GE
Power Conversion

Product Information Packet

January 12, 2017

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

Model Number:	**5KS513SAA172A**
Catalog Number:	**Q562**
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG20
Outline Drawing:	239C6C00HJ

Accessory Connection Diagrams

Bearing Thermocouple:	None	**Heater:**	3027JE-1C
RTD:	None	**Thermistor:**	None
Thermostat:	None	**Winding Thermocouple:**	None
Bearing RTD:	235A3027NA		

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imagination at work

Marks:

MODEL NUMBER:	**5KS513SAA172A**	**Estimated Weight:**	6917 Lbs
Outline Drawing:	239C6C00HJ	**Time Rating:**	CONT
Connection Diagram:	GEM2034E-FIG20	**Enclosure:**	TEFC
Instruction Book:	GEI-56128	**Encl Construction:**	SD
Design Code:	50BD0087BA	**Ambient Max(°C):**	40
Type:	KS	**Alt Ambient Max(°C):**	--
Frame:	5013ST	**Insulation Class:**	F
Phases:	3	**NEMA Design:**	--
Poles:	2	**Nominal Efficiency:**	95.8 %
Output Power:	600HP 444KW	**Guaranteed Efficiency:**	95.0
RPM:	3565	**3/4 Load Efficiency:**	96.3
Voltage:	575	**KVA Code:**	E
Hertz:	60	**Max KVAR:**	51.0
Amps - FL:	496.0	**Power Factor:**	94.5
Service Factor:	1.00	**Bearing - DE:**	6315ZC3
Alt Service Factor:	--	**Bearing - ODE:**	6315ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:
HTR LDS HE1-HE2 115V 350W
ROT CCW FACING ODE LEAD/PH SEQUENCE 3-2-1/1-2-3
INVERTER DUTY PER NEMA MG1 PART 31
ALTERNATE RATING FOR PWM CONTROL:1.0SF 40C AMBIENT
VAR TORQUE RANGE 0-60 HZ
FOR DIRECT COUPLED LOAD ONLY

Additional Information:

2P - ST EXTN - SPLIT LEAD
2500 CU IN - 2(4.00" NPT)
C/B GRD PLATE
115V HTR LDS TO AUX BOX OPP MAIN CONDUIT BOX
SPACE HEATER CAUTION NAMEPLATE
BEARING RTD PROVISION ON BOTH ENDS PLUGGED
NEMA TYPE GRD PAD
F1 MOUNTING

