



GE INDUSTRIAL MOTORS
a **WOLONG** company

Product Technical Information

April 11, 2021

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

Model Number:	5KS145SAA105D2
Catalog Number:	M490
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG3
Outline Drawing:	4002B5814PAP5425

Accessory Connection Diagrams

Bearing Thermocouple:	None	Heater:	None
RTD:	None	Thermistor:	None
Thermostat:	None	Winding Thermocouple:	None
Bearing RTD:	None		

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Marks:

MODEL NUMBER: 5KS145SAA105D2
Outline Drawing: 4002B5814PAP5425
Connection Diagram: GEM2034E-FIG3
Instruction Book: GEI-56128
Design Code: 14BD0076A
Type: KS
Frame: 145T
Phases: 3
Poles: 2
Output Power: 2HP 1.5KW
RPM: 3480
Voltage: 230/460
Hertz: 60
Amps - FL: 5.4/2.7
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: --
KVA Code: L
Max KVAR: 0.8
Power Factor: 80.5
Bearing - DE: 6205ZC3
Bearing - ODE: 6205ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

DE BRG 25BC02JP30 ODE BRG 25BC02JP30
 EXCEPTION TO IEEE-STD-841-2009: DUAL VOLTAGE
 STAMP NP249A5564P051 AS BELOW:
 MODEL:5KS145SAA105D2 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 1.15SF ON SINE-WAVE PWR
 OR 200C VT OR 200C CT OR 200C 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
GROUND SCREW ON FRAME
SHAFT RUNOUT LIMIT .001" TIR
OIL RESISTANT SLEEVING ON LEADS



Performance Characteristics

1st Winding 1st Connection

Design: 14BD0076A

Marks:

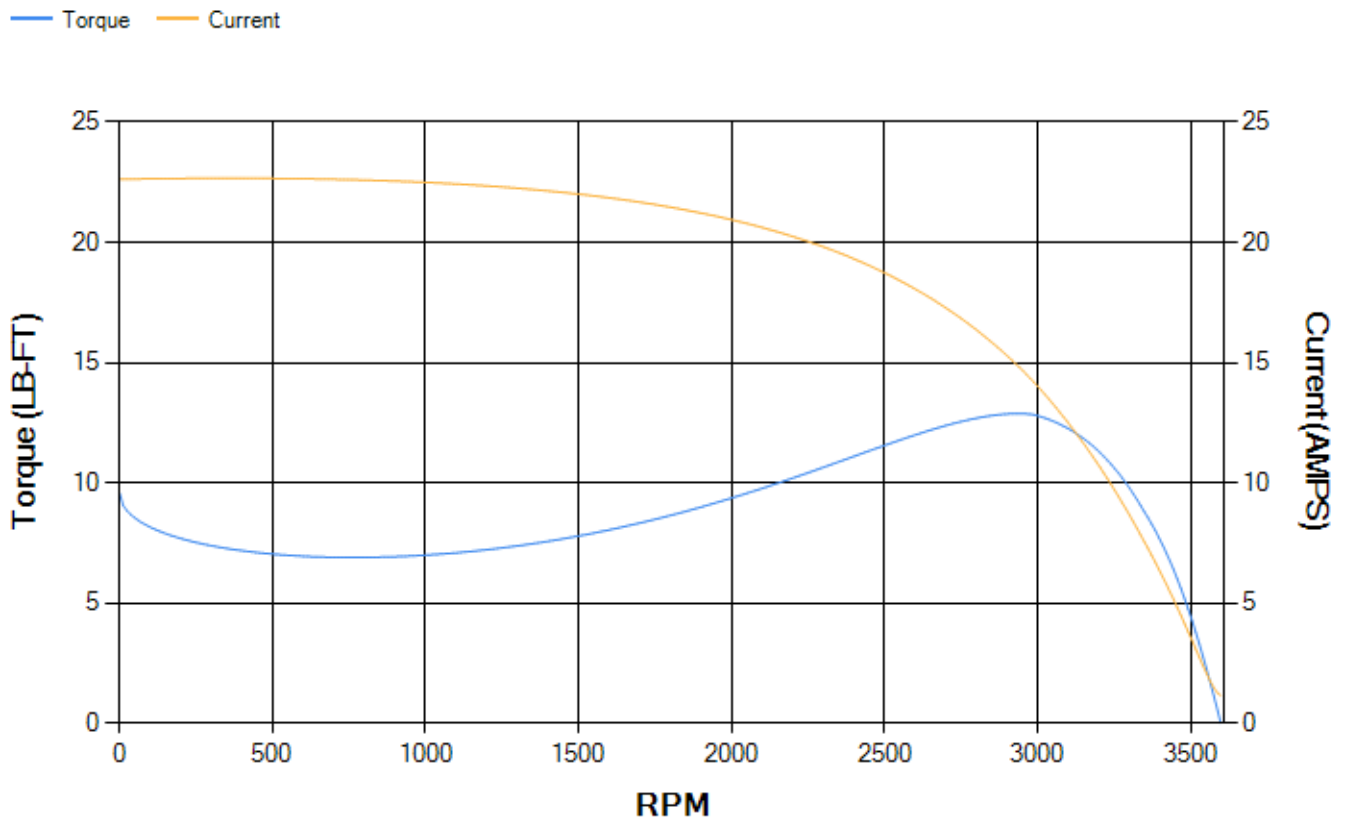
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	84.57	85.01	85.67	85.46	83.52	75.48	0.00
% PF	84.35	83.13	84.36	74.14	62.28	41.4	11.07
AMPS	3.28	3.05	2.57	2.22	1.8	1.5	1.15

