

# Product Information Packet

November 9, 2016

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

|                            |                       |
|----------------------------|-----------------------|
| <b>Model Number:</b>       | <b>5KS182SAA308D1</b> |
| <b>Catalog Number:</b>     | <b>M9943</b>          |
| <b>Instruction Manual:</b> | GEI-56128             |
| <b>Connection Diagram:</b> | GEM2034E-FIG1         |
| <b>Outline Drawing:</b>    | 4002B5818PAP5201      |

| <b>Accessory Connection Diagrams</b> |      |                              |      |
|--------------------------------------|------|------------------------------|------|
| <b>Bearing Thermocouple:</b>         | None | <b>Heater:</b>               | None |
| <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>5KS182SAA308D1</b> | <b>Estimated Weight:</b>      | 76 Lbs  |
| <b>Outline Drawing:</b>    | 4002B5818PAP5201      | <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>     | X\$D    |
| <b>Design Code:</b>        | 18BD3001A             | <b>Ambient Max(°C):</b>       | 40      |
| <b>Type:</b>               | KS                    | <b>Alt Ambient Max(°C):</b>   | 65      |
| <b>Frame:</b>              | 182T                  | <b>Insulation Class:</b>      | H       |
| <b>Phases:</b>             | 3                     | <b>NEMA Design:</b>           | B       |
| <b>Poles:</b>              | 6                     | <b>Nominal Efficiency:</b>    | 87.5 %  |
| <b>Output Power:</b>       | 1.5HP 1.1KW           | <b>Guaranteed Efficiency:</b> | 86.5    |
| <b>RPM:</b>                | 1170                  | <b>3/4 Load Efficiency:</b>   | 88.2    |
| <b>Voltage:</b>            | 460                   | <b>KVA Code:</b>              | M       |
| <b>Hertz:</b>              | 60                    | <b>Max KVAR:</b>              | 1.0     |
| <b>Amps - FL:</b>          | 2.4                   | <b>Power Factor:</b>          | 68.0    |
| <b>Service Factor:</b>     | 1.25                  | <b>Bearing - DE:</b>          | 6206ZC3 |
| <b>Alt Service Factor:</b> | 1.00                  | <b>Bearing - ODE:</b>         | 6206ZC3 |

**Enclosure is Totally Enclosed Fan-Cooled**

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**Stamped Nameplate Notes:**

SF AMPS 2.7  
 STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KS182SAA308D1 S/N: XXX  
 CSA CERTIFIED CSA09.2216219 FOR EX NA IIC 200C GC  
 CL 1 ZONE2 AEX NA IIC 200C;CL 1 DIV2 GRP ABCD 200C  
 IN -40C <= AMB <= 40C, 1.0 SF ON SINE-WAVE PWR  
 SURF TEMP 200C AT 1.25SF ON SINE-WAVE PWR  
 OR 200 C VT OR 200 C CT OR 200 C CHP PWM CONTROL  
 ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB  
 VT 0-60 HZ, CT 3-60 HZ , CHP 60-90 HZ.

**Additional Information:**

6P - T EXTN  
 STANDARD FLOOR MOUNT  
 C/BOX 30 CU IN-0.75 NPT  
 F1 CONDUIT BOX MOUNTING  
 OIL RESISTANT SLEEVING ON LEADS

