

# Product Information Packet

January 13, 2017

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

|                            |                      |
|----------------------------|----------------------|
| <b>Model Number:</b>       | <b>5KS365SAJ108A</b> |
| <b>Catalog Number:</b>     | <b>V4971</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>5KS365SAJ108A</b> | <b>Estimated Weight:</b>      | 1070 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>        | 36BD0118A            | <b>Ambient Max(°C):</b>       | 40       |
| <b>Type:</b>               | KS                   | <b>Alt Ambient Max(°C):</b>   | --       |
| <b>Frame:</b>              | L365HP16             | <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>       | 75HP 55.5KW          | <b>Guaranteed Efficiency:</b> | 93.6     |
| <b>RPM:</b>                | 3575                 | <b>3/4 Load Efficiency:</b>   | 95.1     |
| <b>Voltage:</b>            | 460                  | <b>KVA Code:</b>              | G        |
| <b>Hertz:</b>              | 60                   | <b>Max KVAR:</b>              | 20.8     |
| <b>Amps - FL:</b>          | 85.9                 | <b>Power Factor:</b>          | 86.5     |
| <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**

**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 60 HP, 380V, 50 HZ WITH  
 83.2 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: 36BD0118A**

**Marks:**

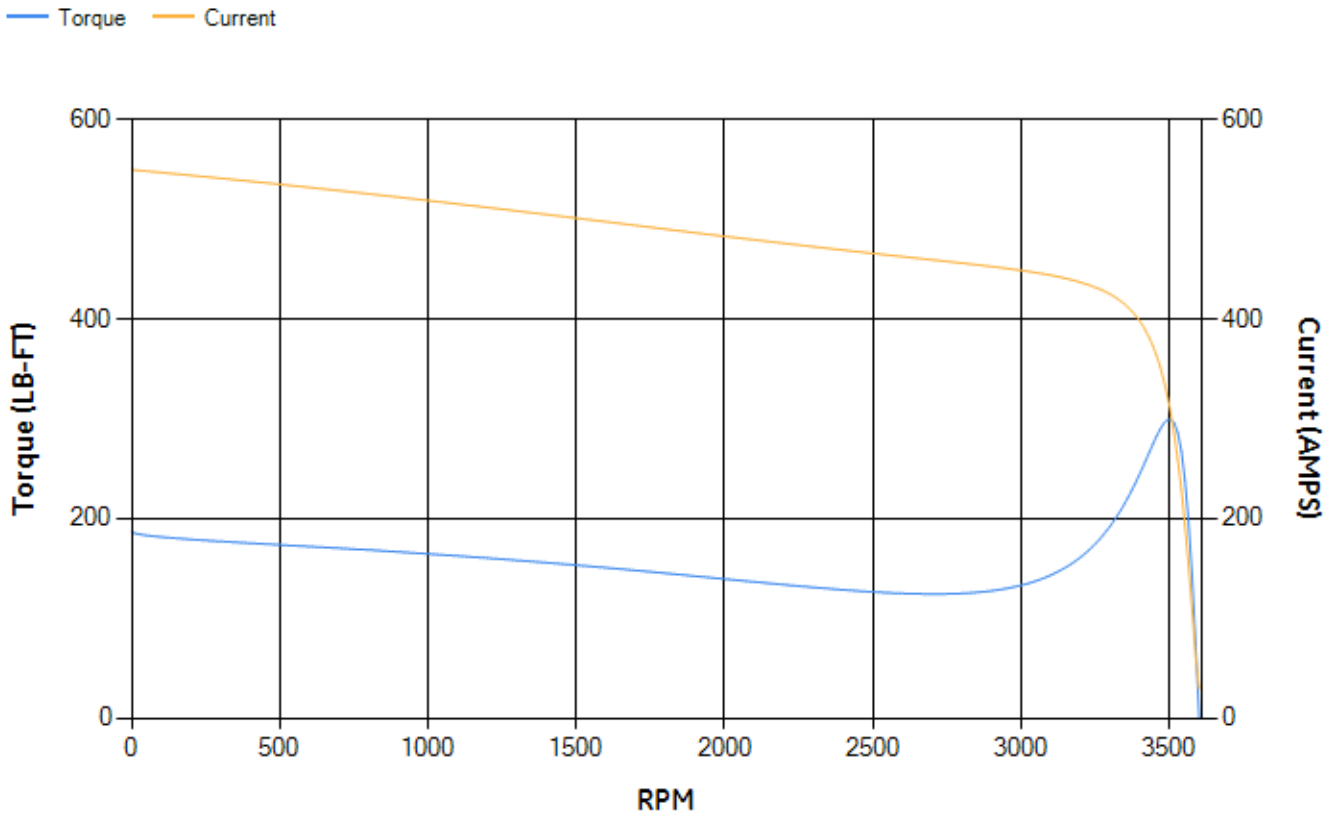
| LOAD % | 125.0  | 115.0 | 100.0 | 75.0  | 50.0  | 25.0  | 0.0   |
|--------|--------|-------|-------|-------|-------|-------|-------|
| % EFF  | 94.48  | 94.68 | 95.12 | 95.07 | 94.57 | 91.73 | 0.00  |
| % PF   | 87.92  | 87.61 | 86.72 | 83.41 | 75.17 | 53.6  | 4.53  |
| AMPS   | 105.63 | 97.31 | 84.94 | 66.39 | 49.38 | 35.7  | 28.99 |

