GE
Power Conversion

Product Information Packet

January 12, 2017

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

Model Number:	**5KS513EAG202A**
Catalog Number:	**P281**
Instruction Manual:	GEI-100351
Connection Diagram:	GEM2034E-FIG2
Outline Drawing:	50DP4181G104DBV

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:	**5KS513EAG202A**	**Estimated Weight:**	5290 Lbs
Outline Drawing:	50DP4181G104DBV	**Time Rating:**	CONT
Connection Diagram:	GEM2034E-FIG2	**Enclosure:**	WPII
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 Two

Stamped Nameplate Notes:

NEMA ENCLOSURE WP-II, 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**

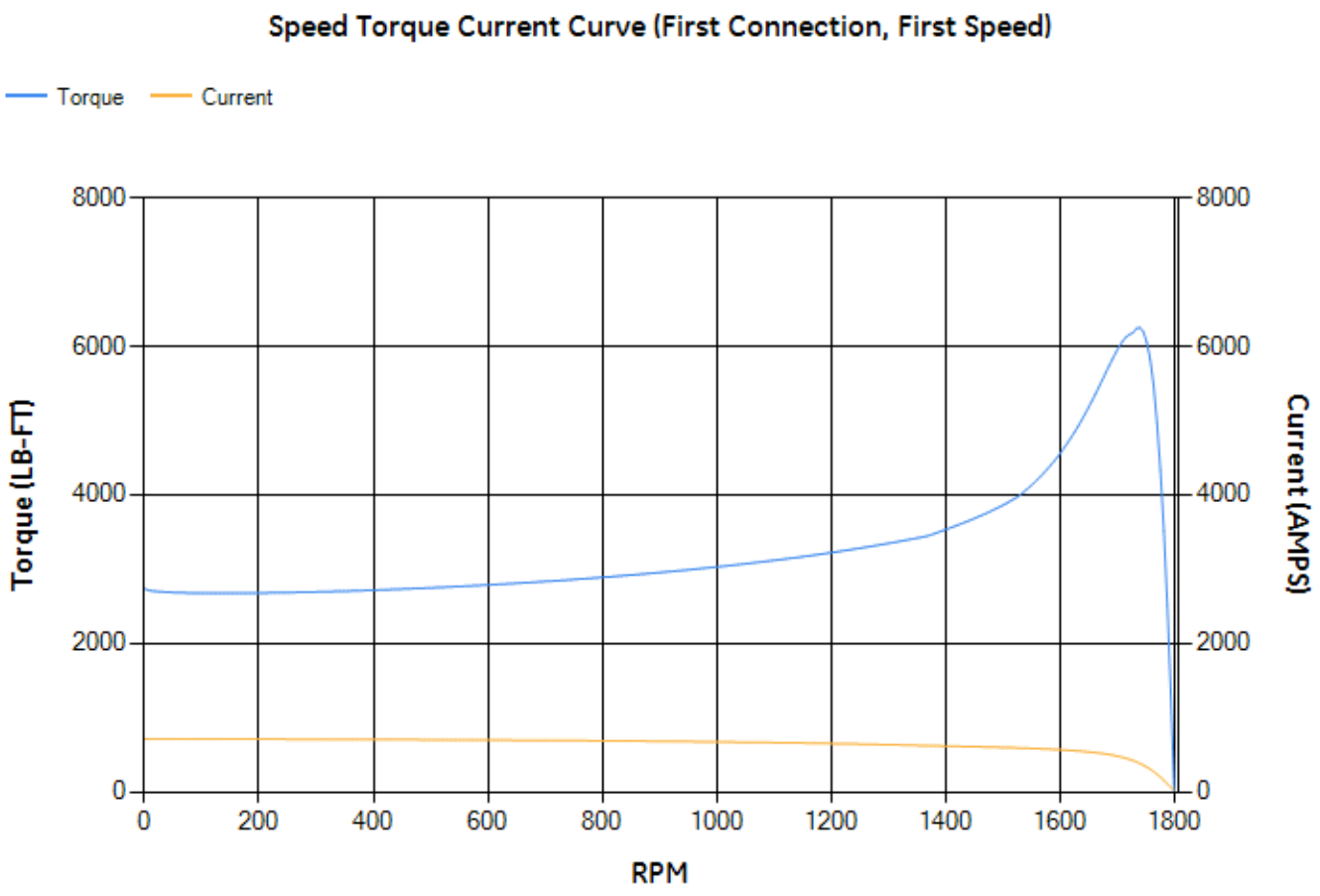
Marks:

