

# Product Information Packet

January 12, 2017

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

|                            |                      |
|----------------------------|----------------------|
| <b>Model Number:</b>       | <b>5KS405CAG208A</b> |
| <b>Catalog Number:</b>     | <b>E9291</b>         |
| <b>Instruction Manual:</b> | GEI-56128            |
| <b>Connection Diagram:</b> | GEM2034E-FIG7        |
| <b>Outline Drawing:</b>    | 225B5700AT           |

| Accessory Connection Diagrams |          |                              |      |
|-------------------------------|----------|------------------------------|------|
| <b>Bearing Thermocouple:</b>  | None     | <b>Heater:</b>               | None |
| <b>RTD:</b>                   | None     | <b>Thermistor:</b>           | None |
| <b>Thermostat:</b>            | 3027JE-2 | <b>Winding Thermocouple:</b> | None |
| <b>Bearing RTD:</b>           | None     |                              |      |

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**Marks:**

|                            |                      |                               |          |
|----------------------------|----------------------|-------------------------------|----------|
| <b>MODEL NUMBER:</b>       | <b>5KS405CAG208A</b> | <b>Estimated Weight:</b>      | 1560 Lbs |
| <b>Outline Drawing:</b>    | 225B5700AT           | <b>Time Rating:</b>           | CONT     |
| <b>Connection Diagram:</b> | GEM2034E-FIG7        | <b>Enclosure:</b>             | TEFC     |
| <b>Instruction Book:</b>   | GEI-56128            | <b>Encl Construction:</b>     | XP       |
| <b>Design Code:</b>        | 40ED1033A            | <b>Ambient Max(°C):</b>       | 40       |
| <b>Type:</b>               | KS                   | <b>Alt Ambient Max(°C):</b>   | XX       |
| <b>Frame:</b>              | 405T                 | <b>Insulation Class:</b>      | F        |
| <b>Phases:</b>             | 3                    | <b>NEMA Design:</b>           | B        |
| <b>Poles:</b>              | 4                    | <b>Nominal Efficiency:</b>    | 95.4 %   |
| <b>Output Power:</b>       | 100HP 74KW           | <b>Guaranteed Efficiency:</b> | 94.5     |
| <b>RPM:</b>                | 1785                 | <b>3/4 Load Efficiency:</b>   | 95.7     |
| <b>Voltage:</b>            | 460                  | <b>KVA Code:</b>              | G        |
| <b>Hertz:</b>              | 60                   | <b>Max KVAR:</b>              | 21.9     |
| <b>Amps - FL:</b>          | 111.0                | <b>Power Factor:</b>          | 88.5     |
| <b>Service Factor:</b>     | 1.0                  | <b>Bearing - DE:</b>          | 6316ZC3  |
| <b>Alt Service Factor:</b> | XX                   | <b>Bearing - ODE:</b>         | 6316ZC3  |

**Enclosure is Totally Enclosed Fan-Cooled**

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**Stamped Nameplate Notes:**

EXPLOSION PROOF MOTOR  
TEMP CODE T3C  
THERMOSTAT LEADS TB1-TB2:TRIP

**Additional Information:**

STAMP NP235A3574 AS FOLLOWS:  
CL I GR C&D CL II GR F&G  
4 POLE, T SHAFT EXTN  
(3)NC THERMOSTAT LEADS TO MAIN CONDUIT BOX  
920 Cu. In. CBOX

