GE
Power Conversion

Product Information Packet

November 9, 2016

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

Model Number:	**5KS145STE209RG3**
Catalog Number:	**M7552**
Instruction Manual:	GEI-M1031
Connection Diagram:	GEM2034E-FIG203
Outline Drawing:	358B6269AC

Accessory Connection Diagrams

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

Table of Contents

imagination at work

Marks:

MODEL NUMBER:	**5KS145STE209RG3**	**Estimated Weight:**	62 Lbs
Outline Drawing:	358B6269AC	**Time Rating:**	CONT
Connection Diagram:	GEM2034E-FIG203	**Enclosure:**	TEFC
Instruction Book:	GEI-M1031	**Encl Construction:**	SD
Design Code:	14AD1012A	**Ambient Max(°C):**	40
Type:	KS	**Alt Ambient Max(°C):**	--
Frame:	145T	**Insulation Class:**	F
Phases:	3	**NEMA Design:**	B
Poles:	4	**Nominal Efficiency:**	86.5 %
Output Power:	1.5HP 1.1KW	**Guaranteed Efficiency:**	84.0
RPM:	1745	**3/4 Load Efficiency:**	88.5
Voltage:	230/460	**KVA Code:**	M
Hertz:	60	**Max KVAR:**	0.8
Amps - FL:	4.2/2.1	**Power Factor:**	77
Service Factor:	1.15	**Bearing - DE:**	6205ZZC3
Alt Service Factor:	--	**Bearing - ODE:**	6205ZZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:
USABLE AT 200V @ 1.5 HP, 4.5 AMPS @ 1.0 SF
LRA: 33.4/16.7
50HZ DATA: 1.0 HP,200/400V, 3.8/1.9 AMPS @ 1.15 SF
50HZ DATA: 1.5HP, 200/400V,4.8/2.4 AMPS @ 1.00 SF
GREASE TYPE: SHELL ALVANIA R3 LITHIUM GREASE

Additional Information:

CONDUIT BOX MATERIAL: CAST IRON
INVERTER DUTY PER NEMA MG1 PART 31
FOR VARIABLE TORQUE LOADS
MADE FROM MODEL 5KS145STE209
W/ SHAFT GROUNDING RING; P/N 235A4970AG12
BAM 2/12

Performance Characteristics 1st Winding 1st Connection **Design: 14AD1012A**

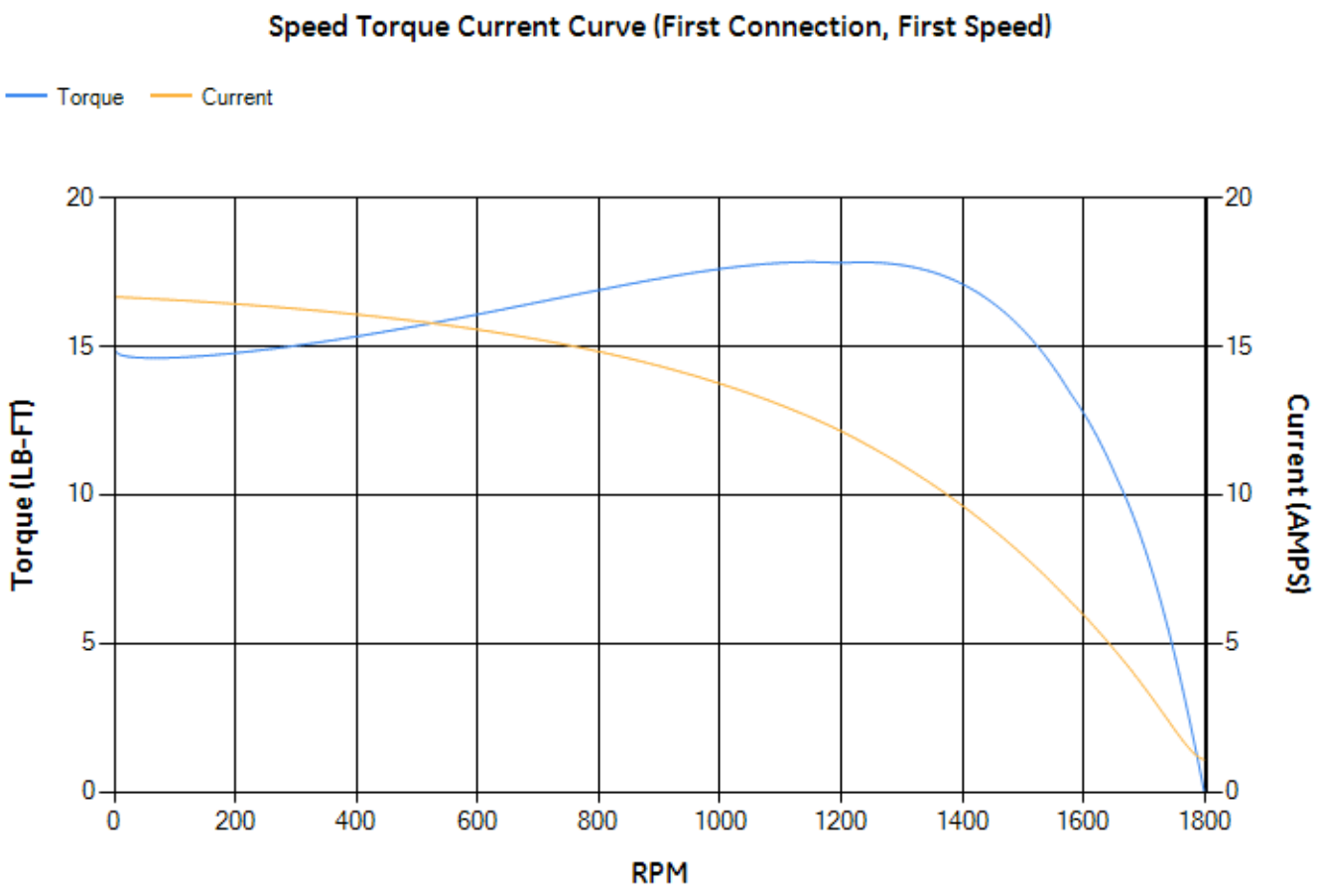
Marks:

LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	87.41	87.84	88.52	88.48	87.09	80.6	0.00
% PF	80.97	79.64	76.97	69.86	57.41	36.61	6.85
AMPS	2.48	2.31	2.06	1.7	1.4	1.19	1.09

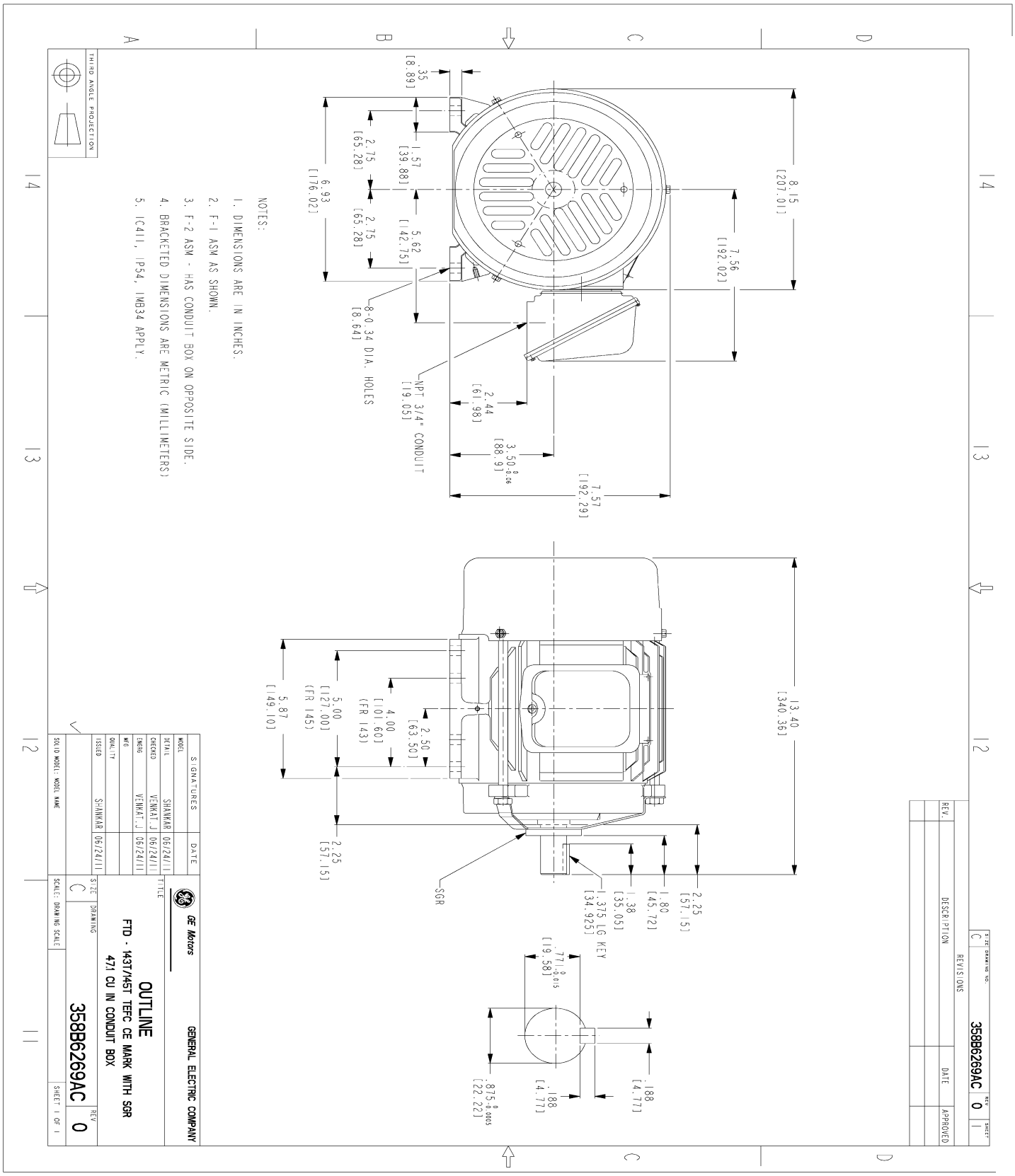
TORQ(FL)#FT	4.52	**TORQ(LR)%FL**	329.44	**TORQ(BD)%FL**	388.6
AMPS(LR)	16.67	**PF AT START**	0.55		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 78 Lb-Ft Sq (3.28 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 32 seconds. Safe stall time at 100% voltage is 75 seconds cold, 58 seconds hot. Rotor inertia is 0.11 Lb-Ft Sq (0 Kg-meter Sq).

