

# Product Information Packet

November 9, 2016

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

|                            |                       |
|----------------------------|-----------------------|
| <b>Model Number:</b>       | <b>5KS182XAE5723C</b> |
| <b>Catalog Number:</b>     | <b>V768</b>           |
| <b>Instruction Manual:</b> | GEK-95351             |
| <b>Connection Diagram:</b> | GEM2034E-FIG1         |
| <b>Outline Drawing:</b>    | 4002B5818PPP5325      |

| Accessory Connection Diagrams |      |                              |      |
|-------------------------------|------|------------------------------|------|
| <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>5KS182XAE5723C</b> | <b>Estimated Weight:</b>      | 76 Lbs    |
| <b>Outline Drawing:</b>    | 4002B5818PPP5325      | <b>Time Rating:</b>           | CONT      |
| <b>Connection Diagram:</b> | GEM2034E-FIG1         | <b>Enclosure:</b>             | TEFC      |
| <b>Instruction Book:</b>   | GEK-95351             | <b>Encl Construction:</b>     | 841       |
| <b>Design Code:</b>        | 18BD0104A             | <b>Ambient Max(°C):</b>       | 40        |
| <b>Type:</b>               | KS                    | <b>Alt Ambient Max(°C):</b>   | --        |
| <b>Frame:</b>              | L182LP10              | <b>Insulation Class:</b>      | H         |
| <b>Phases:</b>             | 3                     | <b>NEMA Design:</b>           | B         |
| <b>Poles:</b>              | 2                     | <b>Nominal Efficiency:</b>    | 86.5 %    |
| <b>Output Power:</b>       | 3HP 2.2KW             | <b>Guaranteed Efficiency:</b> | 84.0      |
| <b>RPM:</b>                | 3530                  | <b>3/4 Load Efficiency:</b>   | 87.1      |
| <b>Voltage:</b>            | 460                   | <b>KVA Code:</b>              | K         |
| <b>Hertz:</b>              | 60                    | <b>Max KVAR:</b>              | 1.1       |
| <b>Amps - FL:</b>          | 4.0                   | <b>Power Factor:</b>          | 82.0      |
| <b>Service Factor:</b>     | 1.15                  | <b>Bearing - DE:</b>          | 5307      |
| <b>Alt Service Factor:</b> | --                    | <b>Bearing - ODE:</b>         | 6206-2ZC3 |

**Enclosure is Totally Enclosed Fan-Cooled**

**Stamped Nameplate Notes:**

VERTICAL-841  
 PREMIUM EFFICIENT MOTOR  
 DE BRG 5307 ODE BRG 30BC02JP3  
 INLINE MOTOR  
 EXCEPTION TO IEEE-STD-841-2009:THRUST BRG ON DE  
 INVERTER DUTY PER NEMA MG1 PART 31  
 ALTERNATE RATING FOR PWM CONTROL:  
 1.0 SF VAR TORQUE RANGE 0-60 HZ  
 MAX EXPOSED INTERNAL AND EXTERNAL SURFACE  
 TEMPERATURES UNDER USUAL SERVICE CONDITIONS  
 AT 1.00 S.F. DO NOT EXCEED 200 DEG C  
 STAMP NP249A5499AP AS BELOW:  
 MODEL:5KS182XAE5723C S/N: XXX  
 EX NA IIC T3 GC CSA.09.2216219  
 CLASS I, ZONE 2, AEX NA IIC T3  
 CLASS I, DIV 2, GROUPS A, B, C, D T3  
 -25C <= TAMB <= 40C

**Additional Information:**

2P - LP EXTN  
 C/BOX 55 CU IN-1.00 NPT  
 PAINTED FRAME ID & SHAFT,  
 FAN COVER INSIDE & ODE E/S OUTSIDE  
 ROUTINE AND 5 POINT VIBRATION TESTS INCL IN C/BOX  
 INPRO SEAL BOTH ENDS  
 BURNDY SERVIT POST ON FRAME  
 SHAFT RUNOUT LIMIT .001" TIR

RCF 5000 CPM, STATIC DEFLECTION .0014 INCHES &  
CENTER OF GRAVITY 6.5 INCHES  
SOLID SHAFT INLINE  
COPPER WASHER UNDER HEADS OF BEARING CAP BOLTS  
APPLY TITE-SEAL (A50CD427A) ON BEARING CAP SCREWS, RABBETS,  
AND PLUG THREADS  
OIL RESISTANT SLEEVING ON LEADS  
BEARING LIFE 26280 HRS AT 703 LB THRUST



