

# Product Information Packet

May 6, 2017

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

<b>Model Number:</b>	<b>5KS324DAJ5020B</b>
<b>Catalog Number:</b>	<b>V4209</b>
<b>Instruction Manual:</b>	GEK-95353
<b>Connection Diagram:</b>	GEM2034E-FIG9
<b>Outline Drawing:</b>	148CB32VMGKBCAA0001

Accessory Connection Diagrams			
<b>Bearing Thermocouple:</b>	None	<b>Heater:</b>	3027JE-1C
<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>5KS324DAJ5020B</b>	<b>Estimated Weight:</b>	680 Lbs
<b>Outline Drawing:</b>	148CB32VMGKBCAA0001	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG9	<b>Enclosure:</b>	WPI
<b>Instruction Book:</b>	GEK-95353	<b>Encl Construction:</b>	OPEN
<b>Design Code:</b>	32BD0145AA	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	L324TP12	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	2	<b>Nominal Efficiency:</b>	93.0 %
<b>Output Power:</b>	50HP 37KW	<b>Guaranteed Efficiency:</b>	91.7
<b>RPM:</b>	3565	<b>3/4 Load Efficiency:</b>	--
<b>Voltage:</b>	230/460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	16.0
<b>Amps - FL:</b>	119.2/59.6	<b>Power Factor:</b>	85.0
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6212C3
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	235A2523AD01

**Enclosure is Weather Protected One**

**Stamped Nameplate Notes:**

HTR LDS HE1-HE2 115V 100W  
 ROT CCW FACING ODE LEAD/PH SEQ 1-2-3/1-2-3  
 INVERTER DUTY PER NEMA MG1 PART 31  
 ALTERNATE RATING FOR PWM CONTROL:1.0SF 40C AMBIENT  
 VAR TORQUE RANGE 2.5-60 HZ  
 UPPER BRG LUBE OIL: 2.1 QTS  
 0 DEG C TO 40 DEG C : ISO 32(MINERAL OR SYNTHETIC)  
 -15 DEG C TO 0 DEG C : ISO 32 SYNTHETIC  
 SUITABLE FOR 40 HP, 190/380V, 50 HZ WITH  
 114.6/57.3 AMPS AND 2970 RPM AT 1.0 SF

**Additional Information:**

2P, VERT HOLLOW SHAFT HIGH THRUST (1D)  
 SPECIAL BALANCE  
 346 CU IN - 3.00" NPT  
 OIL RESISTANT SLEEVING ON LEADS  
 115V HTR LDS TO MAIN CONDUIT BOX  
 COUPLING NOT INCLUDED IN BOM, WILL BE  
 ORDERED SEPERATELY  
 BEARING LIFE 8760 HRS AT 5273 LB THRUST  
 CG:13.86 IN FROM P-BASE FACE,STAT DEF:0.0022 IN  
 RCF:3840 CPM AT C/BOX SIDE, 4020 CPM AT  
 90 DEG FROM C/ BOX SIDE  
 NON-REVERSE BALL CARRIER