**Performance Characteristics**

1st Winding 1st Connection

**Design: 40ED1033A**

**Marks:**

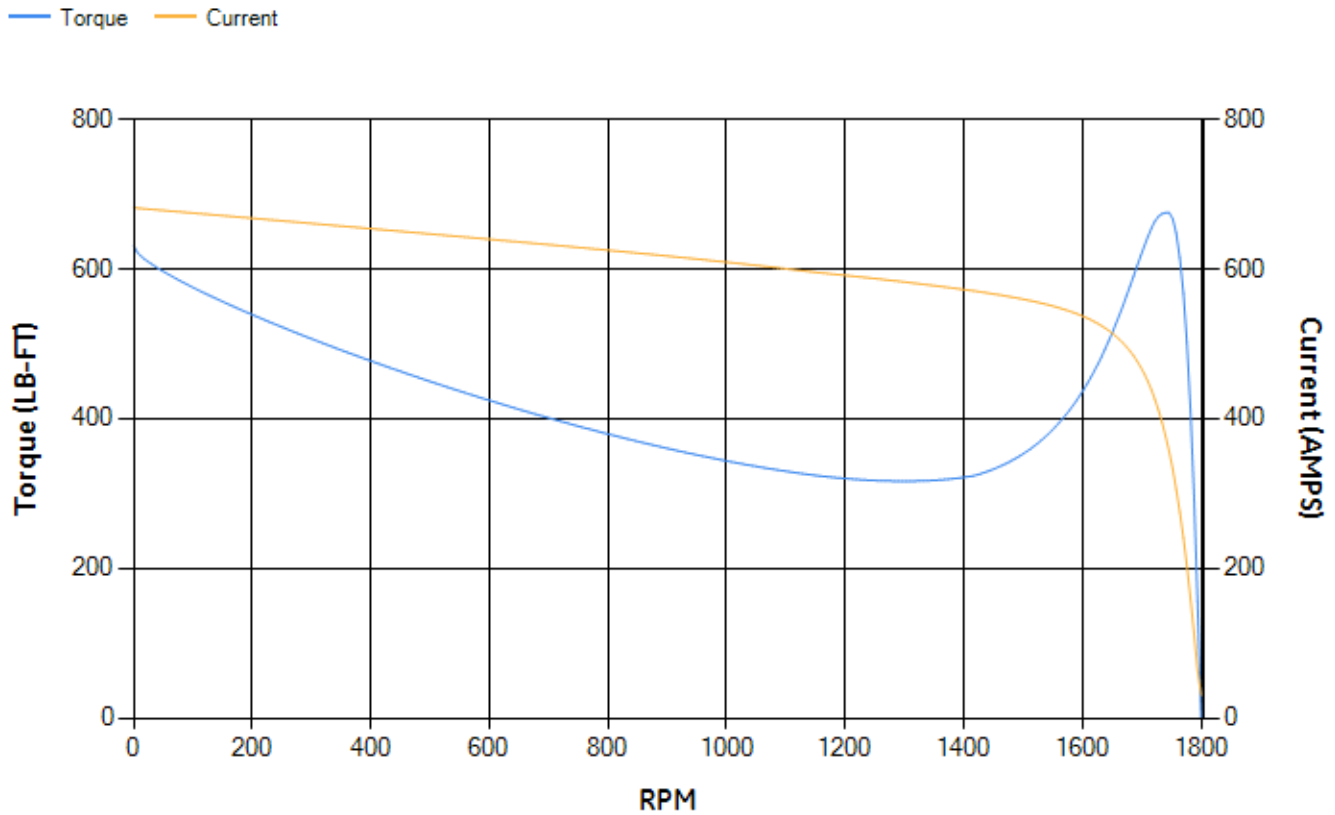
| LOAD % | 125.0  | 115.0  | 100.0  | 75.0  | 50.0  | 25.0  | 0.0   |
|--------|--------|--------|--------|-------|-------|-------|-------|
| % EFF  | 95.08  | 95.29  | 95.73  | 95.7  | 95.31 | 92.89 | 0.00  |
| % PF   | 88.47  | 88.56  | 88.31  | 86.44 | 80.52 | 61.64 | 5.12  |
| AMPS   | 139.07 | 127.55 | 110.71 | 84.86 | 60.98 | 40.86 | 30.44 |

|                    |        |                    |        |                    |        |
|--------------------|--------|--------------------|--------|--------------------|--------|
| <b>TORQ(FL)#FT</b> | 293.78 | <b>TORQ(LR)%FL</b> | 214.92 | <b>TORQ(BD)%FL</b> | 229.02 |
| <b>AMPS(LR)</b>    | 681.84 | <b>PF AT START</b> | 0.31   |                    |        |

This motor is capable of two cold or one hot start with a maximum connected load inertia of 2269 Lb-Ft Sq (95.52 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 41 seconds. Safe stall time at 100% voltage is 94 seconds cold, 49 seconds hot. Rotor inertia is 37.79 Lb-Ft Sq (1.59 Kg-meter Sq).

