



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

# Product Technical Information

September 8, 2022

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

<b>Model Number:</b>	<b>5KS145BAA221</b>
<b>Catalog Number:</b>	<b>M1492</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG3
<b>Outline Drawing:</b>	4002B5814GAP5201

## 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>5KS145BAA221</b>
Outline Drawing:	4002B5814GAP5201
Connection Diagram:	GEM2034E-FIG3
Instruction Book:	GEI-56128
Design Code:	14BD1130A
Type:	KS
Frame:	145T
Phases:	3
Poles:	4
Output Power:	1.5HP 1.1KW
RPM:	1730
Voltage:	230/460
Hertz:	60
Amps - FL:	4.2/2.1
Service Factor:	1.15
Alt Service Factor:	--

<b>Estimated Weight:</b>	50 Lbs
<b>Time Rating:</b>	CONT
<b>Enclosure:</b>	TEFC
<b>Encl Construction:</b>	GP
<b>Ambient Max(°C):</b>	40
<b>Alt Ambient Max(°C):</b>	--
<b>Insulation Class:</b>	F
<b>NEMA Design:</b>	B
<b>Nominal Efficiency:</b>	86.5 %
<b>Guaranteed Efficiency:</b>	84.0 %
<b>3/4 Load Efficiency:</b>	--
<b>KVA Code:</b>	M
<b>Max KVAR:</b>	0.8
<b>Power Factor:</b>	76.5
<b>Bearing - DE:</b>	6205-2ZC3
<b>Bearing - ODE:</b>	6205-2ZC3

Enclosure is Totally Enclosed Fan-Cooled

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Stamped Nameplate Notes:

VT 0-60 HZ NEMA MG1-31; 208V-4.4A



**Additional Information:**

4P - T EXTN  
STANDARD FLOOR MOUNT  
C/BOX 30 CU IN-0.75 NPT  
F1 CONDUIT BOX MOUNTING  
INVERTER DUTY PER NEMA MG1 PART 31  
ALTERNATE RATING FOR PWM CONTROL:1.0SF 40C AMBIENT  
VAR TORQUE RANGE 0-60 HZ  
SUITABLE FOR 208V -4.4 AMPS WITH 1.15 SF