|             |        |             |        |             |       |
|-------------|--------|-------------|--------|-------------|-------|
| TORQ(FL)#FT | 110.18 | TORQ(LR)%FL | 169.66 | TORQ(BD)%FL | 271.5 |
| AMPS(LR)    | 549.47 | PF AT START | 0.33   |             |       |

This motor is capable of two cold or one hot start with a maximum connected load inertia of 168 Lb-Ft Sq (7.07 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 17 seconds. Safe stall time at 100% voltage is 40 seconds cold, 20 seconds hot. Rotor inertia is 9.07 Lb-Ft Sq (0.38 Kg-meter Sq).

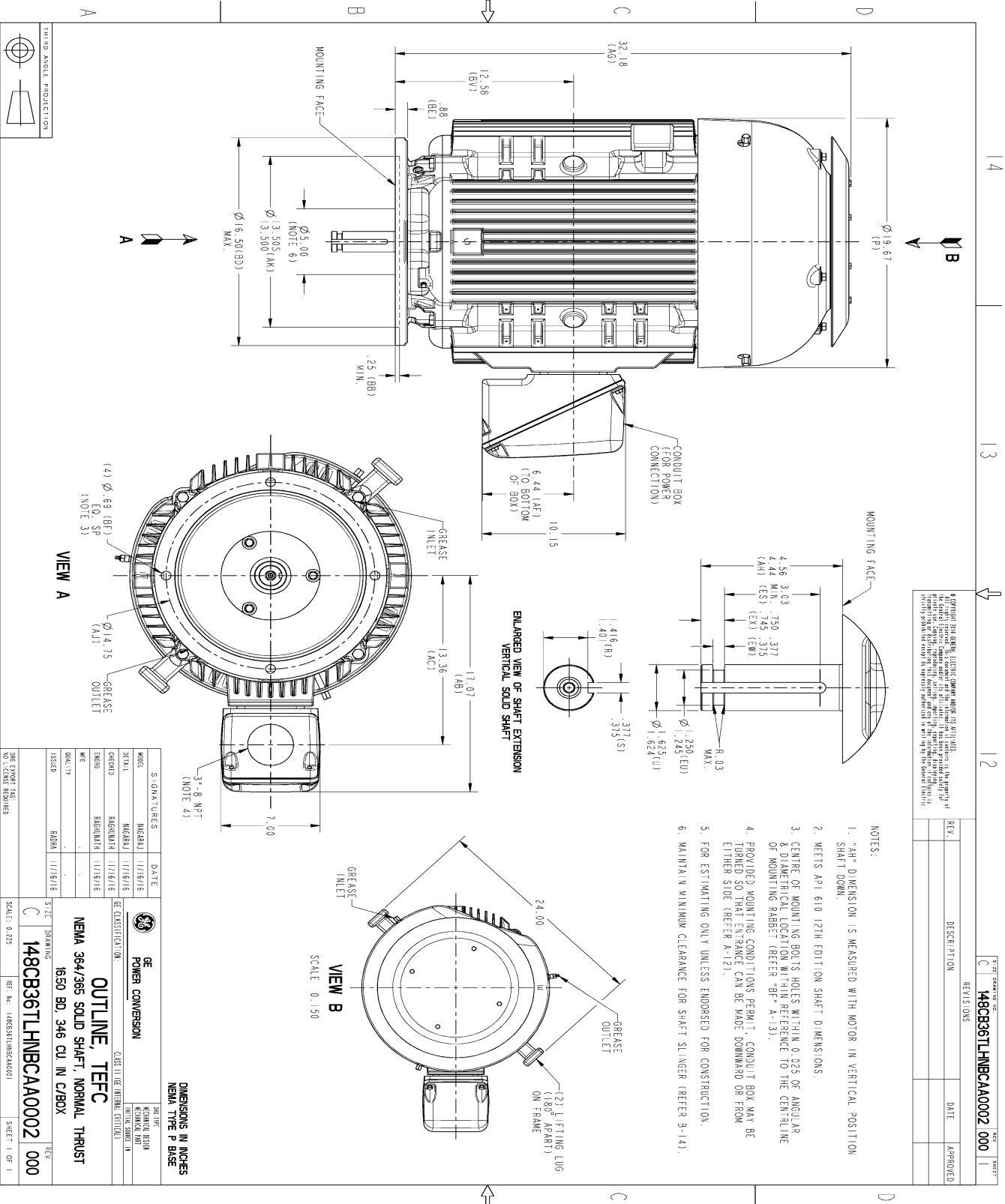
|                    |       |                    |       |
|--------------------|-------|--------------------|-------|
| Open Circuit A-C:  | 1.039 | Short Circuit D-C: | 0.022 |
| Short Circuit A-C: | 0.05  | X/R Ratio:         | 8.401 |
| Stator Slots:      | 48    | Rotor Slots:       | 38    |

