



**GE INDUSTRIAL MOTORS**  
a **WOLONG** company

# Product Technical Information

June 23, 2020

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

<b>Model Number:</b>	<b>5KS145XAA108D3</b>
<b>Catalog Number:</b>	<b>M8907</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	4002B5814PAP5311

## 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		

## Table of Contents

Specification	01
Performance Characteristics	02
Outline Drawing	03
Connection Drawing(s)	04
Spare parts	05

Marks:

**MODEL NUMBER:** 5KS145XAA108D3  
**Outline Drawing:** 4002B5814PAP5311  
**Connection Diagram:** GEM2034E-FIG7  
**Instruction Book:** GEI-56128  
**Design Code:** 14BD0070A  
**Type:** KS  
**Frame:** 145T  
**Phases:** 3  
**Poles:** 2  
**Output Power:** 2HP 1.5KW  
**RPM:** 3515  
**Voltage:** 460  
**Hertz:** 60  
**Amps - FL:** 2.7  
**Service Factor:** 1.15  
**Alt Service Factor:** --

**Estimated Weight:** 50 Lbs  
**Time Rating:** CONT  
**Enclosure:** TEFC  
**Encl Construction:** 841  
**Ambient Max(°C):** 40  
**Alt Ambient Max(°C):** --  
**Insulation Class:** H  
**NEMA Design:** B  
**Nominal Efficiency:** 85.5 %  
**Guaranteed Efficiency:** 84.0 %  
**3/4 Load Efficiency:** 85.4 %  
**KVA Code:** L  
**Max KVAR:** 0.8  
**Power Factor:** 81.0  
**Bearing - DE:** 6205ZC3  
**Bearing - ODE:** 6205ZC3

**Enclosure is Totally Enclosed Fan-Cooled**

Stamped Nameplate Notes:

IEEE-STD-841-2009  
 DE BRG 25BC02JP30 ODE BRG 25BC02JP30  
 STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KS145XAA108D3 S/N: XXX  
 CSA CERTIFIED CSA09.2216219 FOR EX NA IIC 200 C GC  
 CL1 ZONE2 AEXNAIIC 200C FOR CL1DIV2 GRP ABCD 200C  
 IN -25C <= AMB <= 40C, 1.0SF ON SINE-WAVE PWR  
 SURF TEMP 200 C AT 1.15 SF 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:

2P - T EXTN  
 STANDARD FLOOR MOUNT  
 C/BOX 30 CU IN-0.75 NPT  
 F1 CONDUIT BOX MOUNTING  
 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  
 GROUND SCREW ON FRAME  
 SHAFT RUNOUT LIMIT .001" TIR  
 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





