

# Product Information Packet

January 12, 2017

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

|                            |                      |
|----------------------------|----------------------|
| <b>Model Number:</b>       | <b>5KS213CAA104B</b> |
| <b>Catalog Number:</b>     | <b>E9617</b>         |
| <b>Instruction Manual:</b> | GEI-56128            |
| <b>Connection Diagram:</b> | GEM2034E-FIG1        |
| <b>Outline Drawing:</b>    | 4002B5821RAP201      |

| Accessory Connection Diagrams |           |                              |      |
|-------------------------------|-----------|------------------------------|------|
| <b>Bearing Thermocouple:</b>  | None      | <b>Heater:</b>               | None |
| <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>5KS213CAA104B</b> | <b>Estimated Weight:</b>      | 200 Lbs |
| <b>Outline Drawing:</b>    | 4002B5821RAP201      | <b>Time Rating:</b>           | CONT    |
| <b>Connection Diagram:</b> | GEM2034E-FIG1        | <b>Enclosure:</b>             | TEFC    |
| <b>Instruction Book:</b>   | GEI-56128            | <b>Encl Construction:</b>     | XP      |
| <b>Design Code:</b>        | 21BD0074BA           | <b>Ambient Max(°C):</b>       | 40      |
| <b>Type:</b>               | KS                   | <b>Alt Ambient Max(°C):</b>   | --      |
| <b>Frame:</b>              | 213T                 | <b>Insulation Class:</b>      | F       |
| <b>Phases:</b>             | 3                    | <b>NEMA Design:</b>           | B       |
| <b>Poles:</b>              | 2                    | <b>Nominal Efficiency:</b>    | 89.5 %  |
| <b>Output Power:</b>       | 7.5HP 5.6KW          | <b>Guaranteed Efficiency:</b> | 87.5    |
| <b>RPM:</b>                | 3530                 | <b>3/4 Load Efficiency:</b>   | 90.0    |
| <b>Voltage:</b>            | 575                  | <b>KVA Code:</b>              | H       |
| <b>Hertz:</b>              | 60                   | <b>Max KVAR:</b>              | 2.1     |
| <b>Amps - FL:</b>          | 7.2                  | <b>Power Factor:</b>          | 87.5    |
| <b>Service Factor:</b>     | 1.00                 | <b>Bearing - DE:</b>          | 6208ZC3 |
| <b>Alt Service Factor:</b> | --                   | <b>Bearing - ODE:</b>         | 6208ZC3 |

**Enclosure is Totally Enclosed Fan-Cooled**

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**Stamped Nameplate Notes:**

EXPLOSION PROOF MOTOR  
TEMP CODE T3C  
THERMOSTAT LEADS TB1-TB2  
STAMP NP249A5571AD "CL I (C & D) CL II (F & G)"

**Additional Information:**

2P - T EXTN  
STANDARD FLOOR MOUNT  
C/BOX 26 CU IN-1.00 NPT  
F1 CONDUIT BOX MOUNTING  
AUX LEADS EXIT WITH MOTOR LEADS  
CL I C & D CL II F & G EXPLOSION PROOF MOTOR

