

# Product Information Packet

April 28, 2017

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

<b>Model Number:</b>	<b>5KS449SAJ6008A</b>
<b>Catalog Number:</b>	<b>V4719</b>
<b>Instruction Manual:</b>	GEK-95351
<b>Connection Diagram:</b>	GEM2034E-FIG25
<b>Outline Drawing:</b>	148CB49TMHKLGAA0001

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>5KS449SAJ6008A</b>	<b>Estimated Weight:</b>	2800 Lbs
<b>Outline Drawing:</b>	148CB49TMHKLGA0001	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG25	<b>Enclosure:</b>	TEFC
<b>Instruction Book:</b>	GEK-95351	<b>Encl Construction:</b>	X\$D
<b>Design Code:</b>	49BD1229AA	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	L449TP16	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	4	<b>Nominal Efficiency:</b>	96.2 %
<b>Output Power:</b>	250HP 185KW	<b>Guaranteed Efficiency:</b>	95.8
<b>RPM:</b>	1790	<b>3/4 Load Efficiency:</b>	95.8
<b>Voltage:</b>	460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	63.6
<b>Amps - FL:</b>	281.0	<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 Totally Enclosed Fan-Cooled**

**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 200 HP, 380V, 50 HZ WITH  
 271.0 AMPS AND 1490 RPM AT 1.00 SF

**Additional Information:**

4 POLE, VERT HOLLOW SHAFT HIGH THRUST (1D) - SPLIT LEAD  
 1260 CU IN - 2(4.00" NPT)  
 BEARING LIFE 8760 HRS AT 13200 LB THRUST  
 C/B GRD PLATE  
 OIL RESISTANT SLEEVING ON LEADS  
 N.C. TRIP TSTAT LDS TO MAIN CONDUIT BOX  
 115V HTR LDS TO MAIN CONDUIT BOX  
 COUPLING NOT INCLUDED IN BOM, WILL BE  
 ORDERED SEPERATELY  
 SHAFT GROUNDING RING MOUNTED ON DE BRG CAP  
 INSULATED LOWER HALF COUPLING

