



**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>5KS145XAA145C</b>
<b>Catalog Number:</b>	<b>M9405</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	4002B5814PDP5310

## 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>5KS145XAA145C</b>	<b>Estimated Weight:</b>	50 Lbs
<b>Outline Drawing:</b>	4002B5814PDP5310	<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>	841
<b>Design Code:</b>	14BD0070A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	145TC	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	2	<b>Nominal Efficiency:</b>	85.5 %
<b>Output Power:</b>	2HP 1.5KW	<b>Guaranteed Efficiency:</b>	84.0 %
<b>RPM:</b>	3515	<b>3/4 Load Efficiency:</b>	85.4 %
<b>Voltage:</b>	460	<b>KVA Code:</b>	L
<b>Hertz:</b>	60	<b>Max KVAR:</b>	0.8
<b>Amps - FL:</b>	2.7	<b>Power Factor:</b>	81.0
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6206ZC3
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	6205ZC3

Enclosure is Totally Enclosed Fan-Cooled

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Stamped Nameplate Notes:

IEEE-STD-841-2009  
 DE BRG 30BC02JP30 ODE BRG 25BC02JP30  
 STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KS145XAA145C 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  
 C/BOX 30 CU IN-0.75 NPT  
 "C" FACE AT DE ENDSHIELD ROUND FRAME  
 VERTICAL MOUNT SHAFT DOWN WITH DRIPCOVER  
 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  
 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:**

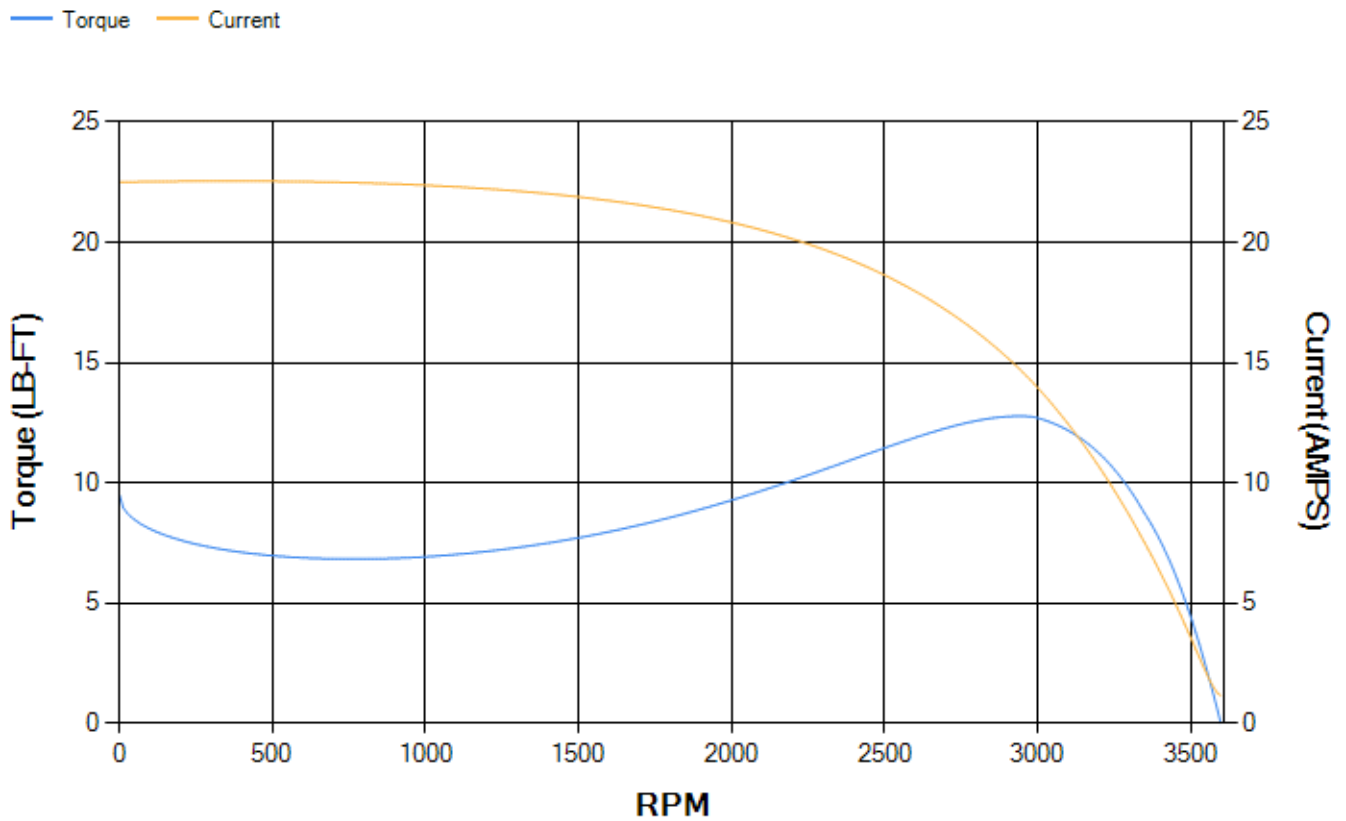
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	84.43	84.88	85.56	85.37	83.45	75.41	0.00
% PF	84.43	83.22	84.44	74.24	62.39	41.49	11.11
AMPS	3.28	3.05	2.57	2.22	1.8	1.5	1.15

