



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

# Product Technical Information

February 17, 2023

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

<b>Model Number:</b>	<b>5KGS445SAA208A</b>
<b>Catalog Number:</b>	<b>M8803</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	239C6600AA

## 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>5KGS445SAA208A</b>	<b>Estimated Weight:</b>	2060 Lbs
<b>Outline Drawing:</b>	239C6600AA	<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>	44BD1159A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KGS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	445T	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	C
<b>Poles:</b>	4	<b>Nominal Efficiency:</b>	95.8 %
<b>Output Power:</b>	150HP 111KW	<b>Guaranteed Efficiency:</b>	95.4 %
<b>RPM:</b>	1780	<b>3/4 Load Efficiency:</b>	--
<b>Voltage:</b>	460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	42.9
<b>Amps - FL:</b>	171.0	<b>Power Factor:</b>	85.5
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6318ZC3
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	6318ZC3

Enclosure is Totally Enclosed Fan-Cooled

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Stamped Nameplate Notes:

STAMP NP249A5564P051 AS BELOW:

MODEL:5KGS445SAA208A 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 260C 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:**

4P - T EXTN  
C/BOX 700 CU IN - 3.00" NPT  
OIL RESISTANT SLEEVING ON LEADS  
F1 MOUNTING



**Performance Characteristics**

1st Winding 1st Connection

**Design: 44BD1159A**

**Marks:**

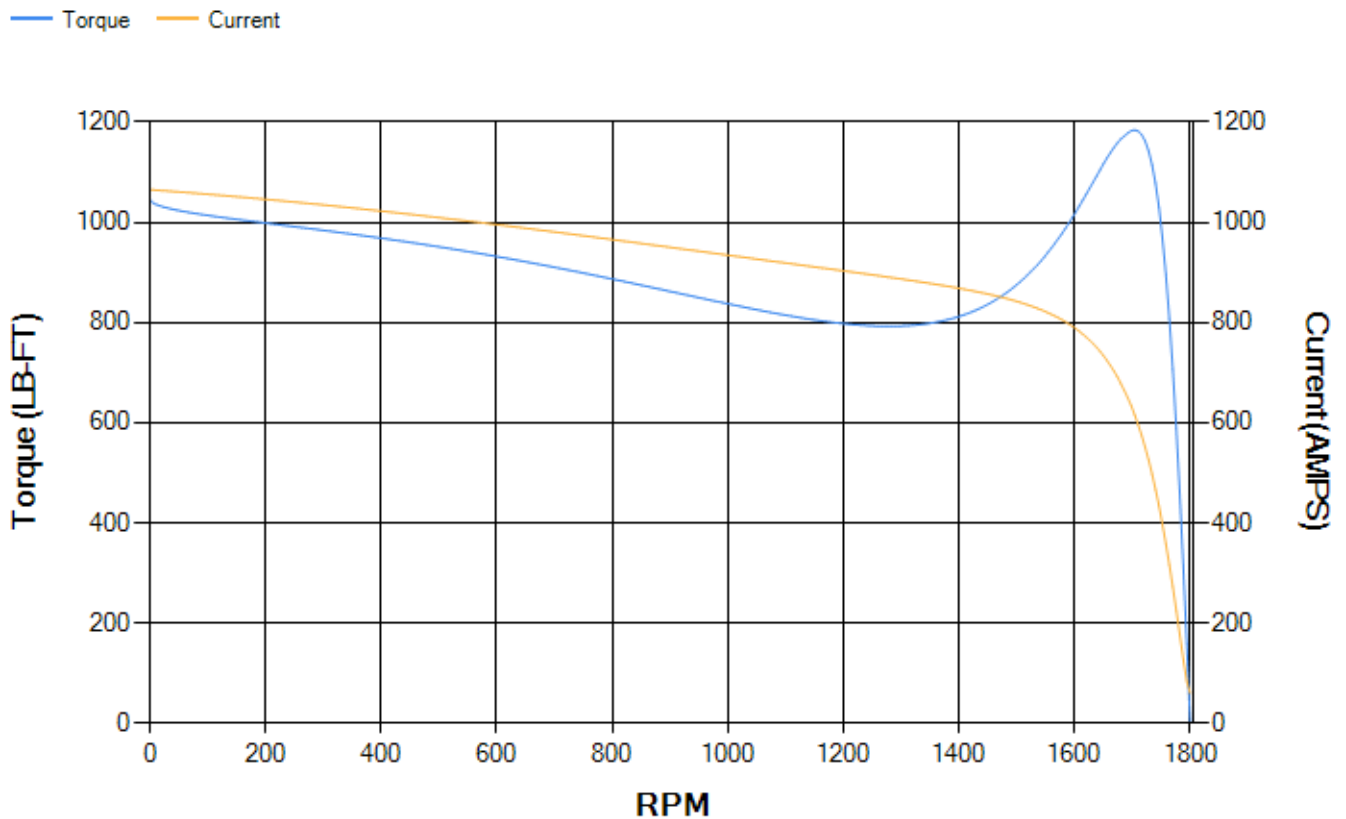
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.29	95.5	95.96	96	95.76	93.77	0.00
% PF	87.03	86.69	85.74	82.23	73.6	51.57	3.29
AMPS	211.62	195.01	170.63	133.38	99.6	72.58	59.83

