

# Product Information Packet

November 8, 2016

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

<b>Model Number:</b>	<b>5KS324XAA279D5</b>
<b>Catalog Number:</b>	<b>M8972</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	239C6001FR

<b>Accessory Connection Diagrams</b>			
<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		

## Table of Contents

Specification	01
Performance Characteristics	02
Outline Drawing	03
Connection Drawing(s)	04
Spare parts	05



**Marks:**

<b>MODEL NUMBER:</b>	<b>5KS324XAA279D5</b>	<b>Estimated Weight:</b>	670 Lbs
<b>Outline Drawing:</b>	239C6001FR	<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>	841
<b>Design Code:</b>	32BD1182A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	324TC	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	4	<b>Nominal Efficiency:</b>	94.1 %
<b>Output Power:</b>	40HP 29.6KW	<b>Guaranteed Efficiency:</b>	93.6
<b>RPM:</b>	1780	<b>3/4 Load Efficiency:</b>	94.4
<b>Voltage:</b>	460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	15.2
<b>Amps - FL:</b>	49.7	<b>Power Factor:</b>	80.0
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6312ZC3
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	6312ZC3

**Enclosure is Totally Enclosed Fan-Cooled**

**Stamped Nameplate Notes:**

IEEE-STD-841-2009  
 DE BRG 60BC03JP30, ODE BRG 60BC03JP30  
 STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KS324XAA279D5 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 230C AT 1.15SF ON SINE-WAVE PWR  
 OR 200 C VT OR 230 C CT OR 200 C CHP PWM CONTROL  
 ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB  
 VT 0-60 HZ, CT 3-60 HZ, CHP 60-90 HZ.

**Additional Information:**

4P - T EXTN  
 PAINTED FRAME ID & SHAFT,  
 FAN COVER INSIDE & ODE E/S OUTSIDE  
 C FACE ON DE  
 346 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: 32BD1182A**

**Marks:**

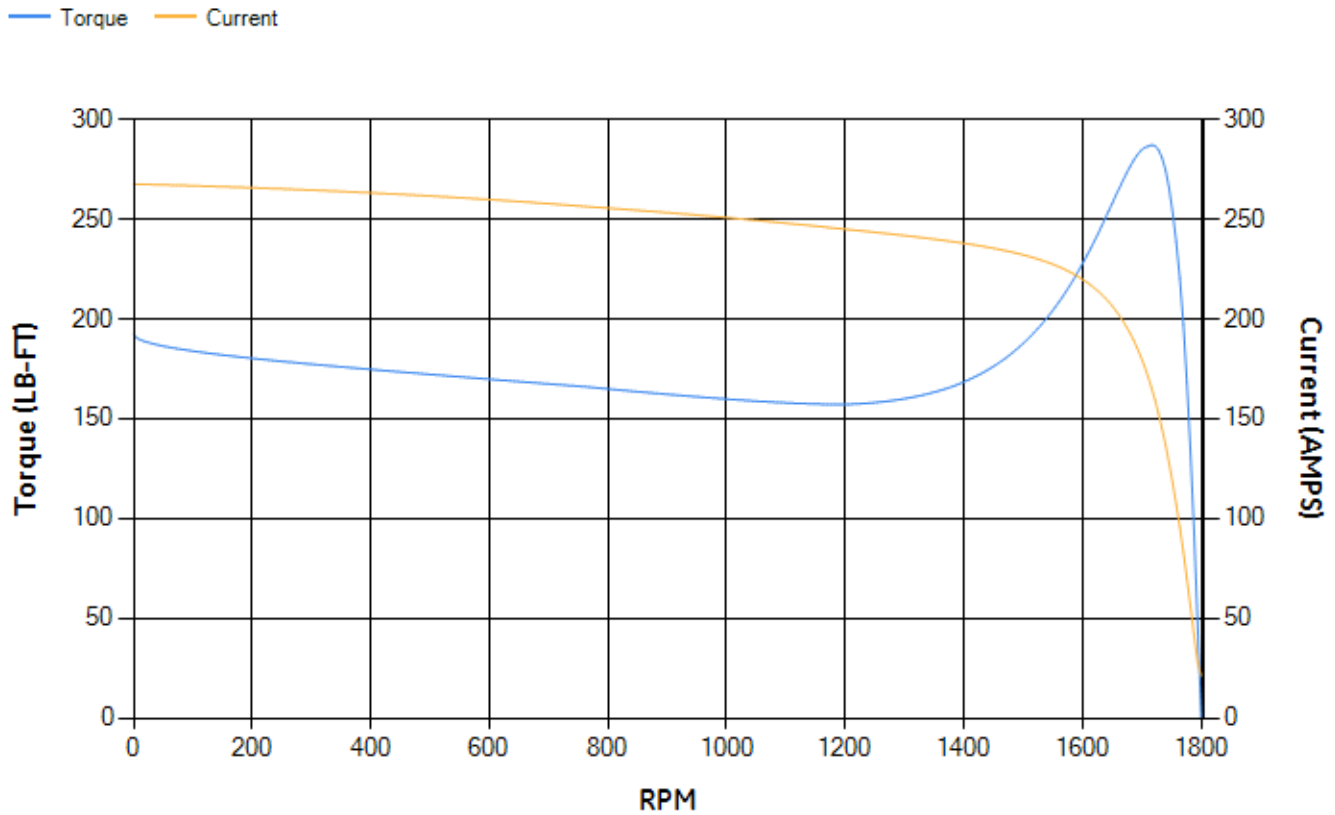
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	93.44	93.73	94.29	94.38	93.95	91	0.00
% PF	82.2	81.63	80.17	75.3	64.74	42.47	3.55
AMPS	60.93	56.27	49.42	39.51	30.78	24.22	21.15