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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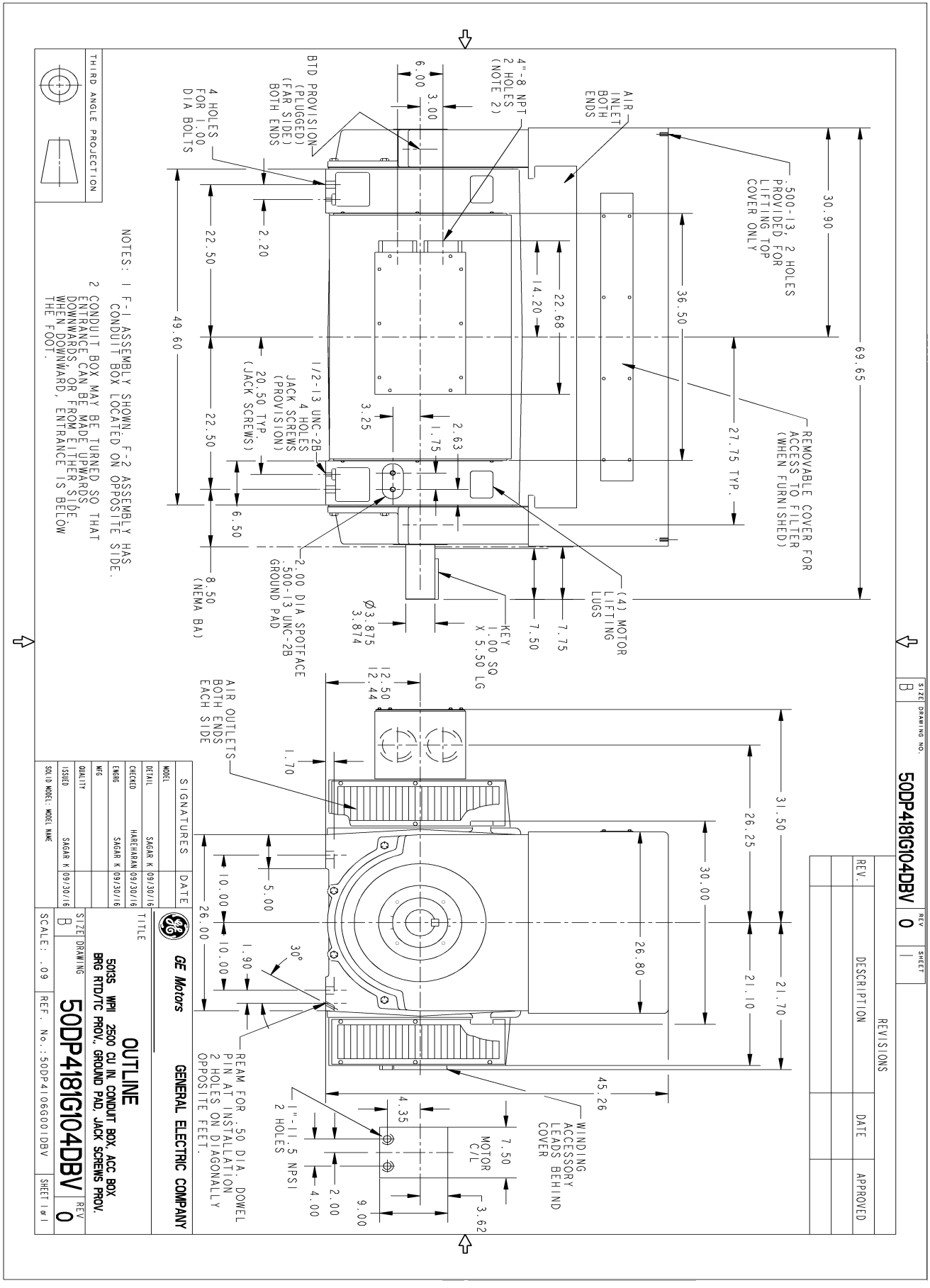
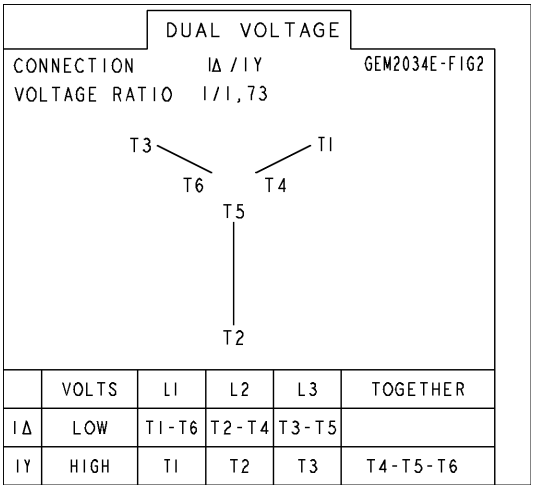

