

# Product Information Packet

January 13, 2017

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

<b>Model Number:</b>	<b>5KS364SAJ108A</b>
<b>Catalog Number:</b>	<b>V4970</b>
<b>Instruction Manual:</b>	GEK-95655
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	148CB36TLHNBCAA0002

## 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		

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**Marks:**

<b>MODEL NUMBER:</b>	<b>5KS364SAJ108A</b>	<b>Estimated Weight:</b>	980 Lbs
<b>Outline Drawing:</b>	148CB36TLHNBCAA0002	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG7	<b>Enclosure:</b>	TEFC
<b>Instruction Book:</b>	GEK-95655	<b>Encl Construction:</b>	X\$D
<b>Design Code:</b>	36BD0117A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	L364HP16	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	2	<b>Nominal Efficiency:</b>	94.5 %
<b>Output Power:</b>	60HP 44.4KW	<b>Guaranteed Efficiency:</b>	93.6
<b>RPM:</b>	3575	<b>3/4 Load Efficiency:</b>	94.6
<b>Voltage:</b>	460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	19.3
<b>Amps - FL:</b>	70.3	<b>Power Factor:</b>	84.5
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6312C3
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	6314ZC3

**Enclosure is Totally Enclosed Fan-Cooled**

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**Stamped Nameplate Notes:**

HTR LDS HE1-HE2 115V 100W  
 INVERTER DUTY PER NEMA MG1 PART 31  
 ALTERNATE RATING FOR PWM CONTROL:1.0SF 40C AMBIENT  
 VAR TORQUE RANGE 0-60 HZ  
 SUITABLE FOR 50 HP, 380V, 50 HZ WITH  
 70.5 AMPS AND 2975 RPM AT 1.00 SF  
 API 610 12TH EDITION SHAFT DIMENSIONS

**Additional Information:**

2 POLE,VERT SOLID SHAFT NORMAL THRUST  
 346 CU IN - 3.00" NPT  
 INPRO SEAL ON UPPER END  
 OIL RESISTANT SLEEVING ON LEADS  
 115V HTR LDS TO MAIN CONDUIT BOX  
 BEARING LIFE 8760 HOURS AT 1250 LB THRUST  
 BRASS TEE DRAIN  
 RCF: 3210 CPM AT C/BOX SIDE, 3510 CPM AT  
 90 DEG FROM C/ BOX SIDE  
 CG: 12.60 IN FROM P-BASE FACE

