



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

# Product Technical Information

October 11, 2022

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

<b>Model Number:</b>	<b>5KS286BAA200</b>
<b>Catalog Number:</b>	<b>M1078</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG9
<b>Outline Drawing:</b>	4002B5828GBP5201

## 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>5KS286BAA200</b>
Outline Drawing:	4002B5828GBP5201
Connection Diagram:	GEM2034E-FIG9
Instruction Book:	GEI-56128
Design Code:	28BD1157A
Type:	KS
Frame:	286TC
Phases:	3
Poles:	4
Output Power:	30HP 22.2KW
RPM:	1775
Voltage:	230/460
Hertz:	60
Amps - FL:	69.8/34.9
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>	93.6 %
<b>Guaranteed Efficiency:</b>	92.4 %
<b>3/4 Load Efficiency:</b>	--
<b>KVA Code:</b>	G
<b>Max KVAR:</b>	8.2
<b>Power Factor:</b>	86.0
<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-75.8A



**Additional Information:**

4P - TC EXTN  
STANDARD FLOOR MOUNT  
C/BOX 137 CU IN-1.50 NPT  
F1 CONDUIT BOX MOUNTING  
"C" FACE (AK- 10.5") AT DE ENDSHIELD  
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 -75.8 AMPS WITH 1.15 SF



**Performance Characteristics**

1st Winding 1st Connection

**Design: 28BD1157A**

**Marks:**

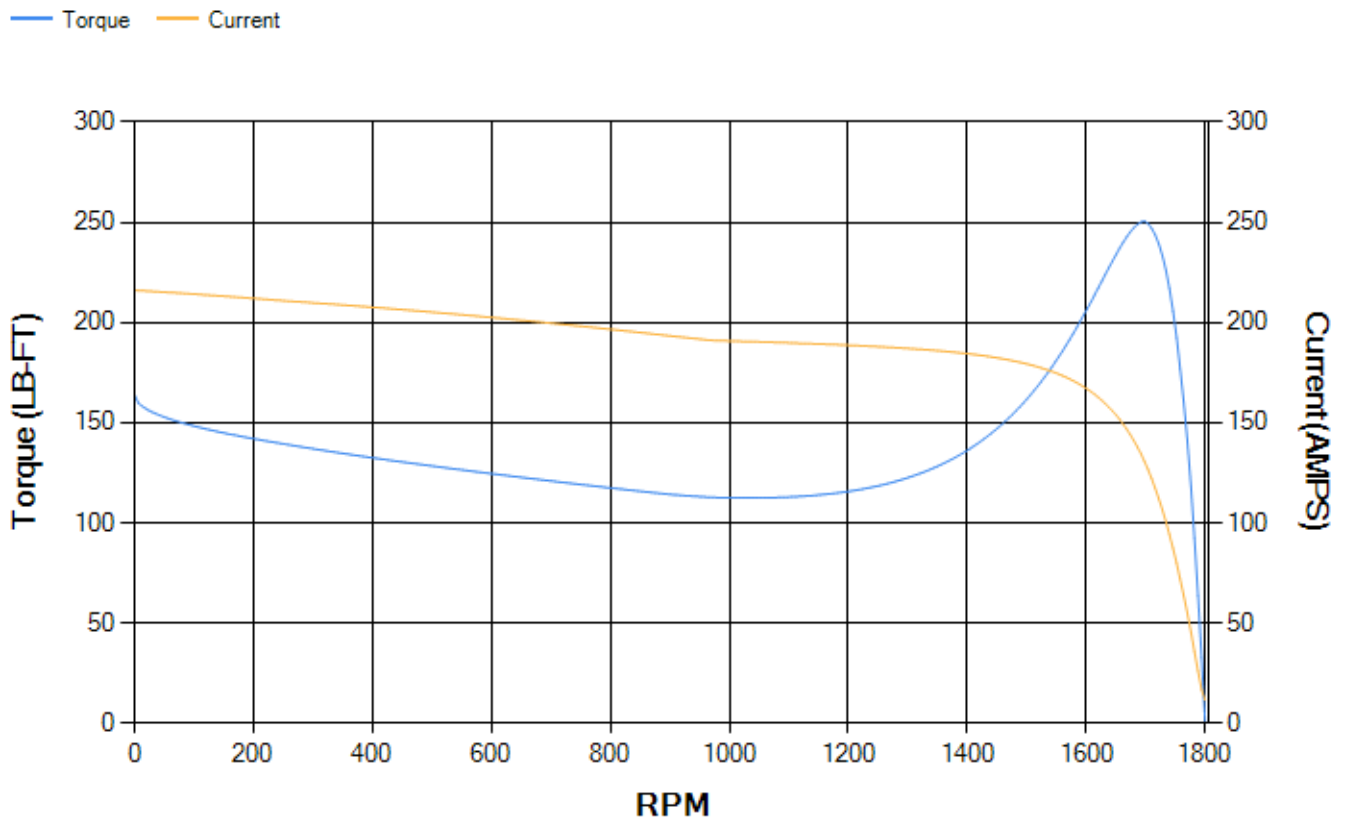
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	92.5	92.93	93.68	94.1	94.05	91.74	0.00
% PF	86.91	86.73	86.02	82.95	74.96	53.68	4.49
AMPS	43.66	40.06	34.83	26.98	19.91	14.25	11.5

<b>TORQ(FL)#FT</b>	88.62	<b>TORQ(LR)%FL</b>	184.77	<b>TORQ(BD)%FL</b>	281.74
<b>AMPS(LR)</b>	216.09	<b>PF AT START</b>	0.38		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 969 Lb-Ft Sq (40.79 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 51 seconds. Safe stall time at 100% voltage is 90 seconds cold, 61 seconds hot. Rotor inertia is 5.39 Lb-Ft Sq (0.23 Kg-meter Sq).