**Performance Characteristics**

1st Winding 1st Connection

**Design: 18BD3001A**

**Marks:**

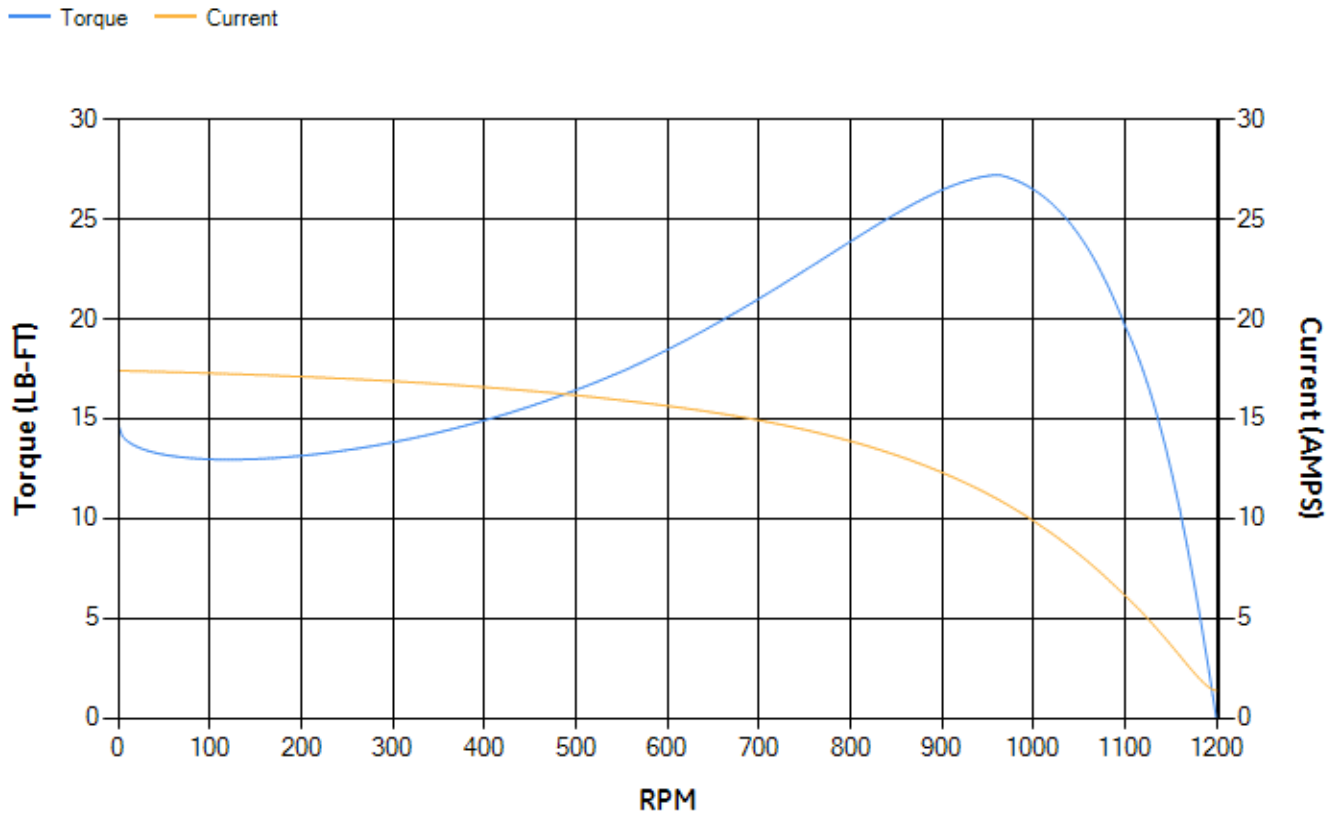
| LOAD % | 125.0 | 115.0 | 100.0 | 75.0  | 50.0  | 25.0  | 0.0  |
|--------|-------|-------|-------|-------|-------|-------|------|
| % EFF  | 87.54 | 87.89 | 88.45 | 88.19 | 86.52 | 79.53 | 0.00 |
| % PF   | 73.63 | 71.73 | 69.93 | 59.69 | 46.9  | 28.68 | 5.86 |
| AMPS   | 2.72  | 2.56  | 2.27  | 2     | 1.73  | 1.54  | 1.37 |

|                    |       |                    |        |                    |        |
|--------------------|-------|--------------------|--------|--------------------|--------|
| <b>TORQ(FL)#FT</b> | 6.72  | <b>TORQ(LR)%FL</b> | 218.46 | <b>TORQ(BD)%FL</b> | 396.13 |
| <b>AMPS(LR)</b>    | 17.41 | <b>PF AT START</b> | 0.46   |                    |        |

This motor is capable of two cold or one hot start with a maximum connected load inertia of 260 Lb-Ft Sq (10.95 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 63 seconds. Safe stall time at 100% voltage is 139 seconds cold, 117 seconds hot. Rotor inertia is 0.35 Lb-Ft Sq (0.01 Kg-meter Sq).

