



**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>5KS449XAA100</b>
<b>Catalog Number:</b>	<b>M9006</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG20
<b>Outline Drawing:</b>	239C6801GX

## 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>5KS449XAA100</b>	<b>Estimated Weight:</b>	2770 Lbs
<b>Outline Drawing:</b>	239C6801GX	<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>	49BD0193A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	449TSC	<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>	460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	39.2
<b>Amps - FL:</b>	264.0	<b>Power Factor:</b>	92.5
<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:

EXCEPTION TO IEEE-STD-841-2009  
ESTIMATED SOUND POWER AT NO-LOAD:94 DBA  
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:5KS449XAA100 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 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 FACE WITH 16.00 RABBIT ON DE  
C/BOX 1260 CU IN - 2(4.00" NPT) WITH DRAIN HOLES  
C/B GRD PLATE  
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: 49BD0193A**

**Marks:**

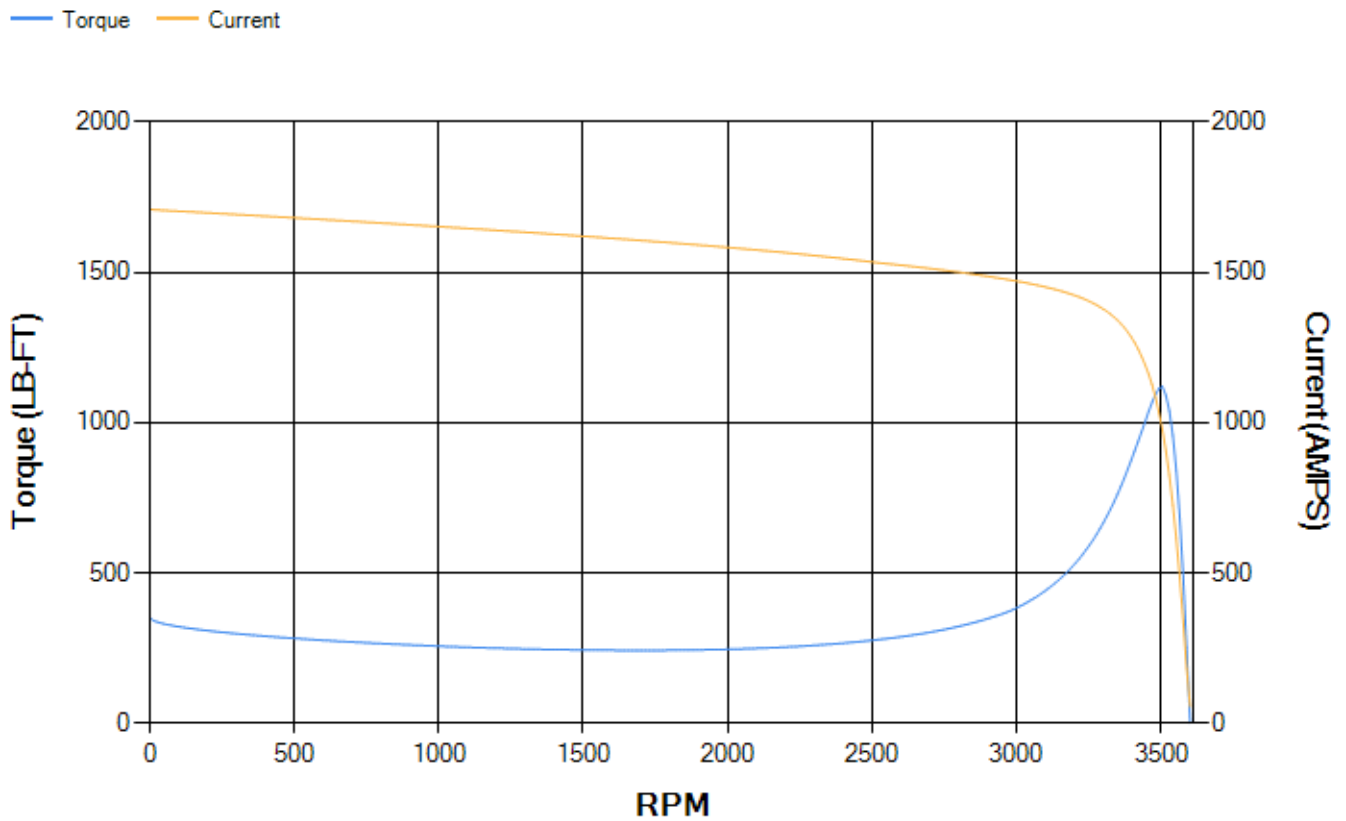
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.5	95.7	96.15	96.17	95.93	94.01	0.00
% PF	92.15	92.29	92.28	91.3	87.55	72.84	5.84
AMPS	332.36	304.66	263.75	199.87	139.3	85.42	54.67

