



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

# Product Technical Information

October 24, 2020

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

<b>Model Number:</b>	<b>5KS449XAA409D3</b>
<b>Catalog Number:</b>	<b>M8942</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG20
<b>Outline Drawing:</b>	239C6800VW

## 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		

## Table of Contents

Specification	01
Performance Characteristics	02
Outline Drawing	03
Connection Drawing(s)	04
Spare parts	05

Marks:

**MODEL NUMBER:** 5KS449XAA409D3  
**Outline Drawing:** 239C6800VW  
**Connection Diagram:** GEM2034E-FIG20  
**Instruction Book:** GEI-56128  
**Design Code:** 49BD4039A  
**Type:** KS  
**Frame:** 449T  
**Phases:** 3  
**Poles:** 8  
**Output Power:** 200HP 148KW  
**RPM:** 890  
**Voltage:** 460  
**Hertz:** 60  
**Amps - FL:** 248.0  
**Service Factor:** 1.15  
**Alt Service Factor:** --

**Estimated Weight:** 3200 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:** 95.0 %  
**Guaranteed Efficiency:** 94.5 %  
**3/4 Load Efficiency:** --  
**KVA Code:** G  
**Max KVAR:** 73.0  
**Power Factor:** 79.5  
**Bearing - DE:** 6318ZC3  
**Bearing - ODE:** 6318ZC3

Enclosure is Totally Enclosed Fan-Cooled

---

Stamped Nameplate Notes:

IEEE-STD-841-2009  
 DE BRG 90BC03JP3, ODE BRG 90BC03JP3  
 STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KS449XAA409D3 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 260C AT 1.15SF ON SINE-WAVE PWR  
 OR 200C VT OR 215C CT OR 200C CHP PWM CONTROL  
 ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB  
 VT 0 - 60 HZ, CT 45-60 HZ, CHP 60-90 HZ.



**Additional Information:**

8P - T EXTN - SPLIT LEAD  
PAINTED FRAME ID & SHAFT,  
FAN COVER INSIDE & ODE E/S OUTSIDE  
C/BOX 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: 49BD4039A**

**Marks:**

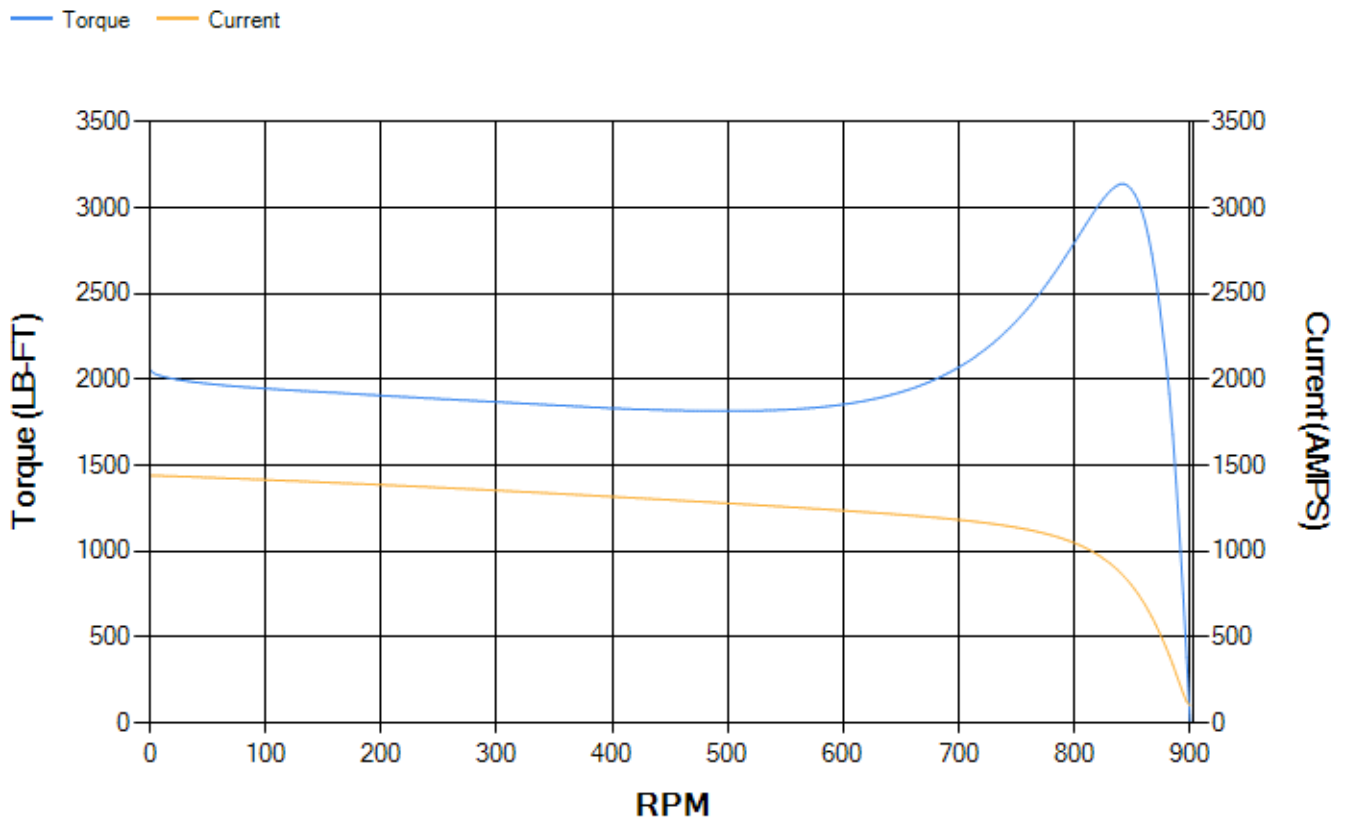
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	94.8	95.08	95.61	95.75	95.57	93.59	0.00
% PF	81.17	80.75	79.5	75	64.82	42.63	2.62
AMPS	304.06	280.41	246.27	195.5	151.1	117.3	101.76