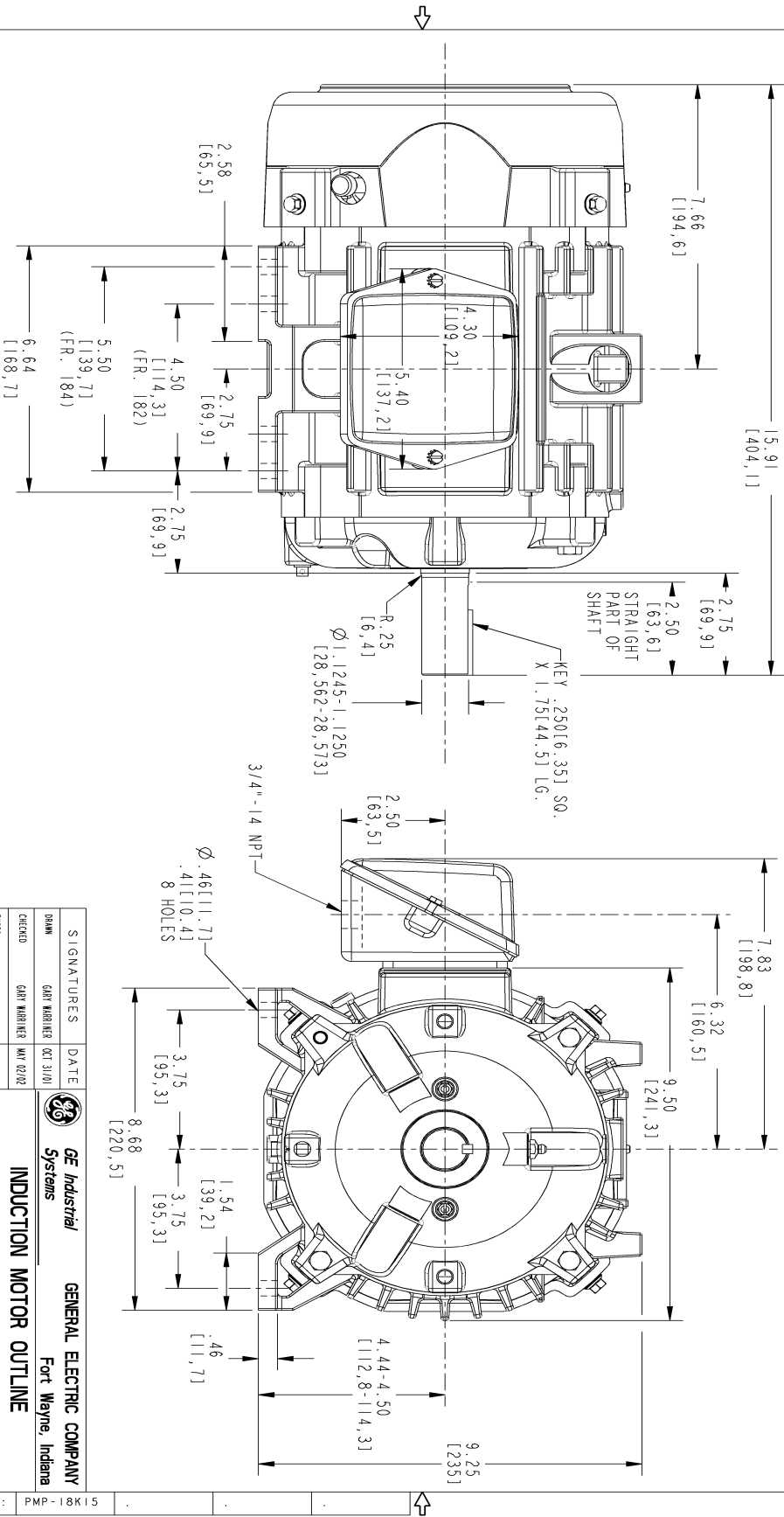
|                           |       |                           |       |
|---------------------------|-------|---------------------------|-------|
| <b>Open Circuit A-C:</b>  | 0.162 | <b>Short Circuit D-C:</b> | 0.008 |
| <b>Short Circuit A-C:</b> | 0.011 | <b>X/R Ratio:</b>         | 3.204 |
| <b>Stator Slots:</b>      | 36    | <b>Rotor Slots:</b>       | 48    |

