



**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>5KS405XAA2088D</b>
<b>Catalog Number:</b>	<b>M9356</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	239C6400RF

## 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:

<b>MODEL NUMBER:</b>	<b>5KS405XAA2088D</b>	<b>Estimated Weight:</b>	1460 Lbs
<b>Outline Drawing:</b>	239C6400RF	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG7	<b>Enclosure:</b>	TEFC
<b>Instruction Book:</b>	GEI-56128	<b>Encl Construction:</b>	841
<b>Design Code:</b>	40BD1159A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	405T	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	4	<b>Nominal Efficiency:</b>	95.4 %
<b>Output Power:</b>	100HP 74KW	<b>Guaranteed Efficiency:</b>	95.0 %
<b>RPM:</b>	1785	<b>3/4 Load Efficiency:</b>	95.6 %
<b>Voltage:</b>	460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	34.6
<b>Amps - FL:</b>	117.0	<b>Power Factor:</b>	83.5
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	NU 316
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	6316ZC3

Enclosure is Totally Enclosed Fan-Cooled

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Stamped Nameplate Notes:

IEEE-STD-841-2009  
 ROLLER BEARING - FOR BELTED LOAD ONLY  
 DE BRG 80RU03M, ODE BRG 80BC03JP3026  
 STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KS405XAA2088D 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 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 15-60 HZ, CHP 60-90 HZ.



**Additional Information:**

4P - 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  
.002" 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.  
B5F4C4 HIGH FATIGUE STEEL AISI 4142 SHAFT MATERIAL  
GROUND PAD  
F1 MOUNTING



**Performance Characteristics**

1st Winding 1st Connection

**Design: 40BD1159A**

**Marks:**

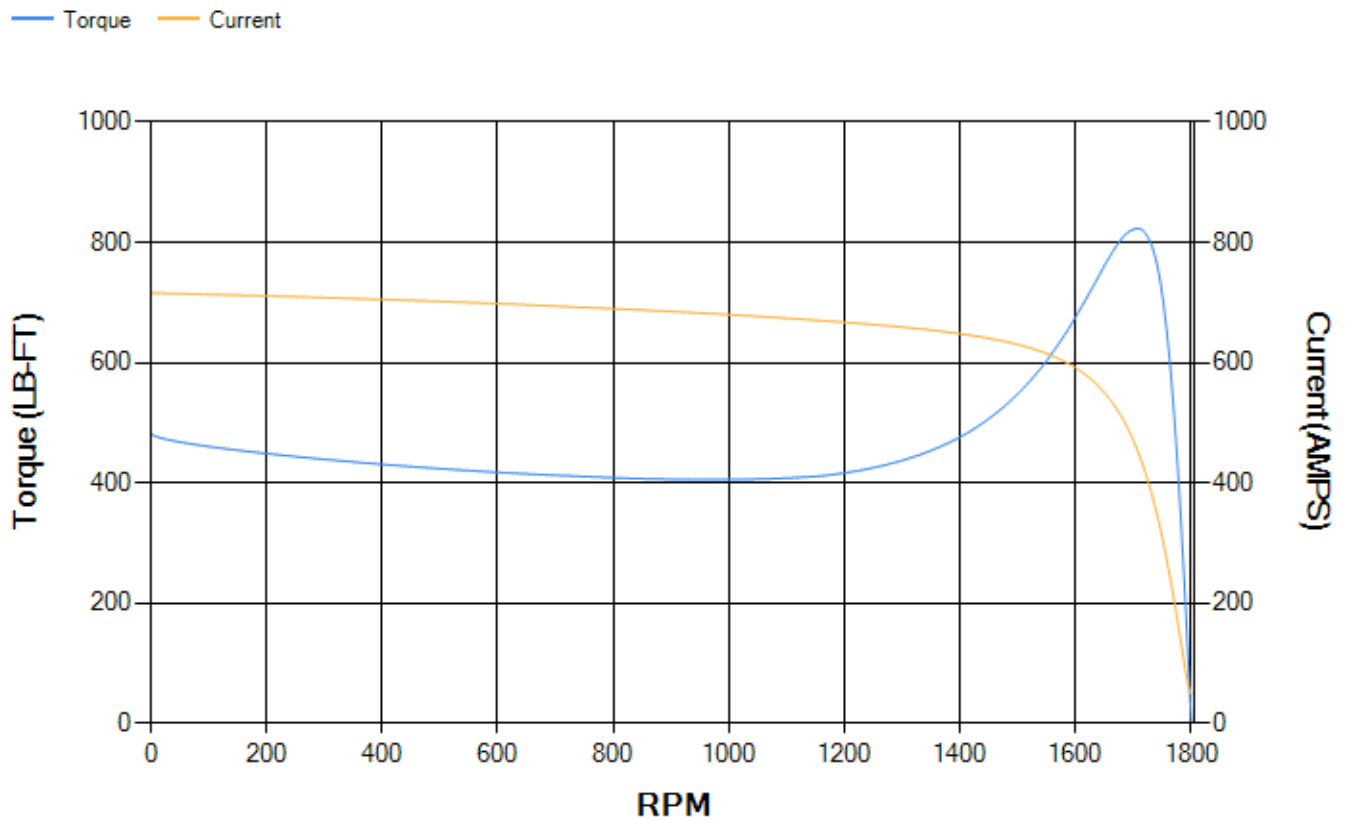
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	94.93	95.13	95.58	95.57	95.2	92.81	0.00
% PF	85.46	84.81	83.3	78.51	68.1	45.2	3.16
AMPS	144.2	133.4	117.56	93.55	72.19	55.77	48.37

