



**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>5KS445XAA200</b>
<b>Catalog Number:</b>	<b>M9011</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG1
<b>Outline Drawing:</b>	239C6601EW

## 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>5KS445XAA200</b>	<b>Estimated Weight:</b>	2060 Lbs
<b>Outline Drawing:</b>	239C6601EW	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG1	<b>Enclosure:</b>	TEFC
<b>Instruction Book:</b>	GEI-56128	<b>Encl Construction:</b>	841
<b>Design Code:</b>	44BD1174A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	445TC	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<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>	1785	<b>3/4 Load Efficiency:</b>	--
<b>Voltage:</b>	460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	40.4
<b>Amps - FL:</b>	168.0	<b>Power Factor:</b>	87.0
<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:

EXCEPTION TO IEEE-STD-841-2009: SOUND POWER 93 DBA  
 DE BRG 90BC03JP3, ODE BRG 90BC03JP3  
 STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KS445XAA200 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 200C CHP PWM CONTROL  
 ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB  
 VT 0 - 60 HZ, CT 15 - 60 HZ, CHP 60 - 90 HZ.



**Additional Information:**

4P - T EXTN  
PAINTED FRAME ID & SHAFT,  
FAN COVER INSIDE & ODE E/S OUTSIDE  
C FACE WITH 16.00 RABBIT ON DE  
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: 44BD1174A**

**Marks:**

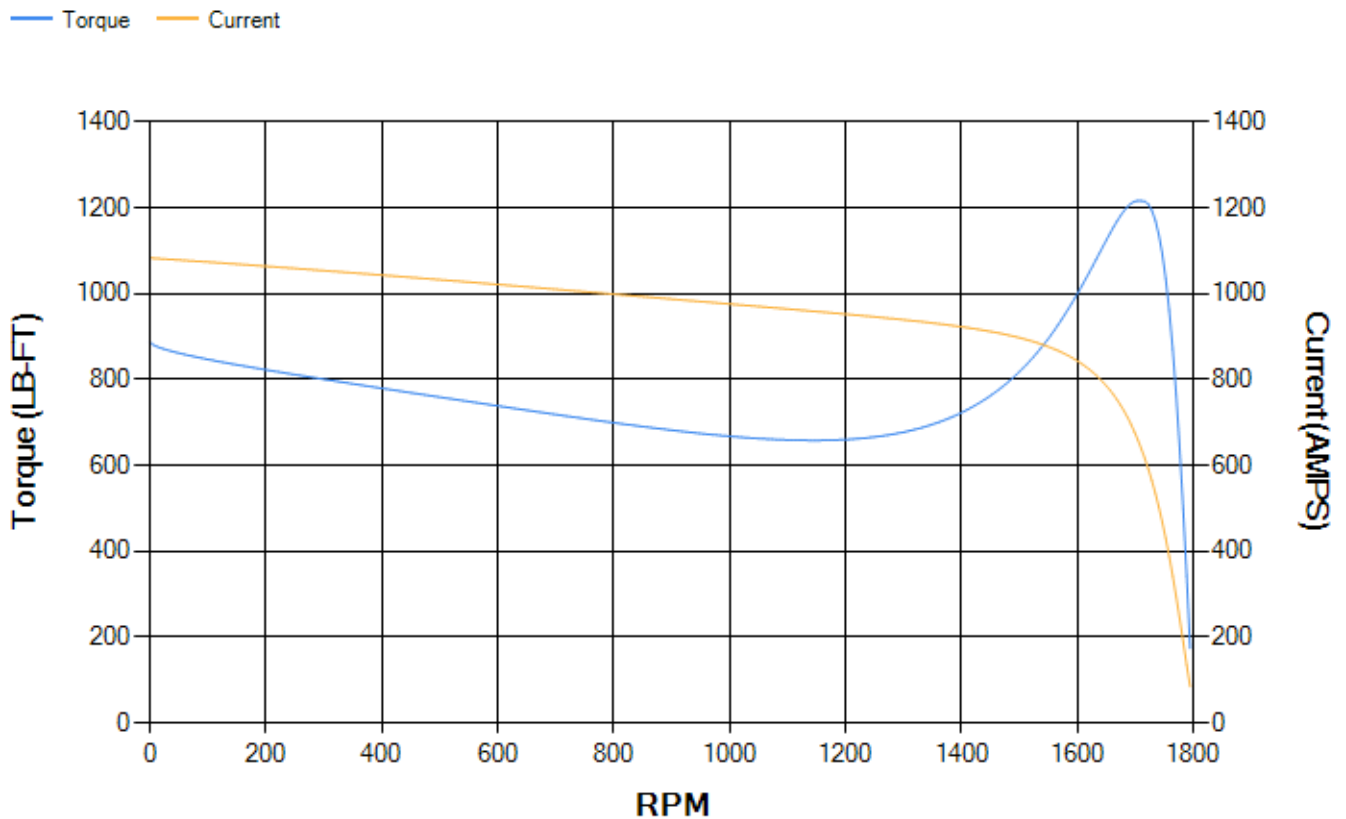
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.32	95.48	95.85	95.71	95.18	92.53	0.00
% PF	88.06	87.76	86.89	83.67	75.62	54.28	4.43
AMPS	209.06	192.69	168.57	131.49	97.52	69.87	56.28

<b>TORQ(FL)#FT</b>	441.48	<b>TORQ(LR)%FL</b>	201.51	<b>TORQ(BD)%FL</b>	275.25
<b>AMPS(LR)</b>	1083.73	<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 3239 Lb-Ft Sq (136.36 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 30 seconds. Safe stall time at 100% voltage is 58 seconds cold, 37 seconds hot. Rotor inertia is 71.16 Lb-Ft Sq (3 Kg-meter Sq).