**Performance Characteristics**

1st Winding 1st Connection

**Design: 36BD0117A**

**Marks:**

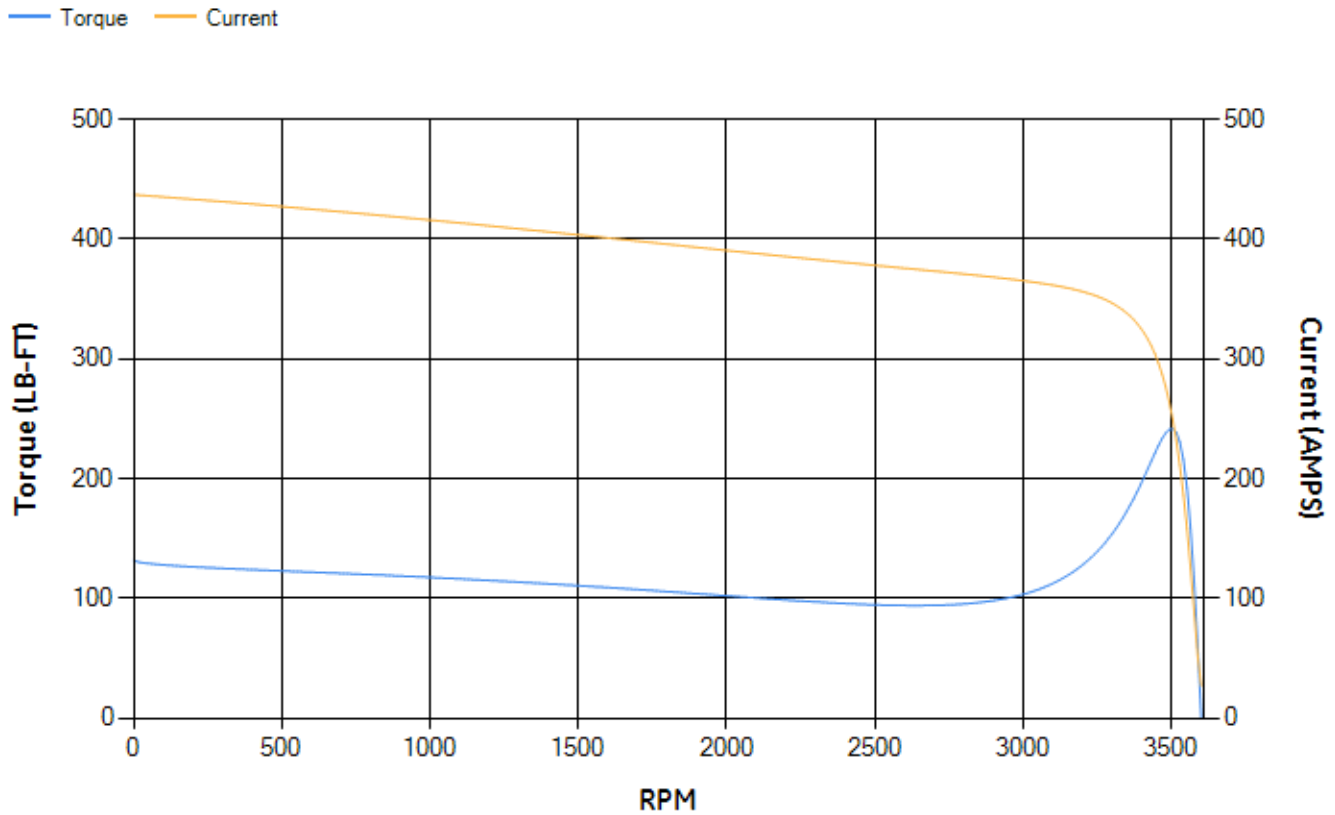
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	94.24	94.42	94.8	94.6	93.84	90.36	0.00
% PF	86.3	85.82	84.6	80.48	71.02	48.83	4.73
AMPS	86.31	79.7	69.89	55.32	42.13	31.82	26.86

<b>TORQ(FL)#FT</b>	88.11	<b>TORQ(LR)%FL</b>	149.69	<b>TORQ(BD)%FL</b>	273.92
<b>AMPS(LR)</b>	437.05	<b>PF AT START</b>	0.3		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 159 Lb-Ft Sq (6.69 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 22 seconds. Safe stall time at 100% voltage is 46 seconds cold, 26 seconds hot. Rotor inertia is 7.03 Lb-Ft Sq (0.3 Kg-meter Sq).