Open Circuit A-C:	0.144	**Short Circuit D-C:**	0.007
Short Circuit A-C:	0.007	**X/R Ratio:**	2.637
Stator Slots:	36	**Rotor Slots:**	28



Marks:


NOTES:
1. DIMENSIONS ARE IN INCHES.
2. F-1 ASM AS SHOWN.
3. F-2 ASM - HAS CONDUIT BOX ON OPPOSITE SIDE.
4. BRACKETED DIMENSIONS ARE METRIC (MILLIMETERS)
5. IC411, IP54, IMB34 APPLY.
.35 [8.89]
2.75 [65.28]
1.57 [39.88]
2.75 [65.28]
5.62 [142.75]
6.93 [176.02]
8.15 [207.01]
7.56 [192.02]
8-0.34 DIA. HOLES [8.64]
NPT 3/4" CONDUIT [19.05]
2.44 [61.98]
3.50 [88.9]
7.57 [192.29]
13.40 [340.36]
2.50 [63.50]
4.00 [101.60] (FR 143)
5.00 [127.00] (FR 145)
5.87 [149.10]
2.25 [57.15]
SGR
1.375 LG KEY [34.925]
1.38 [35.05]
1.80 [45.72]
2.25 [57.15]
.771 [19.58]
.188 [4.77]
.188 [4.77]
.875 [22.22]
THIRD ANGLE PROJECTION
SIGNATURES
DATE
MODEL
DETAIL SHANKAR 06/24/11
CHECKED VENKAT.J 06/24/11
ENGRG VENKAT.J 06/24/11
MFG
QUALITY
ISSUED SHANKAR 06/24/11
SOLID MODEL: MODEL NAME
GE Motors
GENERAL ELECTRIC COMPANY
TITLE
OUTLINE
FTD - 1437/45T TEFC CE MARK WITH SGR
471 CU IN CONDUIT BOX
SCALE: DRAWING SCALE
SIZE C
DRAWING 358B6269AC
REV 0
SHEET 1 OF 1
SIZE C DRAWING NO. 358B6269AC REV 0 SHEET 1
REVISIONS
REV. DESCRIPTION DATE APPROVED

Connection Diagram
GEM2034E-FIG203