**Performance Characteristics**

1st Winding 1st Connection

**Design: 14BD0070A**

**Marks:**

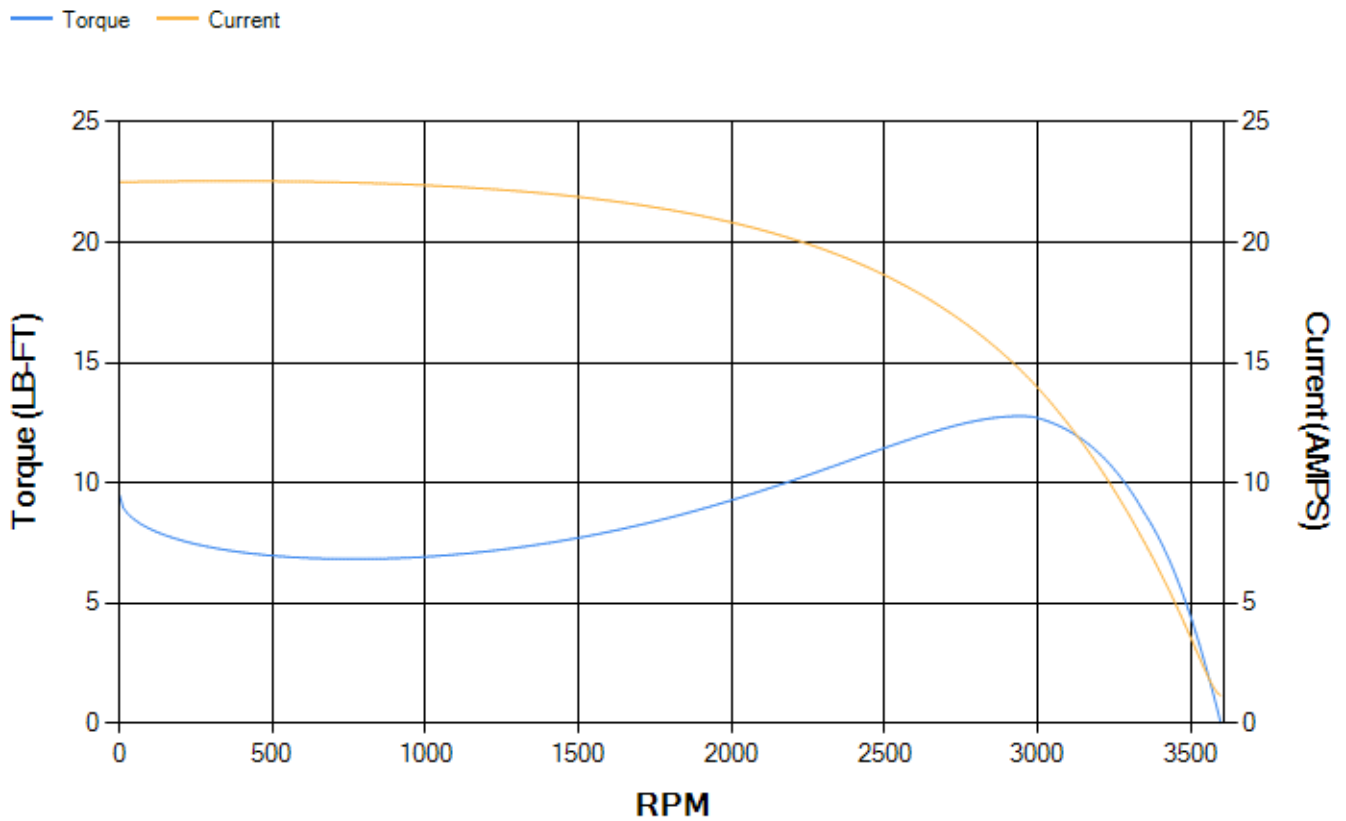
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	84.43	84.88	85.56	85.37	83.45	75.41	0.00
% PF	84.43	83.22	84.44	74.24	62.39	41.49	11.11
AMPS	3.28	3.05	2.57	2.22	1.8	1.5	1.15

<b>TORQ(FL)#FT</b>	2.99	<b>TORQ(LR)%FL</b>	317.86	<b>TORQ(BD)%FL</b>	416.35
<b>AMPS(LR)</b>	22.51	<b>PF AT START</b>	0.55		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 15 Lb-Ft Sq (0.63 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 22 seconds. Safe stall time at 100% voltage is 49 seconds cold, 34 seconds hot. Rotor inertia is 0.04 Lb-Ft Sq (0 Kg-meter Sq).

