



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

# Product Technical Information

February 15, 2021

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

<b>Model Number:</b>	<b>5KS449SAA118D14</b>
<b>Catalog Number:</b>	<b>M9514</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG20
<b>Outline Drawing:</b>	239C6800ARK

## 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:

**MODEL NUMBER:** 5KS449SAA118D14  
**Outline Drawing:** 239C6800ARK  
**Connection Diagram:** GEM2034E-FIG20  
**Instruction Book:** GEI-56128  
**Design Code:** 49BD0193A  
**Type:** KS  
**Frame:** 449TS  
**Phases:** 3  
**Poles:** 2  
**Output Power:** 250HP 185KW  
**RPM:** 3580  
**Voltage:** 460  
**Hertz:** 60  
**Amps - FL:** 264.0  
**Service Factor:** 1.15  
**Alt Service Factor:** --

**Estimated Weight:** 2770 Lbs  
**Time Rating:** CONT  
**Enclosure:** TEFC  
**Encl Construction:** 841  
**Ambient Max(°C):** 40  
**Alt Ambient Max(°C):** --  
**Insulation Class:** H  
**NEMA Design:** B  
**Nominal Efficiency:** 95.8 %  
**Guaranteed Efficiency:** 95.4 %  
**3/4 Load Efficiency:** --  
**KVA Code:** G  
**Max KVAR:** 39.2  
**Power Factor:** 92.5  
**Bearing - DE:** 6314ZC3  
**Bearing - ODE:** 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:5KS449SAA118D14 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 1260 CU IN - 2(4.00" NPT)  
C/B GRD PLATE  
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: 49BD0193A**

**Marks:**

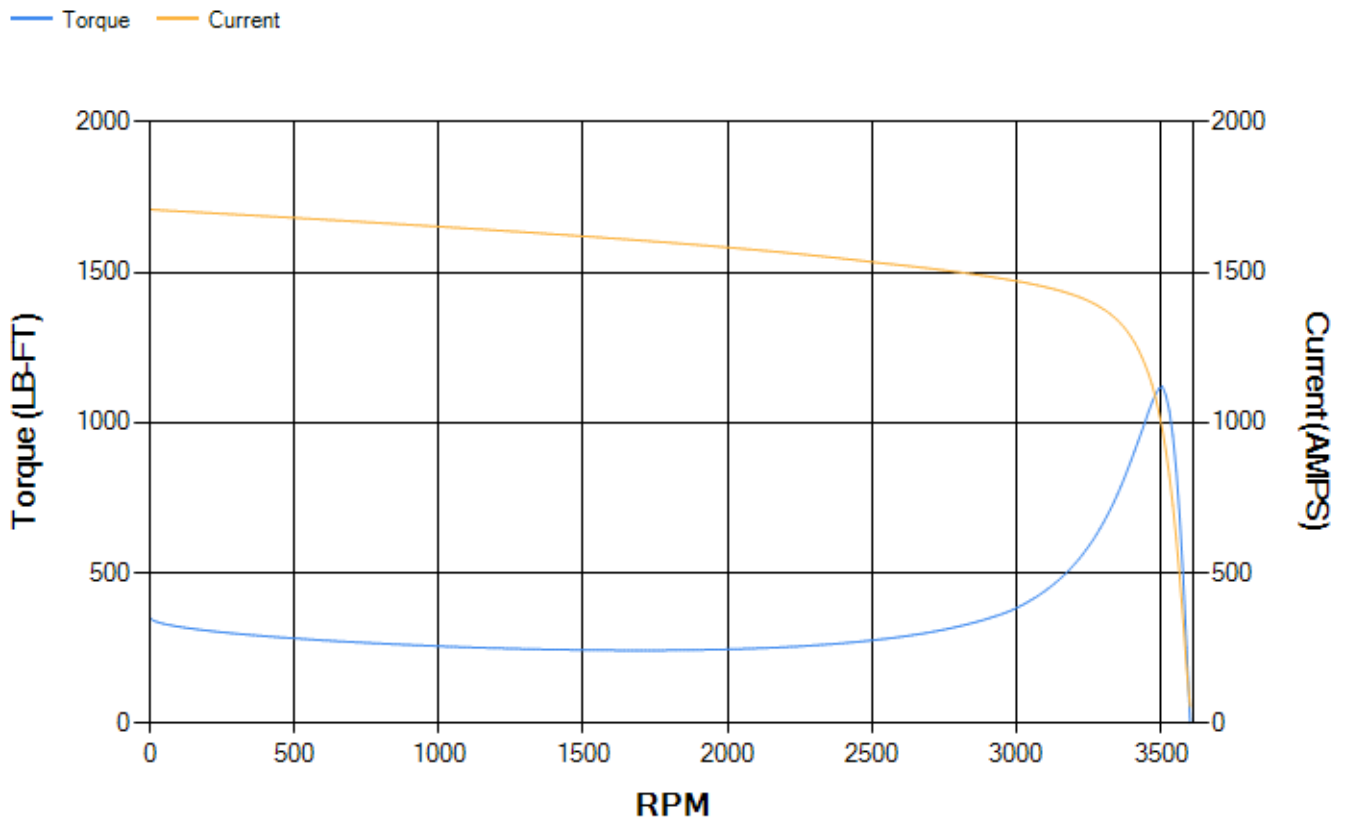
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.5	95.7	96.15	96.17	95.93	94.01	0.00
% PF	92.15	92.29	92.28	91.3	87.55	72.84	5.84
AMPS	332.36	304.66	263.75	199.87	139.3	85.42	54.67