<b>TORQ(FL)#FT</b>	442.26	<b>TORQ(LR)%FL</b>	236.59	<b>TORQ(BD)%FL</b>	267.38
<b>AMPS(LR)</b>	1065.38	<b>PF AT START</b>	0.41		

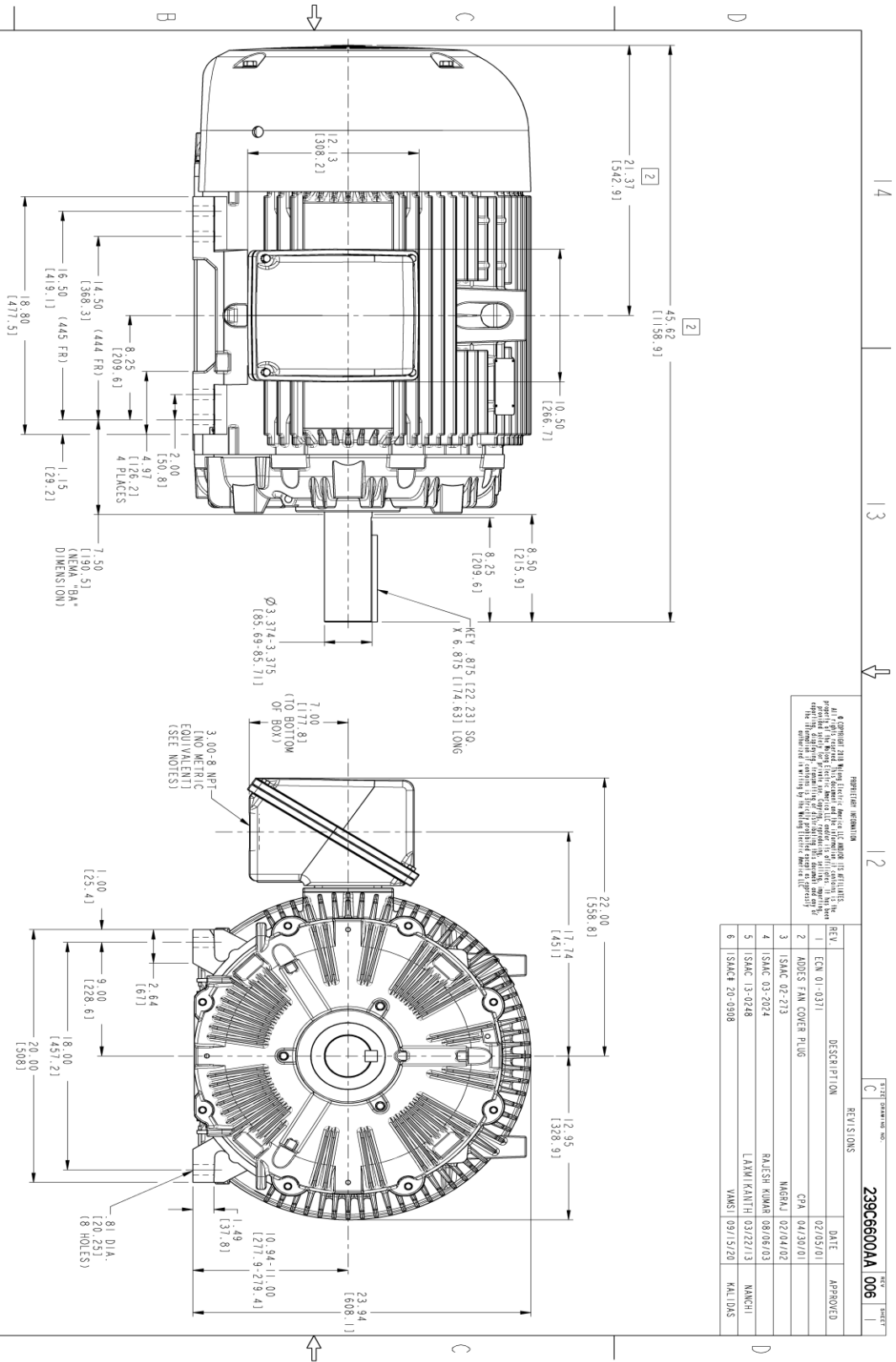
This motor is capable of two cold or one hot start with a maximum connected load inertia of 2409 Lb-Ft Sq (101.42 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 19 seconds. Safe stall time at 100% voltage is 43 seconds cold, 22 seconds hot. Rotor inertia is 71.16 Lb-Ft Sq (3 Kg-meter Sq).

