



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

# Product Technical Information

July 15, 2020

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

<b>Model Number:</b>	<b>5KS447DAJ6022D</b>
<b>Catalog Number:</b>	<b>V4531</b>
<b>Instruction Manual:</b>	GEI-M1045
<b>Connection Diagram:</b>	GEM2034E-FIG19
<b>Outline Drawing:</b>	148CB49VMJKLGLA0001

Accessory Connection Diagrams			
<b>Bearing Thermocouple:</b>	None	<b>Heater:</b>	3027JE-1C
<b>RTD:</b>	None	<b>Thermistor:</b>	None
<b>Thermostat:</b>	3027JE-2A	<b>Winding Thermocouple:</b>	None
<b>Bearing RTD:</b>	None		

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Marks:

<b>MODEL NUMBER:</b>	<b>5KS447DAJ6022D</b>	<b>Estimated Weight:</b>	3030 Lbs
<b>Outline Drawing:</b>	148CB49VMJKLGLA0001	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG19	<b>Enclosure:</b>	WPI
<b>Instruction Book:</b>	GEI-M1045	<b>Encl Construction:</b>	OPEN
<b>Design Code:</b>	49BD1252DB	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	L447TP20	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	4	<b>Nominal Efficiency:</b>	95.8 %
<b>Output Power:</b>	350HP 259KW	<b>Guaranteed Efficiency:</b>	95.0 %
<b>RPM:</b>	1790	<b>3/4 Load Efficiency:</b>	--
<b>Voltage:</b>	460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	84.7
<b>Amps - FL:</b>	392.0	<b>Power Factor:</b>	87.5
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6217C3
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	235A2536AB01

Enclosure is Weather Protected One

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Stamped Nameplate Notes:

NEMA ENCLOSURE WP-I, CSA ENCL DP  
 HTR LDS HE1-HE2 115V 145W  
 ROT CCW FACING ODE LEAD/PH SEQ 1-2-3/1-2-3  
 THERMOSTAT LEADS TB1-TB2 TRIP  
 INVERTER DUTY PER NEMA MG1 PART 31  
 ALTERNATE RATING FOR PWM CONTROL:1.0SF 40C AMBIENT  
 VAR TORQUE RANGE 5 -60 HZ  
 UPPER BRG LUBE OIL: 10.2 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 300 HP, 380V, 50 HZ WITH  
 409.0 AMPS AND 1486 RPM AT 1.0 SF



**Additional Information:**

4P, VERT HOLLOW SHAFT HIGH THRUST (2D)  
C/BOX 1260 CU IN - 2(4.00" NPT)  
C/B GRD PLATE  
SLINGER DE  
OIL RESISTANT SLEEVING ON LEADS  
(3)N.C. CL.F TRIP TSTAT LDS TO MAIN CONDUIT BOX  
115V HTR LDS TO MAIN CONDUIT BOX  
GROUND PAD  
INSULATED LOWER HALF COUPLING AT UPPER END  
SHAFT GROUNDING RING MOUNTED ON LOWER END BRG CAP  
BEARING LIFE 8760 HRS AT 22270 LB THRUST  
PART WINDING START  
CG:25.10 IN FROM P-BASE FACE,STAT DEF:= 0.005 IN  
RCF: 2581 CPM  
NON-REVERSE BALL CARRIER,  
BOLTED COUPLING, BX = 1.688", EW = .375"



**Performance Characteristics**

1st Winding 1st Connection

**Design: 49BD1252DB**

**Marks:**

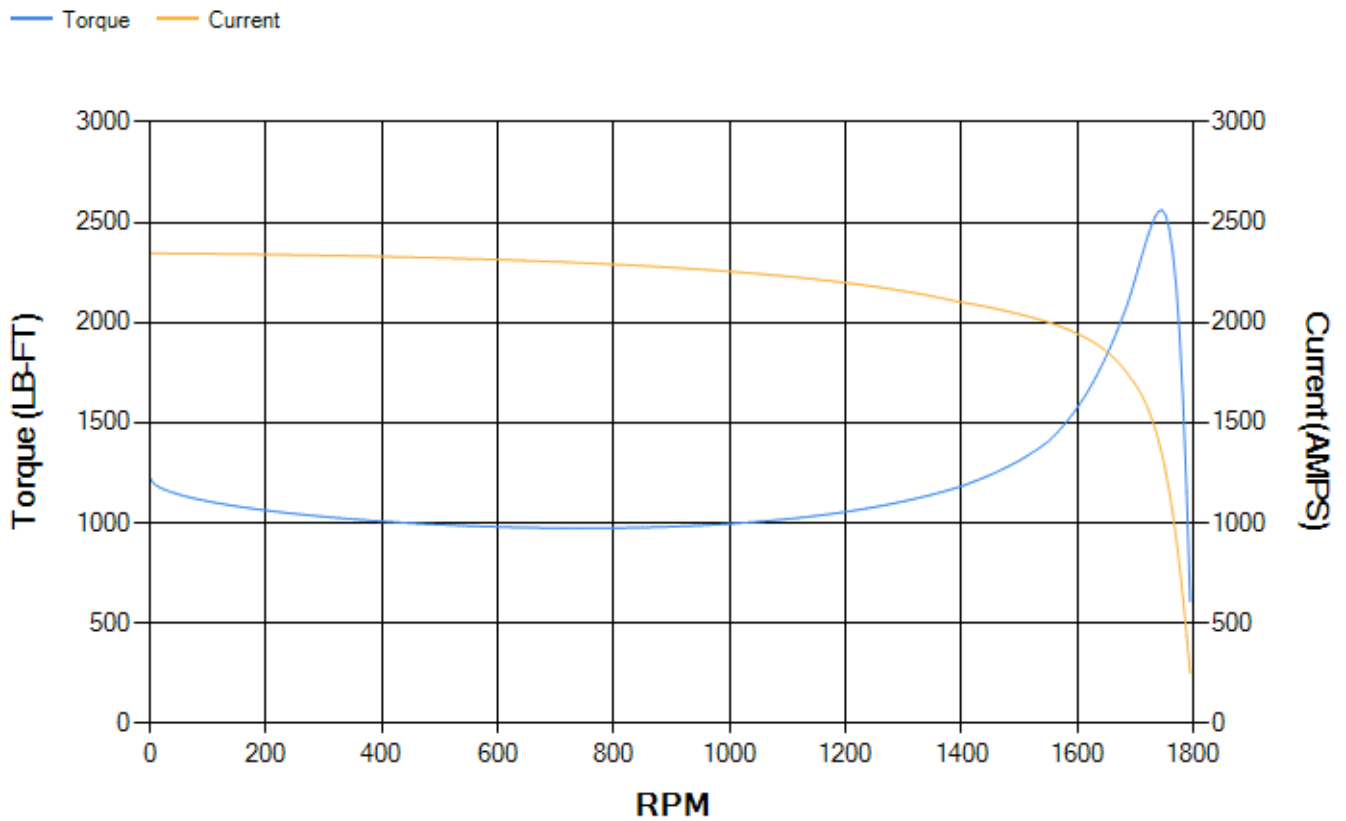
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	94.9	95.14	95.65	95.73	95.5	93.43	0.00
% PF	87.77	87.73	87.27	84.86	77.95	57.66	4.13
AMPS	491.62	451.33	392.45	302.43	220.01	152.02	118.17