<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		

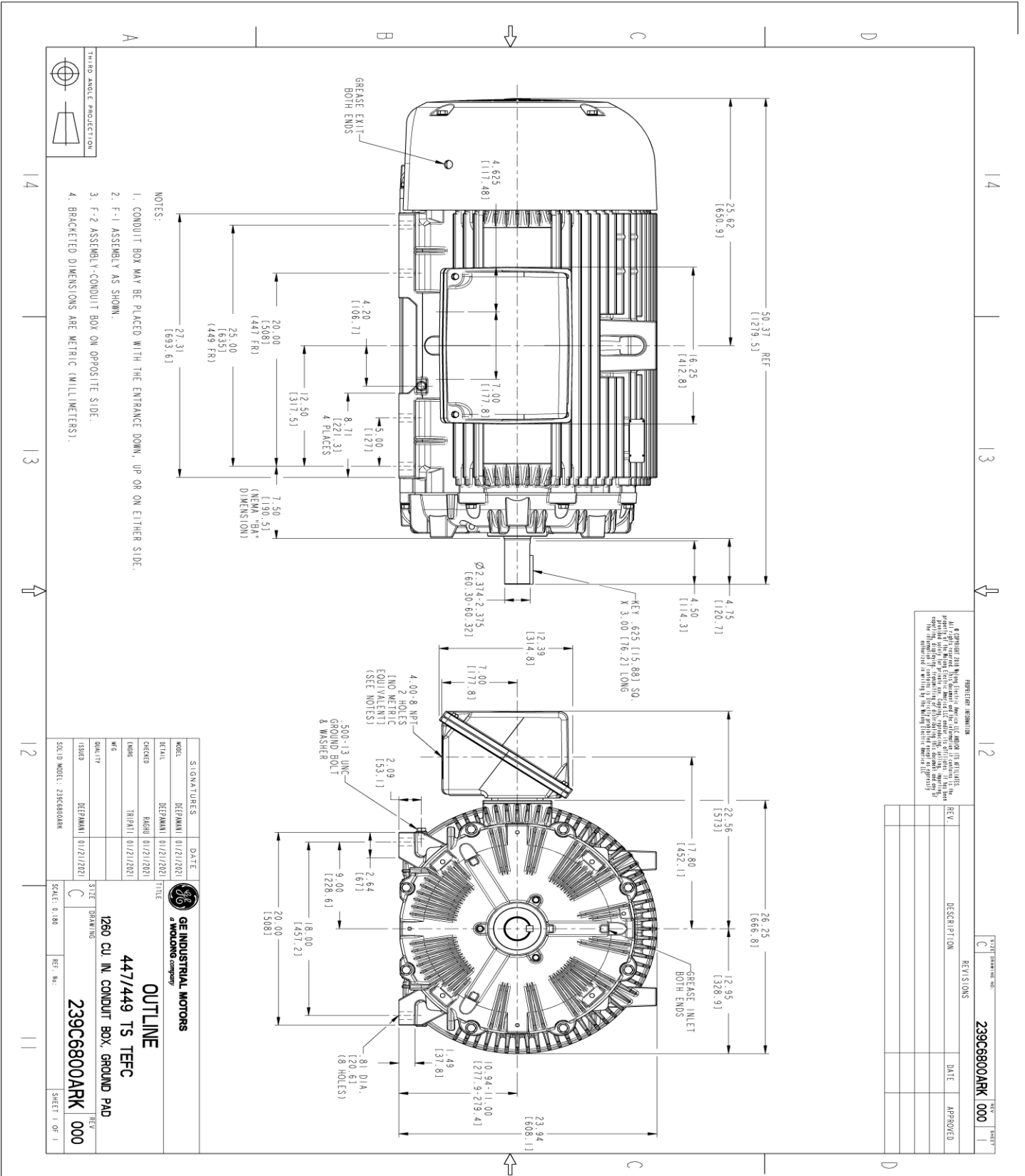
This motor is capable of two cold or one hot start with a maximum connected load inertia of 725 Lb-Ft Sq (30.52 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 42 seconds. Safe stall time at 100%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



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. BRACKETED DIMENSIONS ARE METRIC (MILLIMETERS).

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REV.	DESCRIPTION	DATE	APPROVED

SIGNATURES	DATE	TITLE
DEPMANN	01/21/2021	DESIGNER
DEPMANN	01/21/2021	CHECKER
DEPMANN	01/21/2021	DATE
DEPMANN	01/21/2021	ISSUED

**GE INDUSTRIAL MOTORS**  
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**OUTLINE**  
 447/449 TS TEFC  
 1260 CU IN. CONDUIT BOX, GROUND PAD

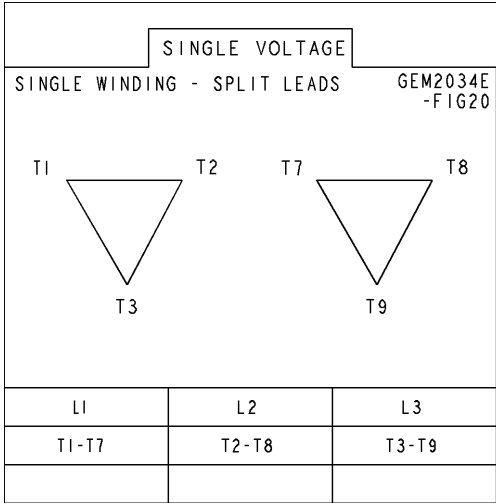
**239C6800ARK 000**

SCALE: 0.180 REF. NO. 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	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	179B9058G03

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