**Performance Characteristics**

1st Winding 1st Connection

**Design: 49BD1229AA**

**Marks:**

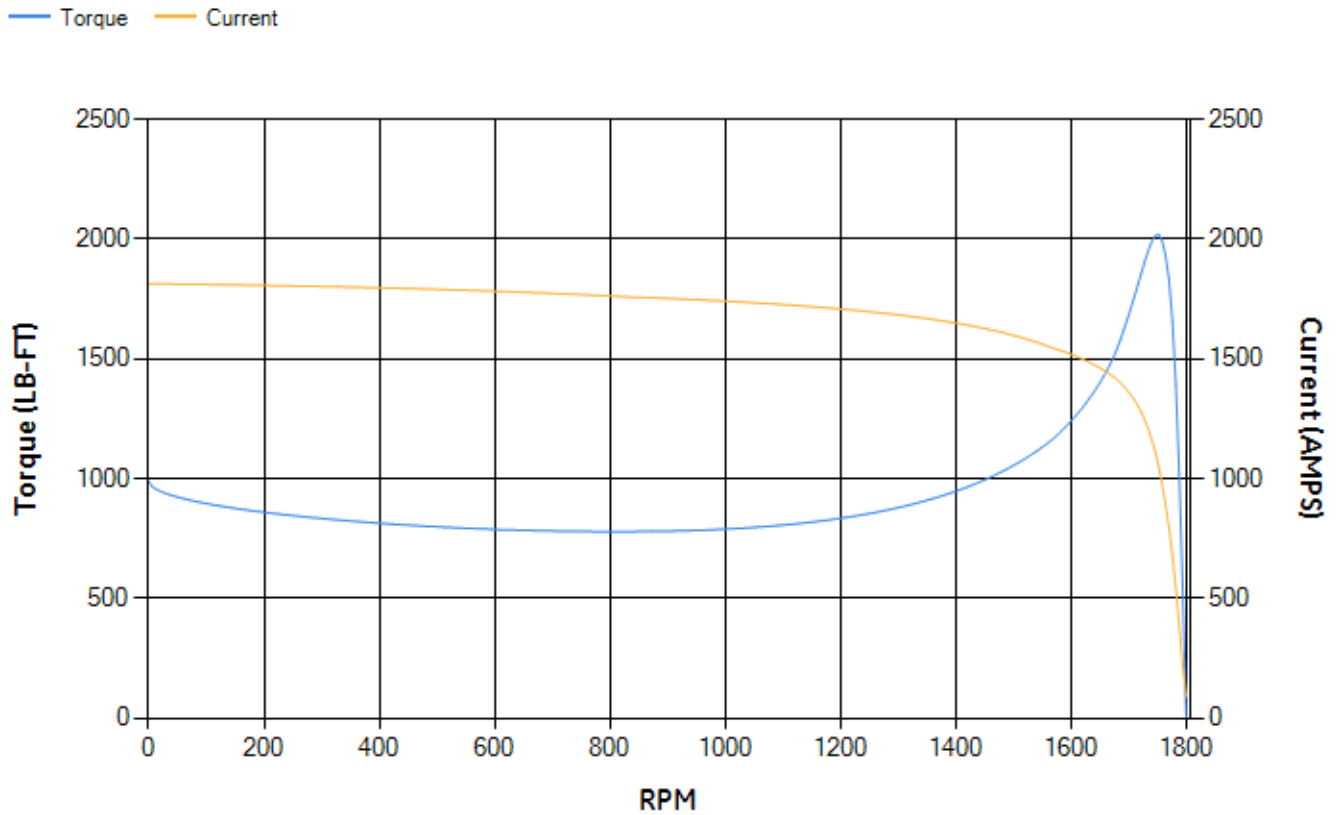
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.51	95.62	95.92	95.65	94.93	91.88	0.00
% PF	87.95	87.76	87.07	84.25	76.87	56.39	5.25
AMPS	348.19	320.67	280.17	217.76	160.32	112.89	88.71

<b>TORQ(FL)#FT</b>	732.78	<b>TORQ(LR)%FL</b>	135.07	<b>TORQ(BD)%FL</b>	275.46
<b>AMPS(LR)</b>	1813.48	<b>PF AT START</b>	0.22		

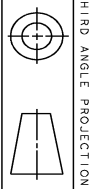
This motor is capable of two cold or one hot start with a maximum connected load inertia of 8341 Lb-Ft Sq (351.16 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 72 seconds. Safe stall time at 100% voltage is 146 seconds cold, 86 seconds hot. Rotor inertia is 109.54 Lb-Ft Sq (4.61 Kg-meter Sq).

<b>Open Circuit A-C:</b>	1.667	<b>Short Circuit D-C:</b>	0.039
<b>Short Circuit A-C:</b>	0.074	<b>X/R Ratio:</b>	14.556
<b>Stator Slots:</b>	72	<b>Rotor Slots:</b>	58

