



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:	5KS286XAA167D1
Catalog Number:	M9521
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG7
Outline Drawing:	4002B5828PDP5389

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:	5KS286XAA167D1	Estimated Weight:	510 Lbs
Outline Drawing:	4002B5828PDP5389	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG7	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	841
Design Code:	28BD0153A	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	286TC	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:	460	KVA Code:	G
Hertz:	60	Max KVAR:	4.2
Amps - FL:	32.7	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:5KS286XAA167D1 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 - T EXTN
C/BOX 137 CU IN-1.50 NPT
"C" FACE AT DE ENDSHIELD ROUND FRAME
VERTICAL MOUNT SHAFT DOWN WITH DRIPCOVER
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
E/SHLD GROUND STUD MTD ON DE C/BOX SIDE NEAR FOOT
ROTATE D.E. E/SHIELD 90 DEG. PER OUTLINE
SHAFT RUNOUT LIMIT .0015" 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: 28BD0153A

Marks:

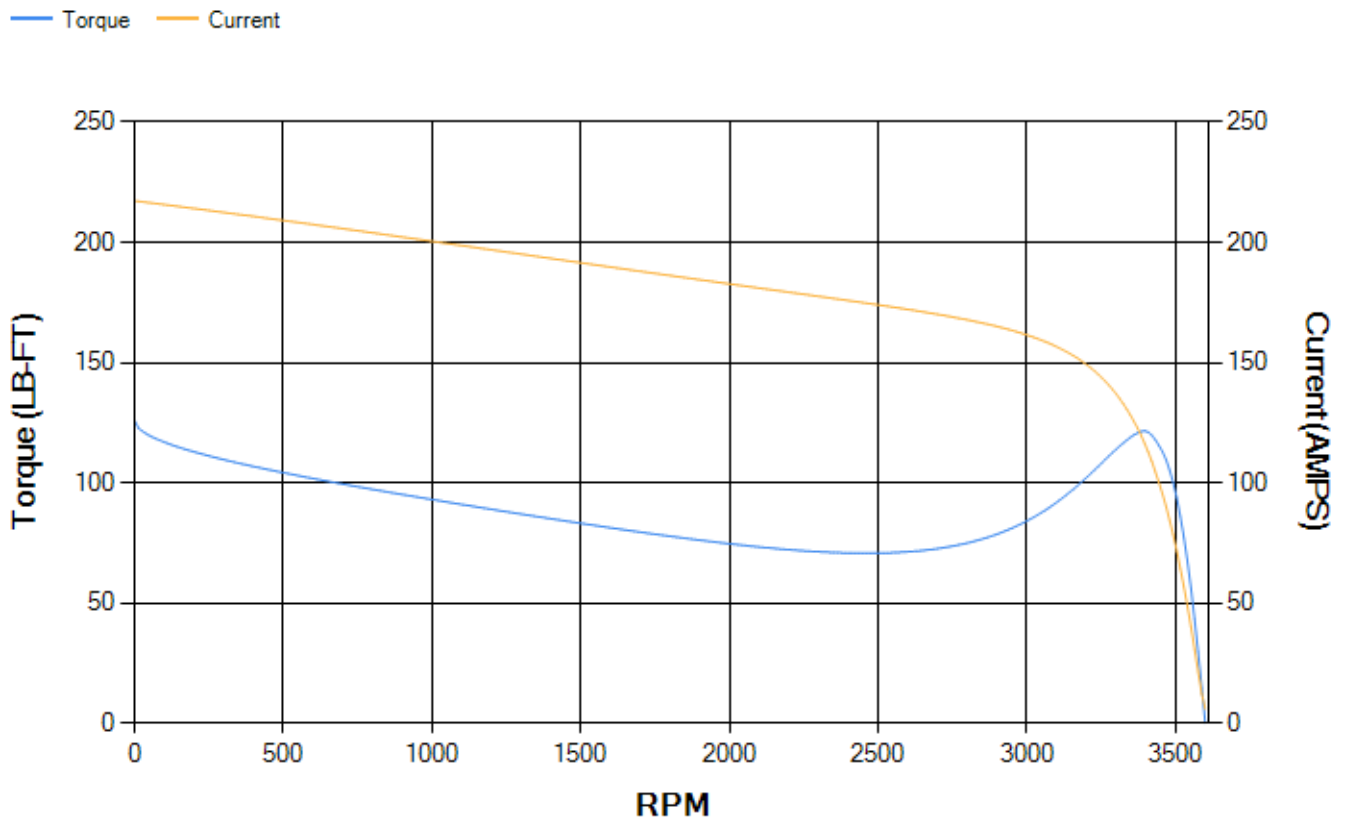
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	91.42	91.93	92.8	93.37	93.42	91.04	0.00
% PF	92.39	92.67	92.86	92.31	89.4	76.93	9.66
AMPS	41.56	37.9	32.58	24.43	16.81	10.02	5.91

