GE
Power Conversion

Product Information Packet

January 12, 2017

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

Model Number:	**5KS513AAG202A**
Catalog Number:	**P181**
Instruction Manual:	GEI-100351
Connection Diagram:	GEM2034E-FIG2
Outline Drawing:	50DP4181G104DBT

Accessory Connection Diagrams

Bearing Thermocouple:	None	**Heater:**	3027JE-1C
RTD:	235A3027XC	**Thermistor:**	None
Thermostat:	None	**Winding Thermocouple:**	None
Bearing RTD:	None		

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imagination at work

Marks:

MODEL NUMBER:	**5KS513AAG202A**	**Estimated Weight:**	5290 Lbs
Outline Drawing:	50DP4181G104DBT	**Time Rating:**	CONT
Connection Diagram:	GEM2034E-FIG2	**Enclosure:**	WPI
Instruction Book:	GEI-100351	**Encl Construction:**	OPEN
Design Code:	50ED1319E	**Ambient Max(°C):**	40
Type:	KS	**Alt Ambient Max(°C):**	XX
Frame:	5013S	**Insulation Class:**	F
Phases:	3	**NEMA Design:**	-
Poles:	4	**Nominal Efficiency:**	96.2 %
Output Power:	900HP 666KW	**Guaranteed Efficiency:**	95.4
RPM:	1785	**3/4 Load Efficiency:**	96.7
Voltage:	2300/4000	**KVA Code:**	F
Hertz:	60	**Max KVAR:**	170.9
Amps - FL:	196.5/113.0	**Power Factor:**	89.0
Service Factor:	1.15	**Bearing - DE:**	6320ZC3
Alt Service Factor:	XX	**Bearing - ODE:**	6320ZC3

Enclosure is Weather Protected One

Stamped Nameplate Notes:

NEMA ENCLOSURE WP-I, CSA ENCL DP
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 200 DEG C
VIBRATION LIMIT = 0.150 IN/SEC
TEMP CONT HTR LDS HE1-HE2 115V 200W
MAXIMUM SPACE HEATER SURFACE
TEMPERATURE 160 DEG C

Additional Information:

4 POLE, S SHAFT EXTN
FORMED COIL
(2)GROUND BOLTS ON FRAME
TEMP CONTRL 115V HEATER LEADS TO ACC BOX
100 OHM WINDING RTD LEADS TO ACC BOX
SUGGESTED WINDING RTD SETTINGS
ALARM 165C TRIP 175C
PROVISION FOR BEARING RTD BOTH ENDS
SUGGESTED BEARING RTD SETTINGS,IF PROVIDED
ALARM 115C TRIP 125C
PROVISION FOR JACK SCREWS
2500 Cu. In. CBOX

