



**GE INDUSTRIAL MOTORS**  
a **WOLONG** company

# Product Technical Information

January 30, 2021

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

<b>Model Number:</b>	<b>5KS405SAA405D1</b>
<b>Catalog Number:</b>	<b>M9193</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG9
<b>Outline Drawing:</b>	239C6400ZJ

## Accessory Connection Diagrams

<b>Bearing Thermocouple:</b>	None	<b>Heater:</b>	None
<b>RTD:</b>	None	<b>Thermistor:</b>	None
<b>Thermostat:</b>	None	<b>Winding Thermocouple:</b>	None
<b>Bearing RTD:</b>	None		

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Marks:

**MODEL NUMBER:** 5KS405SAA405D1  
**Outline Drawing:** 239C6400ZJ  
**Connection Diagram:** GEM2034E-FIG9  
**Instruction Book:** GEI-56128  
**Design Code:** 40BD4024A  
**Type:** KS  
**Frame:** 405T  
**Phases:** 3  
**Poles:** 8  
**Output Power:** 60HP 44.4KW  
**RPM:** 890  
**Voltage:** 230/460  
**Hertz:** 60  
**Amps - FL:** 170.0/85.0  
**Service Factor:** 1.15  
**Alt Service Factor:** --

**Estimated Weight:** 1440 Lbs  
**Time Rating:** CONT  
**Enclosure:** TEFC  
**Encl Construction:** 841  
**Ambient Max(°C):** 40  
**Alt Ambient Max(°C):** --  
**Insulation Class:** H  
**NEMA Design:** B  
**Nominal Efficiency:** 93.0 %  
**Guaranteed Efficiency:** 92.4 %  
**3/4 Load Efficiency:** --  
**KVA Code:** G  
**Max KVAR:** 32.3  
**Power Factor:** 71.0  
**Bearing - DE:** 6316ZC3  
**Bearing - ODE:** 6316ZC3

**Enclosure is Totally Enclosed Fan-Cooled**

Stamped Nameplate Notes:

DE BRG 80BC03JP3, ODE BRG 80BC03JP3  
 EXCEPTION-IEEE-STD-841-2009:DUAL VOLTAGE 230/460  
 STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KS405SAA405D1 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 260C 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 20-60 HZ, CHP 60-90 HZ.



**Additional Information:**

8P - T EXTN  
PAINTED FRAME ID & SHAFT,  
FAN COVER INSIDE & ODE E/S OUTSIDE  
C/BOX 700 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: 40BD4024A**