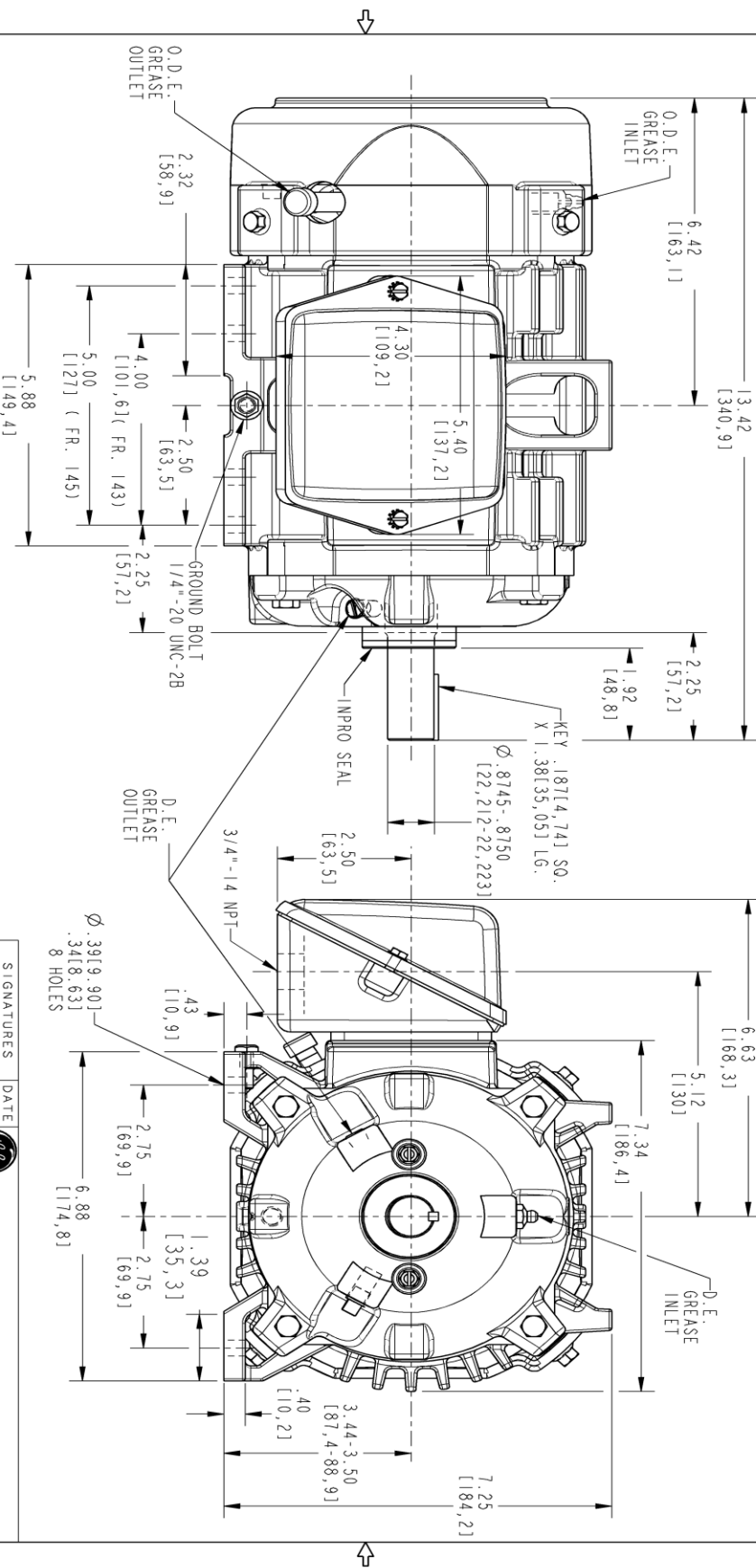
<b>Open Circuit A-C:</b>	0.242	<b>Short Circuit D-C:</b>	0.005
<b>Short Circuit A-C:</b>	0.009	<b>X/R Ratio:</b>	1.88
<b>Stator Slots:</b>	24	<b>Rotor Slots:</b>	34

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



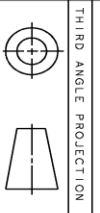
Marks:

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.  
 NOTE 3: SHAFT RUNOUT WILL NOT EXCEED .001 T. I. R.  
 NOTE 4: ALL DIMENSIONS ARE IN INCHES, BRACKETED DIMENSIONS ARE IN METRIC (MILLIMETERS).



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REV.	DESCRIPTION	DATE	APPROVED
1	ISAC# 15-0944	HARIKIRAN 09/24/15	SAGAR
2	ISAC# 18-0869	SREEDevi 10/23/18	PRASHANTH
3	ISAC# 20-0411	21/04/20	DHEERAJ



SIGNATURES	DATE
TEJASNI	06/03/15
TEJASNI	06/03/15
MARTIN	06/03/15
VENKAT	06/03/15

**GE INDUSTRIAL MOTORS**  
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**INDUCTION MOTOR OUTLINE**  
 STANDARD CONSTRUCTION FOR IEEE-841 SPEC  
 FME: FR140T TFC

4002B5814PAP5311

SCALE: 0.500 REF. No.: 4002B5814PAP5301

SHEET 1 OF 1

Marks:

**Connection Diagram**  
**GEM2034E-FIG7**



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	4004D5280PB1	4004D5280SG1
Bearing	235A2500AF01	235A2500AF01
Slinger/Inproseal	4002B5914AF1	4002B5914AG1

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	4001A5914AM-G01
Fan Cover	4003C5785PA1

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