**Performance Characteristics**

1st Winding 1st Connection

**Design: 21BD0074BA**

**Marks:**

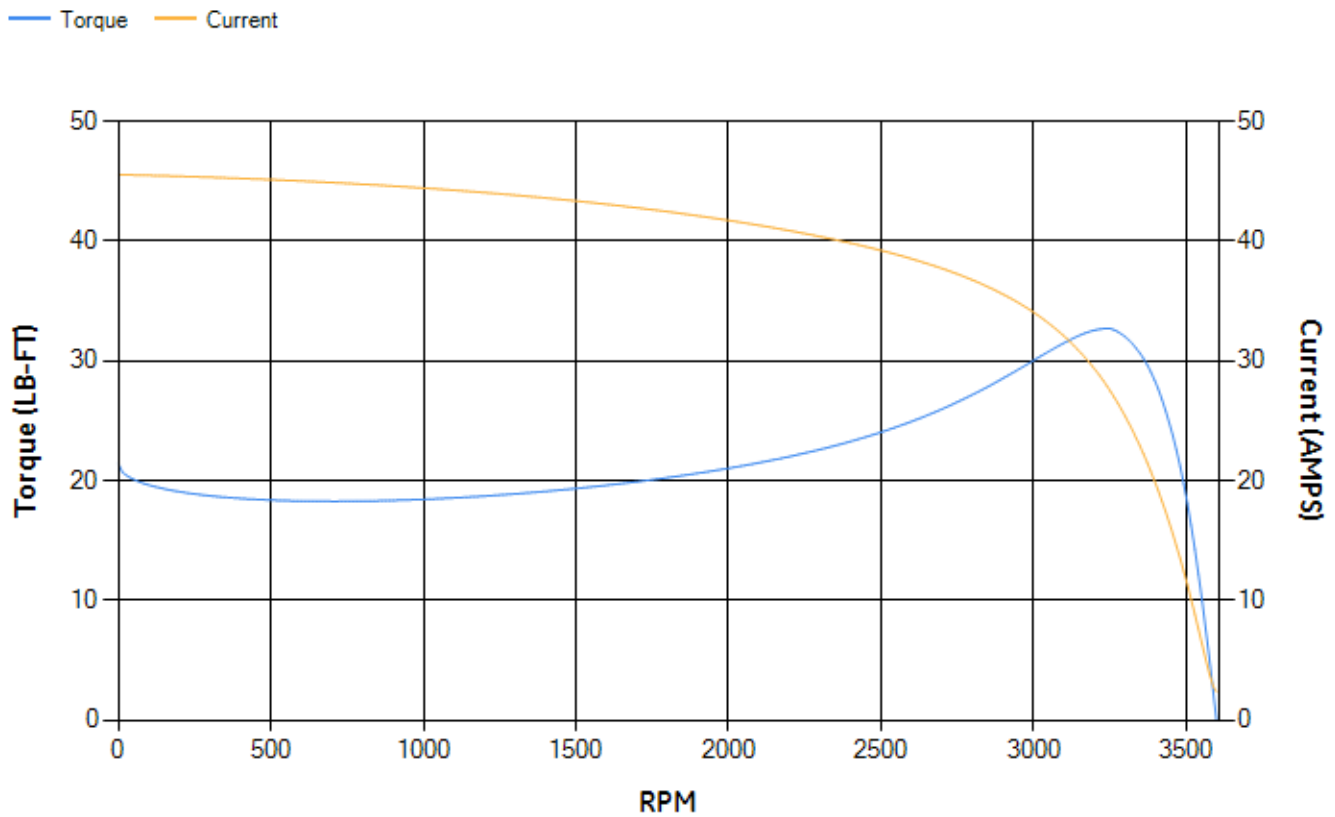
| LOAD % | 125.0 | 115.0 | 100.0 | 75.0  | 50.0  | 25.0  | 0.0  |
|--------|-------|-------|-------|-------|-------|-------|------|
| % EFF  | 88.22 | 88.76 | 89.62 | 89.98 | 89.26 | 84.36 | 0.00 |
| % PF   | 88.65 | 88.4  | 87.61 | 84.51 | 76.74 | 56.46 | 9.44 |
| AMPS   | 8.98  | 8.23  | 7.14  | 5.54  | 4.1   | 2.95  | 2.35 |

|             |       |             |        |             |        |
|-------------|-------|-------------|--------|-------------|--------|
| TORQ(FL)#FT | 11.16 | TORQ(LR)%FL | 191.71 | TORQ(BD)%FL | 290.78 |
| AMPS(LR)    | 45.55 | PF AT START | 0.36   |             |        |

This motor is capable of two cold or one hot start with a maximum connected load inertia of 76 Lb-Ft Sq (3.2 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 48 seconds. Safe stall time at 100% voltage is 85 seconds cold, 59 seconds hot. Rotor inertia is 0.31 Lb-Ft Sq (0.01 Kg-meter Sq).

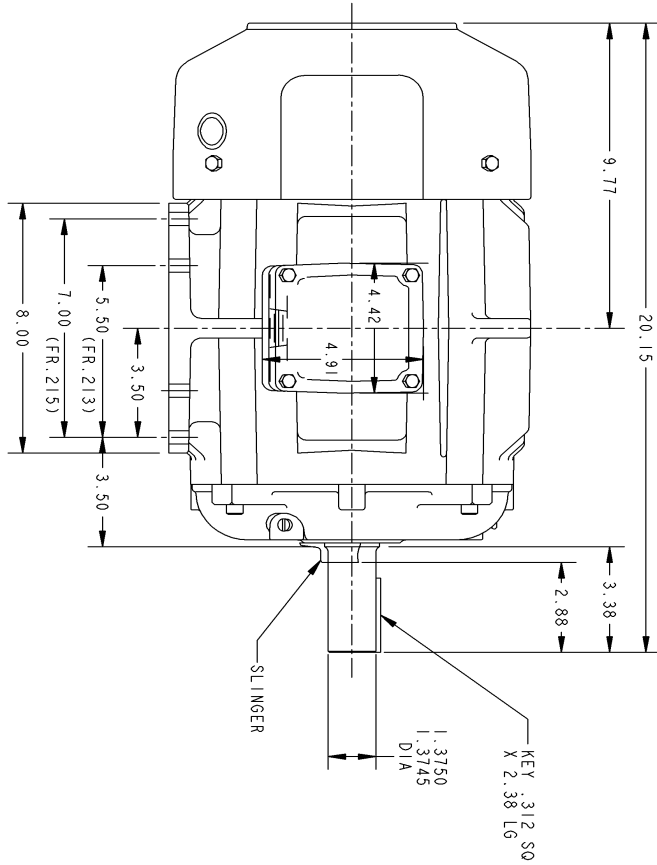
|                    |       |                    |       |
|--------------------|-------|--------------------|-------|
| Open Circuit A-C:  | 0.404 | Short Circuit D-C: | 0.01  |
| Short Circuit A-C: | 0.018 | X/R Ratio:         | 3.728 |
| Stator Slots:      | 36    | Rotor Slots:       | 26    |