<b>TORQ(FL)#FT</b>	294.32	<b>TORQ(LR)%FL</b>	164.02	<b>TORQ(BD)%FL</b>	278.95
<b>AMPS(LR)</b>	715.84	<b>PF AT START</b>	0.32		

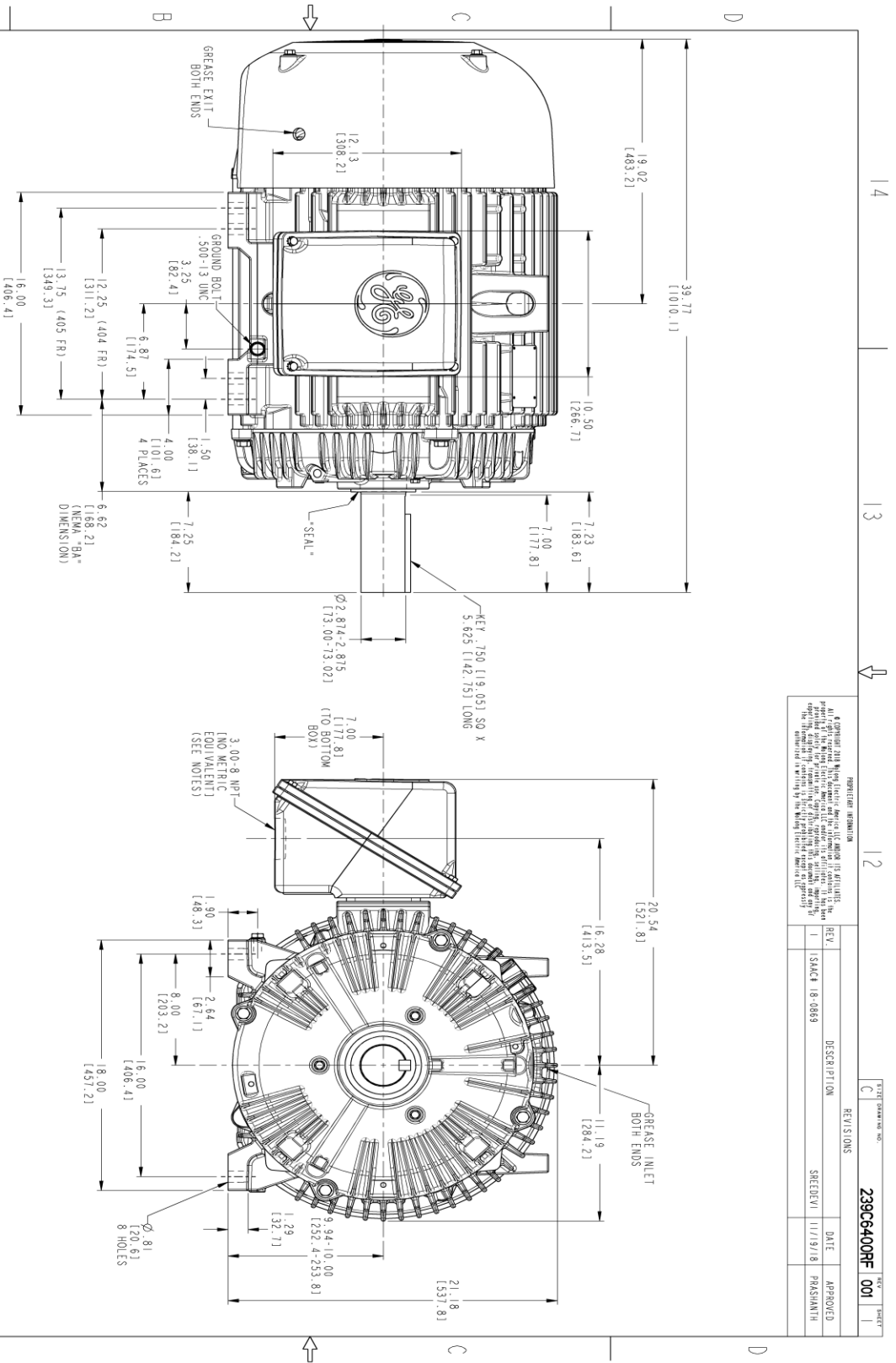
This motor is capable of two cold or one hot start with a maximum connected load inertia of 2242 Lb-Ft Sq (94.39 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 35 seconds. Safe stall time at 100% voltage is 75 seconds cold, 42 seconds hot. Rotor inertia is 23.13 Lb-Ft Sq (0.97 Kg-meter Sq).