TORQ(FL)#FT	2.99	TORQ(LR)%FL	320.96	TORQ(BD)%FL	419.68
AMPS(LR)	22.63	PF AT START	0.54		

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 23 seconds. Safe stall time at 100% voltage is 51 seconds cold, 35 seconds hot. Rotor inertia is 0.04 Lb-Ft Sq (0 Kg-meter Sq).

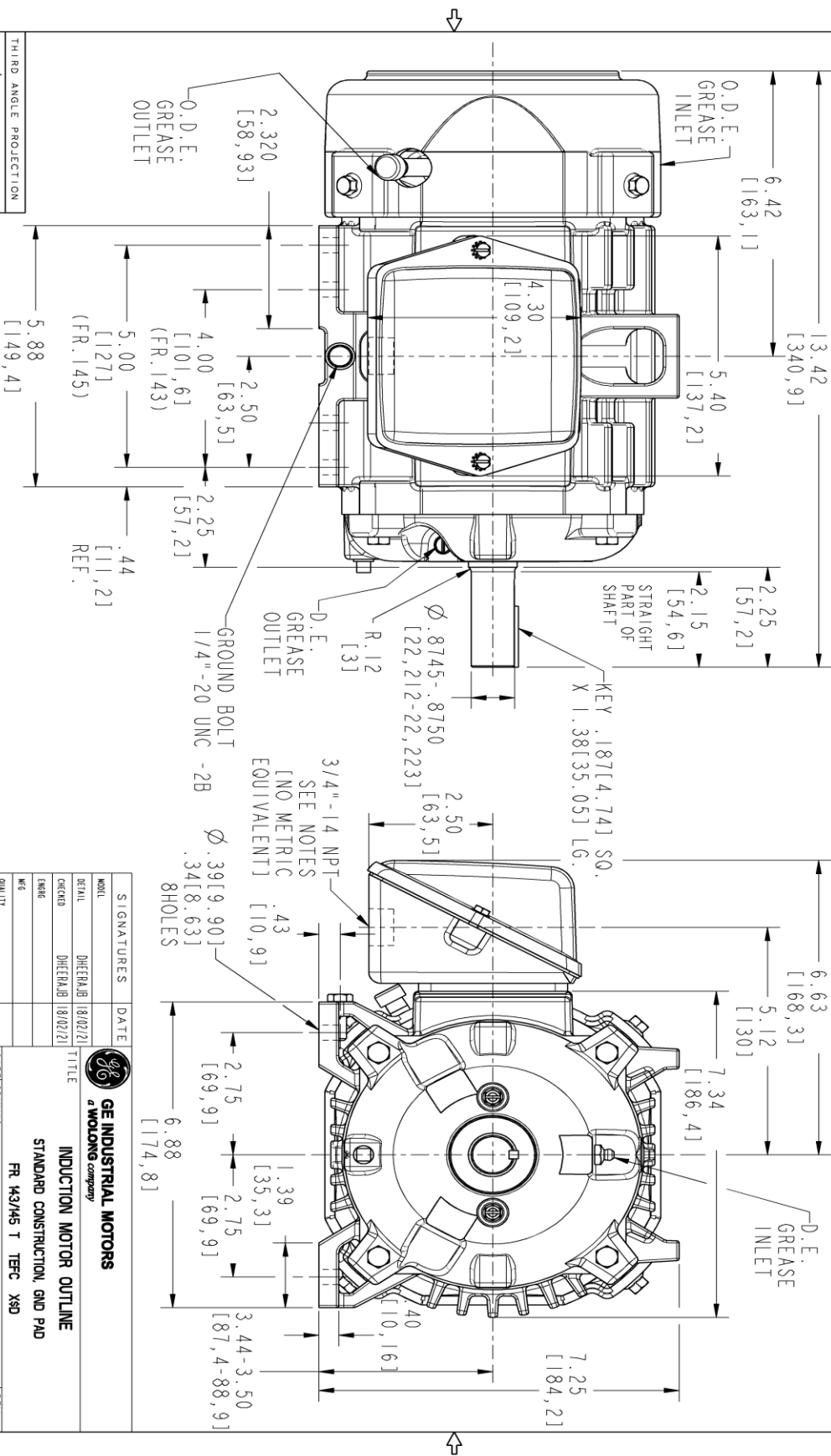
Open Circuit A-C:	0.242	Short Circuit D-C:	0.005
Short Circuit A-C:	0.009	X/R Ratio:	1.917
Stator Slots:	24	Rotor Slots:	34

Speed Torque Current Curve (First Connection, First Speed)



Marks:

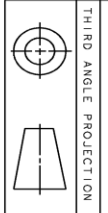
NOTE 1: CONDUIT BOX MAY BE ASSEMBLED WITH ENTRANCE UP, DOWN OR TO EITHER SIDE.
 NOTE 2: FI ASSEMBLY AS SHOWN.
 NOTE 3: ALL DIMENSIONS ARE IN INCHES AND BRACKETED DIMENSIONS ARE IN METRIC [mm].



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SIZE	DRAWING NO.	REV	SHEET
B	4002B5814PAP5425	0	1

REV.	DESCRIPTION	DATE	APPROVED



SIGNATURES		DATE	
MODEL	DHEERABJ	18/02/21	
DETAIL	DHEERABJ	18/02/21	
ENGR			
QC			
QUALITY	DHEERABJ	18/02/21	
ISSUED			
SOLID MODEL:	4002B5814PAP5425	SCALE:	0.500
		REF. NO.:	4002B5814PAP201

GE INDUSTRIAL MOTORS
 a WOLONG company

INDUCTION MOTOR OUTLINE
 STANDARD CONSTRUCTION, GND PAD
 FR 143/45 T TFC XSD

4002B5814PAP5425
 REV 0

Marks:

Connection Diagram
GEM2034E-FIG3



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	4004D5280PB1	4004D5280SG1
Bearing	235A2500AF01	235A2500AF01
Slinger/Inproseal	149C4399G15	149C4399G15

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	