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

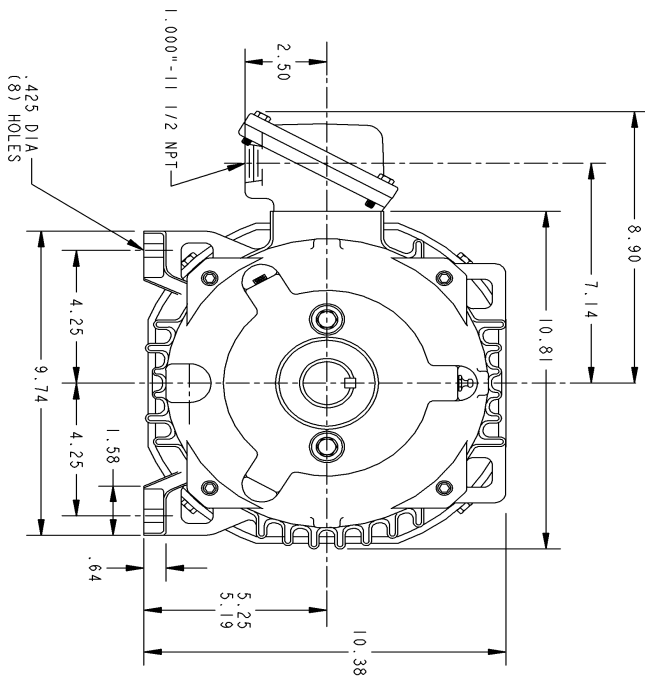


NAME: PT-147 OBJECT: 4002B582IRAP201 DATE: 29-Jun-02 15:55:33

Marks:



NOTE 1: CONDUIT BOX MAY BE ASSEMBLED WITH ENTRANCE UP, DOWN OR TO EITHER SIDE.  
 NOTE 2: F1 ASSEMBLY AS SHOWN. F2 ASSEMBLY CONDUIT BOX ON OPPOSITE SIDE FROM SHOWN LOCATION.

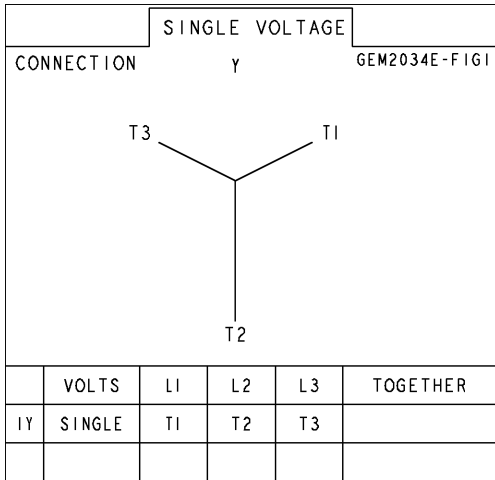


|                         |                    |   |                 |
|-------------------------|--------------------|---|-----------------|
| CAD NO.                 | 0H210:8582IRAP201  | PETERBOROUGH                            | 4002B582IRAP201 |
| REF.                    |                    | MOTOR PLANT                             | CONT ON SHT -   |
| PLAT CLASS              | 100, 101, 116, 150 |   | SHT NO. 1       |
| PLAT SCALE              | .3                 |   |                 |
|                         |                    | TITLE<br><b>INDUCTION MOTOR OUTLINE</b> |                 |
| FIRST MADE FOR FR. 210T |                    | TEFC EXPLOSION PROOF                    |                 |
| STANDARD                |                    | CIR95                                   |                 |

|   |   |          |       |                      |
|---|---|----------|-------|----------------------|
| 5   | CONDUIT BOX IS CHANGED TO 4002B5718RAG002               | 06/28/02 | MORAN | PRINTS TO            |
| 4   | CONDUIT BOX IS CHANGED TO 4002B5725RAG004               | 05/10/02 | DAN   | 18X15                |
| 3   | ADDED DIMENSION   | 01/10/01 | NRS   | NAME                 |
| 2   | REVISED GREASING LOCATION ON FAN COVER PER ISAC 00-2713 | 09/15/00 | NRS   | DRAWN GARY WARRNER   |
| 1   | DE ES WAS 0128D6082RAP001 PER ISAC 00-2713              | 09/08/00 | NRS   | CHECKED GARY WARRNER |
| REV   | DESCRIPTION   | DATE     | INT'L | DATE                 |
| CAD DRAWING - NO MANUAL REVISIONS PERMITTED |   |          |       | 4002B582IRAP201      |
|   |   |          |       | SHT NO. 1            |

Marks:

**Connection Diagram**  
**GEM2034E-FIG1**



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