<b>TORQ(FL)#FT</b>	366.7	<b>TORQ(LR)%FL</b>	96.09	<b>TORQ(BD)%FL</b>	305.12
<b>AMPS(LR)</b>	1709.42	<b>PF AT START</b>	0.18		

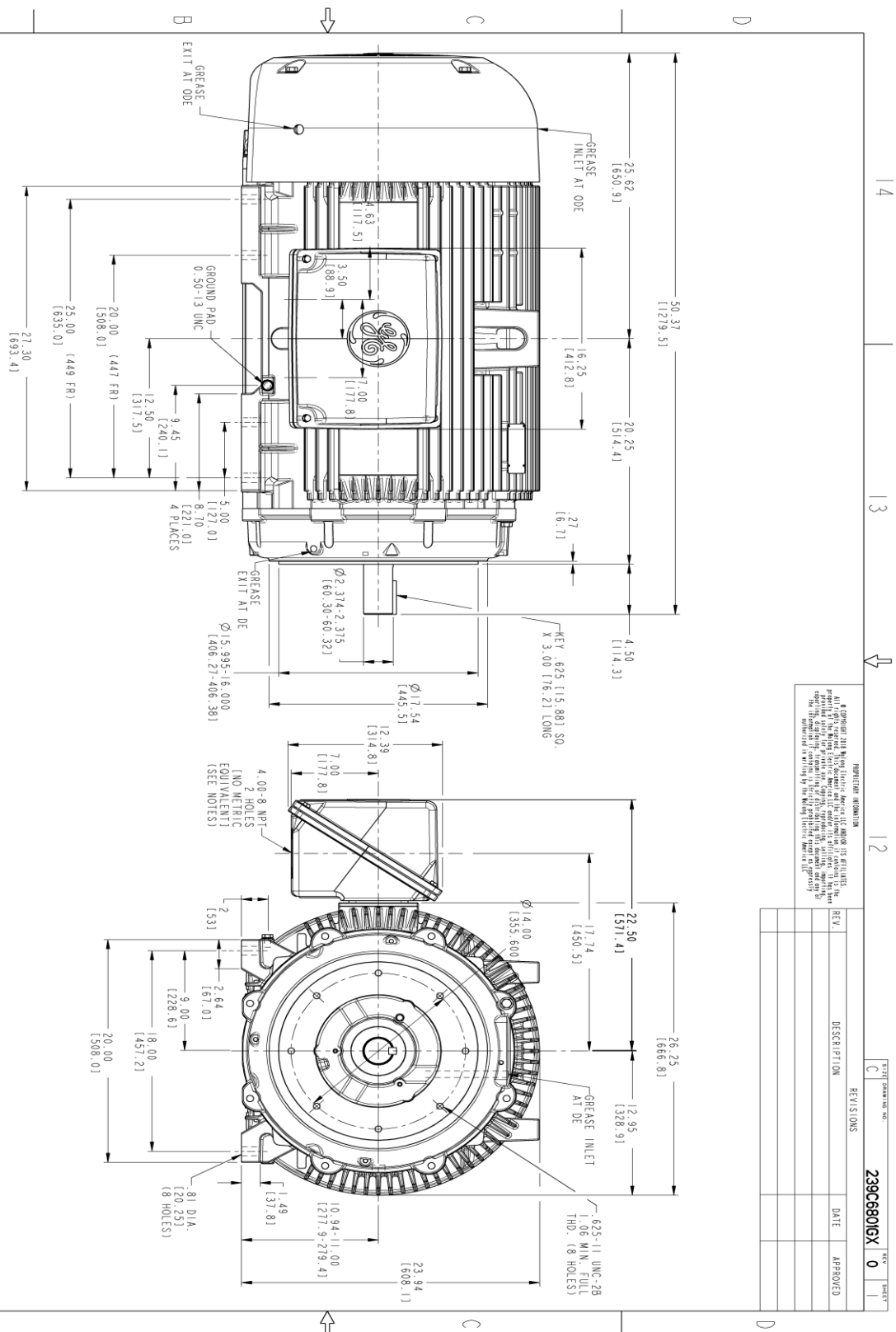
This motor is capable of two cold or one hot start with a maximum connected load inertia of 725 Lb-Ft Sq (30.52 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 42 seconds. Safe stall time at 100% voltage is 98 seconds cold, 50 seconds hot. Rotor inertia is 48.07 Lb-Ft Sq (2.02 Kg-meter Sq).