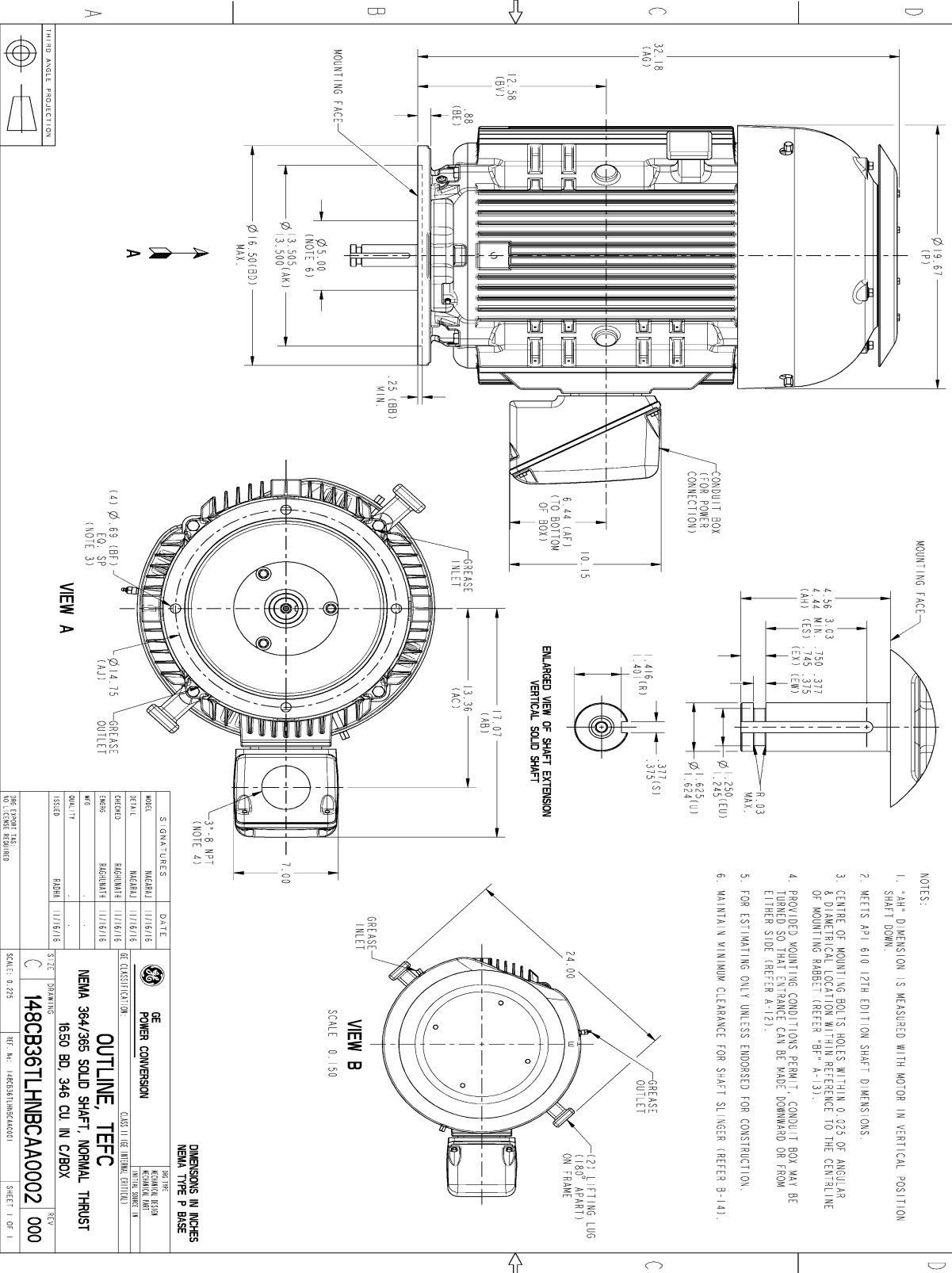
<b>Open Circuit A-C:</b>	0.956	<b>Short Circuit D-C:</b>	0.023
<b>Short Circuit A-C:</b>	0.055	<b>X/R Ratio:</b>	8.805
<b>Stator Slots:</b>	48	<b>Rotor Slots:</b>	38

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



Marks:

SOLID MODEL: 148CB36TLHNBCAA0002



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REV.	DESCRIPTION	DATE	APPROVED

SHEET NO. 1  
 148CB36TLHNBCAA0002\_000

- NOTES:
- "A" DIMENSION IS MEASURED WITH MOTOR IN VERTICAL POSITION SHAFT DOWN.
  - MEETS API 610 12TH EDITION SHAFT DIMENSIONS.
  - CENTRE OF MOUNTING BOLTS HOLES WITHIN 0.025 OF ANGULAR & DIRECTIONAL LOCATION WITHIN REFERENCE TO THE CENTRALLINE OF MOUNTING HUBBLE (REFER "B" A-13).
  - PROVIDED MOUNTING CONDITIONS PERMIT CONDUIT BOX MAY BE TURNED SO THAT ENTRANCE CAN BE MADE DOWNWARD OR FROM EITHER SIDE (REFER A-12).
  - FOR ESTIMATING ONLY UNLESS ENDORSED FOR CONSTRUCTION.
  - MAINTAIN MINIMUM CLEARANCE FOR SHAFT SLINGER (REFER B-14).

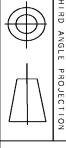
DIMENSIONS IN INCHES  
 NEMA TYPE P BASE

SIGNATURES	DATE	GE POWER CONVERSION
DESIGNER	11/16/16	
CHECKED	11/16/16	
ENG'G	11/16/16	
DRAWN	11/16/16	

CLASSIFICATION: NEMA 364/365 SOLID SHAFT, NORMAL THRUST  
 1650 BD, 346 CU IN C/BOX

SIZE	DRAWING	REV

SCALE: 0.25



THIRD ANGLE PROJECTION

Marks:

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



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



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E8258BA1	115E4250LK1
Bearing	235A2509AR01	235A2616AA01
Slinger/Inproseal	235A2300FM1	235A4575GS3

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C6700G02
Fan Cover	128D6810AD1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	149C4429AA2

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	