TORQ(FL)#FT	44.4	TORQ(LR)%FL	283.3	TORQ(BD)%FL	272.73
AMPS(LR)	217.28	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:	5.017
Stator Slots:	48	Rotor Slots:	38

Speed Torque Current Curve (First Connection, First Speed)



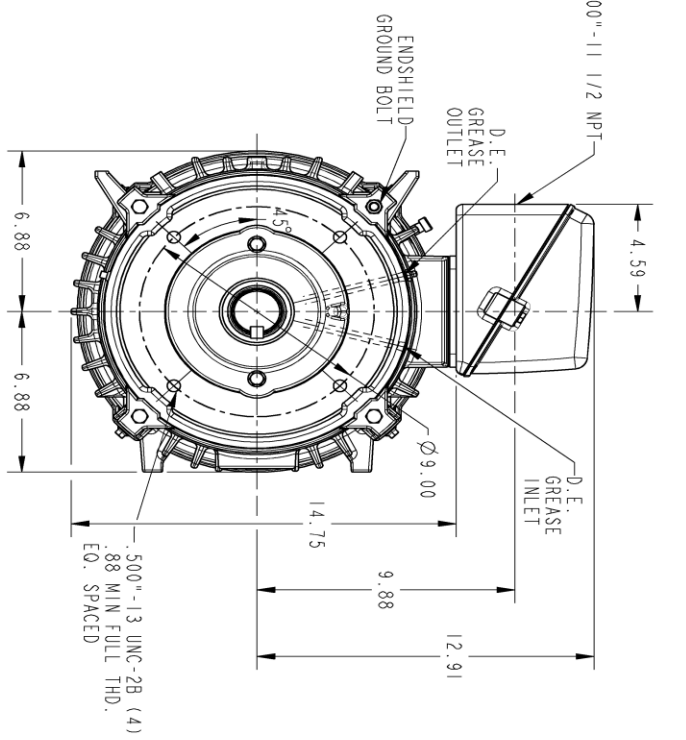
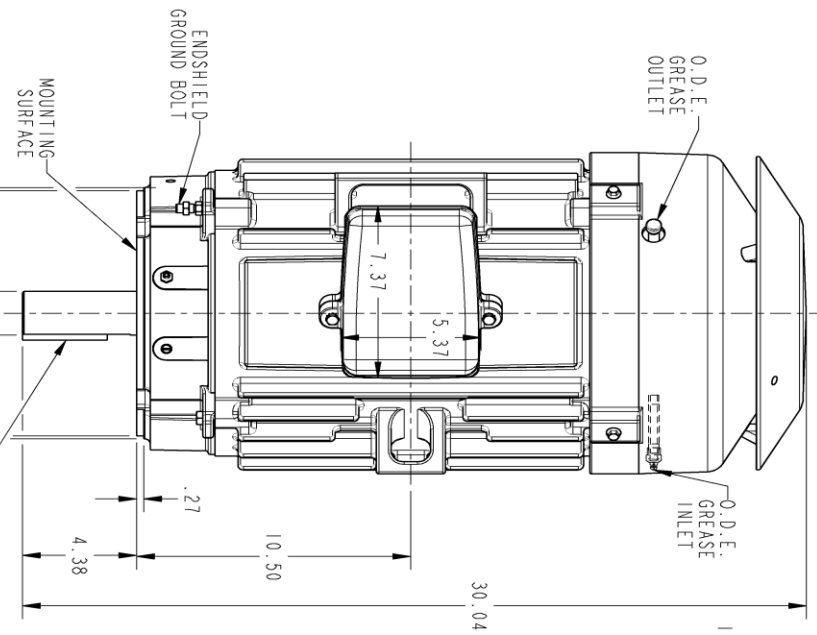
Marks:

- 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 TO BE SQUARE AND CONCENTRIC WITH SHAFT WITHIN .004 T.I.R.
- NOTE 4: SHAFT RUNOUT WILL NOT EXCEED .0015 T.I.R.
- NOTE 5: DE ENDSHIELD ROTATED 90° COUNTER CLOCKWISE.

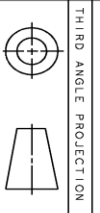
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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ISAAC# 18-0869	SNEDEVI 11/08/18	PRASHANTH

SIZE DRAWING NO. B
 4002B5828PDP5389 001



VIEW AT "A"



SIGNATURES	DATE	TITLE
LAXMIKANTH	03/06/2017	INDUCTION MOTOR OUTLINE
LAXMIKANTH	03/06/2017	IEEE-841 SPEC AND DRIP COVER (0.50" RABBER)
PYUSH	03/06/2017	FME: KS284TCV TFC 'C' FACE FOOTLESS 137 CU. IN. BOX
LAXMIKANTH	03/06/2017	SIZE DRAWING

QUALITY: LAXMIKANTH 03/06/2017

ISSUED: LAXMIKANTH 03/06/2017

SOLID MODEL: 4002B5828PDP5389

SCALE: 0.220 REF. No.: 4002B5828PDP5310

4002B5828PDP5389 001



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	4003C5528BN-G01

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