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



Marks:

SOLID MODEL: 148CB36TLHNBCAA0002



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| REV. | DESCRIPTION | DATE | APPROVED |
|------|-------------|------|----------|
|      |             |      |          |

- NOTES:
- "AH" DIMENSION IS MEASURED WITH MOTOR IN VERTICAL POSITION SHAFT DOWN.
  - MEETS API 610 12TH EDITION SHAFT DIMENSIONS.
  - CENTRE OF MOUNTING BOLTS HOLES WITHIN 0.028 OF ANGULAR & DIRECTIONAL LOCATION WITHIN REFERENCE TO THE CENTRALLINE OF MOUNTING HUBBLE (REFER "BF" 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).

| SIGNATURES | DATE     |
|------------|----------|
| DESIGNER   | 11/16/16 |
| CHECKED    | 11/16/16 |
| DATE       | 11/16/16 |
| SCALE      | 11/16/16 |

|       |                     |
|-------|---------------------|
| MODEL | 148CB36TLHNBCAA0002 |
| REV   | 000                 |
| DATE  | 11/16/16            |
| SCALE | 0.225               |

**GE**  
**POWER CONVERSION**

**OUTLINE, TEFC**  
**NEMA 364/365 SOLID SHAFT, NORMAL THRUST**  
**1650 BD, 346 CU IN C/BOX**

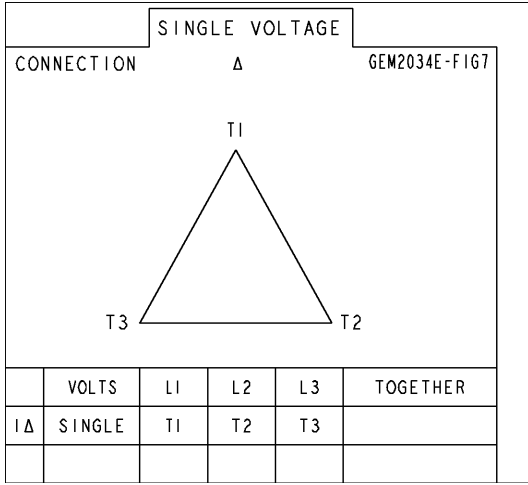
**DIMENSIONS IN INCHES**  
**NEMA TYPE P BASE**

148CB36TLHNBCAA0002 000

SHEET 1 OF 1

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             |       |