



GE INDUSTRIAL MOTORS
a **WOLONG** company

Product Technical Information

June 24, 2020

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

Model Number:	5KS286XAA222BW8
Catalog Number:	M6627
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG7
Outline Drawing:	4002B5828PAP5698

Accessory Connection Diagrams

Bearing Thermocouple:	None	Heater:	None
RTD:	None	Thermistor:	None
Thermostat:	None	Winding Thermocouple:	None
Bearing RTD:	None		

Table of Contents

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

Marks:

MODEL NUMBER:	5KS286XAA222BW8	Estimated Weight:	510 Lbs
Outline Drawing:	4002B5828PAP5698	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG7	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	661
Design Code:	28BD1157A	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	286T	Insulation Class:	H
Phases:	3	NEMA Design:	B
Poles:	4	Nominal Efficiency:	93.6 %
Output Power:	30HP 22.2KW	Guaranteed Efficiency:	93.0 %
RPM:	1775	3/4 Load Efficiency:	94.1 %
Voltage:	460	KVA Code:	G
Hertz:	60	Max KVAR:	8.2
Amps - FL:	34.9	Power Factor:	86.0
Service Factor:	1.15	Bearing - DE:	NU310ECJ/C3
Alt Service Factor:	--	Bearing - ODE:	6310ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

API-STD-661
 DE BRG 50RU03X3 ODE BRG 50BC03JP30
 IP 56
 ROLLER BEARING - FOR BELTED LOAD ONLY
 STAMP NP249A5564P051 AS BELOW:
 MODEL:5KS286XAA222BW8 S/N: XXX
 CSA CERTIFIED CSA09.2216219 FOR EX NA IIC 200 C GC
 CL1ZONE2 AEXNAIIC 200 C; CL1DIV2 GRP ABCD 200 C
 IN -25C <= AMB <= 40C, 1.0 SF ON SINE-WAVE PWR
 SURF TEMP 200 C AT 1.15 SF ON SINE-WAVE PWR
 OR 200 C VT OR 200 C CT OR 200 C CHP PWM CONTROL
 ALTERNATE RATING FOR PWM CONTROL 1.0 SF 40 C AMB
 VT 0-60 HZ, CT 6-60 HZ, CHP 60-90 HZ.



Additional Information:

4P - T EXTN
STANDARD WALL MOUNT SHAFT UP
C/BOX 137 CU IN-1.50 NPT
VERTICAL MOUNT SHAFT UP
PAINTED FRAME ID & SHAFT,
FAN COVER INSIDE & ODE E/S OUTSIDE
ROUTINE AND 5 POINT VIBRATION TESTS INCL IN C/BOX
INPRO SEAL BOTH ENDS
GROUND SCREW ON FRAME
SHAFT RUNOUT LIMIT .002" TIR
COPPER WASHER UNDER HEADS OF BEARING CAP BOLTS
APPLY TITE-SEAL (A50CD427A) ON BEARING CAP SCREWS, RABBETS,
AND PLUG THREADS
OIL RESISTANT SLEEVING ON LEADS
B5F4C4 HIGH FATIGUE STEEL AISI 4142 SHAFT MATERIAL



Performance Characteristics

1st Winding 1st Connection

Design: 28BD1157A

Marks:

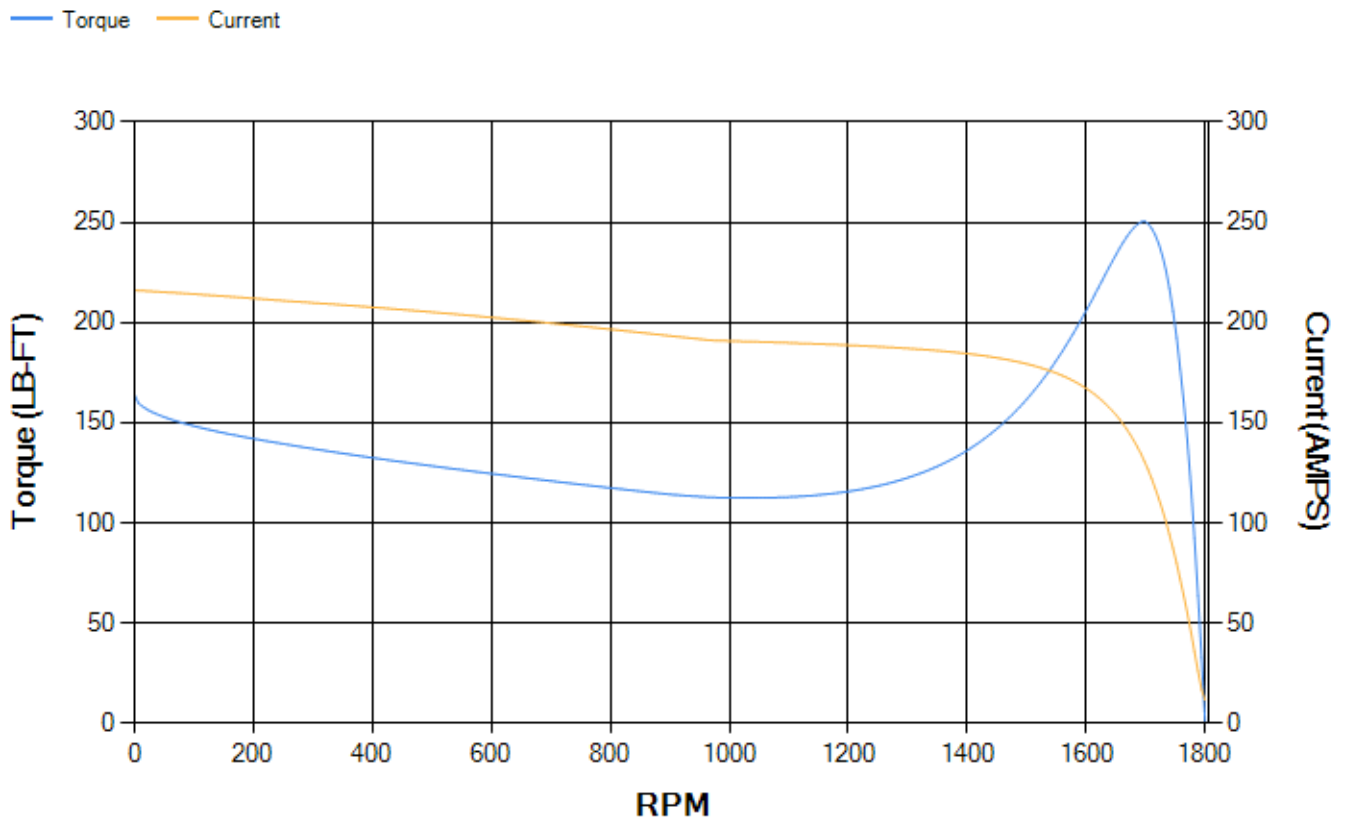
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	92.5	92.93	93.68	94.1	94.05	91.74	0.00
% PF	86.91	86.73	86.02	82.95	74.96	53.68	4.49
AMPS	43.66	40.06	34.83	26.98	19.91	14.25	11.5

TORQ(FL)#FT	88.62	TORQ(LR)%FL	184.77	TORQ(BD)%FL	281.74
AMPS(LR)	216.09	PF AT START	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).