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



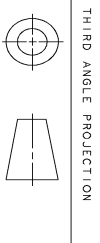
Marks:

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.



| REV. | DESCRIPTION                 | DATE       | APPROVED  |
|------|-----------------------------|------------|-----------|
| 1    | DUAL DIMENSION ADDED SWITCH | 11/22/07   | HEMANTH   |
| 2    | ISAC# 12-0387               | 04/14/2012 | HARIKIRAN |
| 3    | ISAC#14-0583                | 07/17/14   | MAAYATHA  |
| 4    | ISAC#15-0206                | 03/05/15   | VJ JAY    |

SIZE DRAWING NO. 4002B5818PAP5201 SH 4 REV

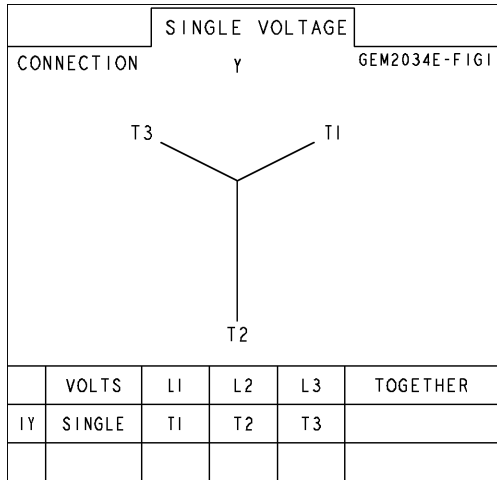


|                                       |              |              |   |
|---------------------------------------|--------------|--------------|---|
| SIGNATURES                            |              | DATE         | <p><b>GENERAL ELECTRIC COMPANY</b><br/>Fort Wayne, Indiana</p> <p><b>INDUCTION MOTOR OUTLINE</b><br/>STANDARD CONSTRUCTION<br/>FME: FR180T TEFC</p> |
| DESIGN                                | GARY WARRNER | OCT 31/01    |   |
| CHECKED                               | GARY WARRNER | MAY 02/02    |   |
| ENGR                                  | GARY WARRNER | MAY 02/02    |   |
| ISSUED                                | GARY WARRNER | MAY 02/02    |   |
| APPLIED PRACTICES                     |              | SIZE DRAWING | REV.  |
| SCALE: 0.400 REF. NO: 4002B5818PAP201 |              | B            | 4   |

DISTRIBUTION: PMP-18K15

Marks:

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



| End shield Assembly |               |                |
|---------------------|---------------|----------------|
| Part Description    | DE Side Part# | ODE Side Part# |
| End Shield          | 4004D5281PB1  | 4004D5281SG1   |
| Bearing             | 235A2602AA01  | 235A2602AA01   |
| Slinger/Inproseal   | 149C4399G16   | 149C4399G16    |

| Fan & Fan Cover Assembly |                 |
|--------------------------|-----------------|
| Part Description         | Part#           |
| Fan                      | 4001A5914AM-G01 |
| Fan Cover                | 4003C5786PA1    |

| Conduit & Accessories Box Assembly |                 |
|------------------------------------|-----------------|
| Part Description                   | Part#           |
| Conduit Box                        | 4002B5718PA-G01 |

| Mechanical Accessories |       |
|------------------------|-------|
| Part Description       | Part# |
| Brake                  |       |
| Tachometer             |       |