



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

# Product Technical Information

June 22, 2020

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

<b>Model Number:</b>	<b>5KS449SAA408D5</b>
<b>Catalog Number:</b>	<b>M9785</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	239C6800AA

## 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:

<b>MODEL NUMBER:</b>	<b>5KS449SAA408D5</b>	<b>Estimated Weight:</b>	2660 Lbs
<b>Outline Drawing:</b>	239C6800AA	<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>	X\$D
<b>Design Code:</b>	49BD4025A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	50
<b>Frame:</b>	449T	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	8	<b>Nominal Efficiency:</b>	94.5 %
<b>Output Power:</b>	150HP 111KW	<b>Guaranteed Efficiency:</b>	94.1 %
<b>RPM:</b>	890	<b>3/4 Load Efficiency:</b>	95.3 %
<b>Voltage:</b>	460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	53.1
<b>Amps - FL:</b>	187.0	<b>Power Factor:</b>	79.5
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6318ZC3
<b>Alt Service Factor:</b>	1.00	<b>Bearing - ODE:</b>	6318ZC3

Enclosure is Totally Enclosed Fan-Cooled

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Stamped Nameplate Notes:

STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KS449SAA408D5 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 280C 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  
 700 CU IN - 3.00" NPT  
 OIL RESISTANT SLEEVING ON LEADS  
 F1 MOUNTING



**Performance Characteristics**

1st Winding 1st Connection

**Design: 49BD4025A**

**Marks:**

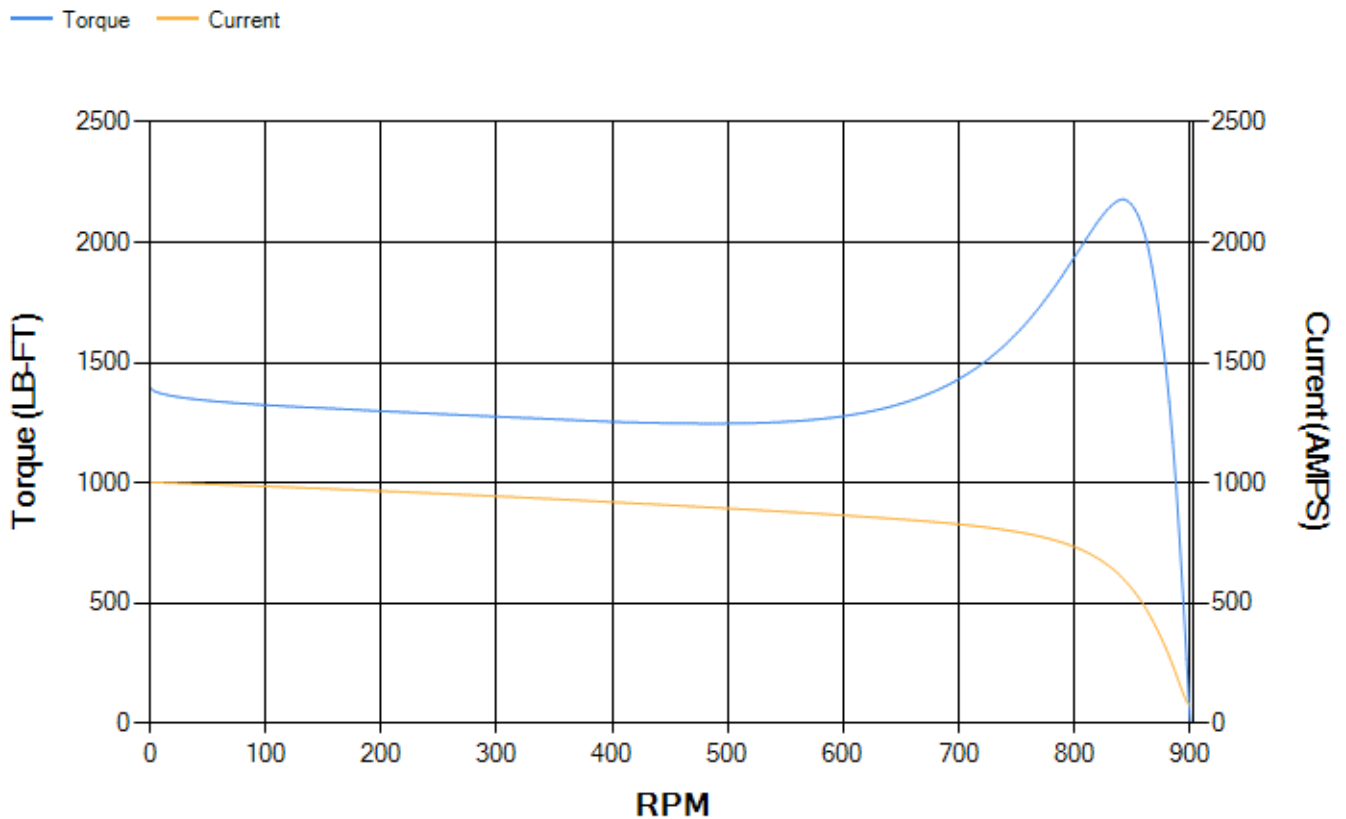
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	94.08	94.42	95.05	95.3	95.19	93.19	0.00
% PF	80.96	80.7	79.7	75.61	65.85	43.81	2.84
AMPS	230.41	211.87	185.33	146.13	111.99	85.97	74.04