<b>TORQ(FL)#FT</b>	118.11	<b>TORQ(LR)%FL</b>	162.86	<b>TORQ(BD)%FL</b>	242.16
<b>AMPS(LR)</b>	267.58	<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 952 Lb-Ft Sq (40.08 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 40 seconds. Safe stall time at 100% voltage is 88 seconds cold, 47 seconds hot. Rotor inertia is 7.01 Lb-Ft Sq (0.3 Kg-meter Sq).

<b>Open Circuit A-C:</b>	0.48	<b>Short Circuit D-C:</b>	0.022
<b>Short Circuit A-C:</b>	0.032	<b>X/R Ratio:</b>	8.428
<b>Stator Slots:</b>	48	<b>Rotor Slots:</b>	38

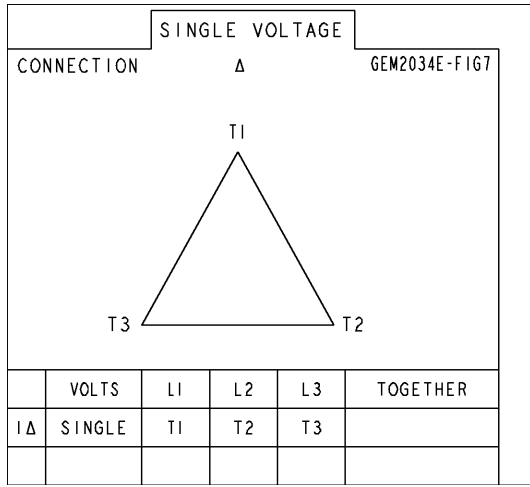
**Speed Torque Current Curve (First Connection, First Speed)**





Marks:

**Connection Diagram**  
**GEM2034E-FIG7**



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E4203AA1	115E4200LA1
Bearing	235A2609AA01	235A2609AA01
Slinger/Inproseal	235A4575GS2	235A4575GS2

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C6900G04
Fan Cover	128D6800AA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	149C4429AA2

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	