GE INDUSTRIAL MOTORS
a WOLONG company

Product Technical Information

January 10, 2021

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

Model Number:	**5KS324SAA405D1**
Catalog Number:	**M9173**
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG9
Outline Drawing:	239C6000BC

Accessory Connection Diagrams

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

Table of Contents

Marks:

MODEL NUMBER:	**5KS324SAA405D1**	**Estimated Weight:**	620 Lbs
Outline Drawing:	239C6000BC	**Time Rating:**	CONT
Connection Diagram:	GEM2034E-FIG9	**Enclosure:**	TEFC
Instruction Book:	GEI-56128	**Encl Construction:**	841
Design Code:	32BD4036A	**Ambient Max(°C):**	40
Type:	KS	**Alt Ambient Max(°C):**	--
Frame:	324T	**Insulation Class:**	H
Phases:	3	**NEMA Design:**	B
Poles:	8	**Nominal Efficiency:**	90.2 %
Output Power:	20HP 14.8KW	**Guaranteed Efficiency:**	89.5 %
RPM:	880	**3/4 Load Efficiency:**	--
Voltage:	230/460	**KVA Code:**	G
Hertz:	60	**Max KVAR:**	12.8
Amps - FL:	62.0/31.0	**Power Factor:**	67.0
Service Factor:	1.15	**Bearing - DE:**	6312ZC3
Alt Service Factor:	--	**Bearing - ODE:**	6312ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

DE BRG 60BC03JP30, ODE BRG 60BC03JP30
EXCEPTION-IEEE-STD-841-2009:DUAL VOLTAGE 230/460
STAMP NP249A5564P051 AS BELOW:
MODEL:5KS324SAA405D1 S/N: XXX
CSA CERTIFIED CSA09.2216219 FOR EX NA IIC 200 C GC
CL 1 ZONE2 AEX NA IIC 200C;CL 1 DIV2 GRP ABCD 200C
IN -40C <= AMB <= 40C, 1.0 SF ON SINE-WAVE PWR
SURF TEMP 215C AT 1.15SF ON SINE-WAVE PWR
OR 200C VT OR 230C CT OR 200C CHP PWM CONTROL
ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB
VT 0-60 HZ, CT 4-60 HZ, CHP 60-90 HZ.

Additional Information:

8P - T EXTN
PAINTED FRAME ID & SHAFT,
FAN COVER INSIDE & ODE E/S OUTSIDE
C/BOX 346 CU IN - 3.00" NPT
OIL RESISTANT SLEEVING ON LEADS
.0015" TIR SHAFT RUNOUT
ROUTINE TEST REPORT AND 5 POINT VIBRATION TEST
REPORT INCLUDED IN C/B
GROUND PAD
F1 MOUNTING

Performance Characteristics 1st Winding 1st Connection **Design: 32BD4036A**

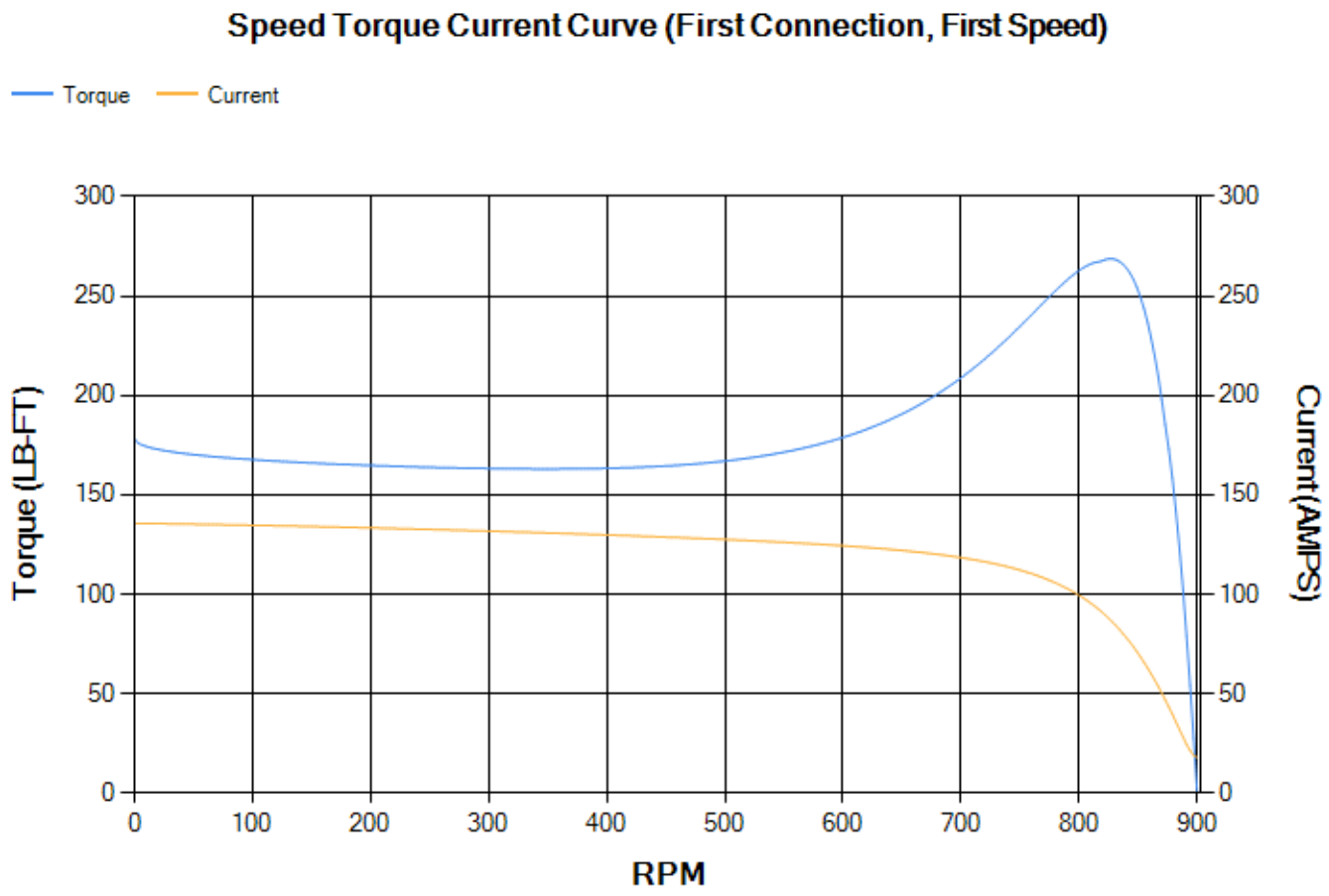
Marks:

LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	89.15	89.69	90.48	90.68	89.78	84.7	0.00
% PF	70.47	69.37	66.87	59.83	47.72	28.92	3.89
AMPS	37.24	34.6	30.91	25.88	21.84	19.1	17.85

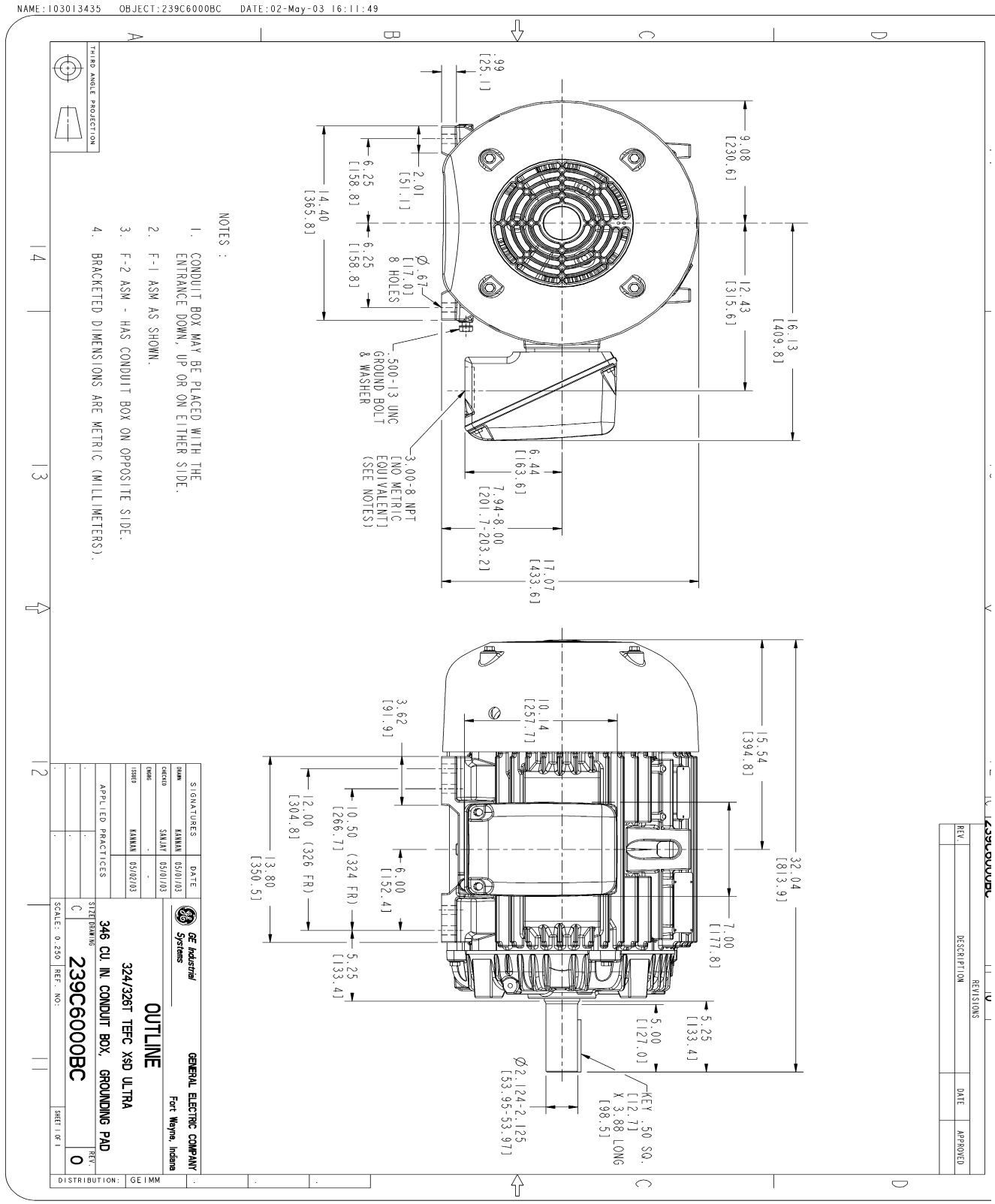
TORQ(FL)#FT	119.3	**TORQ(LR)%FL**	149.35	**TORQ(BD)%FL**	223.26
AMPS(LR)	135.65	**PF AT START**	0.35		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 3548 Lb-Ft Sq (149.37 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 71 seconds. Safe stall time at 100% voltage is 149 seconds cold, 85 seconds hot. Rotor inertia is 7.18 Lb-Ft Sq (0.3 Kg-meter Sq).