**TORQ(FL)#FT** 887.22      **TORQ(LR)%FL** 157.76      **TORQ(BD)%FL** 245.15  
**AMPS(LR)** 1002.72      **PF AT START** 0.33

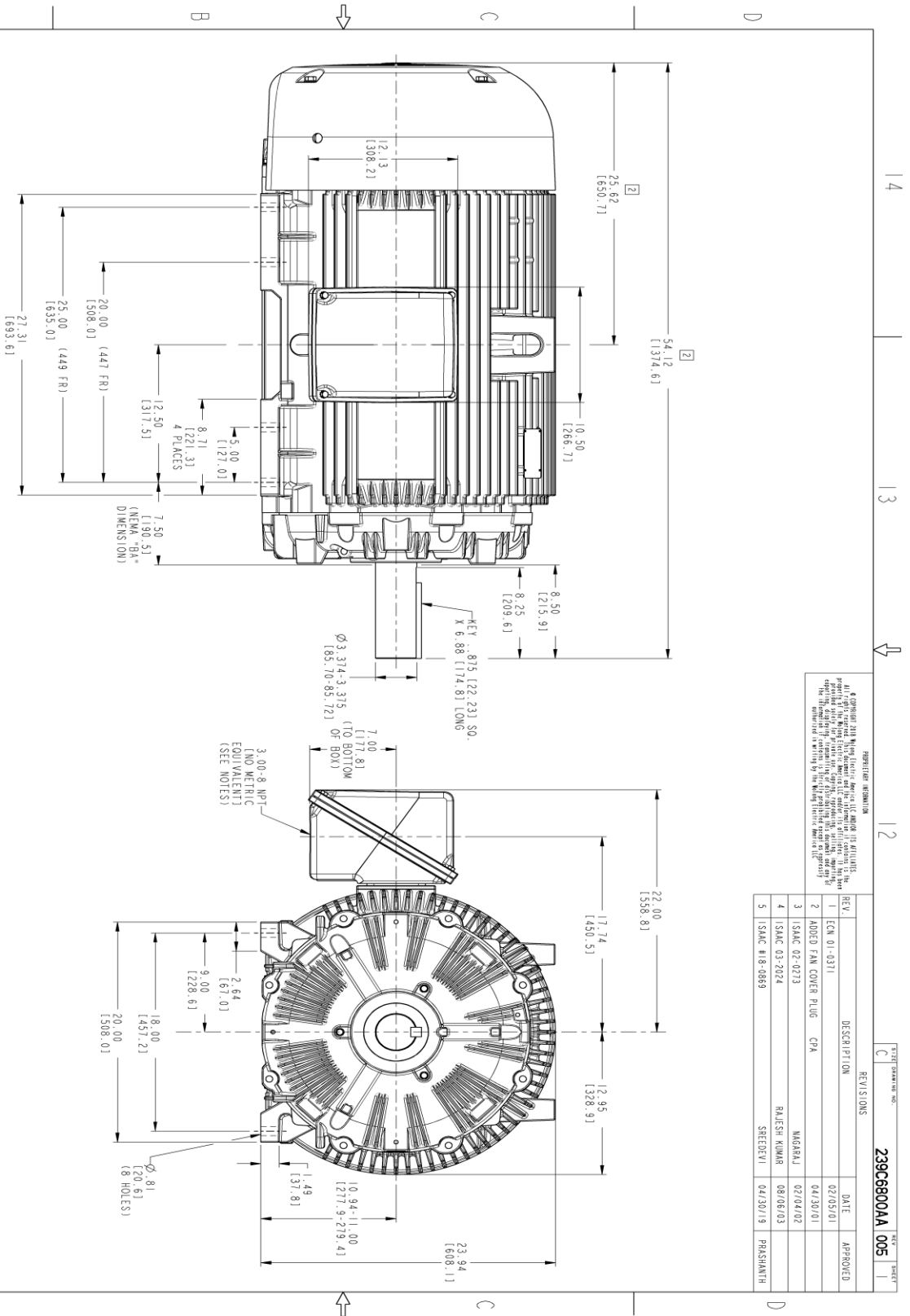
This motor is capable of two cold or one hot start with a maximum connected load inertia of 17460 Lb-Ft Sq (735.07 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 46 seconds. Safe stall time at 100% voltage is 114 seconds cold, 56 seconds hot. Rotor inertia is 137.14 Lb-Ft Sq (5.77 Kg-meter Sq).

