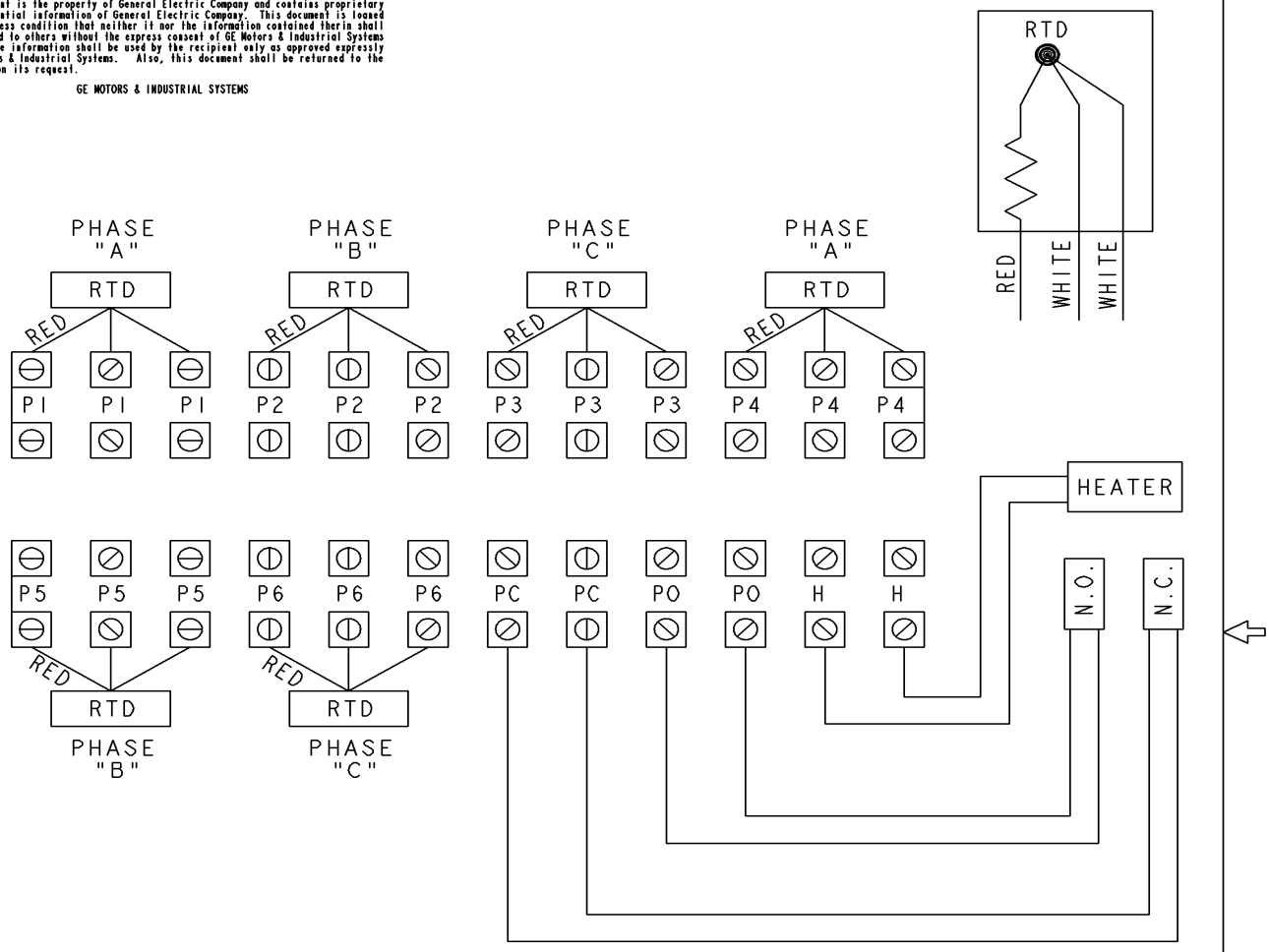
THIRD ANGLE PROJECTION



PROPRIETARY AND CONFIDENTIAL

GE MOTORS & INDUSTRIAL SYSTEMS

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



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.

UNLESS OTHERWISE SPECIFIED	SIGNATURES	DATE
DIMENSIONS ARE IN INCHES	DRAWN R.D.COE	09/21/01
TOLERANCES ON:		
2 PL DECIMALS ±	CHECKED R.D.C.	09/21/01
3 PL DECIMALS ±	ENGRG	
ANGLES ±		
FRACTIONS ± ✓	ISSUED	09/24/01
MATERIAL:		
	CAD NO. 235A3027RY	
APPLIED PRACTICES:		

GE Motors & Industrial Systems — Fort Wayne, Indiana

CONNECTION DIAGRAM

WINDING RTD'S & T'STATS & HEATERS

SIZE	FSCM NO	DWG NO	DISTR TO
A		235A3027RY	

SCALE .95 | SHEET 1 OF 1