Performance Characteristics 1st Winding 1st Connection **Design: 50BD0087BA**

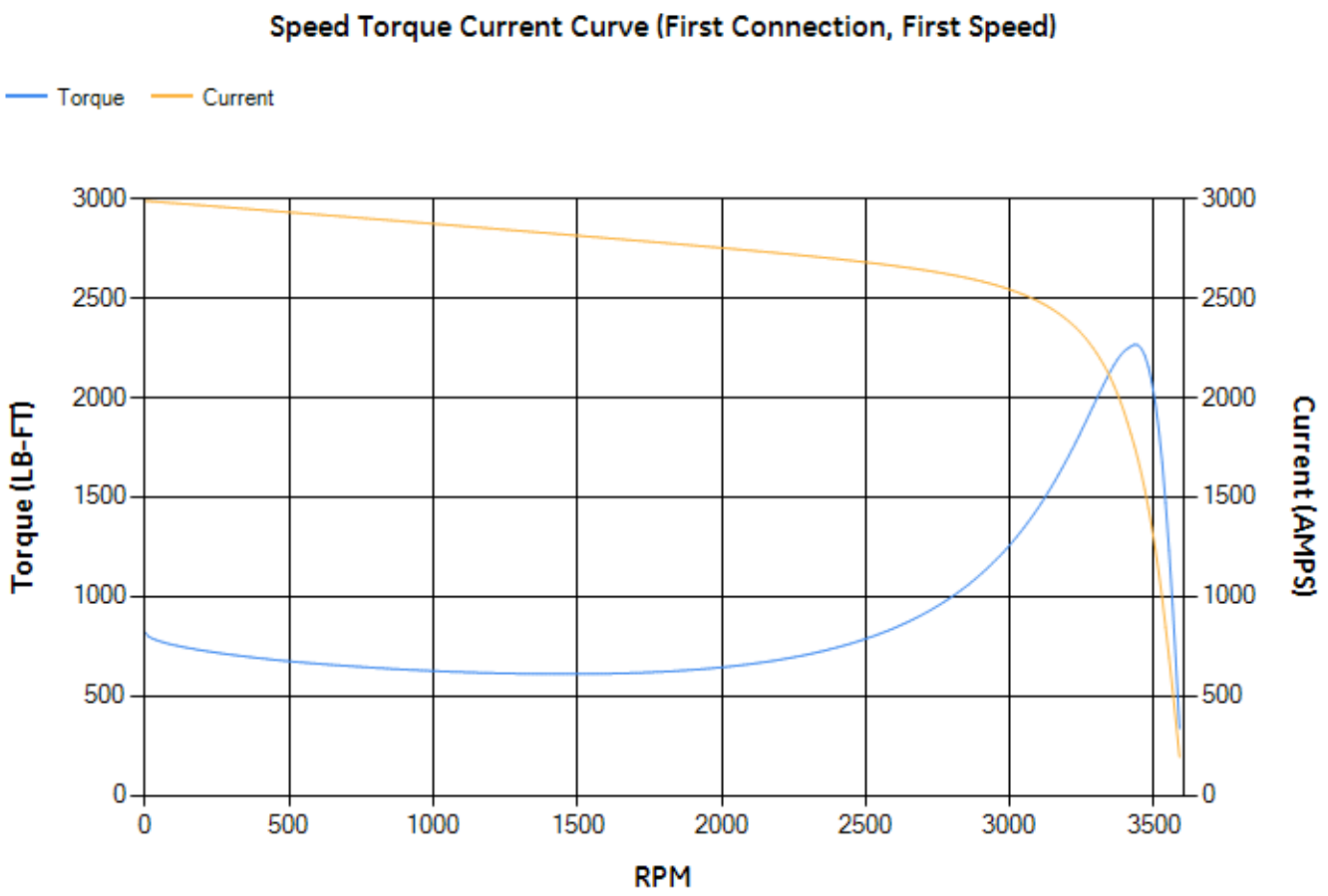
Marks:

LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.19	95.47	96.03	96.26	96.29	94.96	0.00
% PF	93.81	94.24	94.72	95.01	94.03	87.47	8.23
AMPS	628.87	574.25	493.17	368.43	248.08	135.22	56.95

TORQ(FL)#FT	884.04	**TORQ(LR)%FL**	92.7	**TORQ(BD)%FL**	256.13
AMPS(LR)	2988.73	**PF AT START**	0.17		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 1210 Lb-Ft Sq (50.94 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 61 seconds cold, 33 seconds hot. Rotor inertia is 158.26 Lb-Ft Sq (6.66 Kg-meter Sq).

Open Circuit A-C:	2.321	**Short Circuit D-C:**	0.042
Short Circuit A-C:	0.047	**X/R Ratio:**	15.759
Stator Slots:	48	**Rotor Slots:**	40