**Performance Characteristics**

1st Winding 1st Connection

**Design: 18BD0104A**

**Marks:**

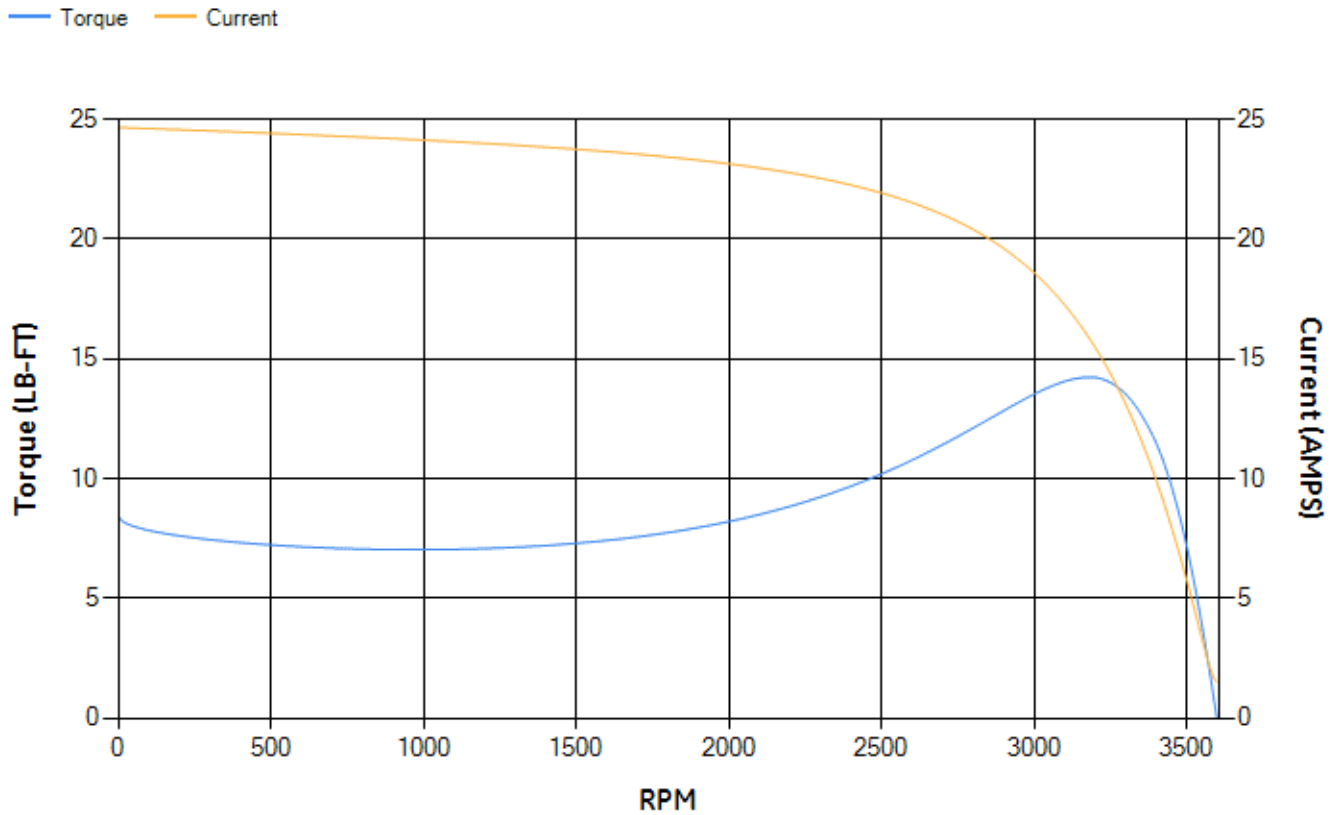
| LOAD % | 125.0 | 115.0 | 100.0 | 75.0  | 50.0  | 25.0  | 0.0   |
|--------|-------|-------|-------|-------|-------|-------|-------|
| % EFF  | 87.06 | 87.32 | 87.71 | 87.09 | 84.83 | 76.66 | 0.00  |
| % PF   | 84.31 | 83.54 | 85.35 | 76.76 | 66.53 | 46.21 | 13.09 |
| AMPS   | 4.78  | 4.43  | 3.75  | 3.15  | 2.49  | 1.98  | 1.49  |

|                    |       |                    |       |                    |        |
|--------------------|-------|--------------------|-------|--------------------|--------|
| <b>TORQ(FL)#FT</b> | 4.46  | <b>TORQ(LR)%FL</b> | 188.9 | <b>TORQ(BD)%FL</b> | 316.66 |
| <b>AMPS(LR)</b>    | 24.66 | <b>PF AT START</b> | 0.4   |                    |        |