**Marks:**

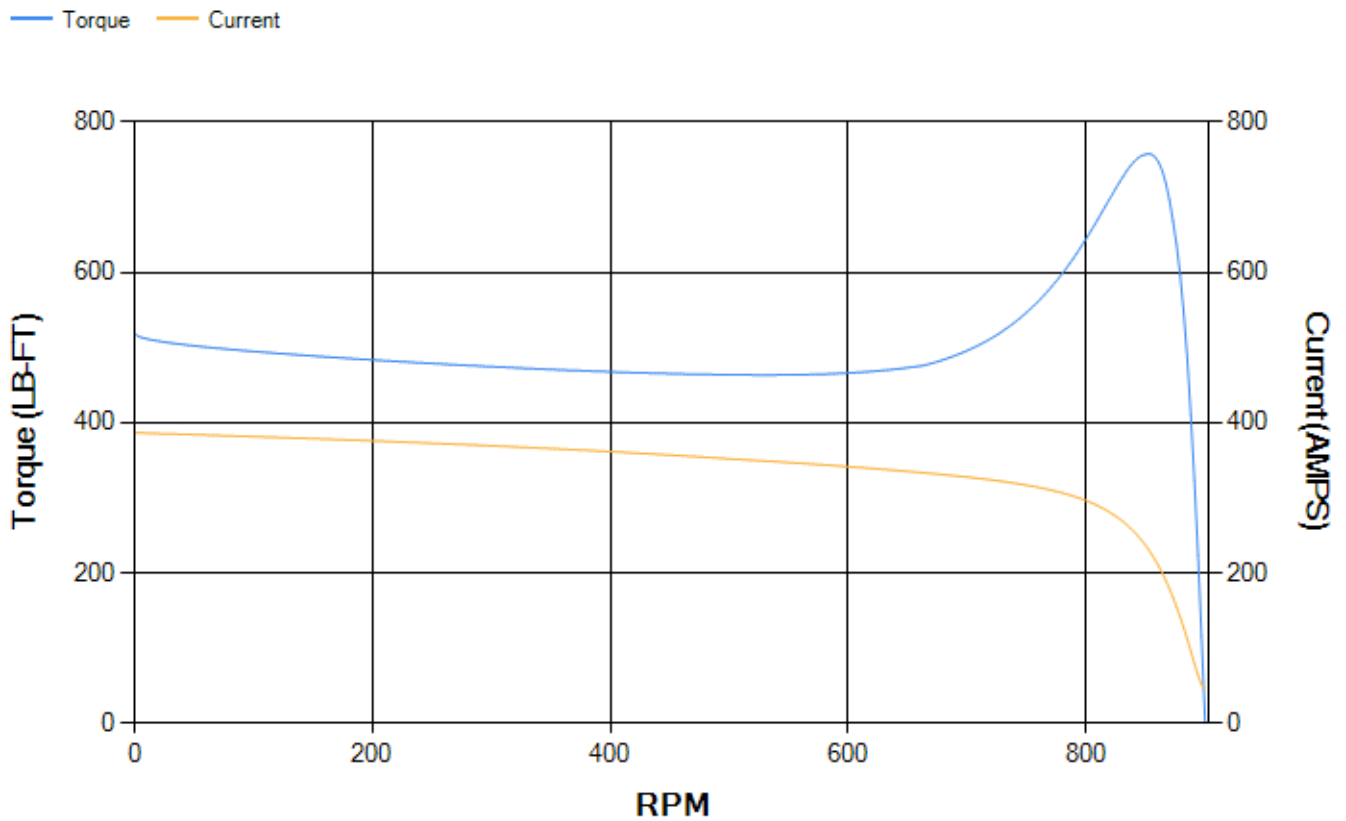
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	92.56	92.92	93.54	93.69	93.2	89.87	0.00
% PF	74.32	73.38	71.18	64.64	52.54	31.99	2.79
AMPS	102.04	94.72	84.29	69.54	57.35	48.83	45.11

<b>TORQ(FL)#FT</b>	354.41	<b>TORQ(LR)%FL</b>	146.38	<b>TORQ(BD)%FL</b>	213.32
<b>AMPS(LR)</b>	386.5	<b>PF AT START</b>	0.36		