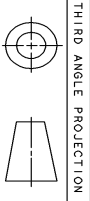
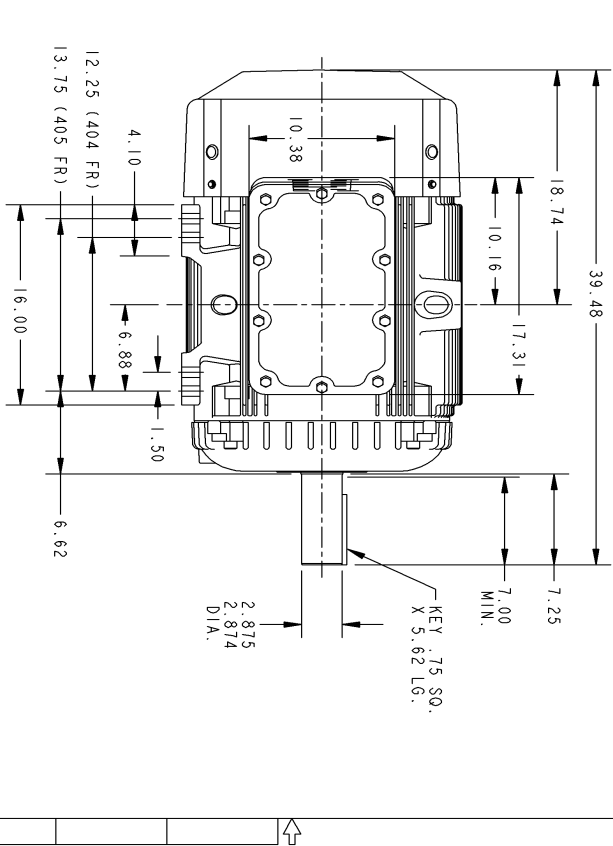
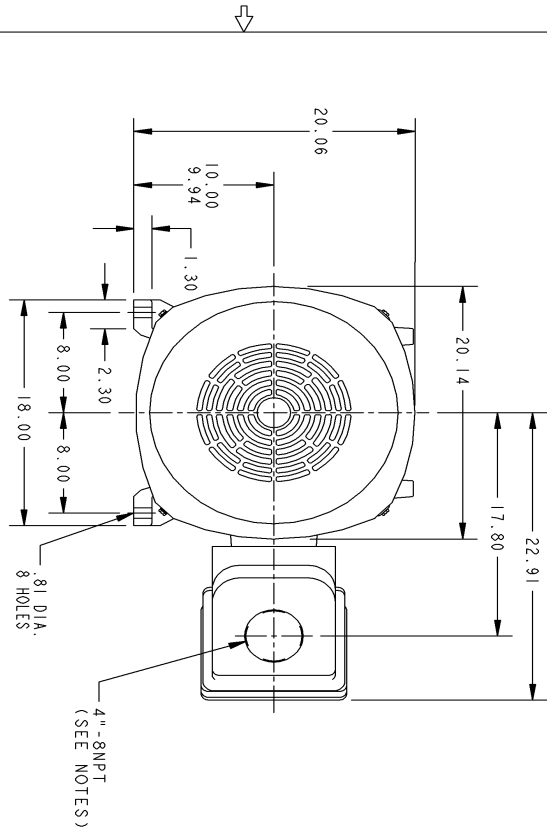
|                           |       |                           |        |
|---------------------------|-------|---------------------------|--------|
| <b>Open Circuit A-C:</b>  | 1.343 | <b>Short Circuit D-C:</b> | 0.034  |
| <b>Short Circuit A-C:</b> | 0.061 | <b>X/R Ratio:</b>         | 12.712 |
| <b>Stator Slots:</b>      | 72    | <b>Rotor Slots:</b>       | 58     |

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



NAME: 90422 OBJECT: 225B5700AT DATE: 26-Jul-02 03:28:46

Marks:



THIRD ANGLE PROJECTION

- NOTES:
1. CONDUIT BOX MAY BE PLACED WITH THE ENTRANCE ON EITHER SIDE OR UP.
  2. F-1 ASM AS SHOWN
  3. F-2 ASM-COND. BOX ON OPPOSITE SIDE.

SIZE: 225B5700AT  
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| REV. | DESCRIPTION | DATE | APPROVED |
|------|-------------|------|----------|
|      |             |      |          |
|      |             |      |          |

| UNLESS OTHERWISE SPECIFIED: | SIGNATURES        | DATE      |
|-----------------------------|-------------------|-----------|
| DIMENSIONS ARE IN INCHES    | DRWN              | 25-JUL-02 |
| TOLERANCE ON:               | CHECKED           | 25-JUL-02 |
| 2 PL. DECIMALS ± 0.01       | ENGRS             |           |
| 3 PL. DECIMALS ± 0.005      | ISSUED            | 25-JUL-02 |
| ANGLES ± 0.5                | APPLIED PRACTICES |           |

**GE Industrial Systems**  
**GENERAL ELECTRIC COMPANY**  
 Fort Wayne, Indiana

404-405 "T" XP (920 CU. IN. BOX)  
 SIZE DRAWING: **225B5700AT**  
 SCALE: DRAWING SCALE  
 SHEET 1 OF 1

DISTRIBUTION:

Marks:

**Connection Diagram**  
GEM2034E-FIG7



**Thermostat Connection**  
3027JE-2

FIG. 2  
THERMOSTAT CONN.