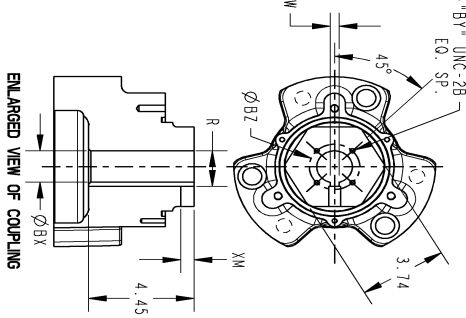
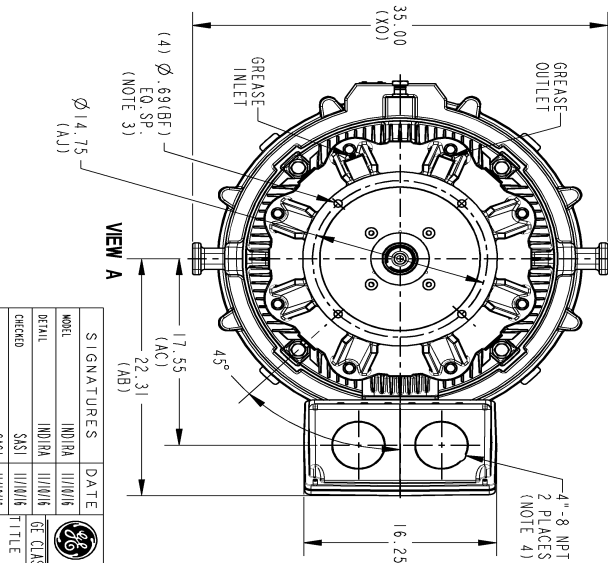
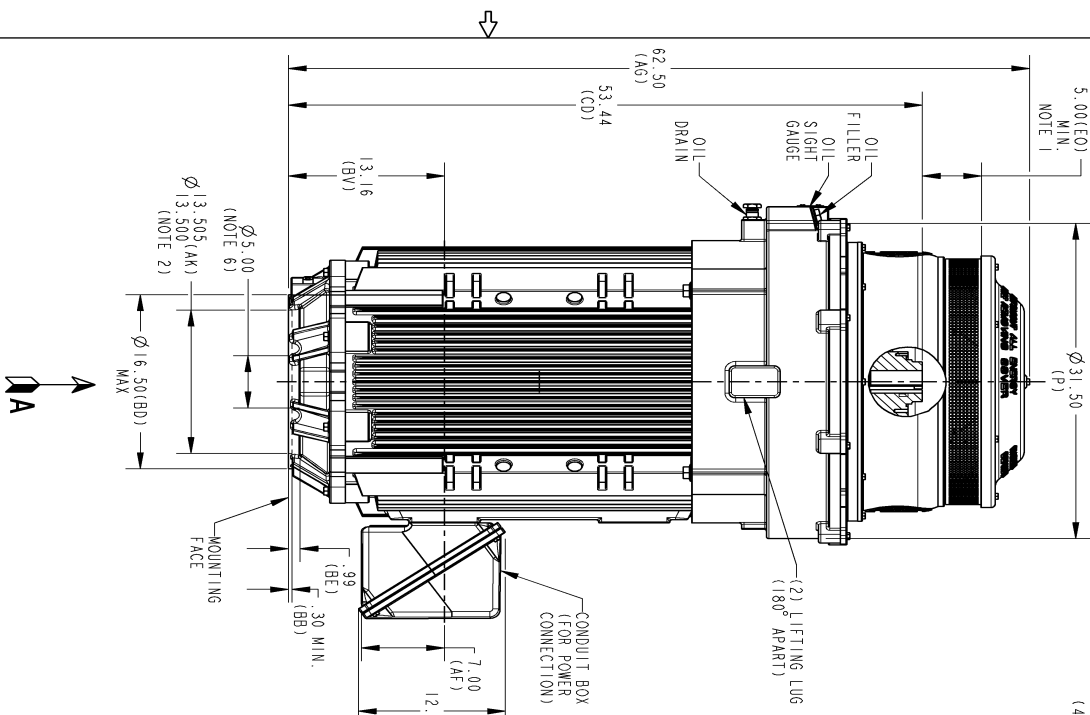
**Speed Torque Current Curve (First Connection, First Speed)**



SOLID MODEL: 148CB49TMHKLGA0001



THIRD ANGLE PROJECTION



SIGNATURES	DATE	REV	SHEET
DESIGN	ISSUED	0	1
CHECKED	ISSUED	0	1
ENG'G	ISSUED	0	1

MODEL	IND/PA	IND/NA	IND/US
MODEL	IND/PA	IND/NA	IND/US
TITLE	OUTLINE, NEMA TFC 447-449		
CLASSIFICATION	VERTICAL HOLLOW SHAFT HIGH THRUST GRS LOWER		
GE	165 BD, 1260 CU IN C/BOX		
SCALE:	0.100	REF. No.	