Performance Characteristics 1st Winding 1st Connection **Design: 50ED1319E**

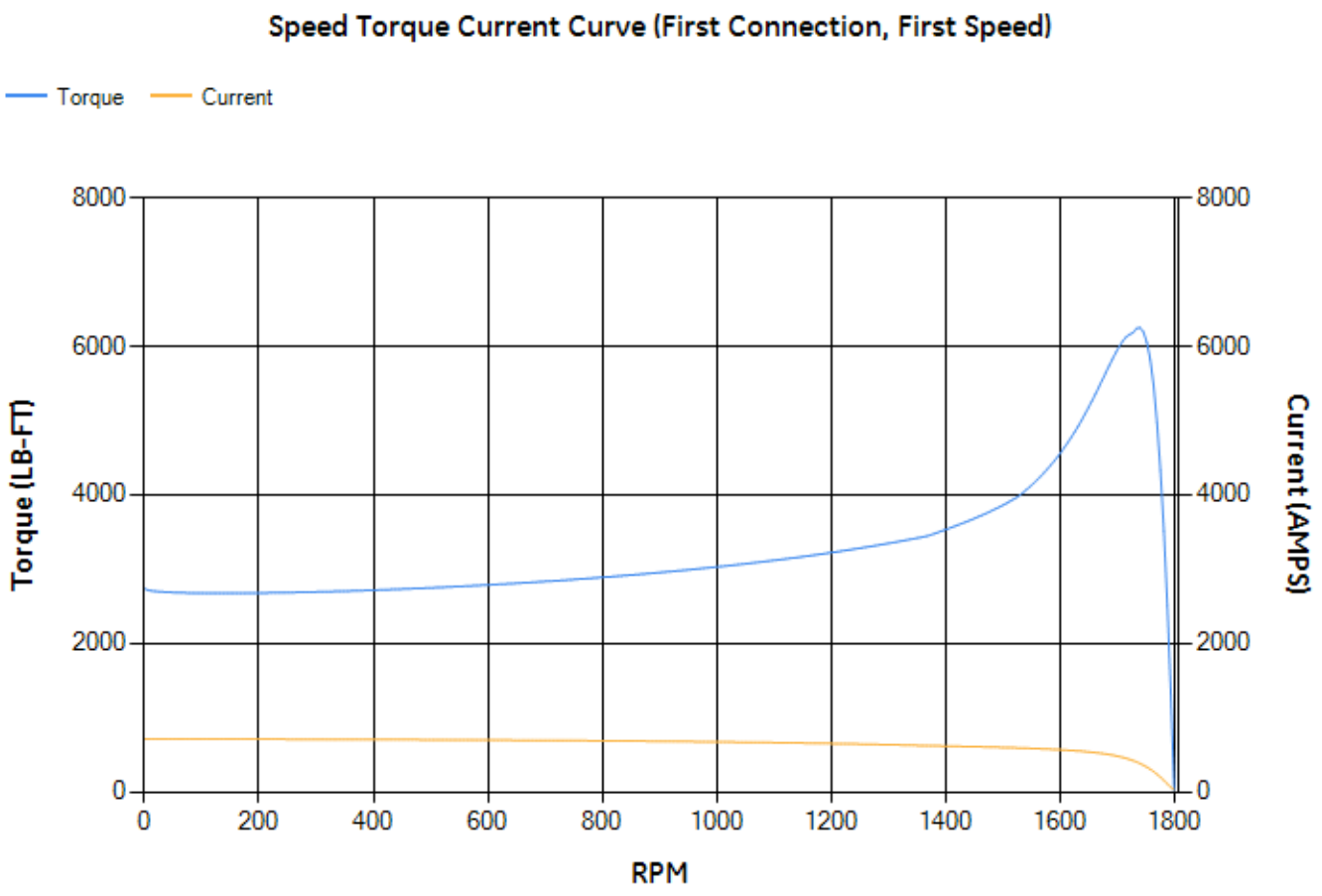
Marks:

LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.71	95.97	96.5	96.72	96.8	95.76	0.00
% PF	89.16	89.31	90.06	87.66	82.31	63.86	3
AMPS	141.88	129.97	111.35	85.69	60.79	39.61	27.41

TORQ(FL)#FT	2649.88	**TORQ(LR)%FL**	103.29	**TORQ(BD)%FL**	232.69
AMPS(LR)	711.41	**PF AT START**	0.21		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 5490 Lb-Ft Sq (231.13 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 14 seconds. Safe stall time at 100% voltage is 47 seconds cold, 25 seconds hot. Rotor inertia is 232.59 Lb-Ft Sq (9.79 Kg-meter Sq).

Open Circuit A-C:	1.154	**Short Circuit D-C:**	0.028
Short Circuit A-C:	0.042	**X/R Ratio:**	10.671
Stator Slots:	72	**Rotor Slots:**	58