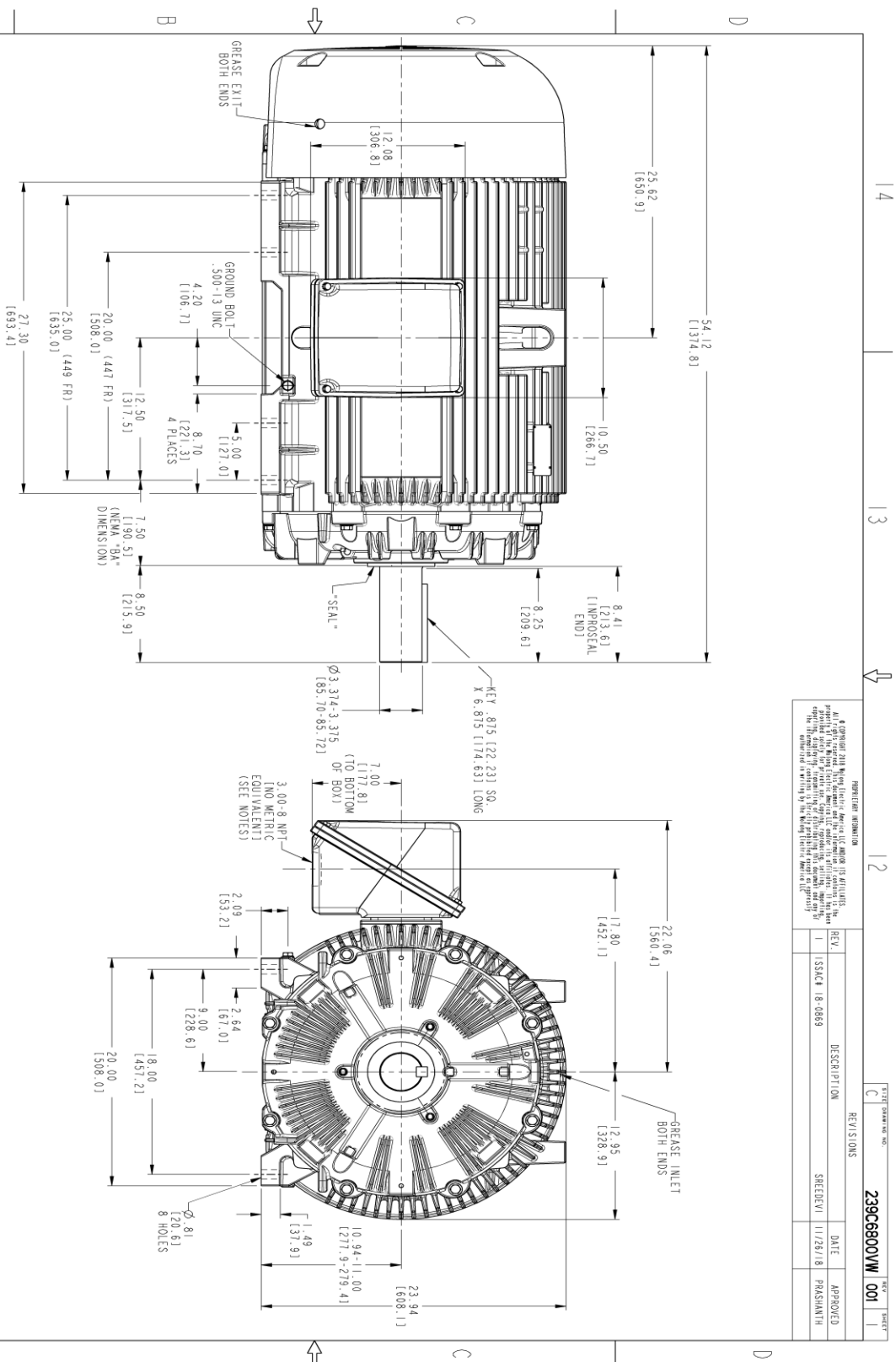
<b>TORQ(FL)#FT</b>	1181.54	<b>TORQ(LR)%FL</b>	174.61	<b>TORQ(BD)%FL</b>	265.4
<b>AMPS(LR)</b>	1443.24	<b>PF AT START</b>	0.33		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 28029 Lb-Ft Sq (1180.02 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 50 seconds. Safe stall time at 100% voltage is 121 seconds cold, 60 seconds hot. Rotor inertia is 213.06 Lb-Ft Sq (8.97 Kg-meter Sq).

