



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

# Product Technical Information

February 14, 2021

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

<b>Model Number:</b>	<b>5KS449SAA122D8</b>
<b>Catalog Number:</b>	<b>M8959</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG20
<b>Outline Drawing:</b>	239C6800ARL

## 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>5KS449SAA122D8</b>	<b>Estimated Weight:</b>	2770 Lbs
<b>Outline Drawing:</b>	239C6800ARL	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG20	<b>Enclosure:</b>	TEFC
<b>Instruction Book:</b>	GEI-56128	<b>Encl Construction:</b>	841
<b>Design Code:</b>	49BD0193B	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	449TS	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	2	<b>Nominal Efficiency:</b>	95.8 %
<b>Output Power:</b>	250HP 185KW	<b>Guaranteed Efficiency:</b>	95.4 %
<b>RPM:</b>	3580	<b>3/4 Load Efficiency:</b>	--
<b>Voltage:</b>	575	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	42.9
<b>Amps - FL:</b>	212.0	<b>Power Factor:</b>	92.0
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6314ZC3
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	6314ZC3

Enclosure is Totally Enclosed Fan-Cooled

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Stamped Nameplate Notes:

IEEE-STD-841-2009

FOR DIRECT COUPLED LOAD ONLY

DE BRG 70BC03JP30, ODE BRG 70BC03JP30

ROT CW FACING ODE LEAD/PH SEQ 1-2-3/1-2-3

STAMP NP249A5564P051 AS BELOW:

MODEL:5KS449SAA122D8 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 215C AT 1.15SF ON SINE-WAVE PWR

OR 200C VT OR 215C CT OR ---C CHP PWM CONTROL

ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB

VT 0-60 HZ, CT 45-60 HZ, CHP --- HZ.



**Additional Information:**

2P - TS EXTN - SPLIT LEAD  
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: 49BD0193B**

**Marks:**

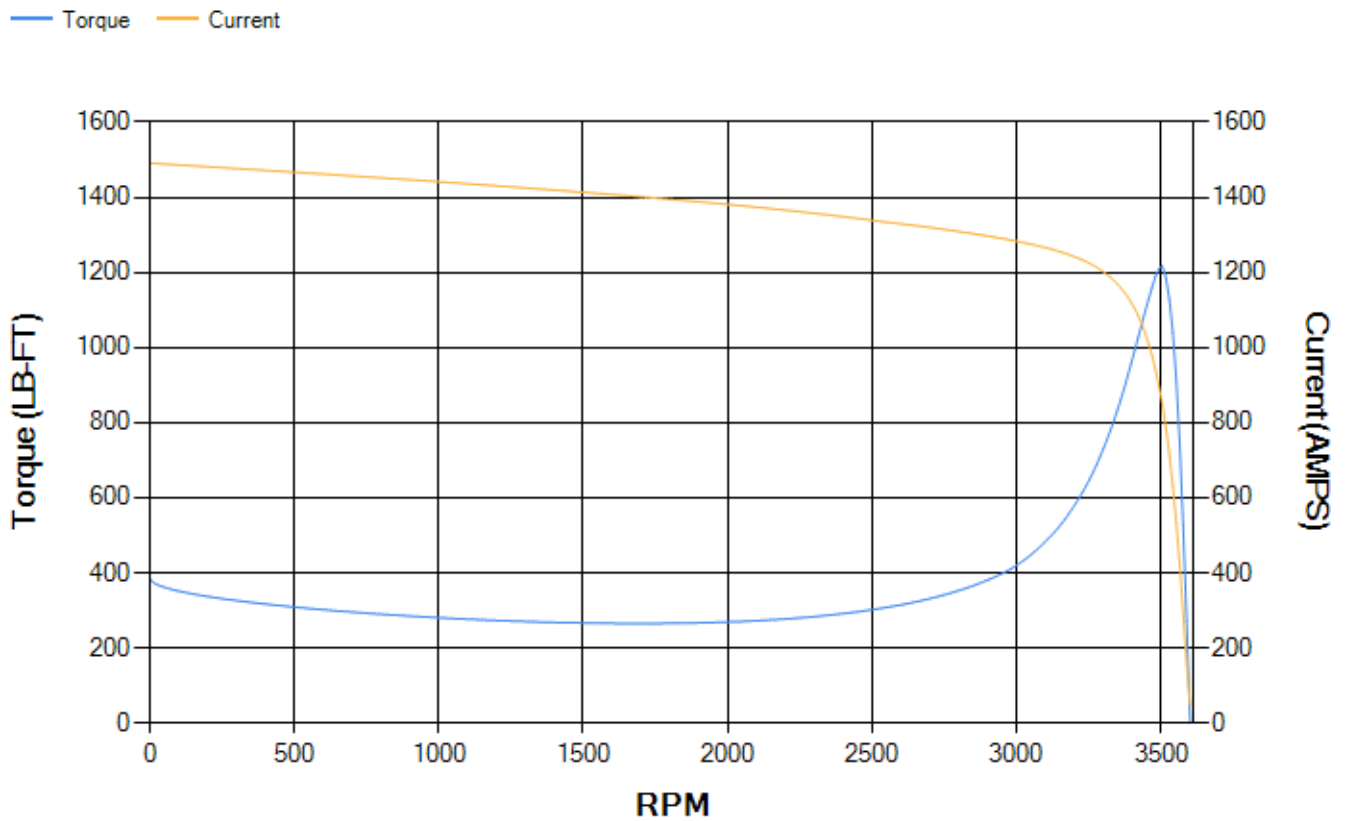
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.77	95.94	96.33	96.28	95.95	93.89	0.00
% PF	92.26	92.29	92.08	90.7	86.24	70.06	5.52
AMPS	264.79	243.13	211.04	160.77	113.11	71.15	47.88

