



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

# Product Technical Information

April 1, 2021

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

<b>Model Number:</b>	<b>5KS145SAA405D2</b>
<b>Catalog Number:</b>	<b>M460</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG3
<b>Outline Drawing:</b>	4002B5814PAP5425

## 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:

**MODEL NUMBER:** 5KS145SAA405D2  
**Outline Drawing:** 4002B5814PAP5425  
**Connection Diagram:** GEM2034E-FIG3  
**Instruction Book:** GEI-56128  
**Design Code:** 14BD4008AA  
**Type:** KS  
**Frame:** 145T  
**Phases:** 3  
**Poles:** 8  
**Output Power:** 0.75HP 0.6KW  
**RPM:** 840  
**Voltage:** 230/460  
**Hertz:** 60  
**Amps - FL:** 3.6/1.8  
**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:** --  
**Nominal Efficiency:** 70.0 %  
**Guaranteed Efficiency:** 68.0 %  
**3/4 Load Efficiency:** --  
**KVA Code:** P  
**Max KVAR:** 0.9  
**Power Factor:** 55.0  
**Bearing - DE:** 6205ZC3  
**Bearing - ODE:** 6205ZC3

Enclosure is Totally Enclosed Fan-Cooled

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Stamped Nameplate Notes:

DE BRG 25BC02JP30 ODE BRG 25BC02JP30  
 EXCEPTION TO IEEE-STD-841-2009: DUAL VOLTAGE  
 STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KS145SAA405D2 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:**

8P - 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: 14BD4008AA**

**Marks:**

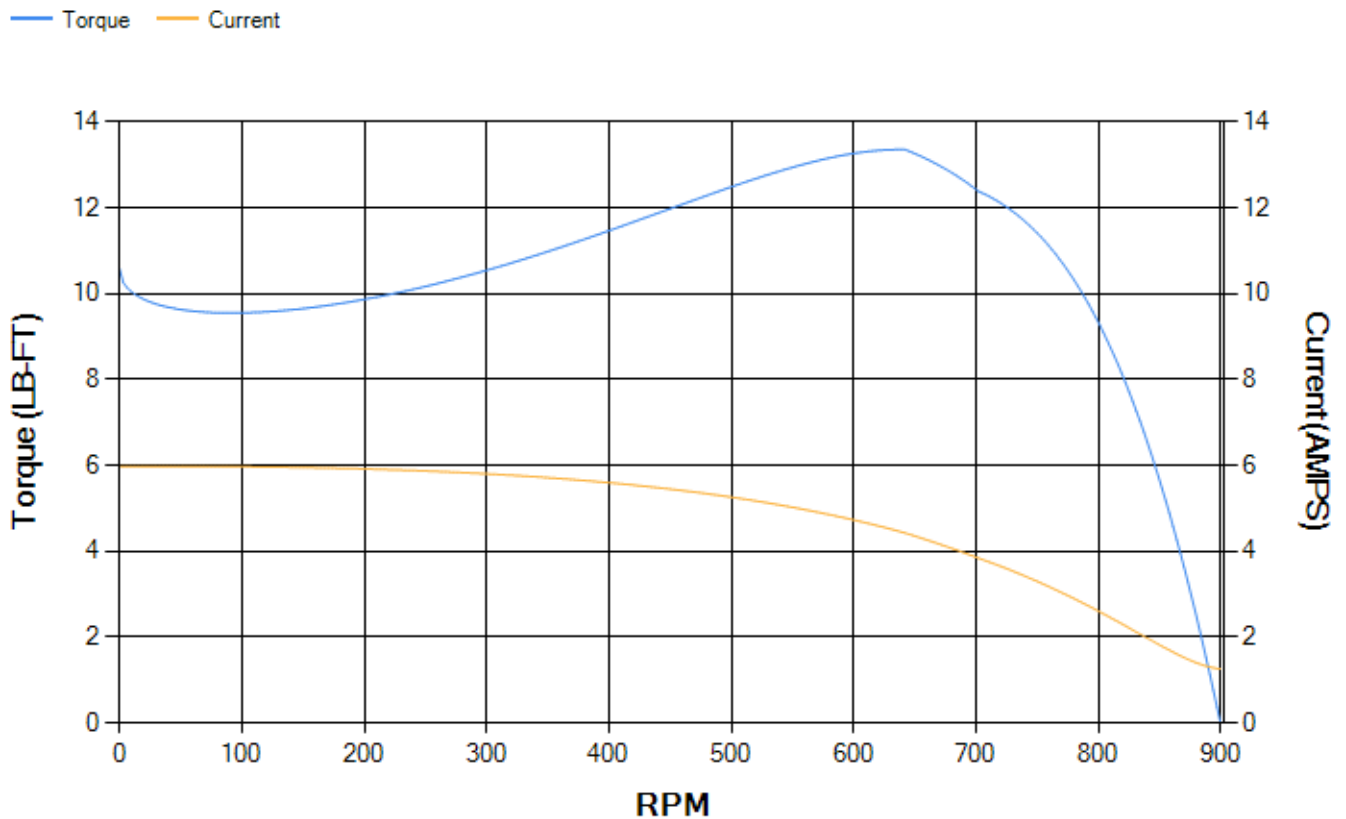
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	72.59	73.5	74.54	74.07	70.42	58.16	0.00
% PF	62.08	59.44	56.81	45.88	34.96	22.52	8.78
AMPS	1.95	1.85	1.68	1.55	1.43	1.34	1.26

<b>TORQ(FL)#FT</b>	4.65	<b>TORQ(LR)%FL</b>	227.61	<b>TORQ(BD)%FL</b>	274.57
<b>AMPS(LR)</b>	5.98	<b>PF AT START</b>	0.57		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 277 Lb-Ft Sq (11.66 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 82 seconds. Safe stall time at 100% voltage is 183 seconds cold, 120 seconds hot. Rotor inertia is 0.11 Lb-Ft Sq (0 Kg-meter Sq).

<b>Open Circuit A-C:</b>	0.047	<b>Short Circuit D-C:</b>	0.006
<b>Short Circuit A-C:</b>	0.007	<b>X/R Ratio:</b>	2.251
<b>Stator Slots:</b>	36	<b>Rotor Slots:</b>	48

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





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	