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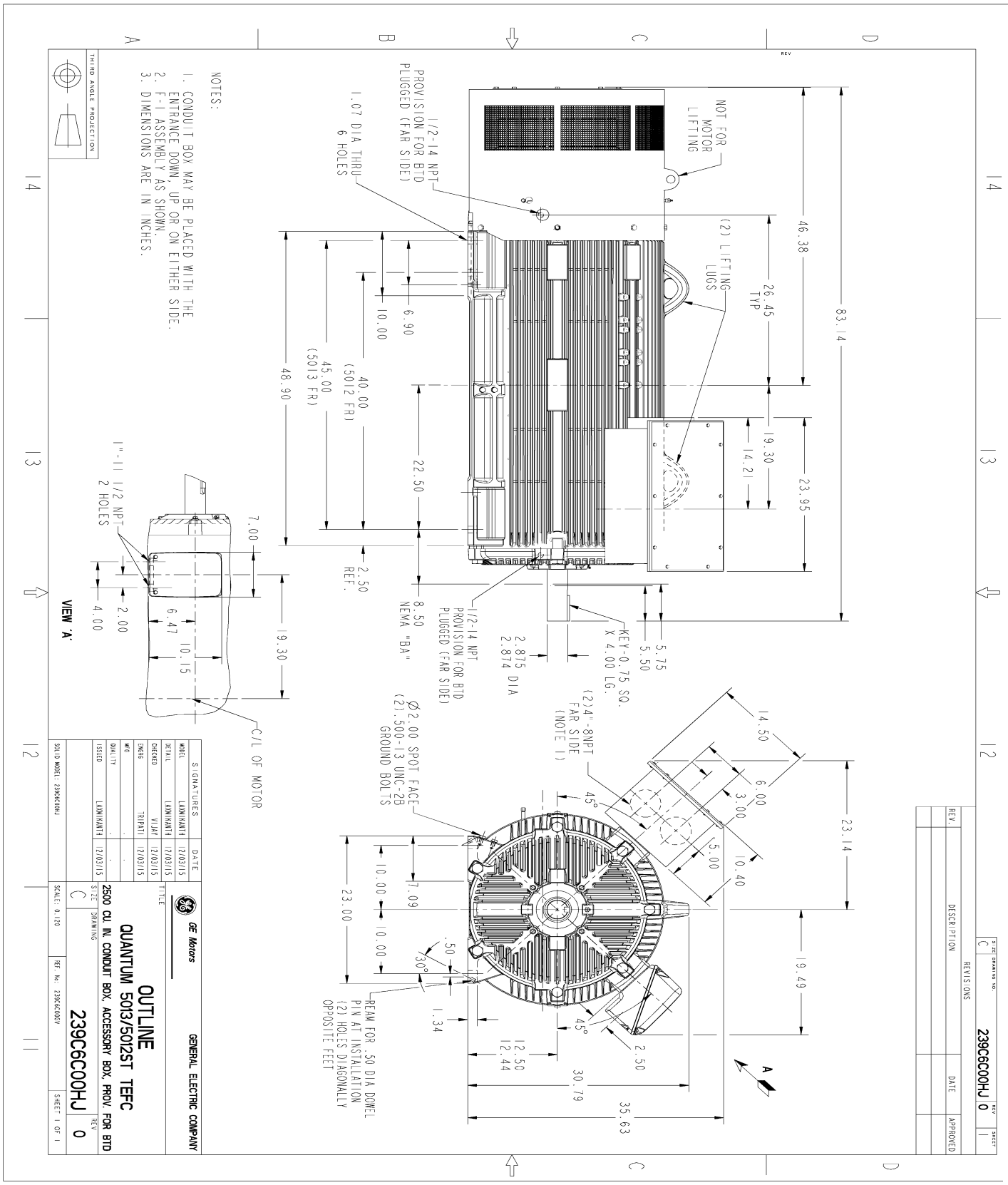
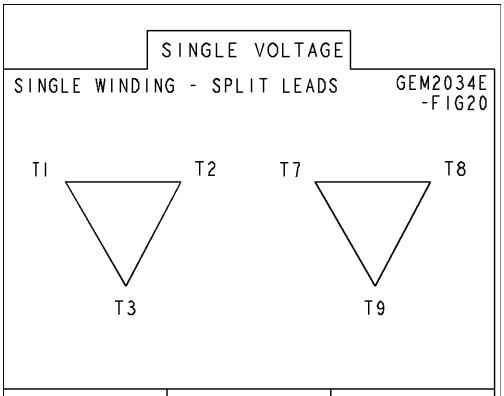