<b>Open Circuit A-C:</b>	0.68	<b>Short Circuit D-C:</b>	0.029
<b>Short Circuit A-C:</b>	0.031	<b>X/R Ratio:</b>	10.907
<b>Stator Slots:</b>	72	<b>Rotor Slots:</b>	58

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



Marks:



PROPRIETARY INFORMATION  
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REV.	DESCRIPTION	DATE	APPROVED
1	ECN 01-0311	02/05/01	
2	ADDS FAN COVER PLUG	04/30/01	
3	ISAC 02-213	MGRAL 02/04/02	
4	ISAC 03-2024	RAJESH KUMAR 08/06/03	
5	ISAC 13-0248	LAXMI KANTH 03/22/13	
6	ISAC# 20-0308	YANLI 09/15/20	

- NOTES:
- CONDUIT BOX MAY BE PLACED WITH THE ENTRANCE DOWN, UP OR ON EITHER SIDE.
  - F-1 ASSEMBLY AS SHOWN (B3L).
  - ALL DIMENSIONS ARE IN INCHES. BRACKETED DIMENSIONS ARE METRIC (MILLIMETERS).

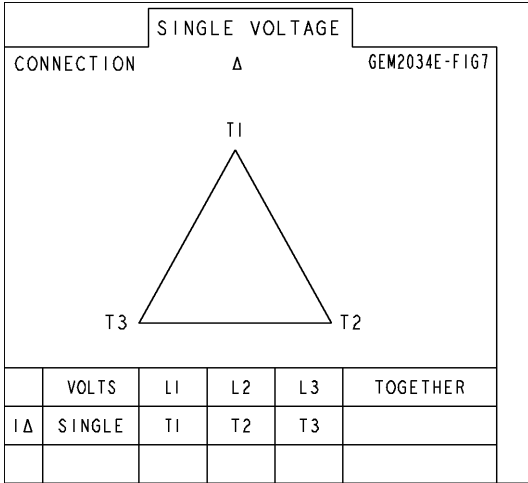


SIGNATURES	DATE	TITLE
MODEL: J. M. JÜRGEN	04/17/00	GE INDUSTRIAL MOTORS
REVIEW: J. M. JÜRGEN	04/17/00	GE WOLONG COMPANY
CHECKED: W. ELLSWORTH	04/17/00	OUTLINE
DRAWN: D. STARK	04/17/00	444/445T TEFC
DATE: 04/17/00		700 CU. IN. CONDUIT BOX
QUALITY: W. ELLSWORTH	04/17/00	239C6600AA
ISSUED: W. ELLSWORTH	04/17/00	REV
SOLD MODEL: 239C6600AA		006

SCALE: 0.200 REF. NO. 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	235A2614AA01	235A2614AA01
Slinger/Inproseal	149C4399G07	149C4399G07

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C7100AA2
Fan Cover	128D6841AA1

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