<b>Open Circuit A-C:</b>	0.487	<b>Short Circuit D-C:</b>	0.036
<b>Short Circuit A-C:</b>	0.031	<b>X/R Ratio:</b>	13.728
<b>Stator Slots:</b>	72	<b>Rotor Slots:</b>	58

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

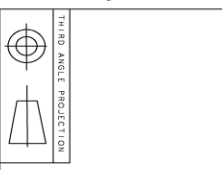




REVISION INFORMATION

REV.	DESCRIPTION	DATE	APPROVED
1	ISSUE	11/26/18	PARSHANTH

SHEET DRAWING NO. 239C6800WW 001



- 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.

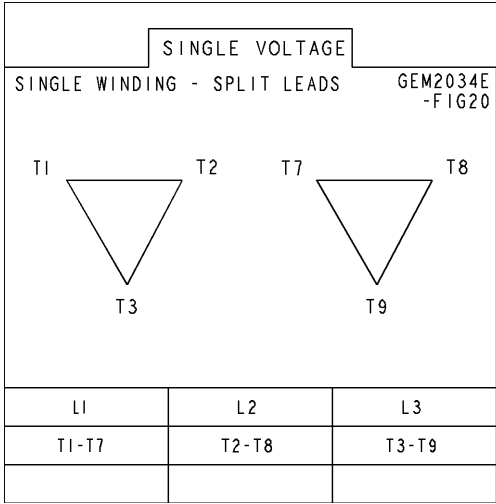
SIGNATURES		DATE	 <b>GE INDUSTRIAL MOTORS</b> a WOLONG company <b>OUTLINE</b> 447/449 T TEFC XSD 841 700 CU. IN. C BOX <b>239C6800WW</b>
MODEL	TEJASNI	01/22/15	
REVISED BY	TEJASNI	01/20/15	
CHECKED	VENKAT	01/20/15	
DESIGNED BY	VENKAT	01/20/15	QUALITY
ISSUED BY	TEJASNI	01/20/15	SCALE: 0.180
SOLD MODEL: 239C6800WW			REF. NO.: 239C6800AW

1 4 1 3 1 2 1 1

**Marks:**

---

**Connection Diagram**  
**GEM2034E-FIG20**



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E4355AA1	115E4355LM1
Bearing	235A2514AG01	235A2514AG01
Slinger/Inproseal	235A4575GS5	235A4575GS5

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C7100G03
Fan Cover	128D6841AA1

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