<b>TORQ(FL)#FT</b>	1027.18	<b>TORQ(LR)%FL</b>	119.64	<b>TORQ(BD)%FL</b>	249.17
<b>AMPS(LR)</b>	2345.4	<b>PF AT START</b>	0.24		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 4905 Lb-Ft Sq (206.5 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 35 seconds. Safe stall time at 100% voltage is 87 seconds cold, 52 seconds hot. Rotor inertia is 106.75 Lb-Ft Sq (4.49 Kg-meter Sq).

<b>Open Circuit A-C:</b>	1.424	<b>Short Circuit D-C:</b>	0.027
<b>Short Circuit A-C:</b>	0.065	<b>X/R Ratio:</b>	10.105
<b>Stator Slots:</b>	72	<b>Rotor Slots:</b>	58

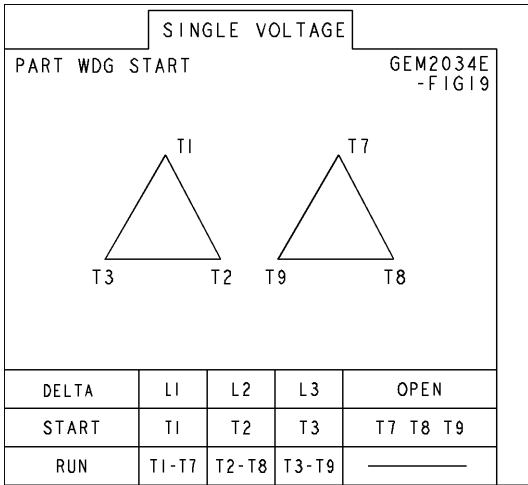
**Speed Torque Current Curve (First Connection, First Speed)**



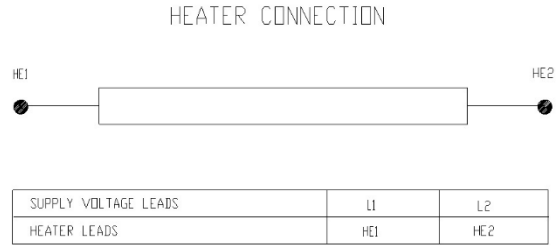


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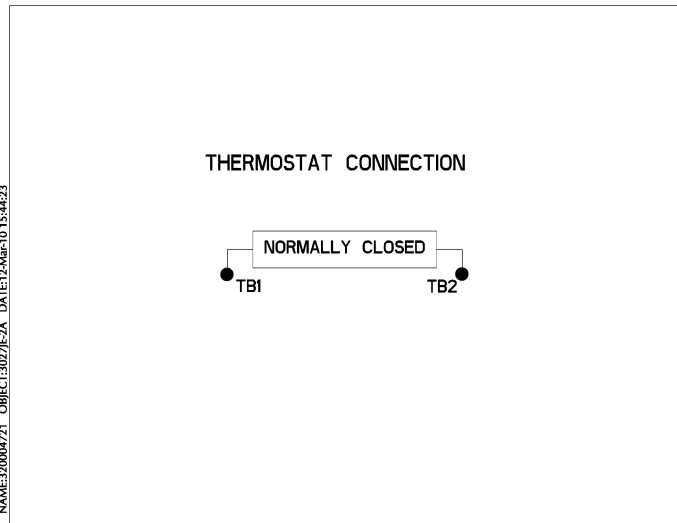
**Connection Diagram**  
**GEM2034E-FIG19**



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



**Thermostat Connection**  
**3027JE-2A**



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E7661AA1	115E7670LM1
Bearing	235A2522AJ01	235A2536AB01
Slinger/Inproseal	149C4399G06	

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	
Fan Cover	161C1050AA1

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