<b>Open Circuit A-C:</b>	0.673	<b>Short Circuit D-C:</b>	0.025
<b>Short Circuit A-C:</b>	0.041	<b>X/R Ratio:</b>	9.474
<b>Stator Slots:</b>	72	<b>Rotor Slots:</b>	58

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



Marks:



REGISTRATION INFORMATION

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REV.	DESCRIPTION	DATE	APPROVED
1	ISSUE 18-0869	11/19/18	PARSHANTH

REV. 18-0869

DATE 11/19/18

APPROVED PARSHANTH

239C6400RF 001

- NOTES:
1. CONDUIT BOX MAY BE PLACED WITH THE ENTRANCE DOWN, UP OR ON EITHER SIDE.
  2. F-1 ASSEMBLY AS SHOWN.
  3. F-2 ASSEMBLY CONDUIT BOX ON OPPOSITE SIDE.
  4. BRACKETED DIMENSIONS ARE METRIC (MILLIMETERS).
  5. TOLERANCE ON PERMISSIBLE SHAFT EXTENSION RUNOUT IS .002 T.I.R.



SIGNATURES	DATE	TITLE
MODEL: TEJANI 01/21/15	01/21/15	GE INDUSTRIAL MOTORS
DESIGN: TEJANI 01/21/15	01/21/15	GE WOLONG COMPANY
CHECKED: KARTHICK 01/21/15	01/21/15	
DATE: KARTHICK 01/21/15	01/21/15	
WKS:		
QUALITY:		
ISSUED: TEJANI 01/21/15	01/21/15	
SIZE: C		
SCALE: 0.250		
SOL. ID MODEL: 239C6400RF		
REF. NO: 239C64007		

404/405 T TEFC XSD 841

700 CU. IN. CONDUIT BOX, .002" TIR

239C6400RF 001

SHEET 1 OF 1

**Marks:**

**Connection Diagram**  
**GEM2034E-FIG7**



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E4304AA1	115E4304LK1
Bearing	235A2526AA01	235A2518AC01
Slinger/Inproseal	235A4575GS4	235A4575GS4

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C7100AA2
Fan Cover	128D6832AA1

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