**Performance Characteristics**

1st Winding 1st Connection

**Design: 32BD0145AA**

**Marks:**

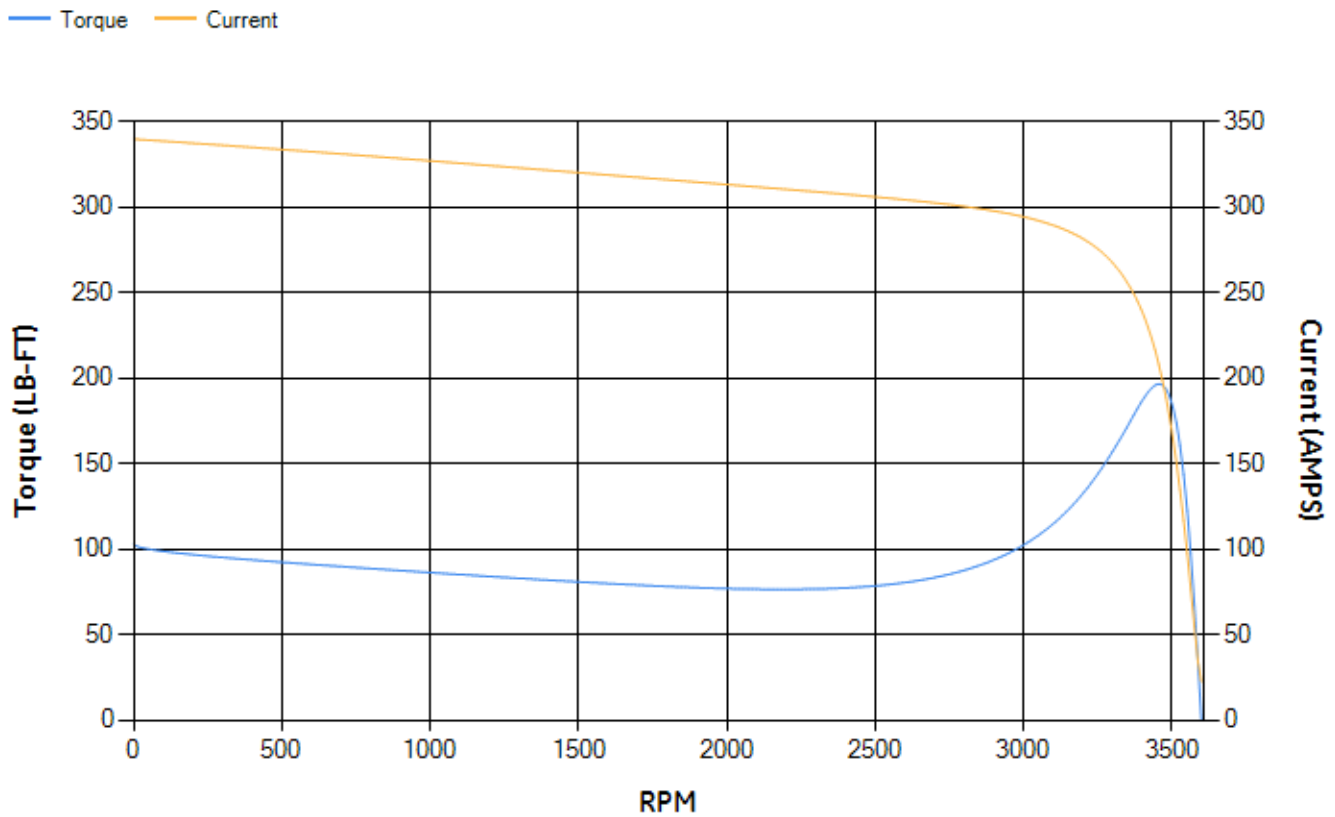
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	91.98	92.17	92.52	92.12	90.76	85.37	0.00
% PF	86.55	86.13	85.02	81.17	72.23	51.07	7.96
AMPS	73.48	67.79	59.4	46.93	35.69	26.84	22.32

TORQ(FL)#FT	73.61	TORQ(LR)%FL	139.58	TORQ(BD)%FL	266.73
AMPS(LR)	339.62	PF AT START	0.3		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 156 Lb-Ft Sq (6.57 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 26 seconds. Safe stall time at 100% voltage is 45 seconds cold, 32 seconds hot. Rotor inertia is 3.51 Lb-Ft Sq (0.15 Kg-meter Sq).

Open Circuit A-C:	0.73	Short Circuit D-C:	0.019
Short Circuit A-C:	0.046	X/R Ratio:	7.025
Stator Slots:	48	Rotor Slots:	38

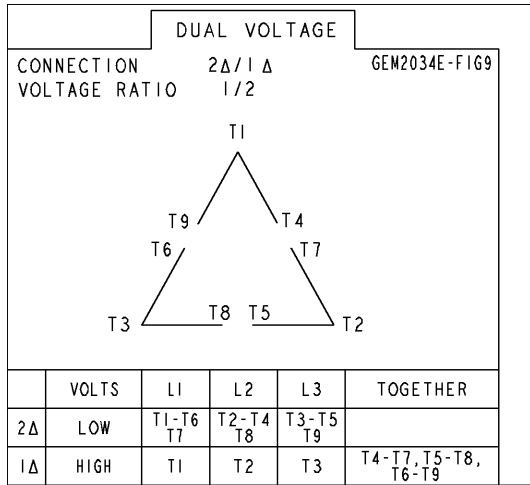
**Speed Torque Current Curve (First Connection, First Speed)**





Marks:

**Connection Diagram**  
**GEM2034E-FIG9**



**Heater Connection**  
**3027JE-1C**



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E7204AC1	115E7208LA1
Bearing	235A2509BE01	235A2523AD01
Slinger/Inproseal	235A2300FM1	

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	
Fan Cover	161C1052AA1

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

