



**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>5KS324XAA2109C</b>
<b>Catalog Number:</b>	<b>M9526</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	239C6005DE

## 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>5KS324XAA2109C</b>	<b>Estimated Weight:</b>	670 Lbs
<b>Outline Drawing:</b>	239C6005DE	<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

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Stamped Nameplate Notes:

IEEE-STD-841-2009

DE BRG 60BC03JP30, ODE BRG 60BC03JP30

STAMP NP249A5564P051 AS BELOW:

MODEL:5KS324XAA2109C 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.  
ROUND FRAME  
GROUND PAD  
VERTICAL MOUNT SHAFT DOWN WITH DRIP COVER



**Performance Characteristics**

1st Winding 1st Connection

**Design: 32BD1182A**

**Marks:**

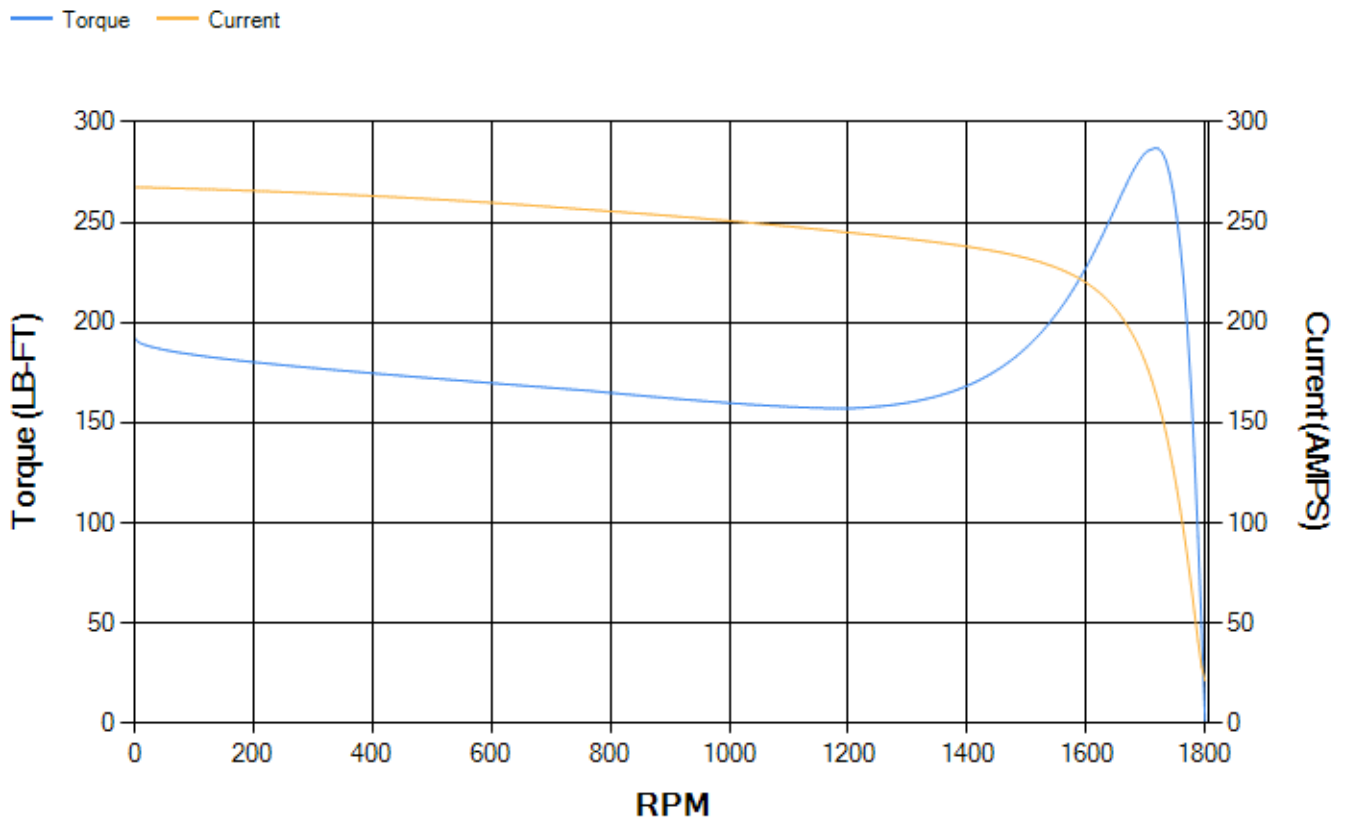
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	93.44	93.73	94.29	94.38	93.95	91	0.00
% PF	82.18	81.61	80.15	75.28	64.7	42.44	3.55
AMPS	60.94	56.28	49.43	39.52	30.79	24.24	21.17

<b>TORQ(FL)#FT</b>	118.11	<b>TORQ(LR)%FL</b>	162.85	<b>TORQ(BD)%FL</b>	242.14
<b>AMPS(LR)</b>	267.59	<b>PF AT START</b>	0.33		

