



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

# Product Technical Information

February 17, 2023

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

<b>Model Number:</b>	<b>5KS445DAJ8039</b>
<b>Catalog Number:</b>	<b>V4852</b>
<b>Instruction Manual:</b>	GEI-M1045
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	148CB44VMKKCCAA0001

## 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>5KS445DAJ8039</b>	<b>Estimated Weight:</b>	2350 Lbs
<b>Outline Drawing:</b>	148CB44VMKKCCAA0001	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG7	<b>Enclosure:</b>	WPI
<b>Instruction Book:</b>	GEI-M1045	<b>Encl Construction:</b>	OPEN
<b>Design Code:</b>	44BD4037A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	L445TP24	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	8	<b>Nominal Efficiency:</b>	94.1 %
<b>Output Power:</b>	100HP 74KW	<b>Guaranteed Efficiency:</b>	93.0 %
<b>RPM:</b>	890	<b>3/4 Load Efficiency:</b>	--
<b>Voltage:</b>	460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	39.3
<b>Amps - FL:</b>	127.0	<b>Power Factor:</b>	78.5
<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 ALARM  
INVERTER DUTY PER NEMA MG1 PART 31  
ALTERNATE RATING FOR PWM CONTROL:1.0SF 40C AMBIENT  
VAR TORQUE RANGE 10-60 HZ  
UPPER BRG LUBE OIL: 10.2 QTS  
AMB 0 TO 40 DEG C : ISO 32(MINERAL OR SYNTHETIC)  
AMB -25 TO 0 DEG C : ISO 32 SYNTHETIC



**Additional Information:**

8P, VERT HOLLOW SHAFT HIGH THRUST (1D)  
C/BOX 700 CU IN - 3.00" NPT  
OIL RESISTANT SLEEVING ON LEADS  
(3)N.C. CLASS H ALARM TSTAT LDS TO MAIN CONDUIT BOX  
115V HTR LDS TO MAIN CONDUIT BOX  
BEARING LIFE 8760 HRS AT 17830 LB THRUST  
CG:22.60 IN FROM P-BASE FACE,STAT DEF:= 0.003 IN  
RCF: 3466 CPM  
NON-REVERSE BALL CARRIER,  
BOLTED COUPLING, BX = 2.188 IN, EW= 0.500 IN



**Performance Characteristics**

1st Winding 1st Connection

**Design: 44BD4037A**

**Marks:**

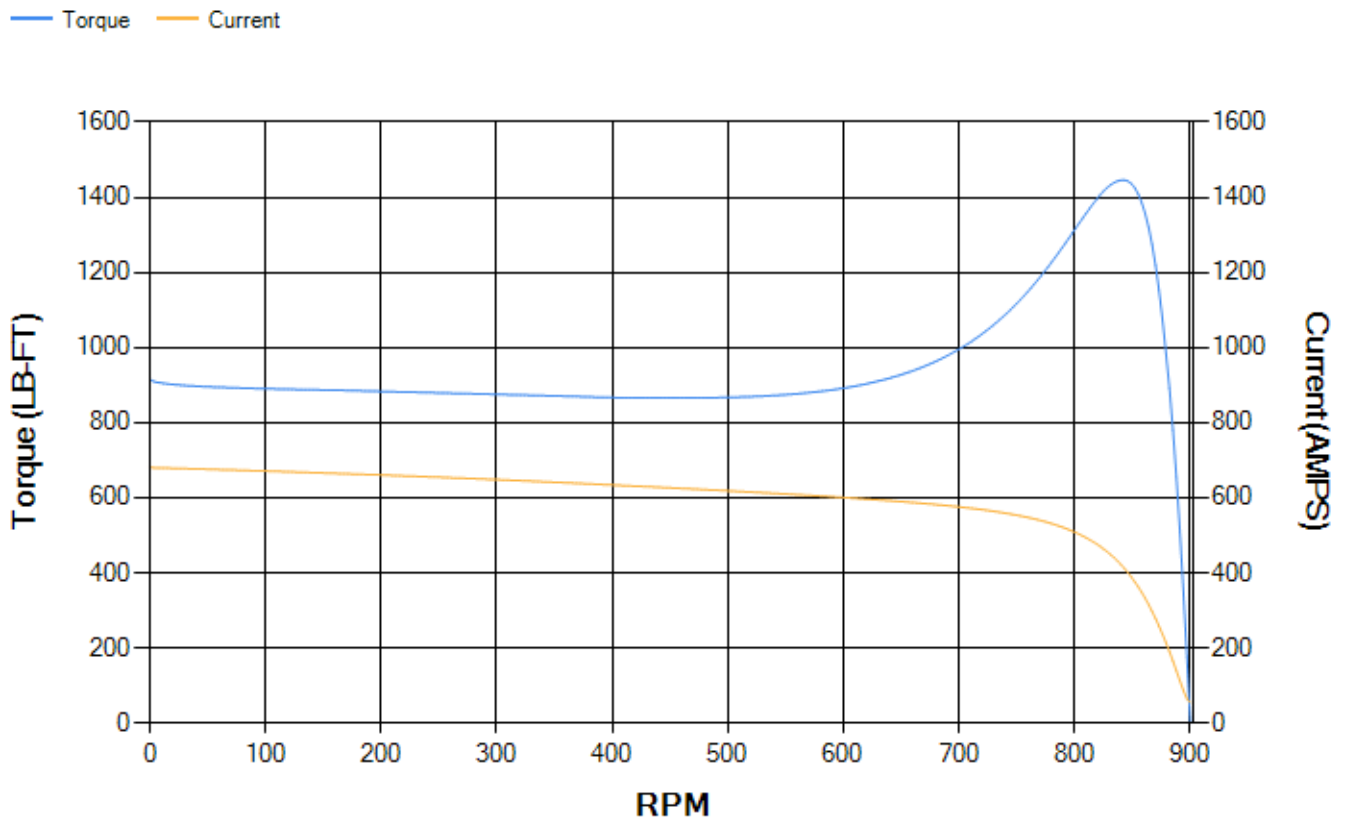
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	93.43	93.69	94.17	94.08	93.37	89.77	0.00
% PF	80.42	79.95	78.61	73.88	63.48	41.76	4.26
AMPS	155.7	143.69	126.44	100.99	78.96	62.42	54.78

