

# Product Information Packet

November 8, 2016

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

<b>Model Number:</b>	<b>5KS324XAA271BW8</b>
<b>Catalog Number:</b>	<b>M6628</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	239C6000RM

<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		

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**Marks:**

<b>MODEL NUMBER:</b>	<b>5KS324XAA271BW8</b>	<b>Estimated Weight:</b>	670 Lbs
<b>Outline Drawing:</b>	239C6000RM	<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>	661
<b>Design Code:</b>	32BD1182A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	324T	<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>	NU 312
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	6312ZC3

**Enclosure is Totally Enclosed Fan-Cooled**

**Stamped Nameplate Notes:**

API STD 661  
 ROLLER BEARING - FOR BELTED LOAD ONLY  
 DE BRG 60RU03J, ODE BRG 60BC03JP30  
 IP 56  
 STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KS324XAA271BW8 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  
 346 CU IN - 3.00" NPT  
 INPRO SEAL BOTH ENDS  
 OIL RESISTANT SLEEVING ON LEADS  
 .002" 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.

B5F4C4 HIGH FATIGUE STEEL AISI 4142 SHAFT MATERIAL  
GROUND PAD  
VERTICAL MOUNT SHAFT UP

**Performance Characteristics**

1st Winding 1st Connection

**Design: 32BD1182A**

**Marks:**

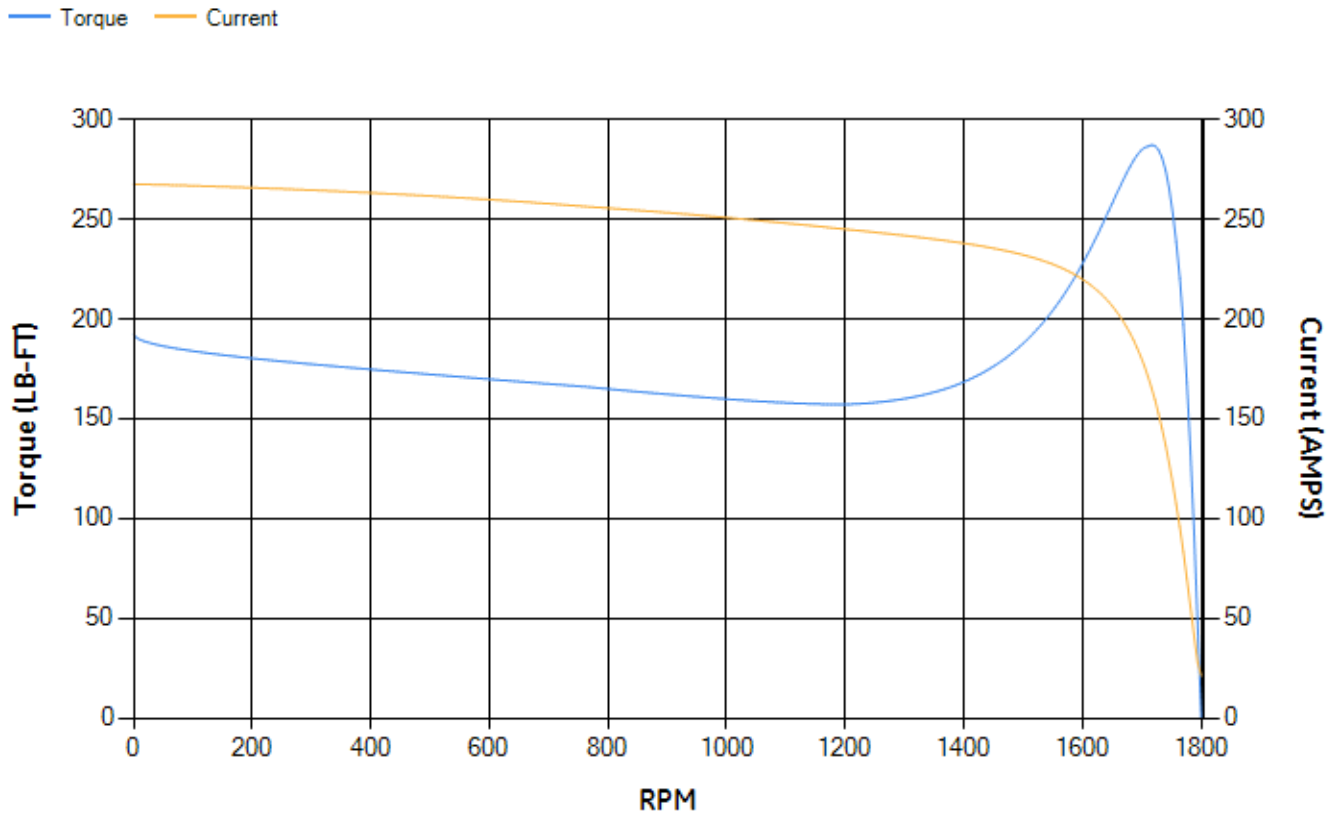
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	93.44	93.73	94.29	94.38	93.95	91	0.00
% PF	82.2	81.63	80.17	75.3	64.74	42.47	3.55
AMPS	60.93	56.27	49.42	39.51	30.78	24.22	21.15

