

# Product Information Packet

April 26, 2017

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

<b>Model Number:</b>	<b>5KS447DAJ6021A</b>
<b>Catalog Number:</b>	<b>V4530</b>
<b>Instruction Manual:</b>	GEK-95352
<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>5KS447DAJ6021A</b>	<b>Estimated Weight:</b>	3200 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>	GEK-95352	<b>Encl Construction:</b>	OPEN
<b>Design Code:</b>	49BD1251AB	<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>	300HP 222KW	<b>Guaranteed Efficiency:</b>	95.0
<b>RPM:</b>	1780	<b>3/4 Load Efficiency:</b>	96.2
<b>Voltage:</b>	460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	77.6
<b>Amps - FL:</b>	337.0	<b>Power Factor:</b>	87.0
<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**

**Stamped Nameplate Notes:**

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  
 SUITABLE FOR 250 HP, 380V, 50 HZ WITH  
 338.0 AMPS AND 1480 RPM AT 1.0 SF

**Additional Information:**

4 POLE, VERT HOLLOW SHAFT HIGH THRUST (2D)  
 SPECIAL BALANCE  
 1260 CU IN - 2(4.00" NPT)  
 BEARING LIFE 8760 HRS AT 20800 LB THRUST  
 C/B GRD PLATE  
 OIL RESISTANT SLEEVING ON LEADS  
 115V HTR LDS TO MAIN CONDUIT BOX  
 COUPLING NOT INCLUDED IN BOM, WILL BE  
 ORDERED SEPERATELY  
 PART WINDING START  
 AEGIS GROUNDING RING MOUNTED ON LOWER END BEARING CAP  
 GROUND PAD ON FRAME  
 INSULATED LOWER HALF COUPLING

**Performance Characteristics**

1st Winding 1st Connection

**Design: 49BD1251AB**

**Marks:**

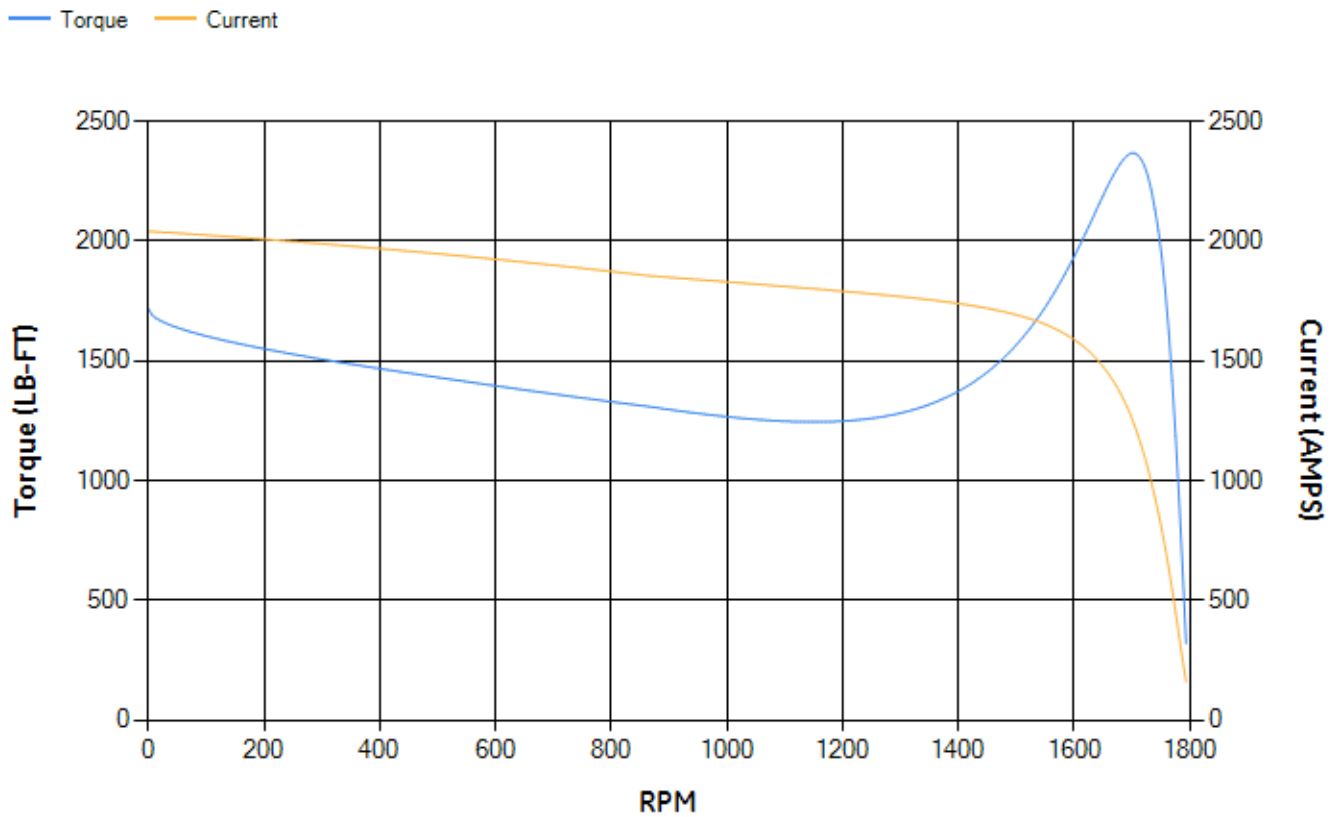
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	94.49	94.73	95.21	95.23	94.85	92.3	0.00
% PF	88.03	87.85	87.17	84.31	76.77	55.87	4.68
AMPS	421.95	388.03	338.33	262.27	192.81	136.12	108.22