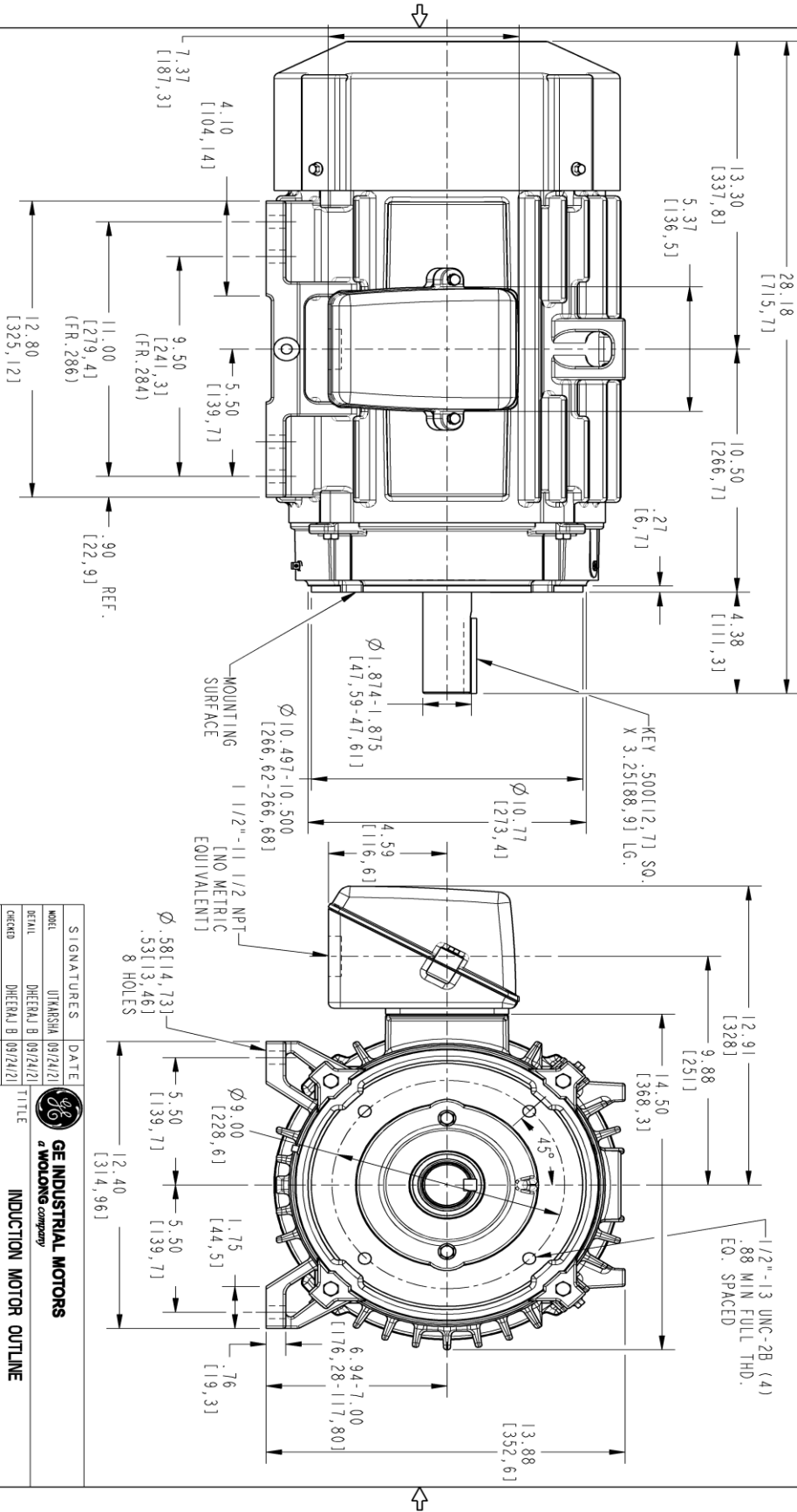
<b>Open Circuit A-C:</b>	0.634	<b>Short Circuit D-C:</b>	0.016
<b>Short Circuit A-C:</b>	0.027	<b>X/R Ratio:</b>	5.921
<b>Stator Slots:</b>	48	<b>Rotor Slots:</b>	40

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



Marks:

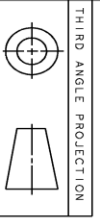
NOTE 1: CONDUIT BOX MAY BE ASSEMBLED WITH ENTRANCE UP, DOWN OR TO EITHER SIDE.  
 NOTE 2: F1 ASSEMBLY AS SHOWN.  
 NOTE 3: MOUNTING SURFACES WILL BE SQUARE AND CONCENTRIC WITH SHAFT WITHIN .004 T.I.R.  
 NOTE 4: SHAFT RUNOUT WILL NOT EXCEED .002 T.I.R.  
 NOTE 5: ALL DIMENSIONS ARE IN INCHES, BRACKETED DIMENSIONS ARE IN METRIC (MILLIMETERS).



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REV.	DESCRIPTION	DATE	APPROVED

SIZE DRAWING NO.	B
4002B58286BP5201	000
REV	1
SHEET	1



THIRD ANGLE PROJECTION

SIGNATURES	DATE
UTKASNSA [09/24/21]	
DHEEMAJ B [09/24/21]	
DHEEMAJ B [09/24/21]	
ENG	
CHK	
APP	
ISSUED	UTKASNSA [09/24/21]
SOLID MODEL	4002B58286BP5201

TITLE	INDUCTION MOTOR OUTLINE
GE INDUSTRIAL MOTORS	
GP CONSTRUCTION	
SCALE	0.250
REV	000
SHEET	1

Marks:

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



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	128D6206WF1	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	