COUPLING DIMENSIONS						
BY	BY	BZ	EW	R	XM	KEY WAY
1.501	1/4-20	2.125	.375	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	2.650	.688	

REVISIONS	
REV.	DESCRIPTION

DIMENSIONS IN INCHES  
NEMA TYPE P BASE

NOTES:

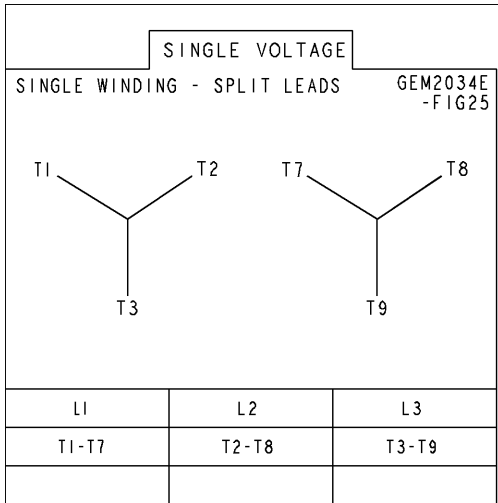
- THE TOTAL HEIGHT OF PUMP SHAFT AND LOCKING NUT ABOVE COUPLING MUST NOT EXCEED THIS DIMENSION.
- TOLERANCE ON FACE ROUND AND PERMISSIBLE ECCENTRICITY OF MOUNTING RABBET ARE .007 T. I. R.
- CENTRE OF MOUNTING BOLTS WITHIN 0.025 OF ANGULAR & DIAMETRICAL LOCATION WITHIN REFERENCE TO THE CENTRILINE OF MOUNTING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

148CB49TMHKLGA0001 0000
SIZE DRAWING NO.

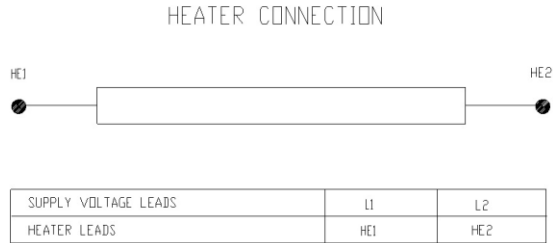
REV 1
SHEET 1

Marks:

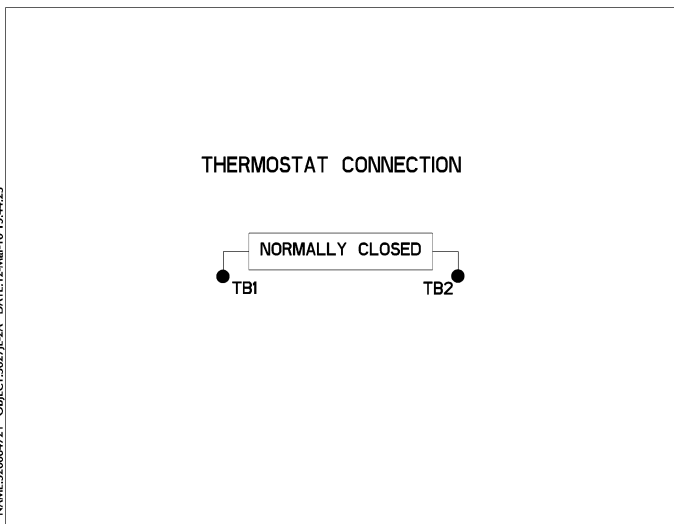
**Connection Diagram**  
**GEM2034E-FIG25**



**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	115E8660AA1	115E8670LA1
Bearing	235A2522AJ01	235A2536AB01
Slinger/Inproseal	149C4399G06	

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C7100AE1
Fan Cover	128D6847AA1

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	