<b>TORQ(FL)#FT</b>	883.88	<b>TORQ(LR)%FL</b>	194.16	<b>TORQ(BD)%FL</b>	267.41
<b>AMPS(LR)</b>	2041.02	<b>PF AT START</b>	0.34		

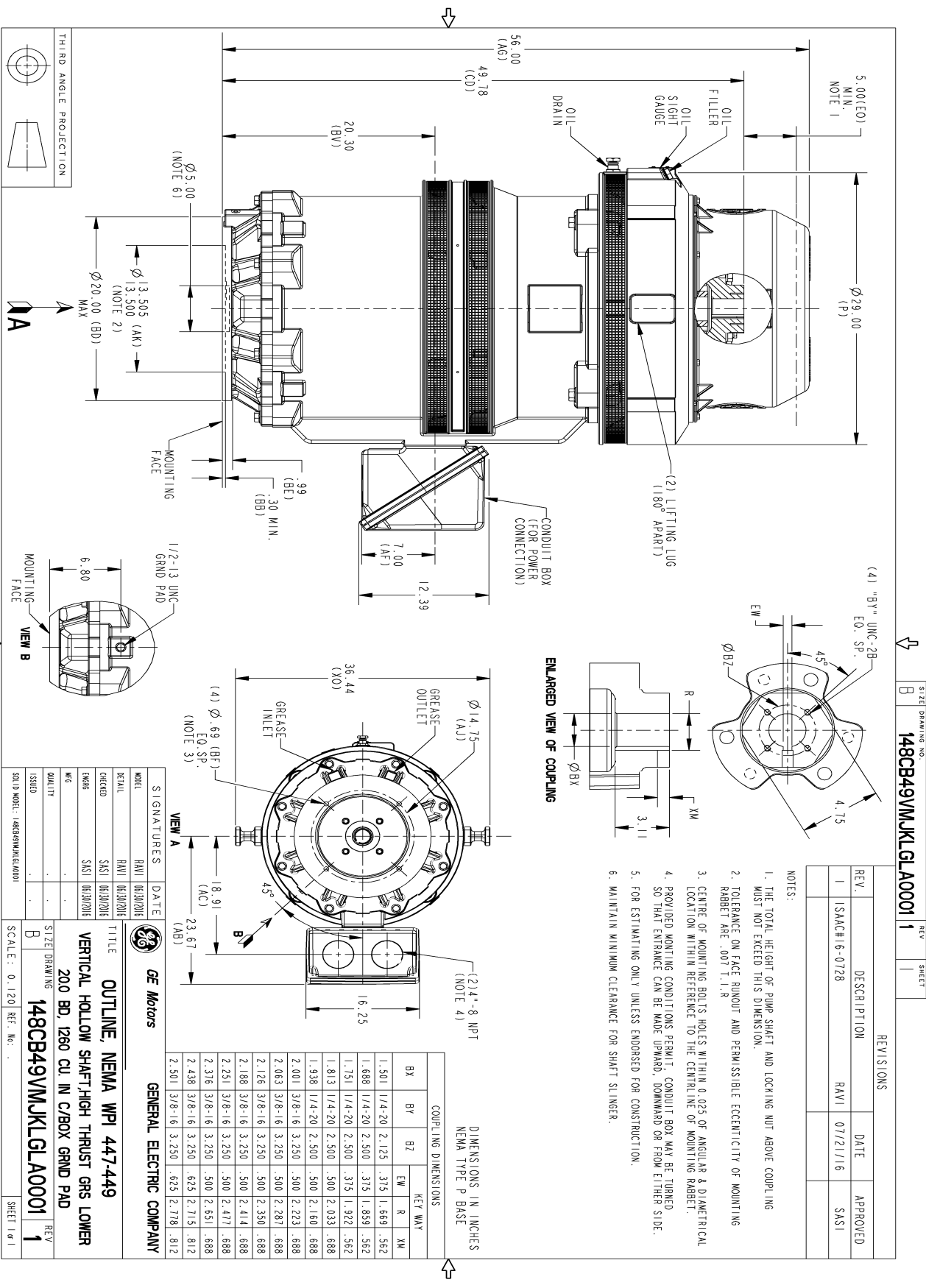
This motor is capable of two cold or one hot start with a maximum connected load inertia of 3842 Lb-Ft Sq (161.75 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 19 seconds. Safe stall time at 100% voltage is 37 seconds cold, 23 seconds hot. Rotor inertia is 85.57 Lb-Ft Sq (3.6 Kg-meter Sq).

<b>Open Circuit A-C:</b>	0.812	<b>Short Circuit D-C:</b>	0.029
<b>Short Circuit A-C:</b>	0.038	<b>X/R Ratio:</b>	10.839
<b>Stator Slots:</b>	72	<b>Rotor Slots:</b>	58

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



Marks:



SIZE DRAWING NO. B 148CB49VMJKLGLA0001 1

REV SHEET 1 1

REVISIONS

REV.	DESCRIPTION	DATE	APPROVED
1	ISAC#16-0728	07/21/16	SASI

NOTES:

1. THE TOTAL HEIGHT OF PUMP SHAFT AND LOCKING NUT ABOVE COUPLING MUST NOT EXCEED THIS DIMENSION.
2. TOLERANCE ON FACE ROUNDOFF AND PERMISSIBLE ECCENTRICITY OF MOUNTING RABBET ARE .007 T.1.R
3. CENTRE OF MOUNTING BOLTS WITHIN 0.025 OF ANGULAR & DIAMETRICAL LOCATION WITHIN REFERENCE TO THE CENTRALITY OF MOUNTING RABBET.
4. PROVIDED MOUNTING CONDITIONS PERMIT, CONDUIT BOX MAY BE TURNED SO THAT ENTRANCE CAN BE MADE UPWARD, DOWNWARD OR FROM EITHER SIDE.
5. FOR ESTIMATING ONLY UNLESS ENDORSED FOR CONSTRUCTION.
6. MAINTAIN MINIMUM CLEARANCE FOR SHAFT SLINGER.