<b>TORQ(FL)#FT</b>	366.48	<b>TORQ(LR)%FL</b>	105.33	<b>TORQ(BD)%FL</b>	331.7
<b>AMPS(LR)</b>	1491.03	<b>PF AT START</b>	0.18		

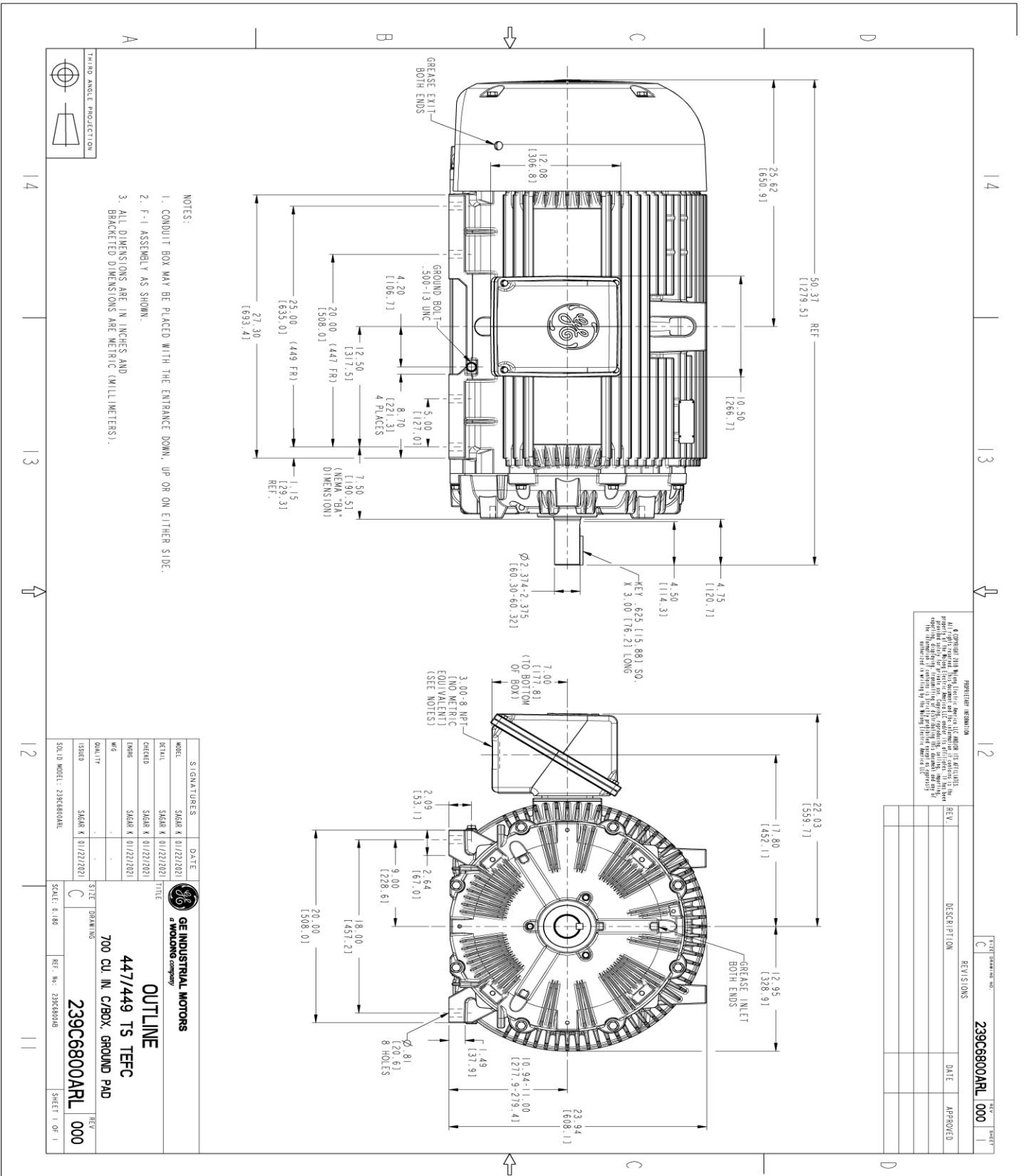
This motor is capable of two cold or one hot start with a maximum connected load inertia of 808 Lb-Ft Sq (34.02 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 40 seconds. Safe stall time at 100% voltage is 91 seconds cold, 48 seconds hot. Rotor inertia is 48.07 Lb-Ft Sq (2.02 Kg-meter Sq).

<b>Open Circuit A-C:</b>	2.262	<b>Short Circuit D-C:</b>	0.037
<b>Short Circuit A-C:</b>	0.076	<b>X/R Ratio:</b>	13.869
<b>Stator Slots:</b>	48	<b>Rotor Slots:</b>	38

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



Marks:



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