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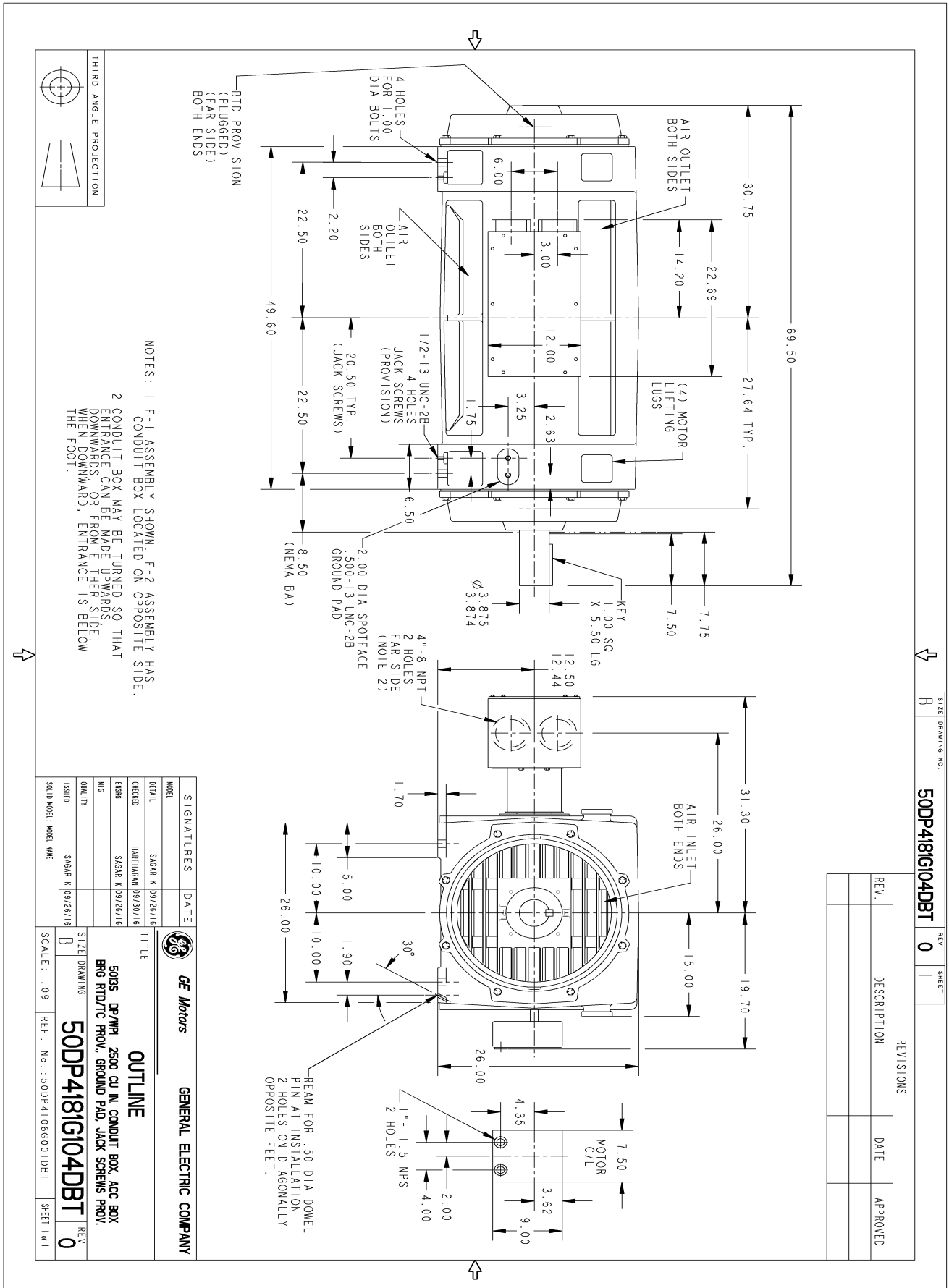

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

50DP418IG104DBT | REV 0 | SHEET 1

SIZE B | DRAWING NO.

SIGNATURES		DATE
MODEL		
DETAIL	SAGAR K	09/26/16
CHECKED	HARIHARAN	09/30/16
ENGRG	SAGAR K	09/26/16
MFG		
QUALITY		
ISSUED	SAGAR K	09/26/16
SOLID MODEL: MODEL NAME		

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TITLE

OUTLINE

5035 DP/WPI, 2500 CU IN. CONDUIT BOX, ACC BOX BRG RTD/TC PROV, GROUND PAD, JACK SCREWS PROV.

SIZE	DRAWING	REV
B	50DP418IG104DBT	0

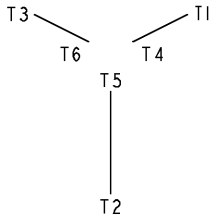
SCALE: .09 | REF. No.: 50DP410GG01DBT | SHEET 1 of 1

