



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

# Product Technical Information

June 25, 2020

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

<b>Model Number:</b>	<b>5KS405XAA304D6</b>
<b>Catalog Number:</b>	<b>M9597</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG1
<b>Outline Drawing:</b>	239C6400PZ

## 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:** 5KS405XAA304D6  
**Outline Drawing:** 239C6400PZ  
**Connection Diagram:** GEM2034E-FIG1  
**Instruction Book:** GEI-56128  
**Design Code:** 40BD3069B  
**Type:** KS  
**Frame:** 405T  
**Phases:** 3  
**Poles:** 6  
**Output Power:** 75HP 55.5KW  
**RPM:** 1190  
**Voltage:** 575  
**Hertz:** 60  
**Amps - FL:** 73.8  
**Service Factor:** 1.15  
**Alt Service Factor:** --

**Estimated Weight:** 1430 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:** 94.5 %  
**Guaranteed Efficiency:** 94.1 %  
**3/4 Load Efficiency:** 94.6 %  
**KVA Code:** G  
**Max KVAR:** 29.0  
**Power Factor:** 80.5  
**Bearing - DE:** 6316ZC3  
**Bearing - ODE:** 6316ZC3

Enclosure is Totally Enclosed Fan-Cooled

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Stamped Nameplate Notes:

IEEE-STD-841-2009  
 DE BRG 80BC03JP3, ODE BRG 80BC03JP3  
 STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KS405XAA304D6 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 -25C <= AMB <= 40C, 1.0 SF ON SINE-WAVE PWR  
 SURF TEMP 230C 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 7.5-60 HZ, CHP 60-90 HZ.



**Additional Information:**

6P - T EXTN  
PAINTED FRAME ID & SHAFT,  
FAN COVER INSIDE & ODE E/S OUTSIDE  
700 CU IN - 3.00" NPT  
INPRO SEAL BOTH ENDS  
OIL RESISTANT SLEEVING ON LEADS  
.0015" TIR SHAFT RUNOUT  
ROUTINE TEST REPORT AND 5 POINT VIBRATION TEST  
REPORT INCLUDED IN C/B  
COPPER WASHER UNDER HEADS OF BEARING CAP BOLTS,  
APPLY TITE-SEAL (A50CD427A) ON BEARING CAP SCREWS,  
RABBETS AND PLUG THREADS.  
GROUND PAD  
F1 MOUNTING



**Performance Characteristics**

1st Winding 1st Connection

**Design: 40BD3069B**

**Marks:**

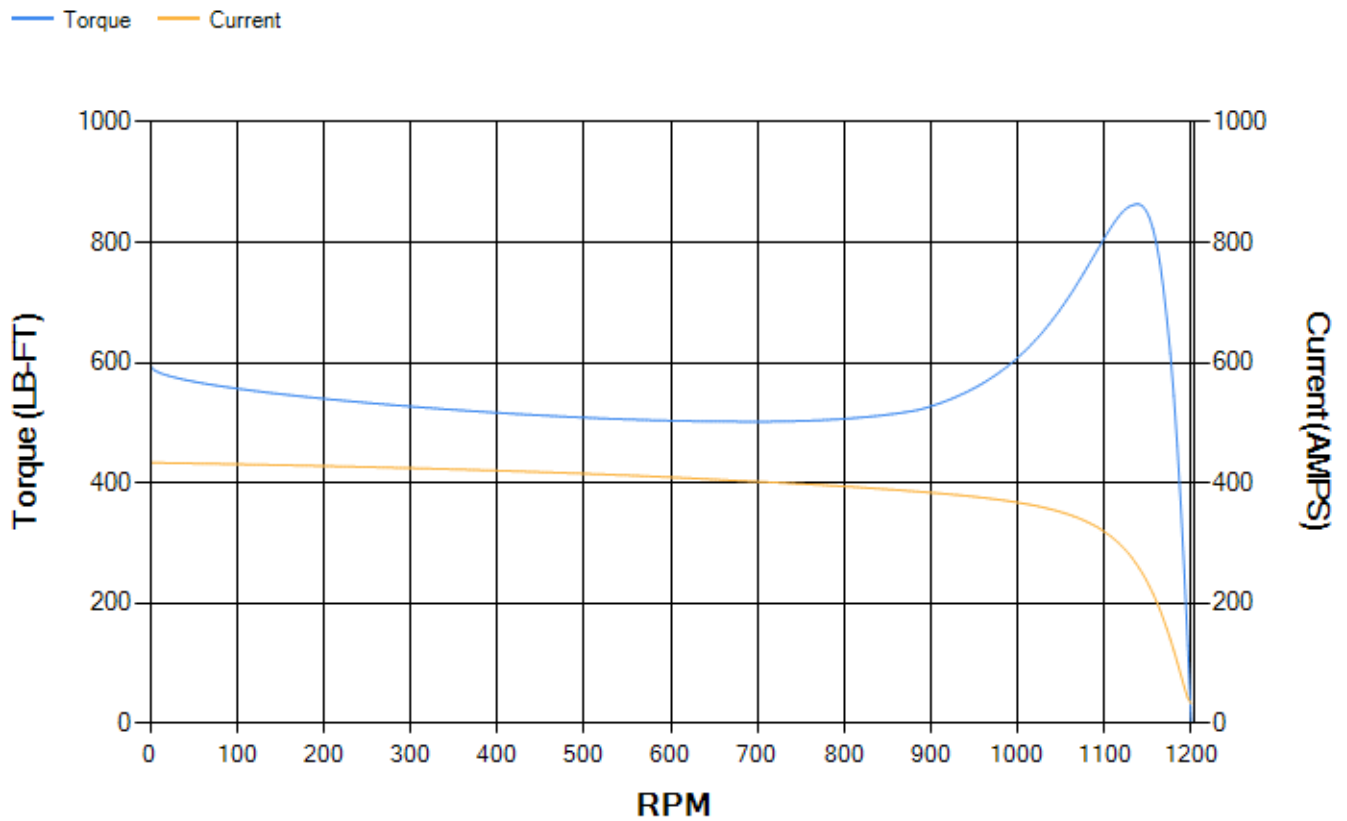
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	93.78	94.05	94.57	94.63	94.21	91.37	0.00
% PF	82.65	81.96	80.32	75.14	64.22	41.72	3.31
AMPS	90.56	83.78	73.77	59.23	46.41	36.83	32.4

