



**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>5KS286BAA305</b>
<b>Catalog Number:</b>	<b>M1155</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG9
<b>Outline Drawing:</b>	4002B5828GAP5201

## 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>5KS286BAA305</b>
Outline Drawing:	4002B5828GAP5201
Connection Diagram:	GEM2034E-FIG9
Instruction Book:	GEI-56128
Design Code:	28BD3094A
Type:	KS
Frame:	286T
Phases:	3
Poles:	6
Output Power:	20HP 14.8KW
RPM:	1180
Voltage:	230/460
Hertz:	60
Amps - FL:	52.4/26.2
Service Factor:	1.15
Alt Service Factor:	--

<b>Estimated Weight:</b>	510 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>	91.7 %
<b>Guaranteed Efficiency:</b>	90.2 %
<b>3/4 Load Efficiency:</b>	--
<b>KVA Code:</b>	G
<b>Max KVAR:</b>	8.6
<b>Power Factor:</b>	78.0
<b>Bearing - DE:</b>	6310-2ZC3
<b>Bearing - ODE:</b>	6310-2ZC3

Enclosure is Totally Enclosed Fan-Cooled

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Stamped Nameplate Notes:

VT 0-60 HZ NEMA MG1-31; 208V-55.4A



**Additional Information:**

6P - T EXTN  
STANDARD FLOOR MOUNT  
C/BOX 137 CU IN-1.50 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 -55.4 AMPS WITH 1.15 SF



**Performance Characteristics**

1st Winding 1st Connection

**Design: 28BD3094A**

**Marks:**

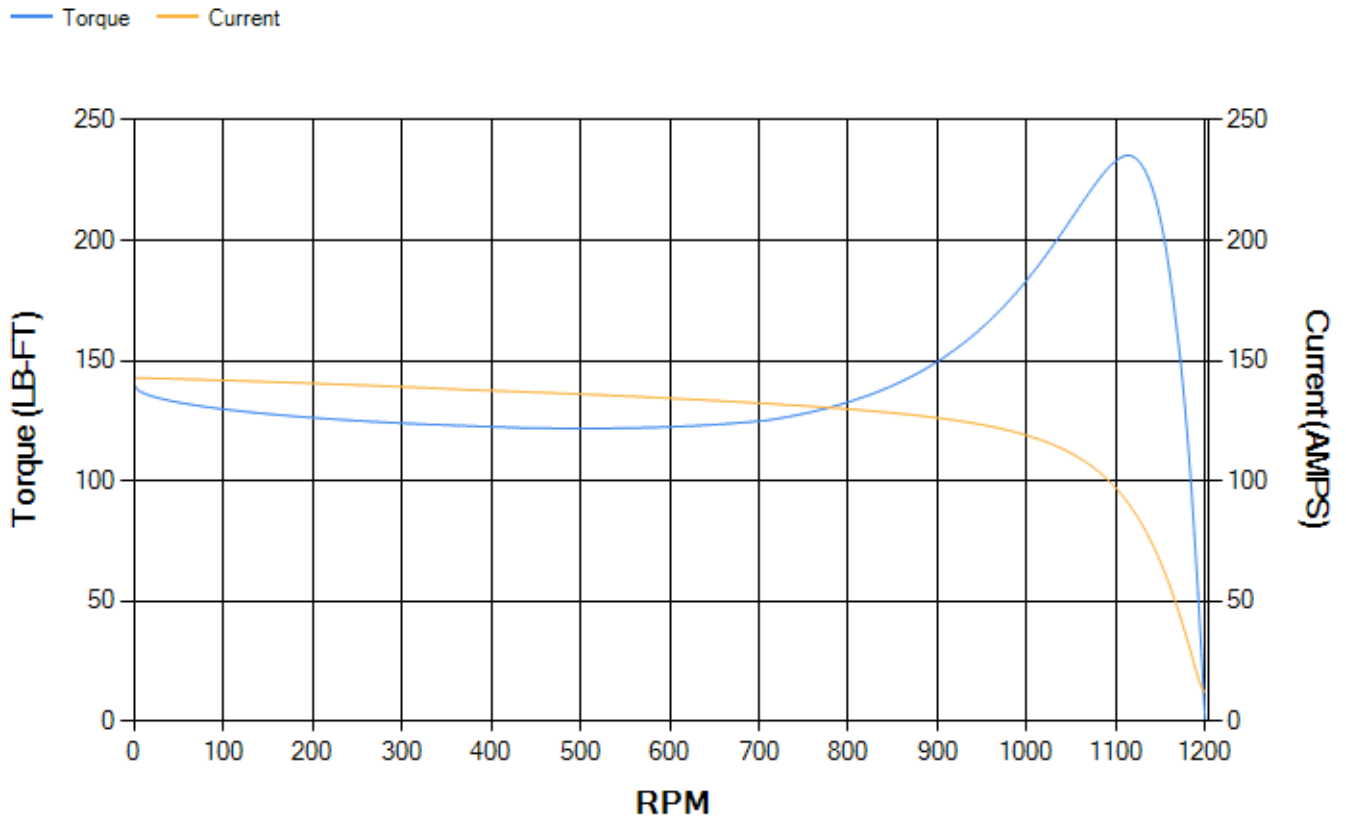
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	90.76	91.25	92.05	92.43	92.06	88.54	0.00
% PF	80.29	79.61	77.9	72.43	61.17	39.32	4.16
AMPS	32.11	29.63	26.12	20.97	16.62	13.44	12.04