<b>Open Circuit A-C:</b>	2.243	<b>Short Circuit D-C:</b>	0.037
<b>Short Circuit A-C:</b>	0.075	<b>X/R Ratio:</b>	13.782
<b>Stator Slots:</b>	48	<b>Rotor Slots:</b>	38

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



Marks:



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REV.	DESCRIPTION	DATE	APPROVED

- NOTES:
1. CONDUIT BOX MAY BE PLACED WITH THE ENTRANCE DOWN, UP OR ON EITHER SIDE.
  2. F-I ASSEMBLY AS SHOWN.
  3. TOLERANCE ON PERMISSIBLE SHAFT EXTENSION ROUNDT IS .0015 I. I. R
  4. ALL DIMENSIONS ARE IN INCHES. BRACKETED DIMENSIONS ARE METRIC (MILLIMETERS).



THIRD ANGLE PROJECTION

SIGNATURES	DATE
MODEL: MALINDS 29103/2020	
RETAIL: MALINDS 29103/2020	
CHECKED: BGDH 29103/2020	
DRAWN: MALINDS 29103/2020	
WFS:	
QUALITY:	
ISSUED: MALINDS 29103/2020	
SOLD MODEL: 239C6801GX	

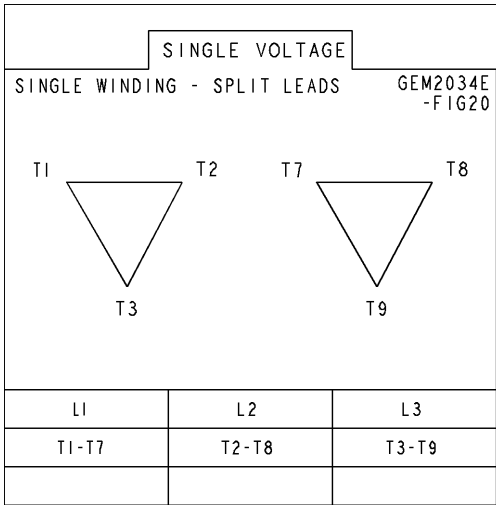
  

<p><b>GE INDUSTRIAL MOTORS</b>                  a WOLONG company</p>	
<p><b>OUTLINE</b></p>	
<p><b>447/449 TSC TEFC XSD 841</b></p>	
<p><b>1260 CU. IN. CONDUIT BOX GROUND PAD</b></p>	
SIZE: C	SCALE: 0.180
DRAWING: 239C6801GX	REV: 0
REF. NO.: 239C6801F	SHEET 1 OF 1

**Marks:**

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



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E4357KA1	115E4354LL1
Bearing	235A2516AC01	235A2516AC01
Slinger/Inproseal	235A4575GS3	235A4575GS3

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

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	179B9058AA-G02

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