<b>TORQ(FL)#FT</b>	331.35	<b>TORQ(LR)%FL</b>	179.38	<b>TORQ(BD)%FL</b>	259.68
<b>AMPS(LR)</b>	433.36	<b>PF AT START</b>	0.35		

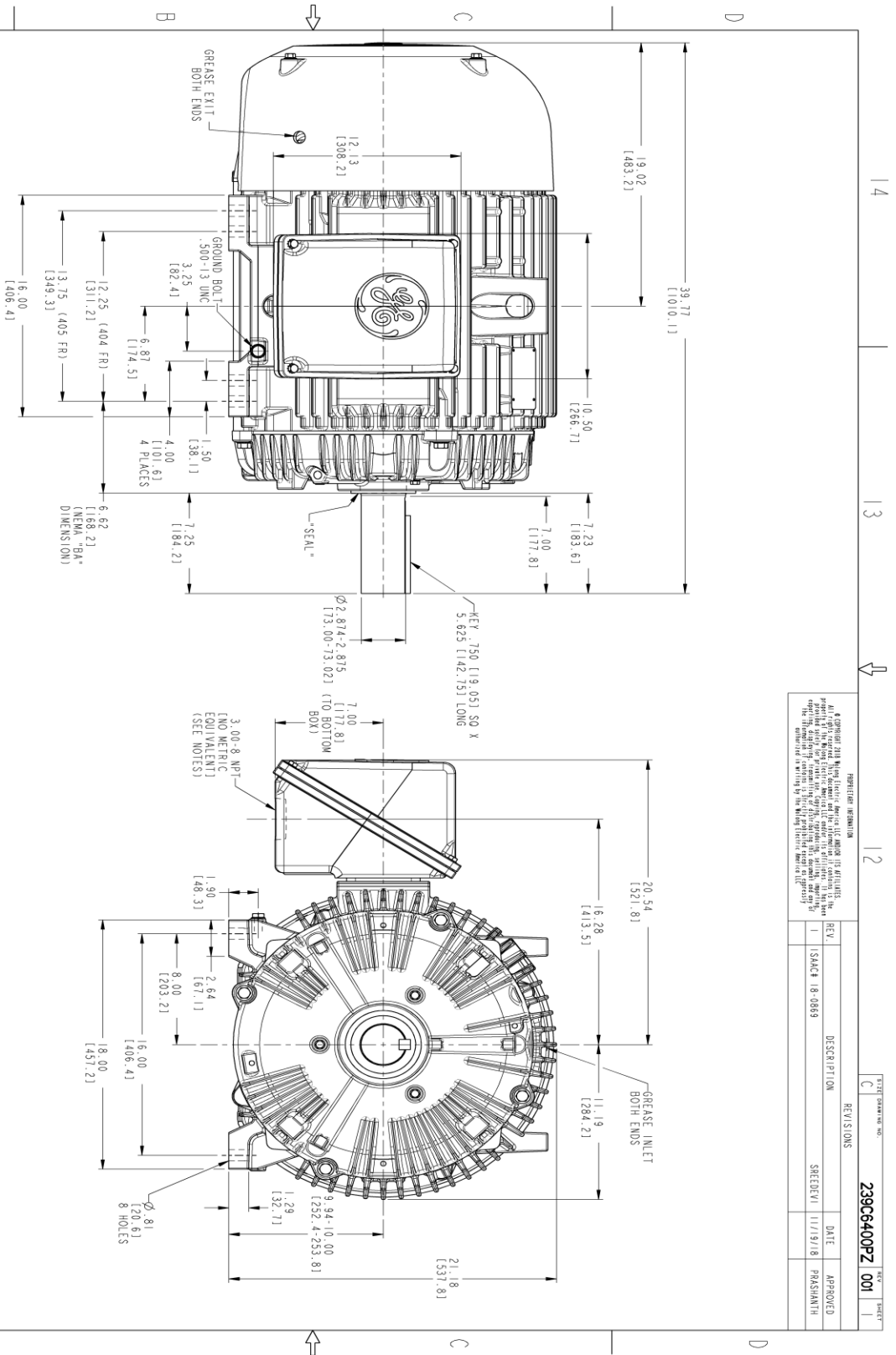
This motor is capable of two cold or one hot start with a maximum connected load inertia of 4912 Lb-Ft Sq (206.8 Kg-meter Sq) at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 43 seconds. Safe stall time at 100% voltage is 104 seconds cold, 56 seconds hot. Rotor inertia is 30.64 Lb-Ft Sq (1.29 Kg-meter Sq).