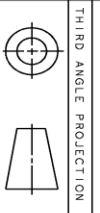
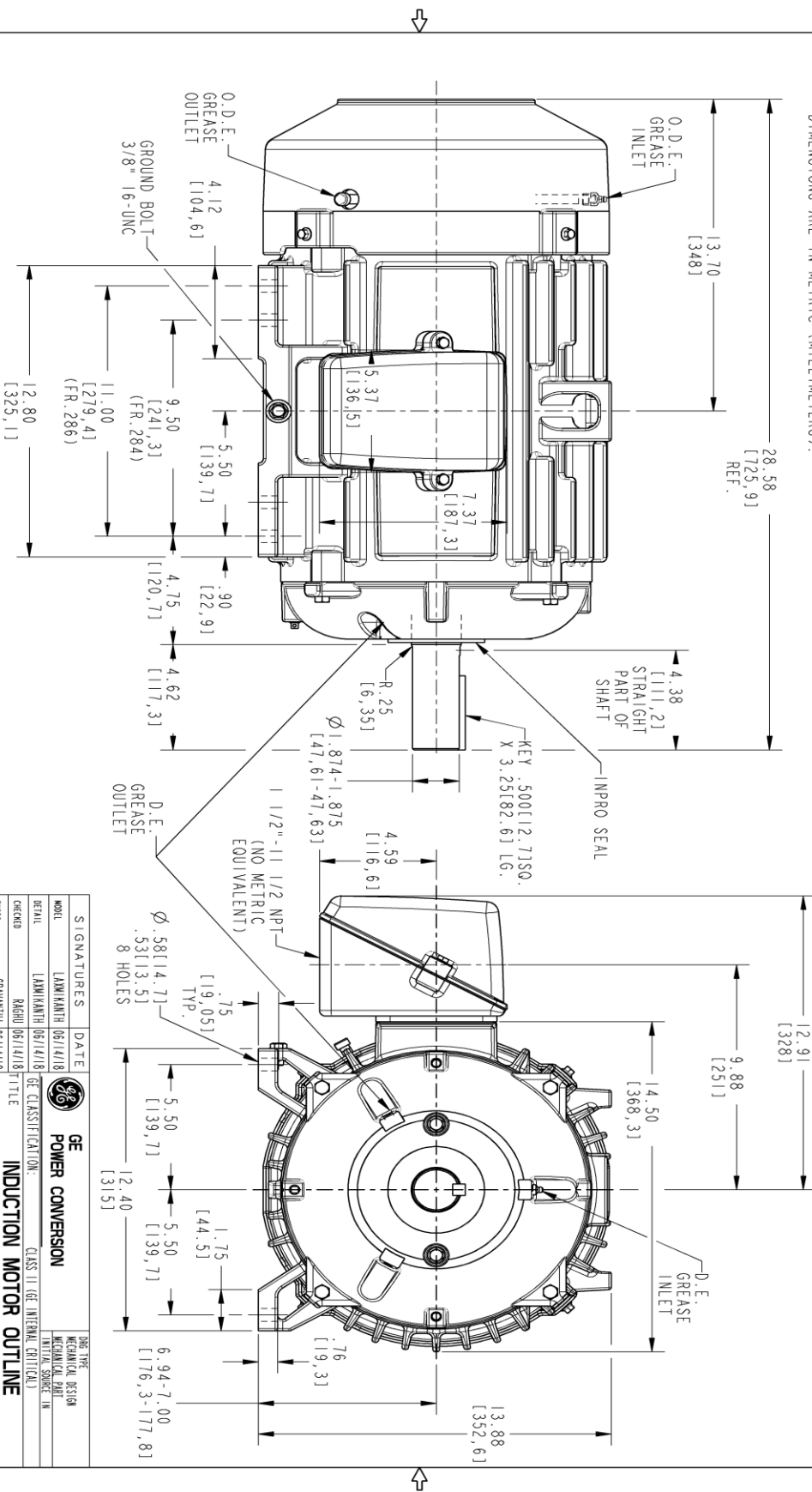
Open Circuit A-C:	0.634	Short Circuit D-C:	0.016
Short Circuit A-C:	0.027	X/R Ratio:	5.921
Stator Slots:	48	Rotor Slots:	40

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. F2 ASSEMBLY CONDUIT BOX ON OPPOSITE SIDE FROM SHOWN LOCATION.
 NOTE 3: SHAFT RUNOUT WILL NOT EXCEED .002 T.I.R.
 NOTE 4: ALL DIMENSIONS ARE IN INCHES, BRACKETED DIMENSIONS ARE IN METRIC (MILLIMETERS).



SOLID MODEL: 4002B5828PAP5698

SIZE	DRAWING NO.	REV	SHEET
B	4002B5828PAP5698	000	000

REV.	DESCRIPTION	DATE	APPROVED

SIGNATURES		DATE	 GE POWER CONVERSION	DESIGNED BY: LAMIKANTH CHECKED BY: SHAMANTH ENG'D BY: SHAMANTH DATE: 06/14/18 TITLE: INDUCTION MOTOR OUTLINE 284/286 T. TFC, IEEE-841, ROLLER BEARING CBOX 137 CUIN. - 150 NPT. GROUND PAD 4002B5828PAP5698 SCALE: 0.250 REF. No: 4002B5828PAP5697
DESIGNED BY:	LAMIKANTH	06/14/18		
CHECKED BY:	SHAMANTH	06/14/18		
ENG'D BY:	SHAMANTH	06/14/18		
ISSUED BY:	LAMIKANTH	06/14/18		
DWG EXPORT TAG:				
NO LICENSE REQUIRED				

Marks:

Connection Diagram
GEM2034E-FIG7



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	4004D5284TS1	4004D5284SE1
Bearing	235A2527AC01	235A2508EC01
Slinger/Inproseal	4002B5914GF4	4002B5914AG5

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C6900G01
Fan Cover	4003C5789PA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	4002B5728PA-G01

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

