



**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>5KS447DAJ6020D1</b>
<b>Catalog Number:</b>	<b>V4431</b>
<b>Instruction Manual:</b>	GEI-M1045
<b>Connection Diagram:</b>	GEM2034E-FIG19
<b>Outline Drawing:</b>	148CB49VMJKLGAA0001

## 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>5KS447DAJ6020D1</b>	<b>Estimated Weight:</b>	3030 Lbs
<b>Outline Drawing:</b>	148CB49VMJKLGAA0001	<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  
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 1.00 SF



**Additional Information:**

4P, VERT HOLLOW SHAFT HIGH THRUST (2D)  
C/BOX 1260 CU IN - 2(4.00" NPT)  
C/B GRD PLATE  
OIL RESISTANT SLEEVING ON LEADS  
115V HTR LDS TO MAIN CONDUIT BOX  
BEARING LIFE 8760 HRS AT 22277 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"  
COMMON FOR STD STOCK AS WELL AS FIRE PUMP



**Performance Characteristics**

1st Winding 1st Connection

**Design: 49BD1252DB**

**Marks:**

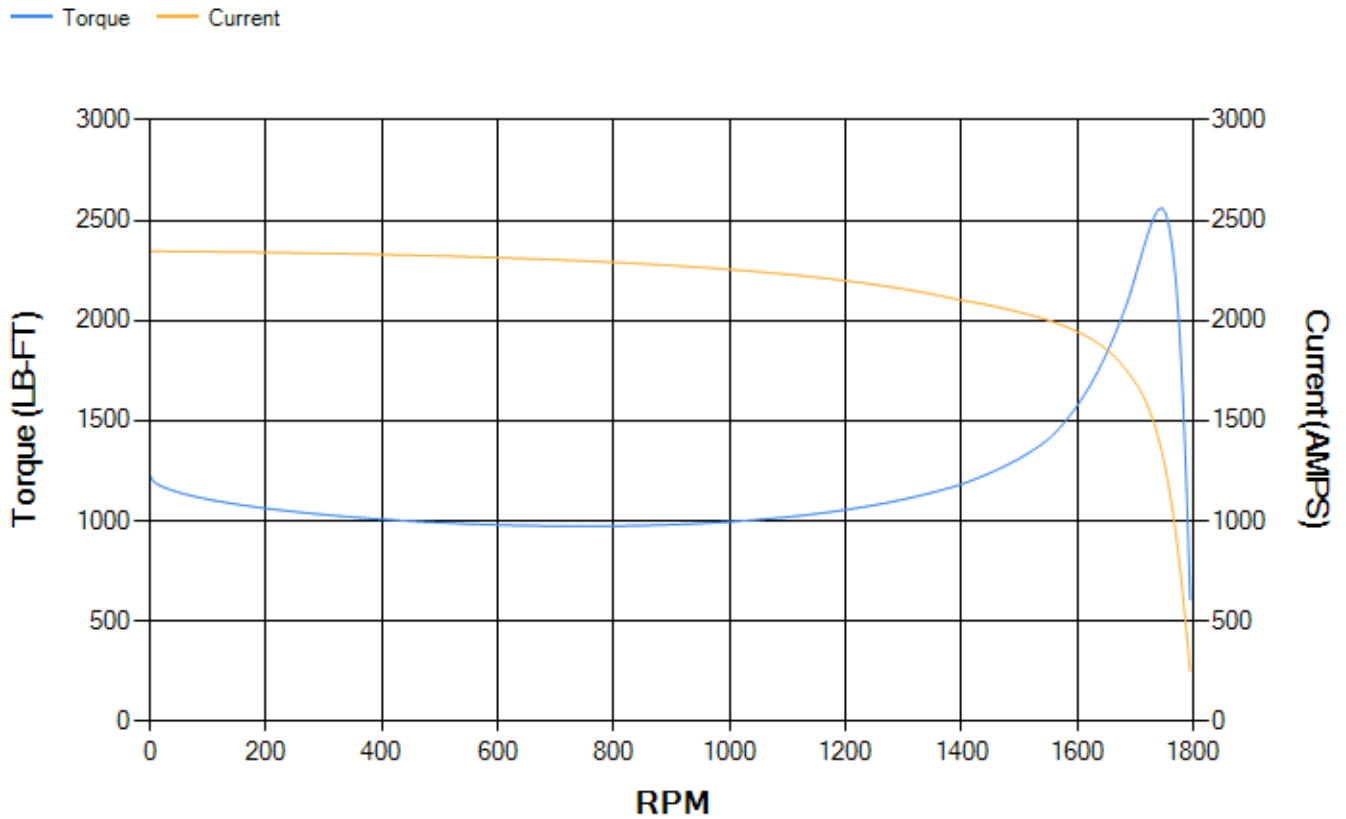
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	94.9	95.14	95.65	95.73	95.5	93.43	0.00
% PF	87.77	87.73	87.27	84.86	77.95	57.66	4.13
AMPS	491.62	451.33	392.45	302.43	220.01	152.02	118.17

<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

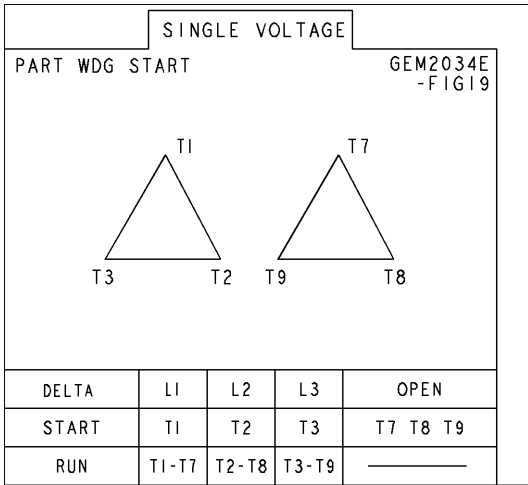
**Speed Torque Current Curve (First Connection, First Speed)**



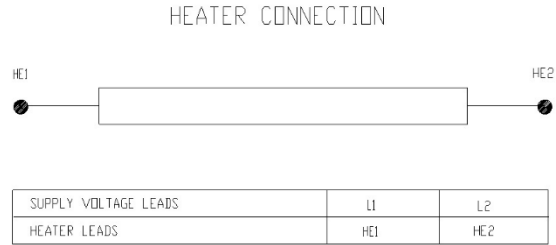


**Marks:**

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



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



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	

