



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:	5KS286XAA181C
Catalog Number:	M9557
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG7
Outline Drawing:	4002B5828PBP5471

Accessory Connection Diagrams

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

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Marks:

MODEL NUMBER:	5KS286XAA181C	Estimated Weight:	510 Lbs
Outline Drawing:	4002B5828PBP5471	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG7	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	841
Design Code:	28BD0153B	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	286TSC	Insulation Class:	H
Phases:	3	NEMA Design:	B
Poles:	2	Nominal Efficiency:	92.4 %
Output Power:	30HP 22.2KW	Guaranteed Efficiency:	91.7 %
RPM:	3545	3/4 Load Efficiency:	93.4 %
Voltage:	575	KVA Code:	G
Hertz:	60	Max KVAR:	4.2
Amps - FL:	26.1	Power Factor:	93.0
Service Factor:	1.15	Bearing - DE:	6310ZC3
Alt Service Factor:	--	Bearing - ODE:	6310ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

IEEE-STD-841-2009
 DE BRG 50BC03JP30 ODE BRG 50BC03JP30
 STAMP NP249A5564P051 AS BELOW:
 MODEL:5KS286XAA181C S/N: XXX
 CSA CERTIFIED CSA09.2216219 FOR EX NA IIC 200C GC
 CL 1 ZONE2 AEX NA IIC 200C;CL 1 DIV2 GRP ABCD 200C
 IN -25C <= AMB <= 40C, 1.0 SF ON SINE-WAVE PWR
 SURF TEMP 260C AT 1.15SF ON SINE-WAVE PWR
 OR 200C VT OR 215C CT OR 215C CHP PWM CONTROL
 ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB
 VT 0 - 60 HZ, CT 15-60HZ, CHP 60-90HZ.



Additional Information:

2P - TS EXTN
STANDARD FLOOR MOUNT
C/BOX 137 CU IN-1.50 NPT
F1 CONDUIT BOX MOUNTING
"C" FACE AT DE ENDSHIELD
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
ROTATE D.E. E/SHIELD 90 DEG. PER OUTLINE
SHAFT RUNOUT LIMIT .001" 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



Performance Characteristics

1st Winding 1st Connection

Design: 28BD0153B

Marks:

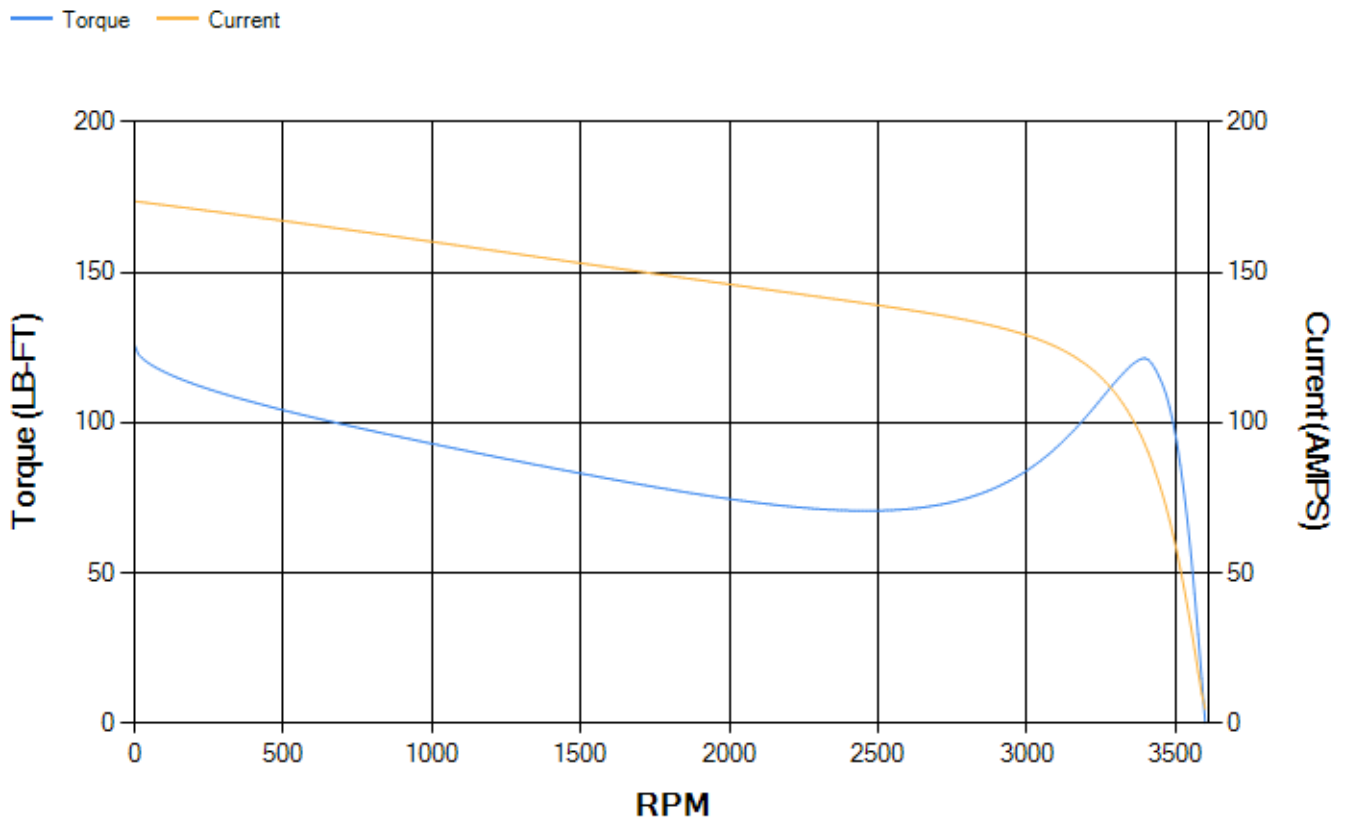
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	91.41	91.92	92.79	93.37	93.42	91.04	0.00
% PF	92.38	92.67	92.86	92.32	89.42	76.97	9.67
AMPS	33.25	30.32	26.07	19.54	13.44	8.01	4.72