<b>TORQ(FL)#FT</b>	590.3	<b>TORQ(LR)%FL</b>	155.24	<b>TORQ(BD)%FL</b>	244.37
<b>AMPS(LR)</b>	680.26	<b>PF AT START</b>	0.37		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 12552 Lb-Ft Sq (528.44 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 48 seconds. Safe stall time at 100% voltage is 98 seconds cold, 66 seconds hot. Rotor inertia is 73.47 Lb-Ft Sq (3.09 Kg-meter Sq).

<b>Open Circuit A-C:</b>	0.493	<b>Short Circuit D-C:</b>	0.023
<b>Short Circuit A-C:</b>	0.034	<b>X/R Ratio:</b>	8.643
<b>Stator Slots:</b>	72	<b>Rotor Slots:</b>	58

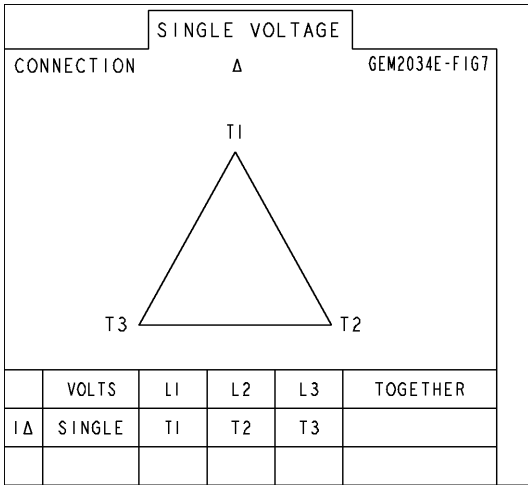
**Speed Torque Current Curve (First Connection, First Speed)**



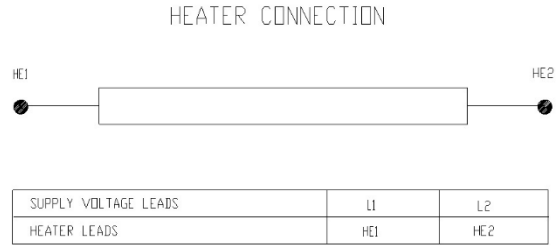


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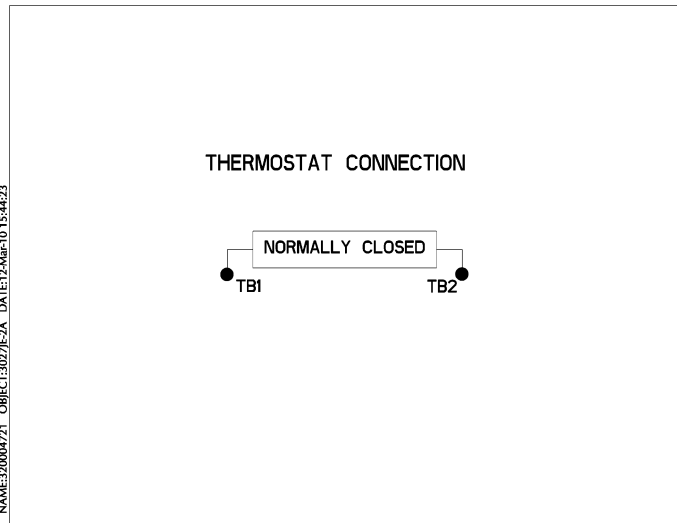
**Connection Diagram**  
**GEM2034E-FIG7**



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



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



NAME:320004721 - OBJECT:3027JE-2A - DATE:12-Mar-10 15:44:23



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E7662AA1	115E7670LM1
Bearing	235A2622AA01	235A2536AB01
Slinger/Inproseal	149C4399G06	

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

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	118D4408AD2

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