NOTES:
1. CONDUIT BOX MAY BE PLACED WITH THE ENTRANCE DOWN, UP OR ON EITHER SIDE.
2. F-1 ASSEMBLY AS SHOWN.
3. DIMENSIONS ARE IN INCHES.
THIRD ANGLE PROJECTION
NOT FOR MOTOR LIFTING
(2) LIFTING LUGS
1/2-14 NPT PROVISION FOR BTD PLUGGED (FAR SIDE)
1.07 DIA THRU 6 HOLES
46.38
26.45 TYP
83.14
19.30
14.21
23.95
10.00
6.90
40.00 (5012 FR)
45.00 (5013 FR)
48.90
22.50
2.50 REF.
8.50 NEMA "BA"
1/2-14 NPT PROVISION FOR BTD PLUGGED (FAR SIDE)
2.875 2.874 DIA
KEY-0.75 SQ. X 4.00 LG.
5.75
5.50
VIEW 'A'
1"-11 1/2 NPT 2 HOLES
7.00
2.00
4.00
6.47
10.15
19.30
C/L OF MOTOR
Ø2.00 SPOT FACE (2).500-13 UNC-2B GROUND BOLTS
(2)4"-8NPT FAR SIDE (NOTE 1)
14.50
6.00
3.00
5.00
10.40
23.14
19.49
45°
10.00
7.09
23.00
10.00
.50
30°
1.34
REAM FOR .50 DIA DOWEL PIN AT INSTALLATION (2) HOLES DIAGONALLY OPPOSITE FEET
2.50
12.50
12.44
30.79
35.63
A
REVISIONS
SIZE C
DRAWING NO. 239C6C00HJ
REV 0
SHEET 1
REV.
DESCRIPTION
DATE
APPROVED
SIGNATURES
MODEL LAXMINARAYAN 12/03/15
DETAIL LAXMINARAYAN 12/03/15
CHECKED VIJAY 12/03/15
ENGRG TRIPATI 12/03/15
MFG
QUALITY
ISSUED LAXMINARAYAN 12/03/15
GE Motors
GENERAL ELECTRIC COMPANY
TITLE
OUTLINE
QUANTUM 5013/5012ST TEFC
2500 CU. IN. CONDUIT BOX, ACCESSORY BOX, PROV. FOR BTD
SIZE C
DRAWING 239C6C00HJ
REV 0
SOLID MODEL: 239C6C00HJ
SCALE: 0.120
REF. No: 239C6C00GV
SHEET 1 OF 1

Marks:

Connection Diagram
GEM2034E-FIG20



L1	L2	L3
T1-T7	T2-T8	T3-T9

Heater Connection
3027JE-1C

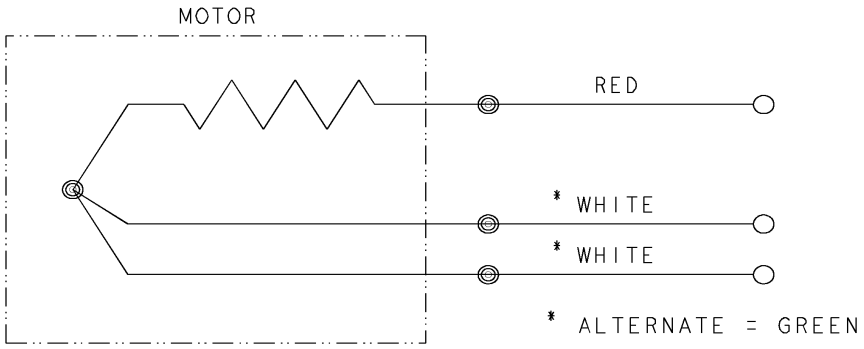
SUPPLY VOLTAGE LEADS	L1	L2
HEATER LEADS	HE1	HE2

REV 1 | SH 1 | DWG NO 235A3027NA | SIZE A

THIRD ANGLE PROJECTION

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
1	ISAAC #12-1124 HARI	11/19/12	KARTHIK

BEARING RTDS



UNLESS OTHERWISE SPECIFIED	SIGNATURES	DATE
DIMENSIONS ARE IN INCHES	DRAWN D.E. BAIR	12/16/92
TOLERANCES ON:		
2 PL DECIMALS ±	CHECKED D.E. BAIR	12/16/92
3 PL DECIMALS ±	ENGRG K. DESAI	12/16/92
ANGLES ±	ISSUED D.E. BAIR	12/16/92
FRACTIONS ± ✓		
MATERIAL:		
	CAD NO. F500:235A3027NA	
APPLIED PRACTICES:		

GE Motors — Fort Wayne, Indiana

CONNECTION DIAGRAM

BEARING RTDS

SIZE	FSCM NO	DWG NO	DISTR TO
A		235A3027NA	-

SCALE 1/1 | SHEET 1 OF 1