TORQ(FL)#FT	44.4	TORQ(LR)%FL	283.23	TORQ(BD)%FL	272.48
AMPS(LR)	173.68	PF AT START	0.43		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 111 Lb-Ft Sq (4.67 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 18 seconds. Safe stall time at 100% voltage is 38 seconds cold, 21 seconds hot. Rotor inertia is 3.21 Lb-Ft Sq (0.14 Kg-meter Sq).

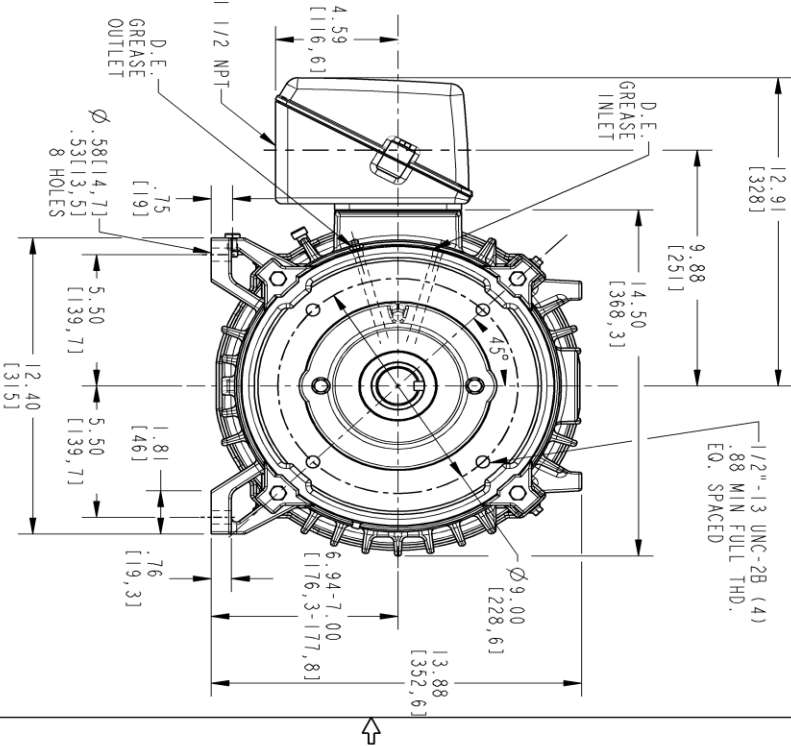
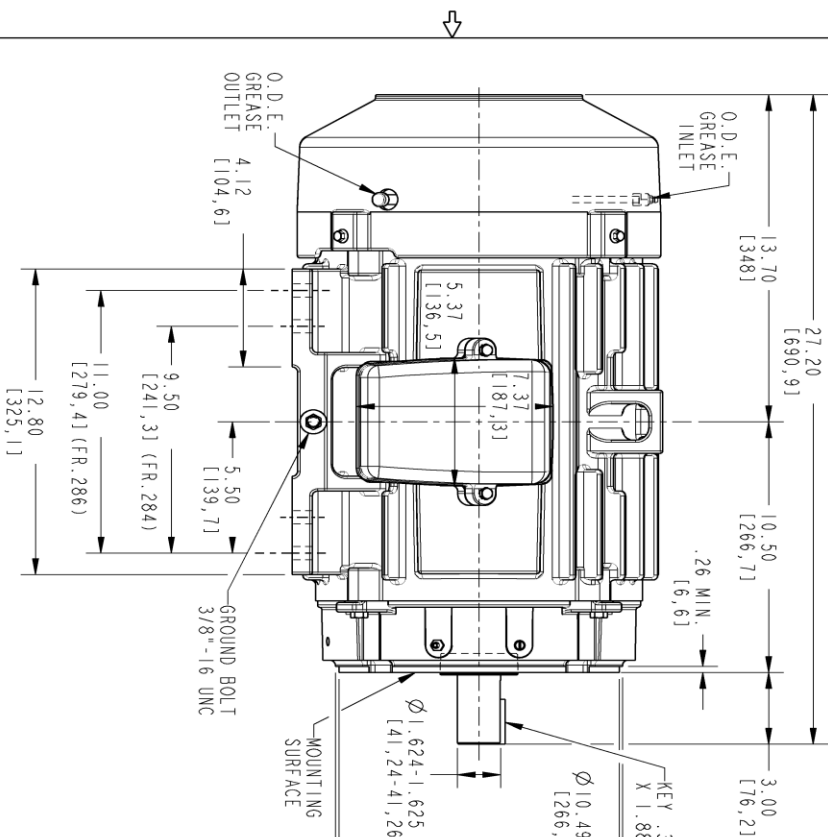
Open Circuit A-C:	1.035	Short Circuit D-C:	0.013
Short Circuit A-C:	0.025	X/R Ratio:	5.016
Stator Slots:	48	Rotor Slots:	38

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: MOUNTING SURFACES WILL BE SQUARE AND CONCENTRIC WITH SHAFT WITHIN .004 T. I. R.
- NOTE 4: SHAFT RUNOUT WILL NOT EXCEED .001 T. I. R.
- NOTE 5: DE ENDSHIELD ROTATED 90° COUNTER CLOCKWISE.
- NOTE 6: ALL DIMENSIONS ARE IN INCHES, BRACKETED DIMENSIONS ARE IN METRIC (MILLIMETERS)



PROPRIETARY INFORMATION		REV. SHEET	
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REV.	DESCRIPTION	DATE	APPROVED
1	ISAC# 18-0869	11/12/18	PRASHANTH
REVISIONS			



SIGNATURES		DATE	
MODEL	LAKSHIKANTH	03/10/17	
DETAIL	LAKSHIKANTH	03/10/17	
CREATOR	PYUSH	03/10/17	
CHK	PYUSH	03/10/17	
QUALITY	LAKSHIKANTH	03/10/17	
ISSUED			
SOLID MODEL:	4002B5828PBP5471	SCALE:	0.225 REF. No.: 4002B5828PBP5313
TITLE		REV.	
INDUCTION MOTOR OUTLINE		B	
IEEE-941 SPECIFICATION (N507 RABERT)		4002B5828PBP5471 001	
FR. 284/286TSC TFC		SHEET 1 of 1	



Marks:

Connection Diagram
GEM2034E-FIG7



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	128D6206RF1	4004D5284SE1
Bearing	235A2508EC01	235A2508EC01
Slinger/Inproseal	4002B5914GF4	4002B5914AG5

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C6704G02
Fan Cover	4003C5789PA1

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

