



**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>5KS143BAA121</b>
<b>Catalog Number:</b>	<b>M1462</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		

## Table of Contents

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

Marks:

<b>MODEL NUMBER:</b>	<b>5KS143BAA121</b>
Outline Drawing:	4002B5814GAP5201
Connection Diagram:	GEM2034E-FIG3
Instruction Book:	GEI-56128
Design Code:	14BD0044A
Type:	KS
Frame:	143T
Phases:	3
Poles:	2
Output Power:	1HP 0.7KW
RPM:	3475
Voltage:	230/460
Hertz:	60
Amps - FL:	3.0/1.5
Service Factor:	1.15
Alt Service Factor:	--

<b>Estimated Weight:</b>	43 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>Nominal Efficiency:</b>	80.0 %
<b>Guaranteed Efficiency:</b>	77.0 %
<b>3/4 Load Efficiency:</b>	--
<b>KVA Code:</b>	N
<b>Max KVAR:</b>	0.4
<b>Power Factor:</b>	80.5
<b>Bearing - DE:</b>	6205-2ZC3
<b>Bearing - ODE:</b>	6205-2ZC3

Enclosure is Totally Enclosed Fan-Cooled

---

Stamped Nameplate Notes:

VT 0-60 HZ NEMA MG1-31; 208V-3A



**Additional Information:**

2P - 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 -3 AMPS WITH 1.15 SF



**Performance Characteristics**

1st Winding 1st Connection

**Design: 14BD0044A**

**Marks:**

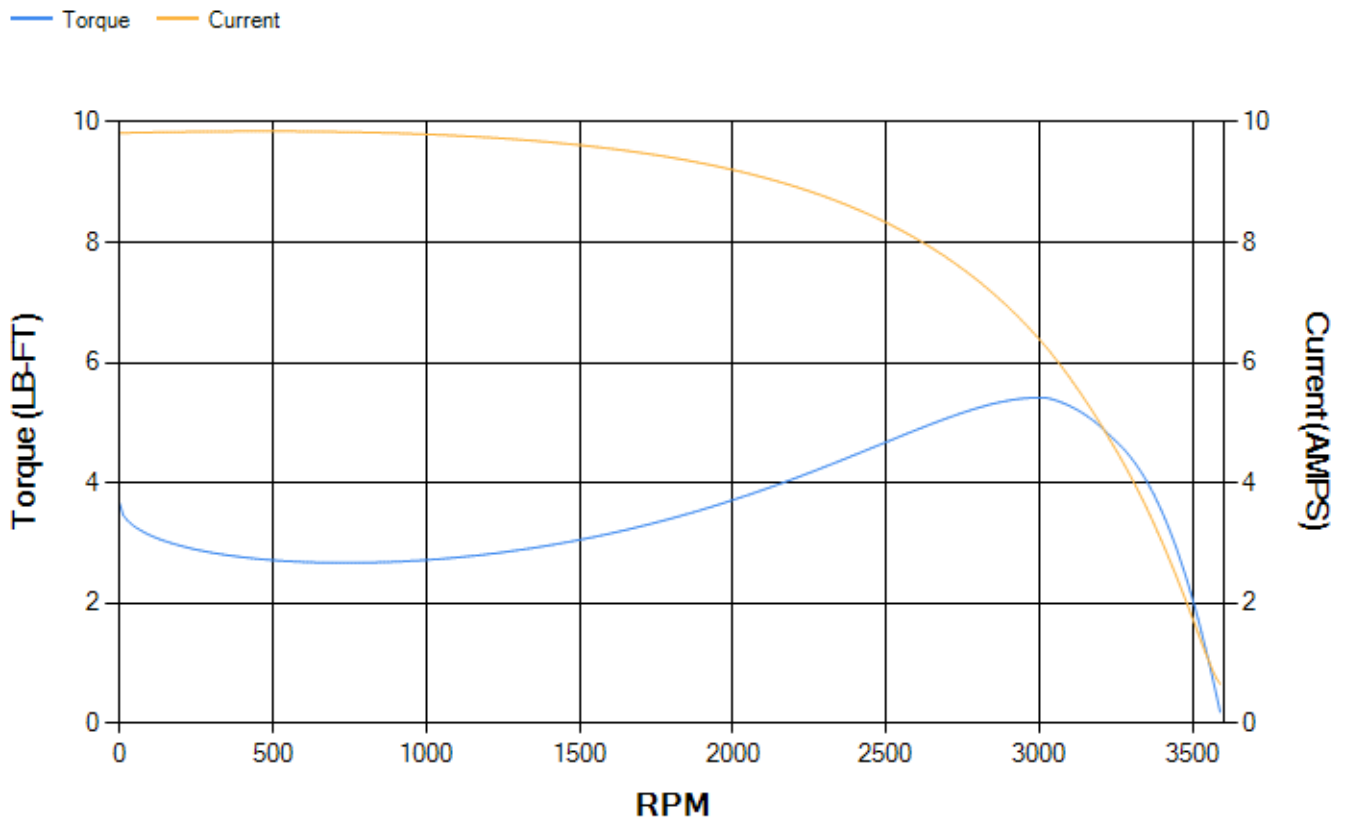
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	80.25	80.59	81	80.05	76.68	65.67	0.00
% PF	84.24	83.07	84.38	74.47	63.37	44.18	17.24
AMPS	1.73	1.61	1.35	1.18	0.96	0.81	0.61