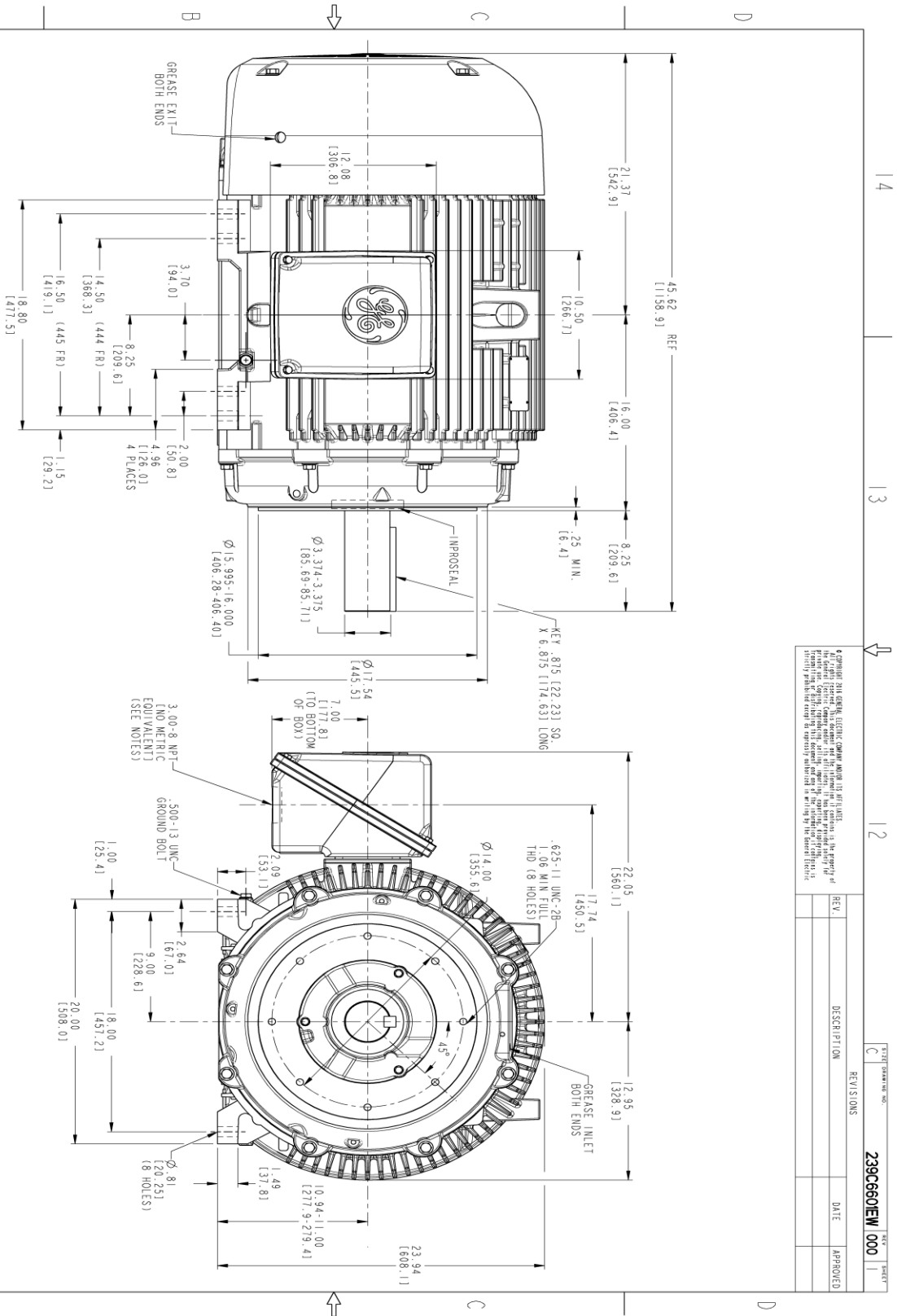
<b>Open Circuit A-C:</b>	0.856	<b>Short Circuit D-C:</b>	0.033
<b>Short Circuit A-C:</b>	0.04	<b>X/R Ratio:</b>	12.52
<b>Stator Slots:</b>	72	<b>Rotor Slots:</b>	58

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



Marks:

SOLID MODEL: 239C6601EW



- 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-CONDUIT BOX ON OPPOSITE SIDE.
  4. ALL DIMENSIONS ARE IN INCHES AND BRACKETED DIMENSIONS ARE IN METRIC (MILLIMETERS).
  5. PERMISSIBLE TOLERANCE ON SHAFT EXTENSION IS .0015 T. I. R.

REV.	DESCRIPTION	DATE	APPROVED

239C6601EW 000

SIGNATURES		DATE	
DESIGN	SCALE: 0.200	REF. NO. 239C6601C	SHEET 1 OF 1
CHECKED	GE POWER CONVERSION		
DATE	CLASS II REF. INTERNAL CIRCULAR		
QUALITY	OUTLINE		
ISSUED	444/445 TC XSD 841		
	700 CU IN CONDUIT BOX		
	239C6601EW 000		

**Marks:**

**Connection Diagram**  
**GEM2034E-FIG1**



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E4357AA1	115E4355LM1
Bearing	235A2514AG01	235A2514AG01
Slinger/Inproseal	235A4575GS5	235A4575GS5

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C7100G02
Fan Cover	128D6841AA1

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