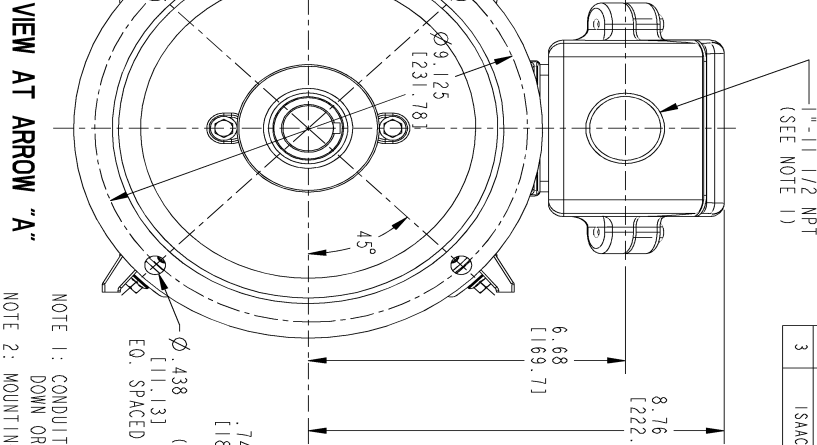
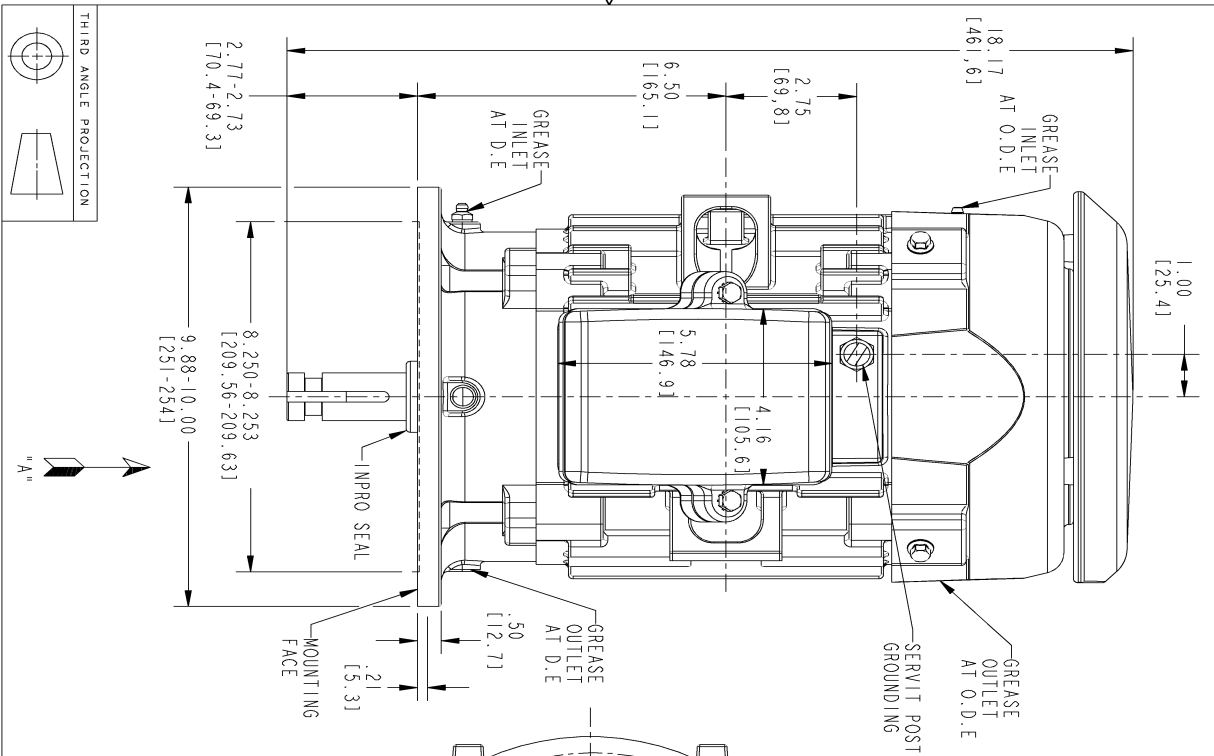
This motor is capable of two cold or one hot start with a maximum connected load inertia of 38 Lb-Ft Sq (1.6 Kg-meter Sq) at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 60 seconds. Safe stall time at 100% voltage is 116 seconds cold, 97 seconds hot. Rotor inertia is 0.12 Lb-Ft Sq (0.01 Kg-meter Sq).