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REV.	DESCRIPTION	DATE	APPROVED

SIGNATURES	DATE	TITLE

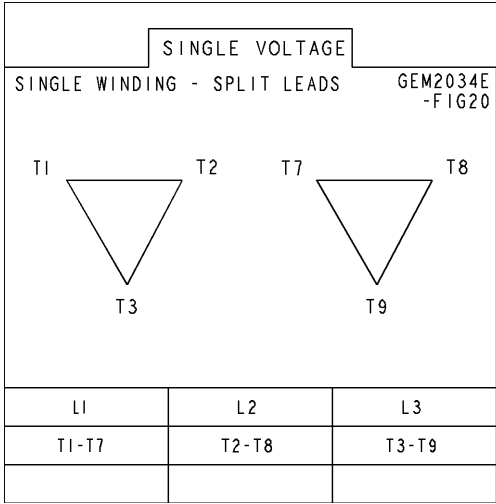
**GE INDUSTRIAL MOTORS**  
**a wolong company**

**OUTLINE**  
**447/449 TS TEFC**  
**700 CU. IN. C/BOX, GROUND PAD**

SIZE: DRAWING  
 SCALE: 0.180  
 REF. NO.: 239C6800ARL  
 239C6800ARL  
 SHEET 1 OF 1

**Marks:**

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



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E4354AA1	115E4354LL1
Bearing	235A2516AC01	235A2516AC01
Slinger/Inproseal	149C4399G05	149C4399G05

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	149C4261AK2
Fan Cover	128D6841AC1

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