<b>Open Circuit A-C:</b>	0.582	<b>Short Circuit D-C:</b>	0.021
<b>Short Circuit A-C:</b>	0.037	<b>X/R Ratio:</b>	7.787
<b>Stator Slots:</b>	72	<b>Rotor Slots:</b>	58

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



Marks:



REVISION INFORMATION  
 1. REVISED TO SHOW THE MOTOR WITH THE ENRANCE DOWN, UP OR ON EITHER SIDE.  
 2. REVISED TO SHOW THE MOTOR WITH THE ENRANCE DOWN, UP OR ON EITHER SIDE.  
 3. REVISED TO SHOW THE MOTOR WITH THE ENRANCE DOWN, UP OR ON EITHER SIDE.  
 4. REVISED TO SHOW THE MOTOR WITH THE ENRANCE DOWN, UP OR ON EITHER SIDE.  
 5. REVISED TO SHOW THE MOTOR WITH THE ENRANCE DOWN, UP OR ON EITHER SIDE.

REV.	DESCRIPTION	DATE	APPROVED
1	ISSUE	11/19/18	PRASHANTH

NOTES:

- CONDUIT BOX MAY BE PLACED WITH THE ENTRANCE DOWN, UP OR ON EITHER SIDE.
- F-1 ASSEMBLY AS SHOWN.
- F-2 ASSEMBLY CONDUIT BOX ON OPPOSITE SIDE.
- BRACKETED DIMENSIONS ARE METRIC (MILLIMETERS).
- TOLERANCE ON PERMISSIBLE SHAFT EXTENSION RUNOUT IS .0015 T.I.R.



SIGNATURES	DATE	TITLE
DESIGNER: TEJASNI	06/29/15	DESIGNER
CHECKED: TEJASNI	06/29/15	CHECKER
DESIGNED: KARTHICK	06/29/15	DESIGNER
WROTE: VENKAT	06/29/15	DESIGNER
QUALITY: TEJASNI	06/29/15	QUALITY

GE INDUSTRIAL MOTORS  
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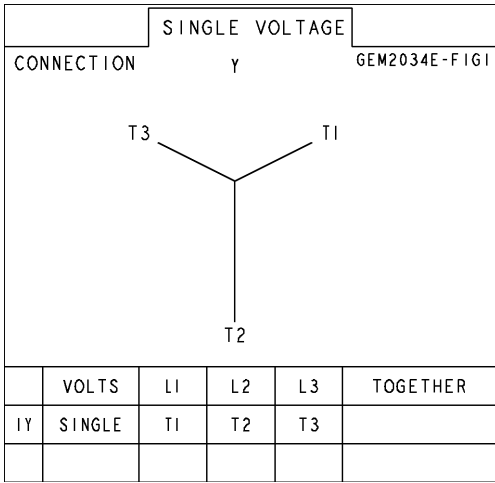
OUTLINE  
 404/405 T TEFC XSD 841  
 700 CU. IN. CONDUIT BOX

239C6400PZ  
 001

SCALE: 0.250 REF. NO: 239C64006 SHEET 1 OF 1

**Marks:**

**Connection Diagram**  
**GEM2034E-FIG1**



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E4304AA1	115E4304LL1
Bearing	235A2518AC01	235A2518AC01
Slinger/Inproseal	235A4575GS4	235A4575GS4

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	