Connection Diagram
GEM2034E-FIG2

DUAL VOLTAGE

CONNECTION IΔ / IY GEM2034E-FIG2

VOLTAGE RATIO 1/1,73



	VOLTS	L1	L2	L3	TOGETHER
IΔ	LOW	T1-T6	T2-T4	T3-T5	
IY	HIGH	T1	T2	T3	T4-T5-T6

Heater Connection
3027JE-1C

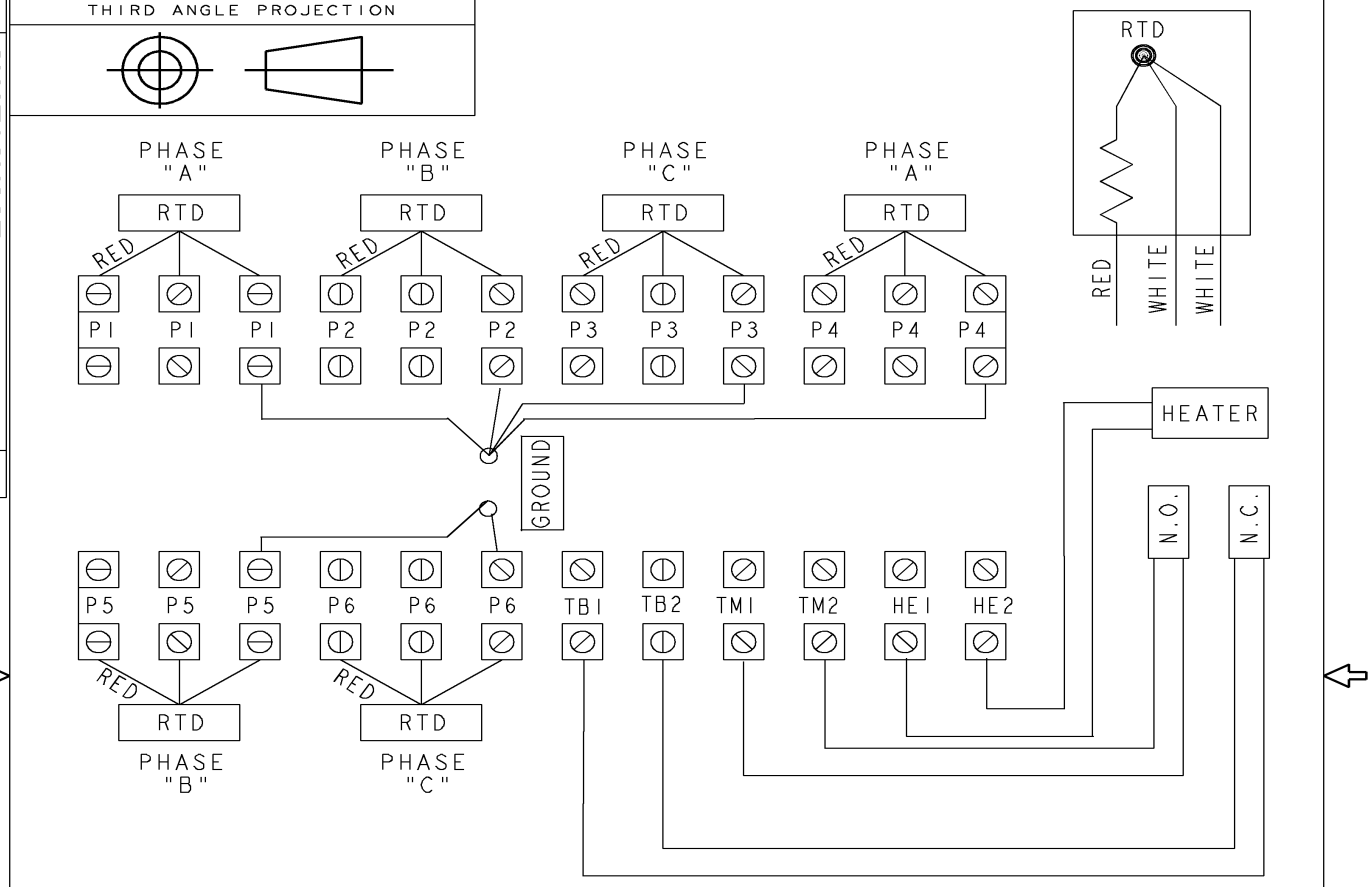
HEATER CONNECTION

SUPPLY VOLTAGE LEADS	L1	L2
HEATER LEADS	HE1	HE2

SHEET —
REV 0
235A3027XC
DRAWING NO.
SIZE A

THIRD ANGLE PROJECTION

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



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	01/08/15
TOLERANCE ON:	CHECKED	KARTHIK	01/08/15
1 PL DECIMALS ± 0.1	ENGRG		
2 PL DECIMALS ± 0.02	MFG		
3 PL DECIMALS ± 0.005	QUALITY		
ANGLES ± 0.5	ISSUED	VIVEK	01/08/15
FRACTIONS ±			
FINISH ✓			
MATERIAL	SOLID MODEL: MODEL NAME		

GE Motors GENERAL ELECTRIC COMPANY

TITLE **CONNECTION DIAGRAM**
IEC
WINDING RTD'S & T'STATS & HEATERS

SIZE	DRAWING	REV
A	235A3027XC	0

SCALE: NA | SHEET 1 of 1

End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	119D1858AT1	119D1858AW1
Bearing	235A2523AF03	235A2523AF03
Slinger/Inproseal	235A2300HC1	

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	
Fan Cover	

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	179B9025G01

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	