



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

# Product Technical Information

May 2, 2023

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

<b>Model Number:</b>	<b>5KS449BAA118</b>
<b>Catalog Number:</b>	<b>M1514</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG20
<b>Outline Drawing:</b>	239CG800AD

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>5KS449BAA118</b>
<b>Outline Drawing:</b>	239CG800AD
<b>Connection Diagram:</b>	GEM2034E-FIG20
<b>Instruction Book:</b>	GEI-56128
<b>Design Code:</b>	49BD0289A
<b>Type:</b>	KS
<b>Frame:</b>	449TS
<b>Phases:</b>	3
<b>Poles:</b>	2
<b>Output Power:</b>	250HP 185KW
<b>RPM:</b>	3580
<b>Voltage:</b>	460
<b>Hertz:</b>	60
<b>Amps - FL:</b>	265.0
<b>Service Factor:</b>	1.15
<b>Alt Service Factor:</b>	--

<b>Estimated Weight:</b>	2750 Lbs
<b>Time Rating:</b>	CONT
<b>Enclosure:</b>	TEFC
<b>Encl Construction:</b>	GP
<b>Ambient Max(°C):</b>	40
<b>Alt Ambient Max(°C):</b>	--
<b>Insulation Class:</b>	F
<b>NEMA Design:</b>	B
<b>Nominal Efficiency:</b>	95.8 %
<b>Guaranteed Efficiency:</b>	95.0 %
<b>3/4 Load Efficiency:</b>	--
<b>KVA Code:</b>	G
<b>Max KVAR:</b>	40.0
<b>Power Factor:</b>	92.0
<b>Bearing - DE:</b>	6314ZC3
<b>Bearing - ODE:</b>	6314ZC3

Enclosure is Totally Enclosed Fan-Cooled

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Stamped Nameplate Notes:

FOR DIRECT COUPLED LOAD ONLY  
 ROT CW FACING ODE LEAD/PH SEQ 1-2-3/1-2-3  
 VT 0-60 HZ NEMA MG1-31



**Additional Information:**

2P - TS EXTN - SPLIT LEAD  
C/BOX 1260 CU IN - 2(4.00" NPT)  
C/B GRD PLATE  
F1 MOUNTING  
INVERTER DUTY PER NEMA MG1 PART 31  
ALTERNATE RATING FOR PWM CONTROL:1.0SF 40C AMBIENT  
VAR TORQUE RANGE 0-60 HZ