<b>TORQ(FL)#FT</b>	1.49	<b>TORQ(LR)%FL</b>	245.08	<b>TORQ(BD)%FL</b>	354.31
<b>AMPS(LR)</b>	9.82	<b>PF AT START</b>	0.56		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 10 Lb-Ft Sq (0.42 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 39 seconds. Safe stall time at 100% voltage is 87 seconds cold, 66 seconds hot. Rotor inertia is 0.03 Lb-Ft Sq (0 Kg-meter Sq).

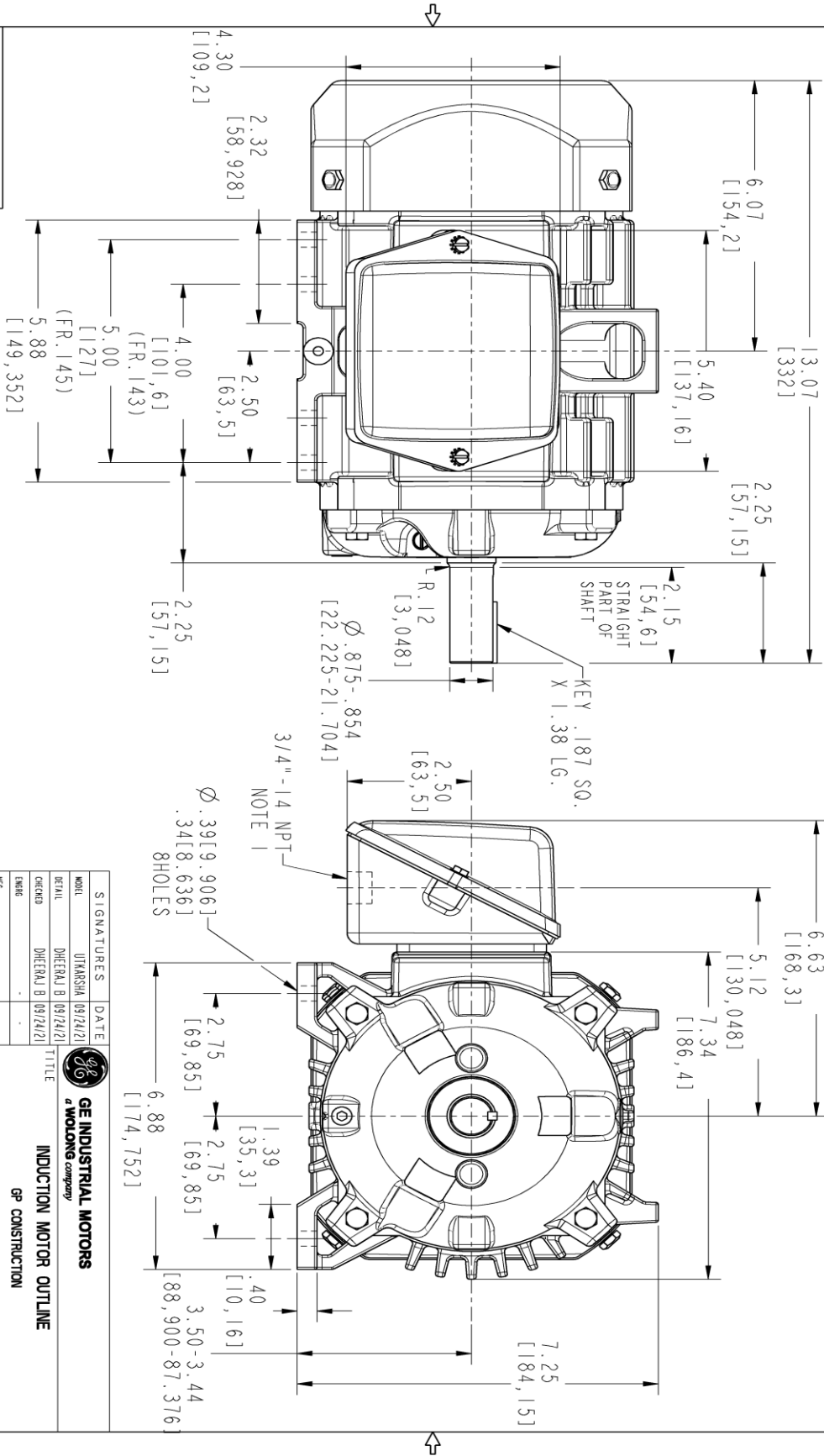
<b>Open Circuit A-C:</b>	0.235	<b>Short Circuit D-C:</b>	0.005
<b>Short Circuit A-C:</b>	0.011	<b>X/R Ratio:</b>	1.835
<b>Stator Slots:</b>	24	<b>Rotor Slots:</b>	34

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



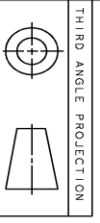
Marks:

NOTE 1: CONDUIT BOX MAY BE ASSEMBLED WITH ENTRANCE UP, DOWN OR TO EITHER SIDE.  
NOTE 2: F1 ASSEMBLY AS SHOWN.



PROPRIETARY INFORMATION  
© COPYRIGHT 2018 Molong Electric America LLC AND/OR ITS AFFILIATES  
All rights reserved. This document and the information it contains is the property of Molong Electric America LLC and/or its affiliates. It has been provided solely for transmission for design and engineering purposes. No other use, reproduction, or distribution is permitted without the express written consent of Molong Electric America LLC. This information is strictly prohibited except as expressly authorized in writing by Molong Electric America LLC.

REV.	DESCRIPTION	DATE	APPROVED
000			



SIGNATURES	DATE	REV	SHEET
UTAKASHA [09/24/21]		000	1
DHEEMAJ B [09/24/21]			
DHEEMAJ B [09/24/21]			
ENG			
QC			
ISSUED	UTAKASHA [09/24/21]		
SOLID MODEL: 4002B5814GAP5201	SCALE: 0.500	REV. No.: 4002B5814GAP5201	SHEET 1 of 1



INDUCTION MOTOR OUTLINE  
GP CONSTRUCTION  
FINE: FR 143/45 T 1EFC

4002B5814GAP5201 000

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 &amp; Fan Cover Assembly

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

## Conduit &amp; Accessories Box Assembly

Part Description	Part#
Conduit Box	4002B5718PX-G01

## Mechanical Accessories

Part Description	Part#
Brake	
Tachometer	