**Open Circuit A-C:** 0.467      **Short Circuit D-C:** 0.031  
**Short Circuit A-C:** 0.031      **X/R Ratio:** 11.647  
**Stator Slots:** 72      **Rotor Slots:** 58

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



Marks:



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REV.	DESCRIPTION	DATE	APPROVED
1	ECH 01-0311	02/05/01	
2	ADDED FAN COVER PLUG CPA	04/30/01	
3	ISAC 02-0213	02/04/02	MAGARAJ
4	ISAC 03-2024	08/08/03	RAJESH KUMAR
5	ISAC #18-0869	04/30/19	PRASHANTH

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 HAS CONDUIT BOX ON OPPOSITE SIDE.
4. BRACKETED DIMENSIONS ARE METRIC (MILLIMETERS).



SIGNATURES	DATE	TITLE
MODEL		
DESIGN		
CHECKED		
DATE		
ISSUED		
SCALE: 0.180		

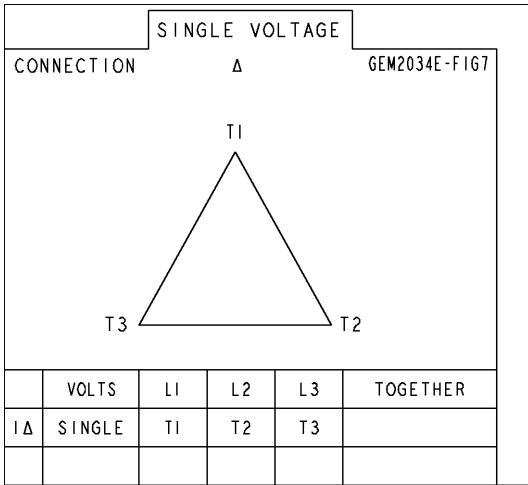
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 a WOLONG company

**OUTLINE DRAWING**  
 447/449T TEFC  
 700 CU. IN. CONDUIT BOX

239C6800AA  
 REV 005  
 SHEET 1 OF 1

**Marks:**

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



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E4355AA1	115E4355LM1
Bearing	235A2514AG01	235A2514AG01
Slinger/Inproseal	149C4399G07	149C4399G07

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	