<b>TORQ(FL)#FT</b>	88.9	<b>TORQ(LR)%FL</b>	157.11	<b>TORQ(BD)%FL</b>	264.08
<b>AMPS(LR)</b>	142.83	<b>PF AT START</b>	0.36		

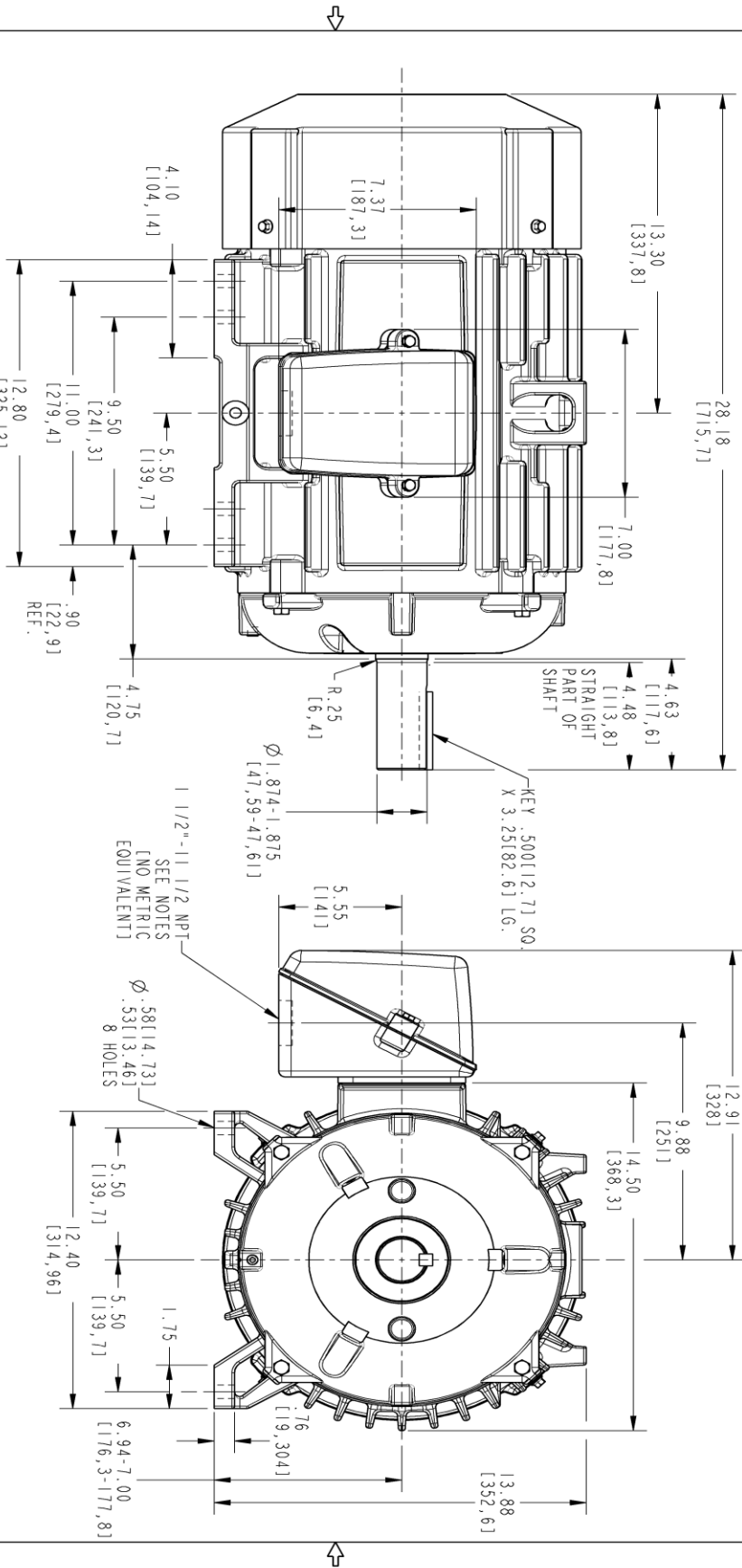
This motor is capable of two cold or one hot start with a maximum connected load inertia of 1029 Lb-Ft Sq (43.32 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 35 seconds. Safe stall time at 100% voltage is 89 seconds cold, 52 seconds hot. Rotor inertia is 6.1 Lb-Ft Sq (0.26 Kg-meter Sq).

<b>Open Circuit A-C:</b>	0.346	<b>Short Circuit D-C:</b>	0.013
<b>Short Circuit A-C:</b>	0.026	<b>X/R Ratio:</b>	4.937
<b>Stator Slots:</b>	54	<b>Rotor Slots:</b>	42

**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: FIT ASSEMBLY AS SHOWN.  
 NOTE 3: ALL DIMENSIONS ARE IN INCHES AND BRACKETED DIMENSIONS ARE IN METRIC mm

PROPRIETARY INFORMATION  
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SIZE	DRAWING NO.	REV	SHEET
B	4002B58286GAP5201	000	1
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



THIRD ANGLE PROJECTION

SIGNATURES	DATE
MODEL: NARAYANA [09/24/21]	
DETAIL: NARAYANA [09/24/21]	
DESIGN: VIJANT [09/24/21]	
ENGR: DHETRAJ [09/24/21]	
QC: NARAYANA [09/24/21]	
ISSUED: NARAYANA [09/24/21]	
SOLID MODEL: 4002B58286GAP5201	
 <b>GE INDUSTRIAL MOTORS</b> a Wolog company	
<b>INDUCTION MOTOR OUTLINE</b> GP CONSTRUCTION	
284/286 T TEFC GP ULTRA 137 CU IN CBOX	
SCALE: 0.250	REF. No.: 4002B58286GAP5201
SHEET DRAWING	REV
<b>4002B58286GAP5201</b>	<b>000</b>
SHEET 1 OF 1	

Marks:

**Connection Diagram**  
**GEM2034E-FIG9**



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	4004D5284PA1	4004D5284SB1
Bearing	235A2608AA02	235A2608AA02
Slinger/Inproseal	149C4399G03	

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C6900G01
Fan Cover	4003C5799PA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	4002B5728SH-G01

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