<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		

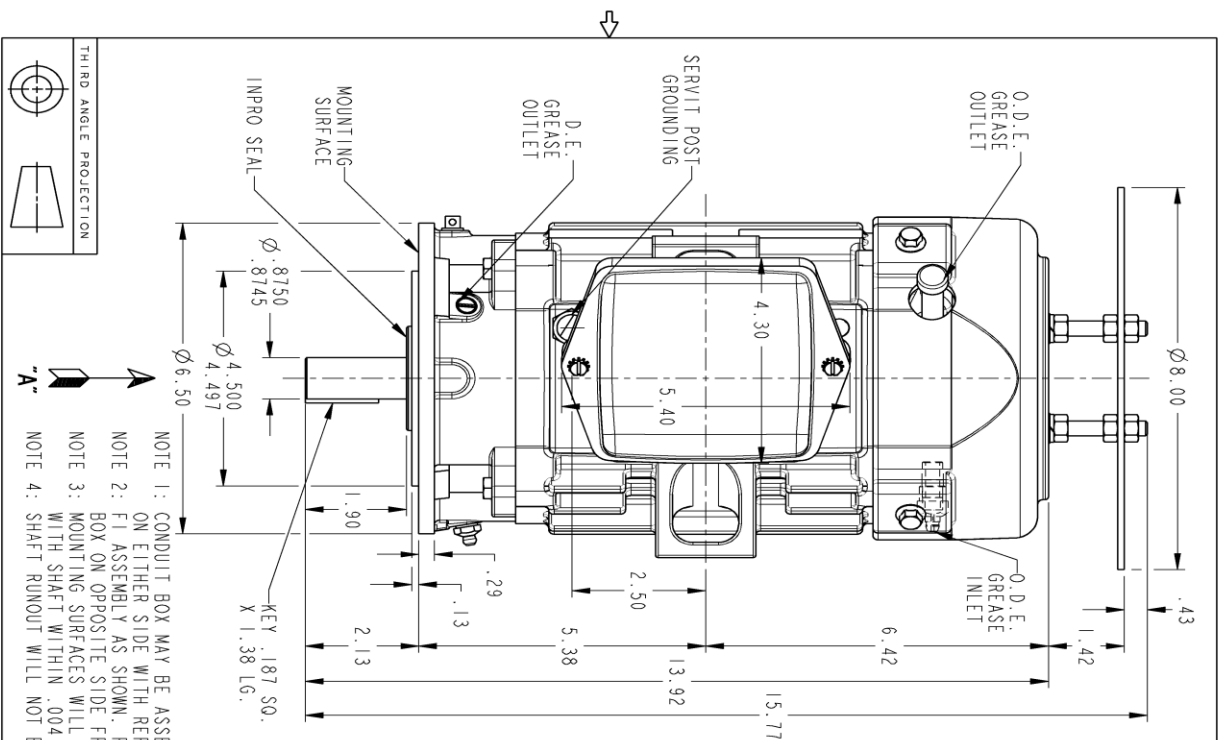
This motor is capable of two cold or one hot start with a maximum connected load inertia of 15 Lb-Ft Sq (0.63 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 22 seconds. Safe stall time at 100% voltage 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:

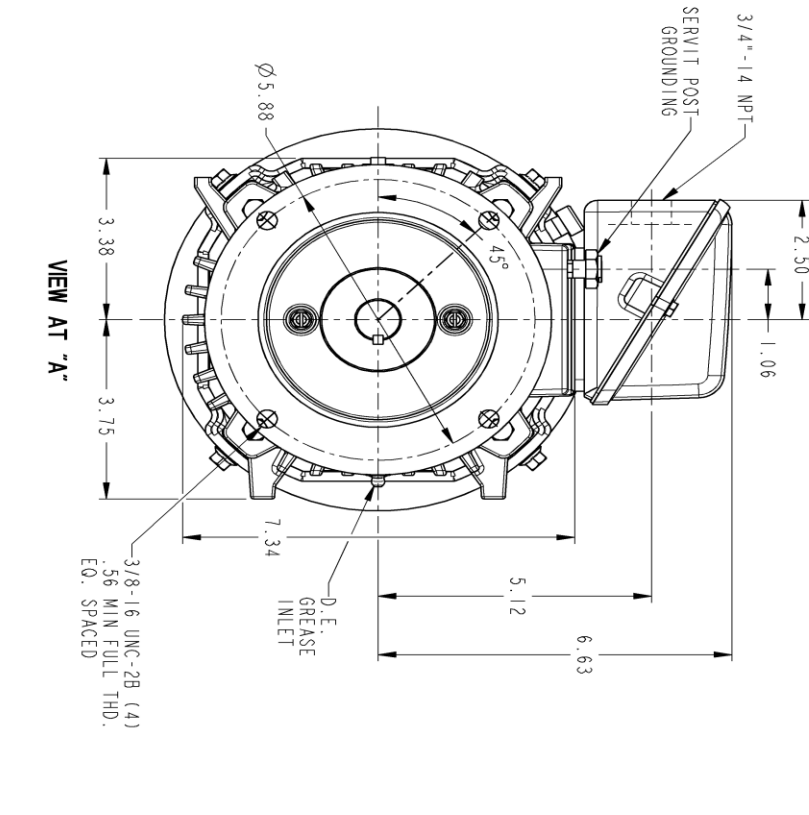


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NOTE 1: CONDUIT BOX MAY BE ASSEMBLED WITH ENTRANCE  
 ON EITHER SIDE WITH REFERENCE TO CURRENT LOCATION.  
 NOTE 2: F1 ASSEMBLY AS SHOWN. F2 ASSEMBLY CONDUIT  
 BOX ON OPPOSITE SIDE FROM SHOWN LOCATION.  
 NOTE 3: MOUNTING SURFACES WILL BE SQUARE AND CONCENTRIC  
 WITH SHAFT WITHIN .004 T.I.R.  
 NOTE 4: SHAFT RUNOUT WILL NOT EXCEED .001 T.I.R.

SIGNATURES	DATE
DESIGNER: ADINARAYANA	05/10/20
ENGINEER: N. PRASAD	05/10/20
ISSUED: N. PRASAD	05/10/20
QUALITY: B	

**GE INDUSTRIAL MOTORS**  
 a wolong company  
**INDUCTION MOTOR OUTLINE**  
 IEEE-941 SPEC WITH CONDUIT BOX & DRIP COVER  
 FAN- 140TC TERC "C" FACE (450° RABBET), FOOTLESS  
**4002B5814PDP5310**  
 SCALE: 0.450 REF. No.:  
 SHEET 1 OF 1



REV.	DESCRIPTION	DATE	APPROVED
1	ISAC# 12-0115	02/01/12	P1YUSH
2	ISAC# 18-0869	10/23/18	PRASHANTH

SIZE: DRAWING NO. **4002B5814PDP5310** REV. **002** SHEET **1**  
 REVISIONS

Marks:

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



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	4004D5289PB1	4004D5280SG1
Bearing	235A2502AM01	235A2500AF01
Slinger/Inproseal	4002B5914AM1	4002B5914AG1

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	4001A5914AM-G01
Fan Cover	4003C5514BN-G01

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