**Performance Characteristics**

1st Winding 1st Connection

**Design: 14BD1130A**

**Marks:**

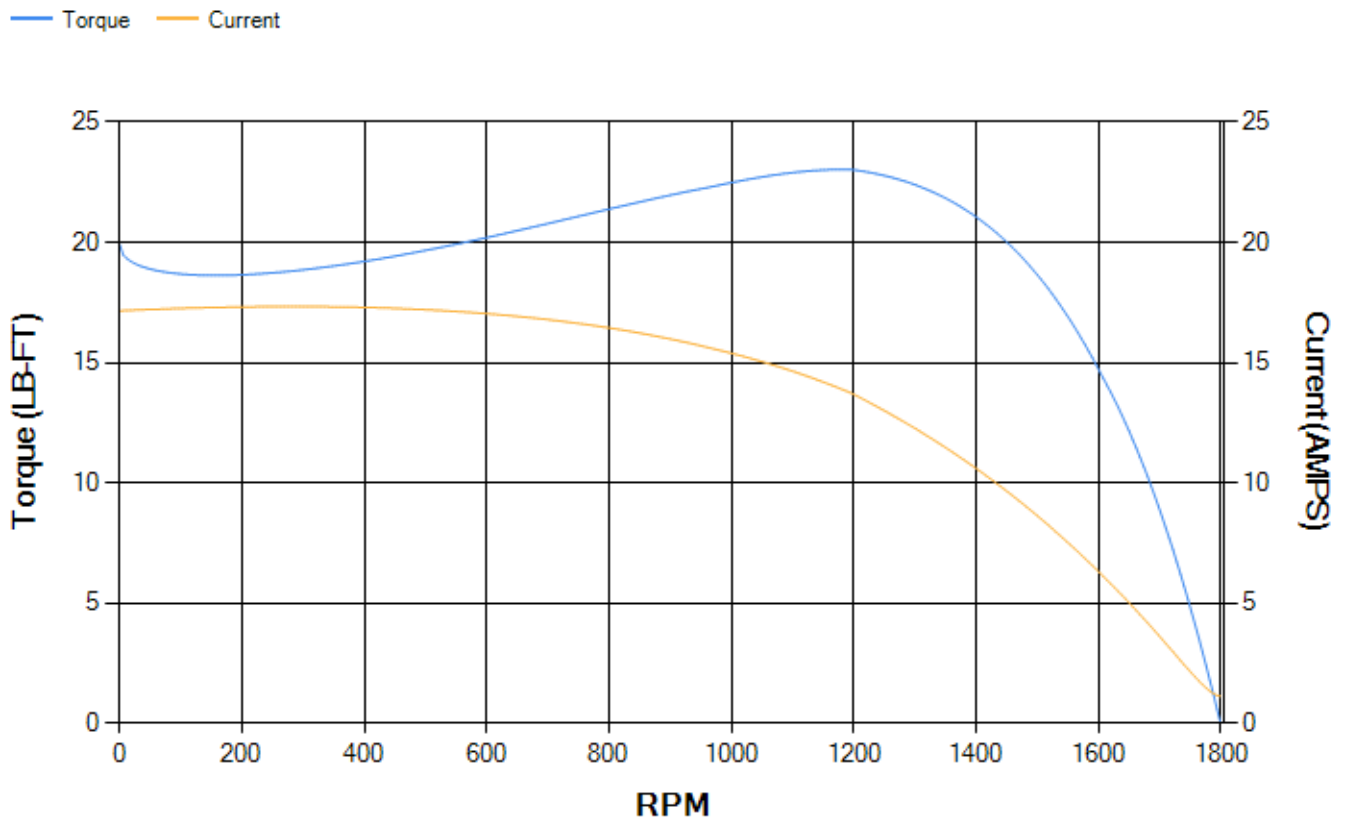
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	86.29	86.68	87.29	87.09	85.37	78.04	0.00
% PF	81.49	79.78	78.04	68.48	55.42	35.07	7.62
AMPS	2.5	2.33	2.05	1.77	1.48	1.28	1.11

<b>TORQ(FL)#FT</b>	4.51	<b>TORQ(LR)%FL</b>	441.58	<b>TORQ(BD)%FL</b>	492.3
<b>AMPS(LR)</b>	17.16	<b>PF AT START</b>	0.66		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 112 Lb-Ft Sq (4.72 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 36 seconds. Safe stall time at 100% voltage is 71 seconds cold, 61 seconds hot. Rotor inertia is 0.11 Lb-Ft Sq (0 Kg-meter Sq).