|                           |       |                           |       |
|---------------------------|-------|---------------------------|-------|
| <b>Open Circuit A-C:</b>  | 0.329 | <b>Short Circuit D-C:</b> | 0.01  |
| <b>Short Circuit A-C:</b> | 0.018 | <b>X/R Ratio:</b>         | 3.956 |
| <b>Stator Slots:</b>      | 36    | <b>Rotor Slots:</b>       | 28    |

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



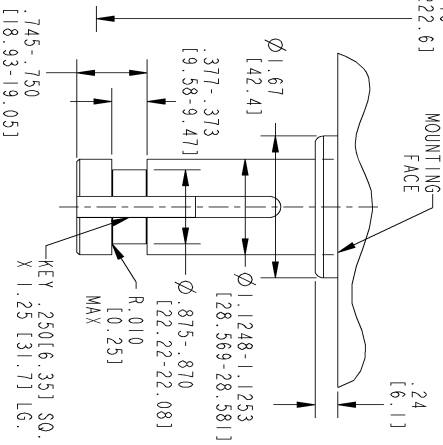
Marks:



VIEW AT ARROW "A"

NOTE 1: CONDUIT BOX MAY BE ASSEMBLED WITH ENTRANCE DOWN OR TO EITHER SIDE.  
 NOTE 2: MOUNTING SURFACES WILL BE SQUARE AND CONCENTRIC WITH SHAFT WITHIN .004 T.I.R.  
 NOTE 3: SHAFT RUNOUT WILL NOT EXCEED .001 T.I.R.

**ENLARGED VIEW OF SHAFT EXTENSION**

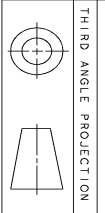


| REV. | DESCRIPTION            | DATE       | APPROVED |
|------|------------------------|------------|----------|
| 1    | ISAAC 11-0298 KARTHUK  | 05/05/2011 | VJAT     |
| 2    | ISAAC# 11-0832 GIREESH | 11/24/11   | ADI      |
| 3    | ISAAC# 13-0820 DHEERAJ | 09/27/13   | ADI      |

|  |                  |  |                 |
|--|------------------|--|-----------------|
| MODEL  | SMITHUN [122801] | SIGNATURES   | DATE            |
| DESIGNED   | HEMANTH [122801] |  |                 |
| CHKD   |                  |  |                 |
| ISSUED   | SMITHUN [122801] |  |                 |
| QUALITY  |                  |  |                 |
| SCALE:   | 0.400            | REF. NO.:  | 4002B5818PP5321 |
| <b>GE Consumer &amp; Industrial</b><br><b>GENERAL ELECTRIC COMPANY</b> |                  | <b>INDUCTION MOTOR OUTLINE</b><br>SOLID SHAFT INLINE WITH IEEE-941 SPEC<br>FME: FR180LP TFC 'P' BASE (BD-10) |                 |
| SIZE DRAWING   | B                | REV  | 3               |

SIZE DRAWING NO. **4002B5818PP5325** 3

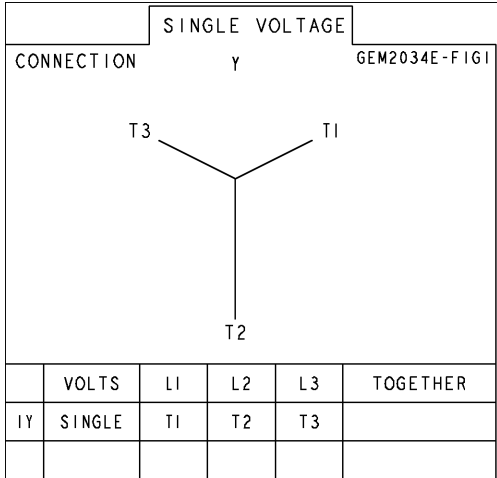
REVISIONS



"A"

Marks:

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



| End shield Assembly |               |                |
|---------------------|---------------|----------------|
| Part Description    | DE Side Part# | ODE Side Part# |
| End Shield          | 4004D5261PH1  | 4004D5281SD1   |
| Bearing             | 235A2501AL01  | 235A2502AF01   |
| Slinger/Inproseal   | 4002B5918CD1  | 4002B5914AG2   |

| Fan & Fan Cover Assembly |                 |
|--------------------------|-----------------|
| Part Description         | Part#           |
| Fan                      | 346L620AP-G01   |
| Fan Cover                | 4003C5518BN-G01 |

| Conduit & Accessories Box Assembly |                 |
|------------------------------------|-----------------|
| Part Description                   | Part#           |
| Conduit Box                        | 4002B5721PA-G01 |

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