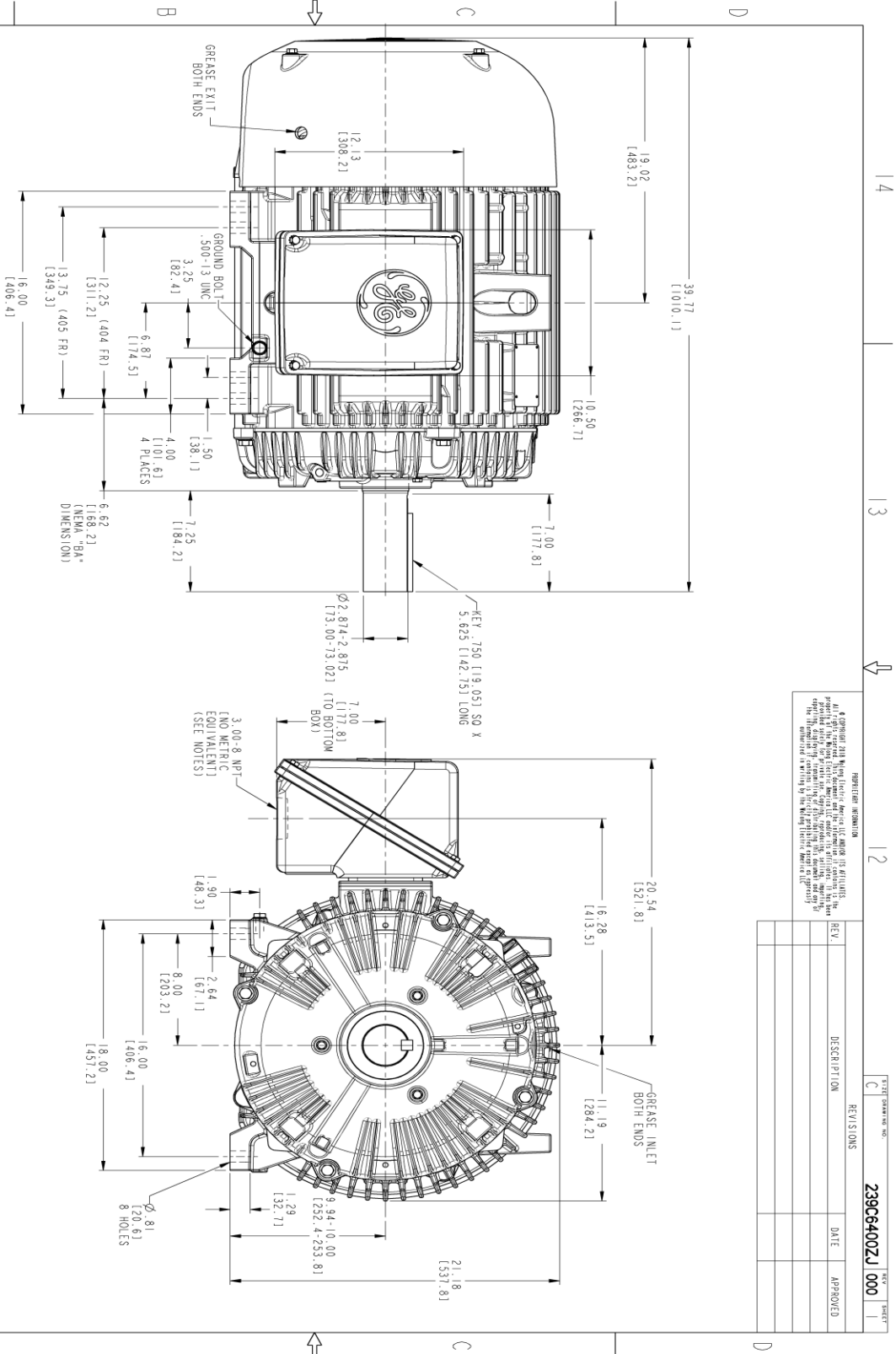
This motor is capable of two cold or one hot start with a maximum connected load inertia of 5471 Lb-Ft Sq (230.33 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 41 seconds. Safe stall time at 100% voltage is 122 seconds cold, 63 seconds hot. Rotor inertia is 31.82 Lb-Ft Sq (1.34 Kg-meter Sq).

<b>Open Circuit A-C:</b>	0.361	<b>Short Circuit D-C:</b>	0.021
<b>Short Circuit A-C:</b>	0.038	<b>X/R Ratio:</b>	7.88
<b>Stator Slots:</b>	72	<b>Rotor Slots:</b>	58

**Speed Torque Current Curve (First Connection, First Speed)**



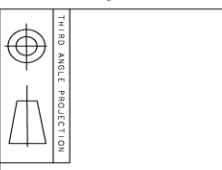
Marks:



- NOTES:
1. CONDUIT BOX MAY BE PLACED WITH THE ENTRANCE DOWN, UP OR ON EITHER SIDE.
  2. F-1 ASSEMBLY AS SHOWN.
  3. ALL DIMENSIONS ARE IN INCHES. BRACKETED DIMENSIONS ARE METRIC (MILLIMETERS).

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REV.	DESCRIPTION	DATE	APPROVED



SIGNATURES	DATE	TITLE
MODEL PRASMANA 04/01/21		<p><b>GE INDUSTRIAL MOTORS</b>                      a WOLSKONG company</p> <p><b>OUTLINE</b>                      404/405 T TEFC XSD                      700 CU IN CONDUIT BOX, GROUND PAD</p>
CHECKED PRASMANA 04/01/21		
DESIGN PRASMANA 04/01/21		
DATE PRASMANA 04/01/21		
ISSUED PRASMANA 04/01/21		SIZE DRAWING 239C6400ZJ 000
SCALE: 0.250		REF. No: 239C6400Z
SHEET 1 OF 1		

Marks:

**Connection Diagram**  
**GEM2034E-FIG9**



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E4304AA1	115E4304LL1
Bearing	235A2518AC01	235A2518AC01
Slinger/Inproseal	149C4399G06	149C4399G06

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C7100G02
Fan Cover	128D6832AA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	118D4408AD2

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