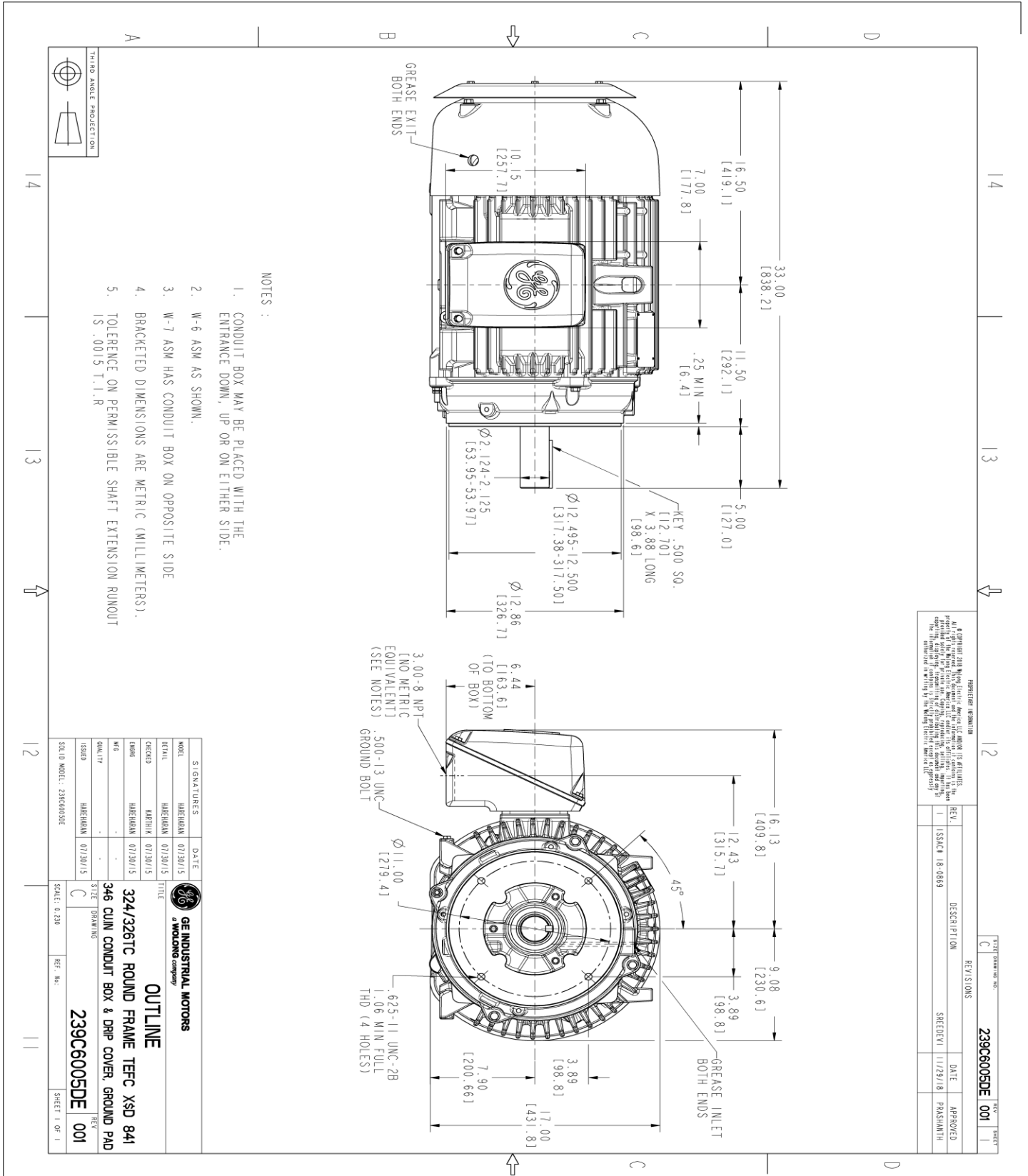
This motor is capable of two cold or one hot start with a maximum connected load inertia of 952 Lb-Ft Sq (40.08 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 40 seconds. Safe stall time at 100% voltage is 88 seconds cold, 47 seconds hot. Rotor inertia is 6.94 Lb-Ft Sq (0.29 Kg-meter Sq).

<b>Open Circuit A-C:</b>	0.479	<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:



NOTES :

1. CONDUIT BOX MAY BE PLACED WITH THE ENTRANCE DOWN, UP OR ON EITHER SIDE.
2. W-6 ASM AS SHOWN.
3. W-7 ASM HAS CONDUIT BOX ON OPPOSITE SIDE
4. BRACKETED DIMENSIONS ARE METRIC (MILLIMETERS).
5. TOLERANCE ON PERMISSIBLE SHAFT EXTENSION ROUNDOUT IS .0015 T.I.R

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1	ISSUE 18-0869	11/29/18	PARSHANTH

SIGNATURES	DATE	TITLE
HAERHMAN	07/20/15	GE INDUSTRIAL MOTORS
HAERHMAN	07/20/15	DESIGN
HAERHMAN	07/20/15	ISSUED
HAERHMAN	07/20/15	SCALE: 0.250

**324/326TC ROUND FRAME TEFC XSD 841**  
**346 CUM CONDUIT BOX & DRIP COVER, GROUND PAD**  
**239C6005DE**



14 13 12 11

Marks:

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



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E4203AA1	115E4200LA1
Bearing	235A2509AS01	235A2509AS01
Slinger/Inproseal	235A4575GS2	235A4575GS2

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C6900G04
Fan Cover	128D6800AB1

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