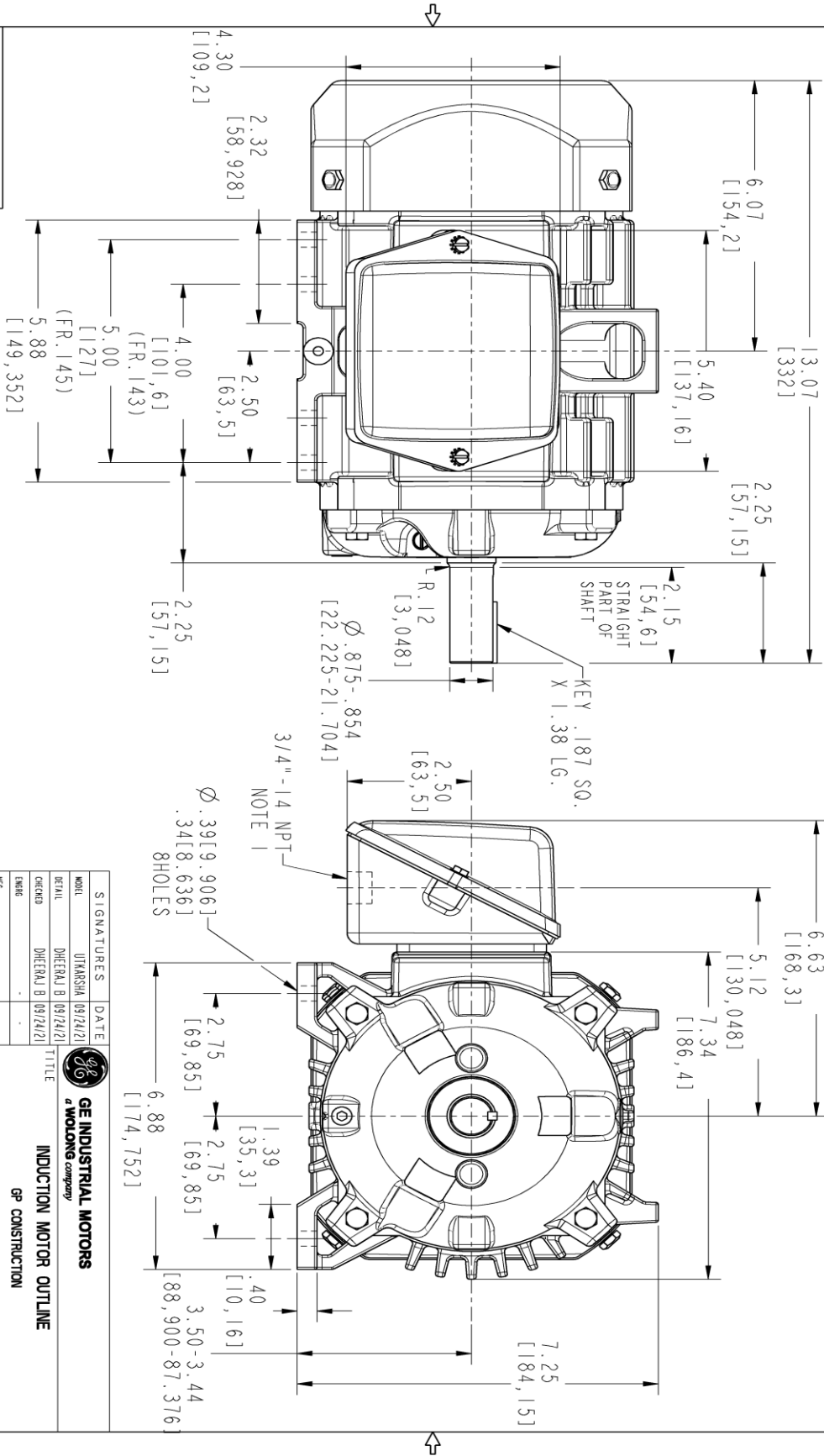
<b>Open Circuit A-C:</b>	0.141	<b>Short Circuit D-C:</b>	0.005
<b>Short Circuit A-C:</b>	0.005	<b>X/R Ratio:</b>	1.925
<b>Stator Slots:</b>	36	<b>Rotor Slots:</b>	48

**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.



**PROPRIETARY INFORMATION**  
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SIZE	DRAWING NO.	REV	SHEET
B	4002B5814GAP5201	000	1
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



THIRD ANGLE PROJECTION

SIGNATURES	DATE	<p><b>GE INDUSTRIAL MOTORS</b> a WOLONG company</p> <p><b>INDUCTION MOTOR OUTLINE</b> GP CONSTRUCTION</p> <p>FILE: FR 143/145 T 1EFC</p>
MODEL	UTAKASHA [09/24/21]	
DETAIL	DHEEMAJ B [09/24/21]	
CREATED	DHEEMAJ B [09/24/21]	
CHKD	-	
QUALITY	UTAKASHA [09/24/21]	SCALE: 0.500
ISSUED	B	REF. No.: 4002B5814GAP5201
SOLID MODEL: 4002B5814GAP5201	SIZE: DRAWING	SHEET 1 OF 1
<b>4002B5814GAP5201</b>		REV
<b>000</b>		

Marks:

**Connection Diagram**  
**GEM2034E-FIG3**



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	4004D5280PA1	4004D5280SB1
Bearing	235A2600AA02	235A2600AA02
Slinger/Inproseal	149C4399G15	

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	4001A5914AM-G01
Fan Cover	4003C5808PA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	4002B5718PX-G01

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