Open Circuit A-C:	0.185	**Short Circuit D-C:**	0.016
Short Circuit A-C:	0.02	**X/R Ratio:**	6.118
Stator Slots:	54	**Rotor Slots:**	40



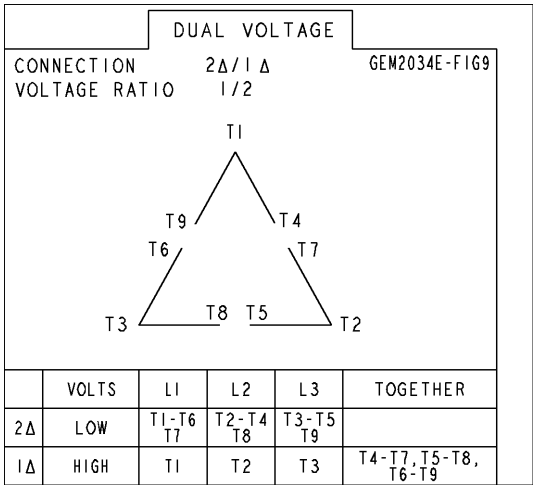
Marks:


NAME:103013435 OBJECT:239C6000BC DATE:02-May-03 16:11:49
239C6000BC
ASSEM
NOTES :
1. CONDUIT BOX MAY BE PLACED WITH THE ENTRANCE DOWN, UP OR ON EITHER SIDE.
2. F-1 ASM AS SHOWN.
3. F-2 ASM - HAS CONDUIT BOX ON OPPOSITE SIDE.
4. BRACKETED DIMENSIONS ARE METRIC (MILLIMETERS).
.99 [25.1]
9.08 [230.6]
12.43 [315.6]
16.13 [409.8]
6.25 [158.8]
2.01 [51.1]
14.40 [365.8]
Ø .67 [17.01] 8 HOLES
.500-13 UNC GROUND BOLT & WASHER
3.00-8 NPT [NO METRIC EQUIVALENT] (SEE NOTES)
6.44 [163.6]
7.94-8.00 [201.7-203.2]
17.07 [433.6]
10.14 [257.7]
3.62 [91.9]
15.54 [394.8]
32.04 [813.9]
12.00 (.326 FR) [304.8]
10.50 (324 FR) [266.7]
6.00 [152.4]
7.00 [177.8]
13.80 [350.5]
5.25 [133.4]
5.00 [127.0]
Ø2.124-2.125 [53.95-53.97]
KEY .50 SQ. [12.7] X 3.88 LONG [98.5]
THIRD ANGLE PROJECTION
SIGNATURES
DRAWN KANNAN 05/01/03
CHECKED SANJAY 05/01/03
ENGRG - -
ISSUED KANNAN 05/02/03
APPLIED PRACTICES
GE Industrial Systems
GENERAL ELECTRIC COMPANY
Fort Wayne, Indiana
OUTLINE
324/326T TEFC XSD ULTRA
346 CU. IN. CONDUIT BOX, GROUNDING PAD
SIZE C
DRAWING 239C6000BC
REV. 0
SCALE: 0.250
REF. NO:
SHEET 1 OF 1
DISTRIBUTION: GE|MM
REVISIONS
REV. DESCRIPTION DATE APPROVED
239C6000BC

Marks:

Connection Diagram

GEM2034E-FIG9



	VOLTS	L1	L2	L3	TOGETHER
2Δ	LOW	T1-T6 T7	T2-T4 T8	T3-T5 T9	
1Δ	HIGH	T1	T2	T3	T4-T7, T5-T8, T6-T9

End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E4200AA1	115E4200LA1
Bearing	235A2509AS01	235A2509AS01
Slinger/Inproseal	149C4399G04	149C4399G04

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C7000G01
Fan Cover	128D6800AA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	149C4429AA2

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	