**Performance Characteristics**

1st Winding 1st Connection

**Design: 49BD0289A**

**Marks:**

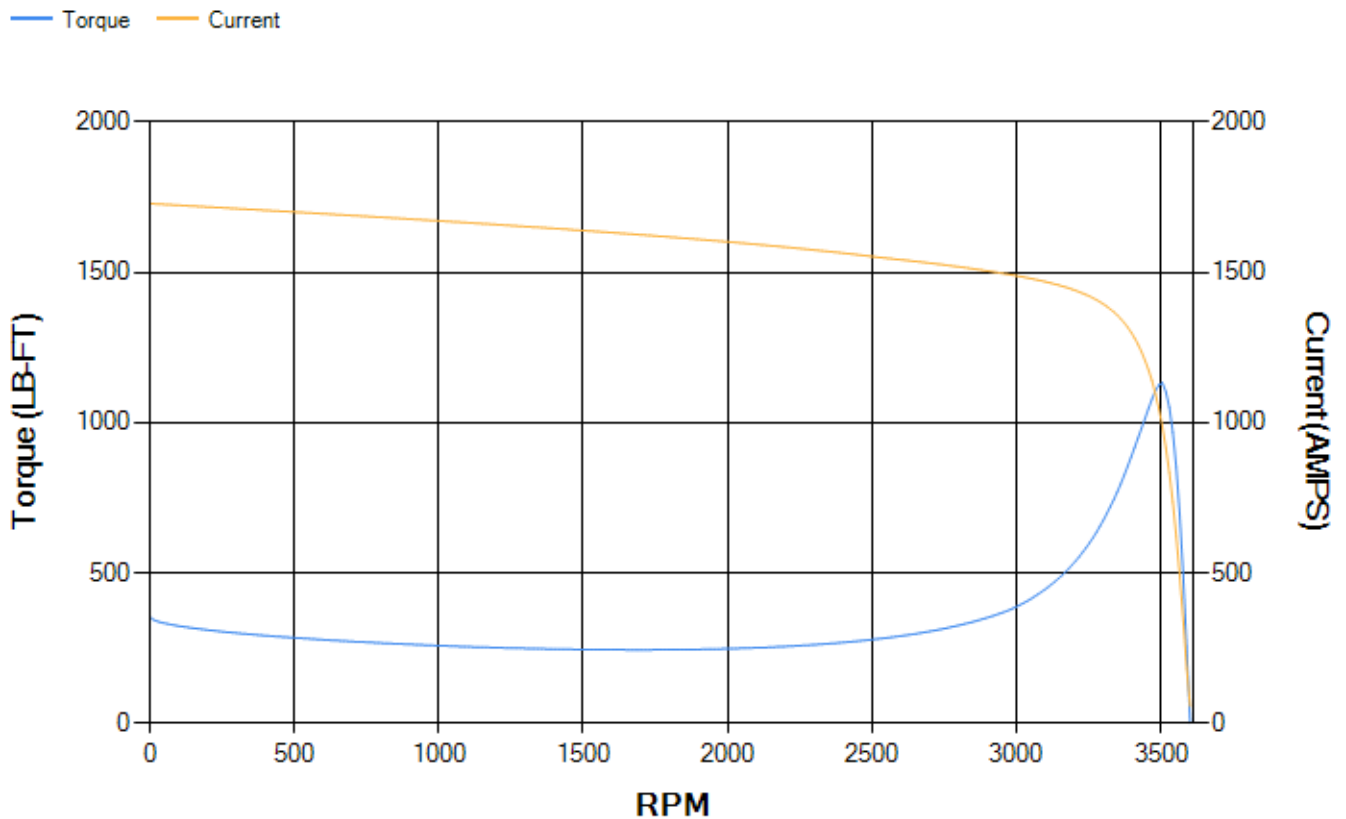
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.53	95.72	96.16	96.18	95.93	93.98	0.00
% PF	92.14	92.26	92.21	91.16	87.27	72.25	5.76
AMPS	332.31	304.69	263.89	200.16	139.75	86.14	55.75

<b>TORQ(FL)#FT</b>	366.68	<b>TORQ(LR)%FL</b>	96.83	<b>TORQ(BD)%FL</b>	308.47
<b>AMPS(LR)</b>	1729.06	<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 721 Lb-Ft Sq (30.35 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 41 seconds. Safe stall time at 100% voltage is 96 seconds cold, 49 seconds hot. Rotor inertia is 47.29 Lb-Ft Sq (1.99 Kg-meter Sq).

<b>Open Circuit A-C:</b>	2.223	<b>Short Circuit D-C:</b>	0.036
<b>Short Circuit A-C:</b>	0.075	<b>X/R Ratio:</b>	13.755
<b>Stator Slots:</b>	48	<b>Rotor Slots:</b>	38

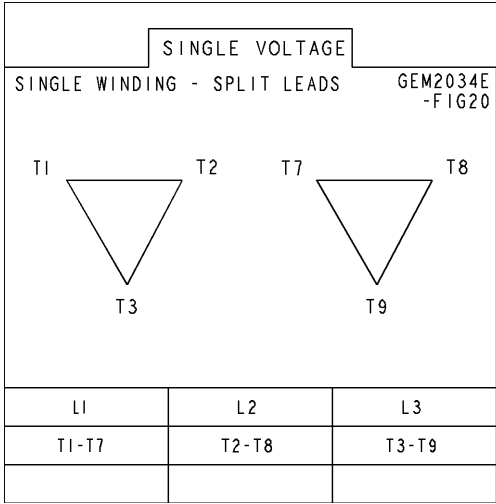
**Speed Torque Current Curve (First Connection, First Speed)**





Marks:

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



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E4354AA1	115E4354ZA1
Bearing	235A2616AA01	235A2616AA01
Slinger/Inproseal	149C4399G05	

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	
Fan Cover	128D6851AA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	179B9058G03

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