69.65
30.90
36.50
27.75 TYP.
.500-13, 2 HOLES PROVIDED FOR LIFTING TOP COVER ONLY
REMOVABLE COVER FOR ACCESS TO FILTER (WHEN FURNISHED)
AIR INLET BOTH ENDS
4"-8 NPT 2 HOLES (NOTE 2)
BTD PROVISION (PLUGGED) (FAR SIDE) BOTH ENDS
4 HOLES FOR 1.00 DIA BOLTS
6.00
3.00
2.20
22.50
49.60
14.20
22.68
3.25
2.63
1.75
1/2-13 UNC-2B 4 HOLES JACK SCREWS (PROVISION)
20.50 TYP. (JACK SCREWS)
6.50
8.50 (NEMA BA)
2.00 DIA SPOTFACE .500-13 UNC-2B GROUND PAD
Ø3.875 3.814
KEY 1.00 SQ X 5.50 LG
7.50
7.75
(4) MOTOR LIFTING LUGS
NOTES: 1 F-1 ASSEMBLY SHOWN. F-2 ASSEMBLY HAS CONDUIT BOX LOCATED ON OPPOSITE SIDE.
2 CONDUIT BOX MAY BE TURNED SO THAT ENTRANCE CAN BE MADE UPWARDS DOWNWARDS OR FROM EITHER SIDE WHEN DOWNWARD, ENTRANCE IS BELOW THE FOOT.
THIRD ANGLE PROJECTION
AIR OUTLETS BOTH ENDS EACH SIDE
12.50
12.44
1.70
31.50
26.25
30.00
26.80
21.10
21.70
10.00
5.00
26.00
1.90
30°
10.00
REAM FOR .50 DIA. DOWEL PIN AT INSTALLATION 2 HOLES ON DIAGONALLY OPPOSITE FEET.
45.26
4.35
1"-11.5 NPSI 2 HOLES
7.50 MOTOR C/L
3.62
2.00
4.00
9.00
WINDING ACCESSORY LEADS BEHIND COVER
SIZE B
DRAWING NO. 50DP418IG104DBV
REV 0
SHEET 1
REVISIONS
REV. | DESCRIPTION | DATE | APPROVED
SIGNATURES
MODEL
DETAIL SAGAR K 09/30/16
CHECKED HARIHARAN 09/30/16
ENGRG SAGAR K 09/30/16
MFG
QUALITY
ISSUED SAGAR K 09/30/16
SOLID MODEL- MODEL NAME
DATE
GE Motors
GENERAL ELECTRIC COMPANY
TITLE
OUTLINE
5033 WPII 2500 CU IN. CONDUIT BOX, ACC BOX
BRG RTD/TC PROV., GROUND PAD, JACK SCREWS PROV.
SIZE B
DRAWING 50DP418IG104DBV
REV 0
SCALE: .09
REF. No.: 50DP4106G001DBV
SHEET 1 of 1

Marks:

Connection Diagram
GEM2034E-FIG2



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

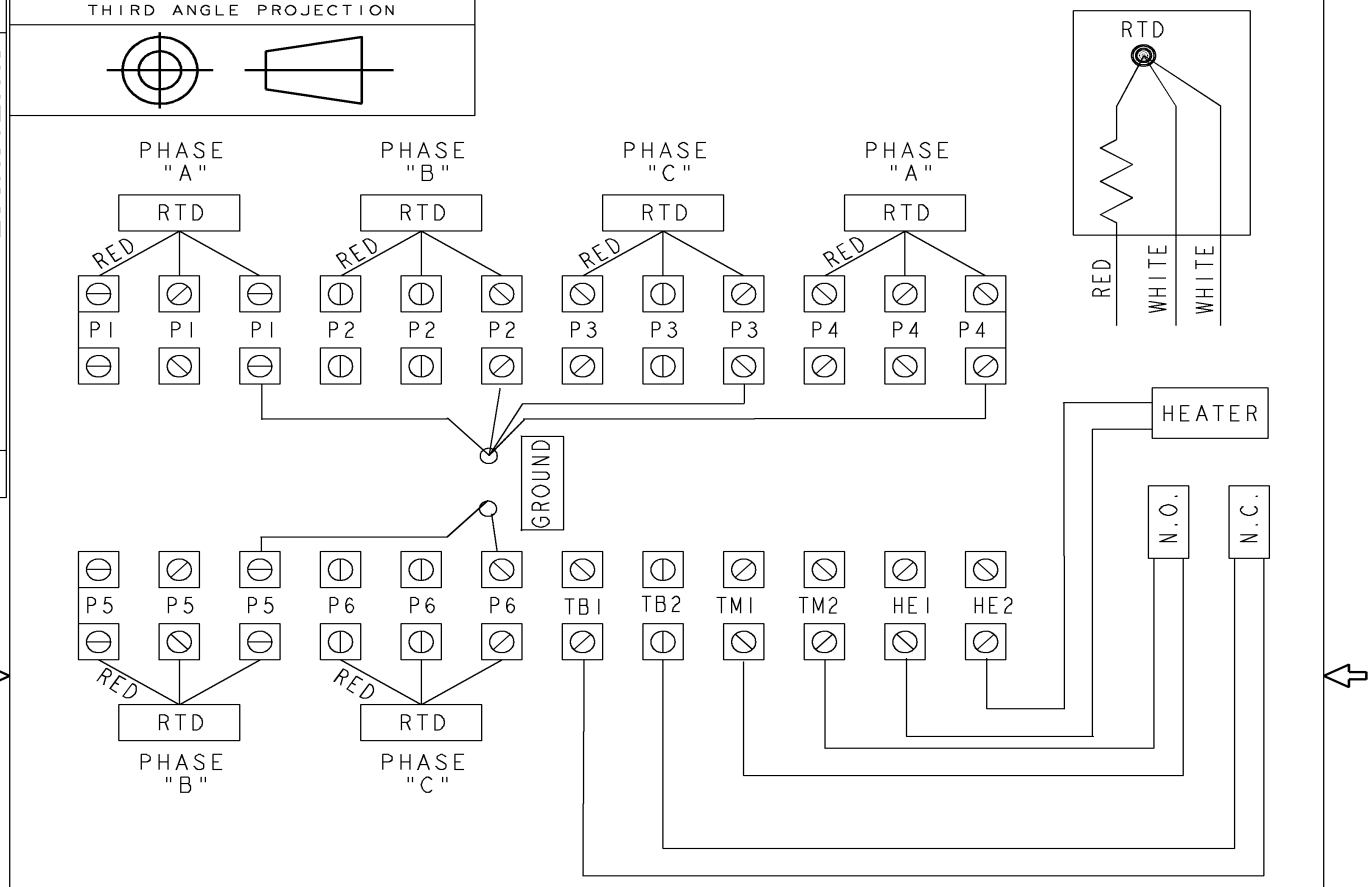
Heater Connection
3027JE-1C

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	119D1866AN1	119D1866AP1
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	