<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		

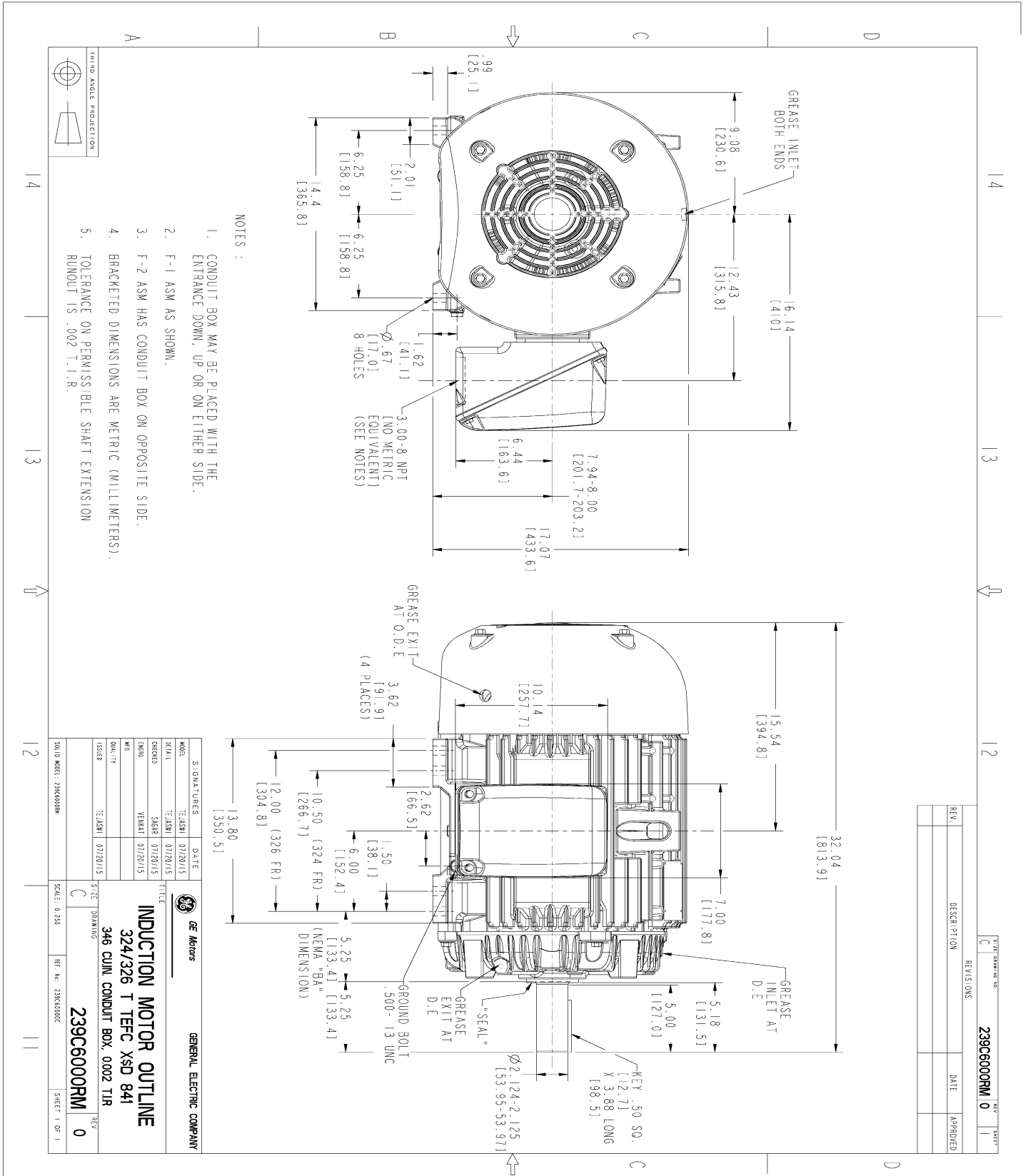
This motor is capable of two cold or one hot start with a maximum connected load inertia of 952 Lb-Ft Sq (40.08 Kg-meter Sq) at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 40 seconds. Safe stall time at 100%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



NOTES :

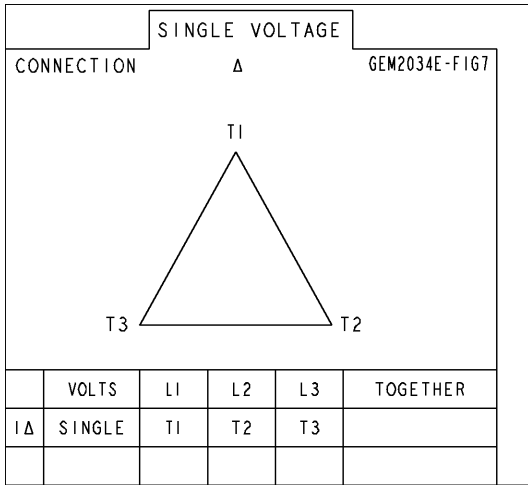
1. CONDUIT BOX MAY BE PLACED WITH THE ENTRANCE DOWN, UP OR ON EITHER SIDE.
2. F-1 ASM AS SHOWN.
3. F-2 ASM HAS CONDUIT BOX ON OPPOSITE SIDE.
4. BRACKETED DIMENSIONS ARE METRIC (MILLIMETERS).
5. TOLERANCE ON PERMISSIBLE SHAFT EXTENSION RUNOUT IS .002 T.I.R.

REV.	DESCRIPTION	DATE	APPROVED

SIGNATURES		DATE	
MODEL	TEJASNI	01/20/15	
SCALE	TEJASNI	01/20/15	
DESIGN	SHAR	01/20/15	
CHKD	VENKAT	01/20/15	
DATE			
QUALITY			
ISSUED	TEJASNI	01/20/15	
TITLE		SCALE: 0.250	
INDUCTION MOTOR OUTLINE		REV	
324/326 T TEFC XSD 841		0	
346 CUM CONDUIT BOX, 0002 TLR			
239C6000RM			
SHEET 1 OF 1			

Marks:

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



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E4200AA1	115E4200LA1
Bearing	235A2512AB01	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	