DIMENSIONS IN INCHES  
NEMA TYPE P BASE

COUPLING DIMENSIONS				KEY WAY			
BM	BY	BZ	EW	R	XM	YM	ZM
1.501	1/4-20	2.125	.315	1.669	.562		
1.688	1/4-20	2.500	.375	1.859	.562		
1.751	1/4-20	2.500	.375	1.922	.562		
1.813	1/4-20	2.500	.500	2.033	.688		
1.938	1/4-20	2.500	.500	2.160	.688		
2.001	3/8-16	3.250	.500	2.223	.688		
2.063	3/8-16	3.250	.500	2.287	.688		
2.126	3/8-16	3.250	.500	2.350	.688		
2.188	3/8-16	3.250	.500	2.414	.688		
2.251	3/8-16	3.250	.500	2.477	.688		
2.316	3/8-16	3.250	.500	2.541	.688		
2.438	3/8-16	3.250	.625	2.715	.812		
2.501	3/8-16	3.250	.625	2.778	.812		

GE Motors  
GENERAL ELECTRIC COMPANY

TITLE OUTLINE, NEMA WPI 447-449

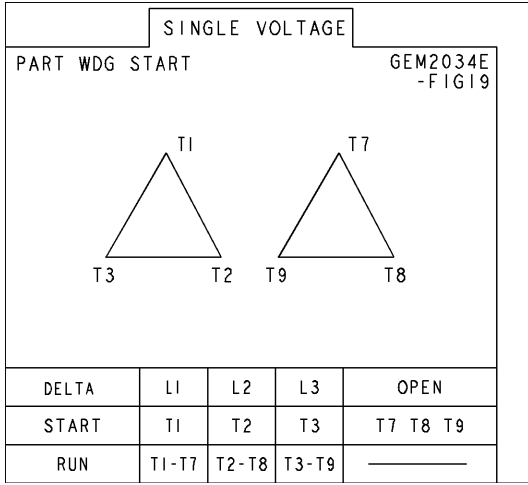
VERTICAL HOLLOW SHAFT-HIGH THRUST GRS LOWER  
200 BD, 1260 CU IN C/BOX GRND PAD

NO.	DETAIL	DATE	BY	REV
1	ISAC#16-0728	07/21/16	SASI	1

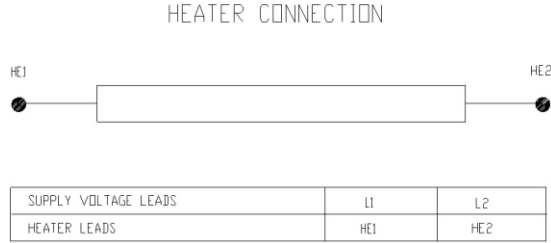
SCALE: 0.120 REF. No.:  
SHEET 1 of 1

Marks:

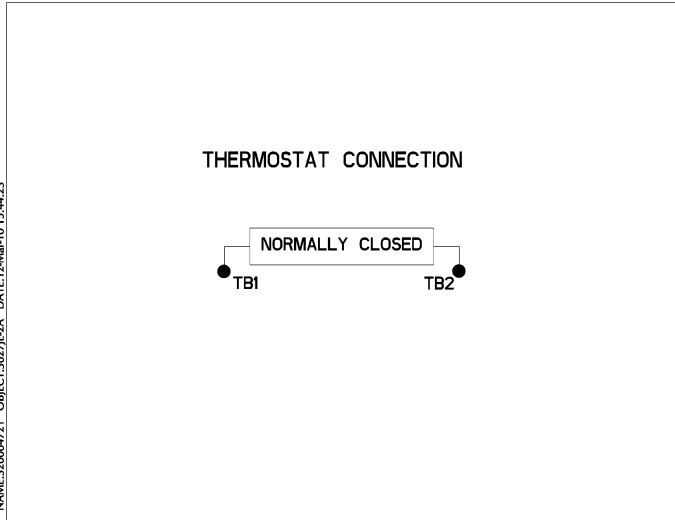
**Connection Diagram**  
**GEM2034E-FIG19**



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



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



NAME:32000471 OBJECT:3027JE-2A DATE:12-Mar-10 15:44:23

End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E7661AA1	115E7670LA1
Bearing	235A2522AJ01	235A2536AB01
Slinger/Inproseal		

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	
Fan Cover	149C4050AA1

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

