



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:	5KS284XAA2002D1
Catalog Number:	M9519
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		

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Marks:

MODEL NUMBER:	5KS284XAA2002D1	Estimated Weight:	460 Lbs
Outline Drawing:	4002B5828PDP5389	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG7	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	841
Design Code:	28BD1162A	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	284TC	Insulation Class:	H
Phases:	3	NEMA Design:	B
Poles:	4	Nominal Efficiency:	93.6 %
Output Power:	25HP 18.5KW	Guaranteed Efficiency:	93.0 %
RPM:	1780	3/4 Load Efficiency:	94.1 %
Voltage:	460	KVA Code:	G
Hertz:	60	Max KVAR:	7.0
Amps - FL:	29.1	Power Factor:	86.0
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:5KS284XAA2002D1 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 200C AT 1.15SF ON SINE-WAVE PWR
 OR 200C VT OR 200C CT OR 200C CHP PWM CONTROL
 ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB
 VT 0 - 60 HZ, CT 3-60HZ, CHP 60-90HZ.



Additional Information:

4P - 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: 28BD1162A

Marks:

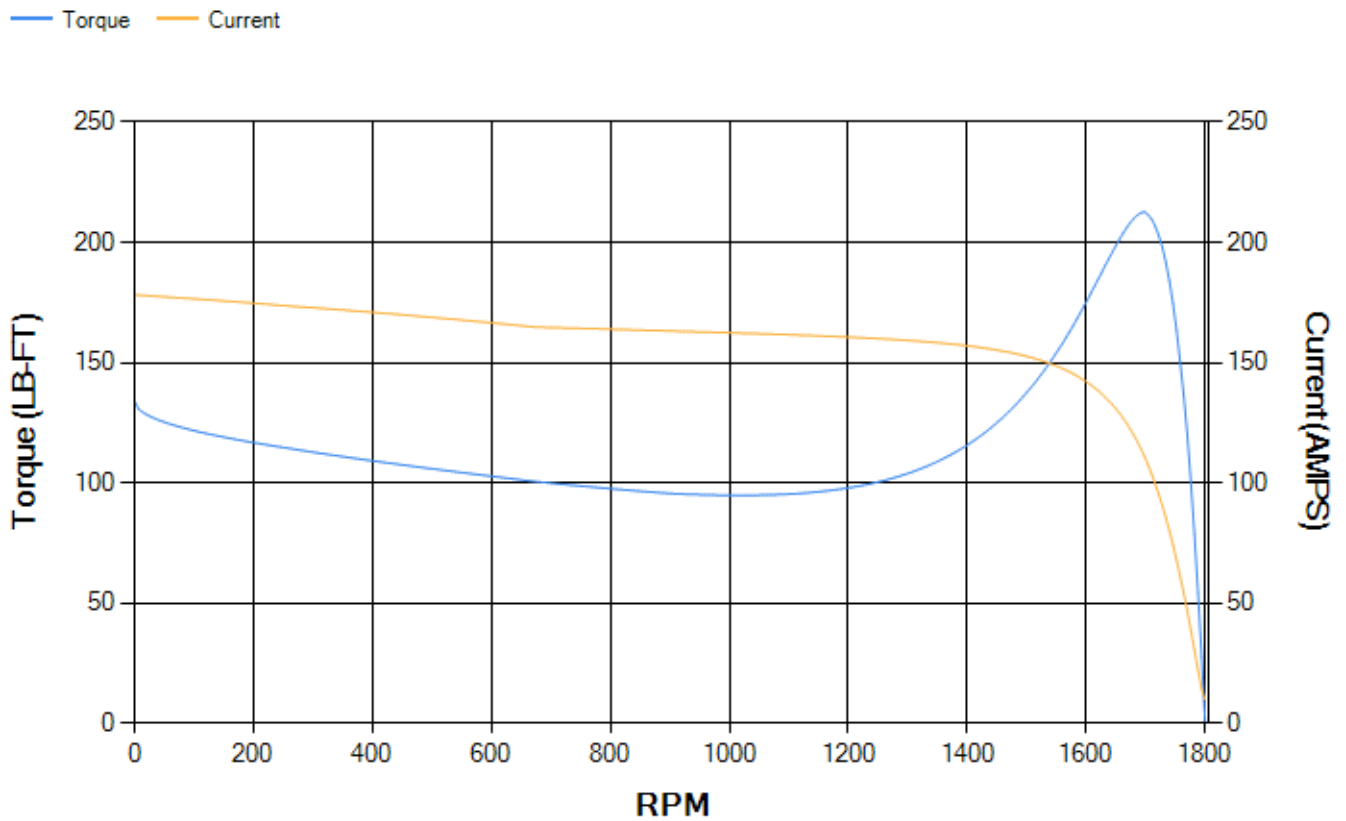
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	92.51	92.93	93.67	94.08	94.02	91.68	0.00
% PF	86.95	86.71	85.9	82.65	74.39	52.87	4.42
AMPS	36.36	33.39	29.06	22.57	16.73	12.07	9.81

TORQ(FL)#FT	73.83	TORQ(LR)%FL	181.27	TORQ(BD)%FL	286.95
AMPS(LR)	178.14	PF AT START	0.38		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 887 Lb-Ft Sq (37.34 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 56 seconds. Safe stall time at 100% voltage is 100 seconds cold, 67 seconds hot. Rotor inertia is 4.88 Lb-Ft Sq (0.21 Kg-meter Sq).

Open Circuit A-C:	0.626	Short Circuit D-C:	0.016
Short Circuit A-C:	0.028	X/R Ratio:	5.887
Stator Slots:	48	Rotor Slots:	40

Speed Torque Current Curve (First Connection, First Speed)



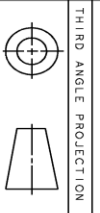
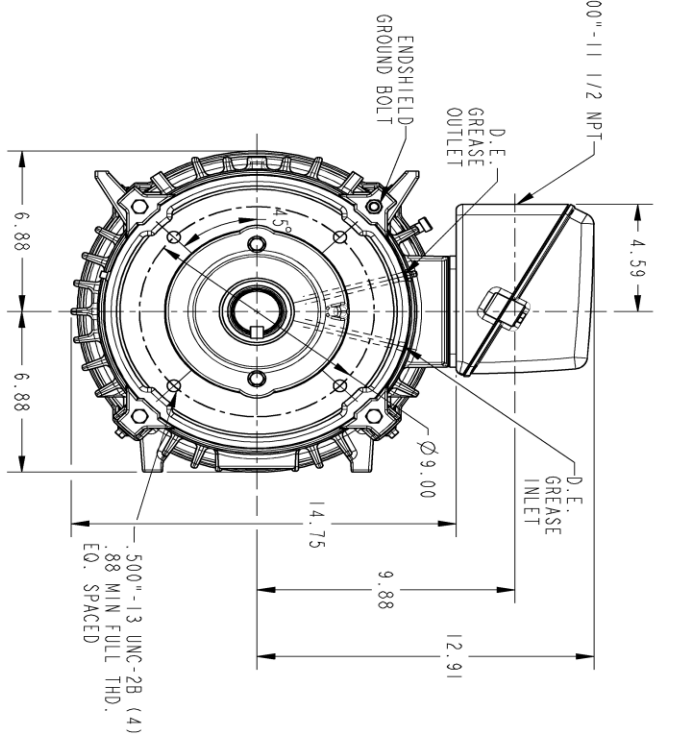
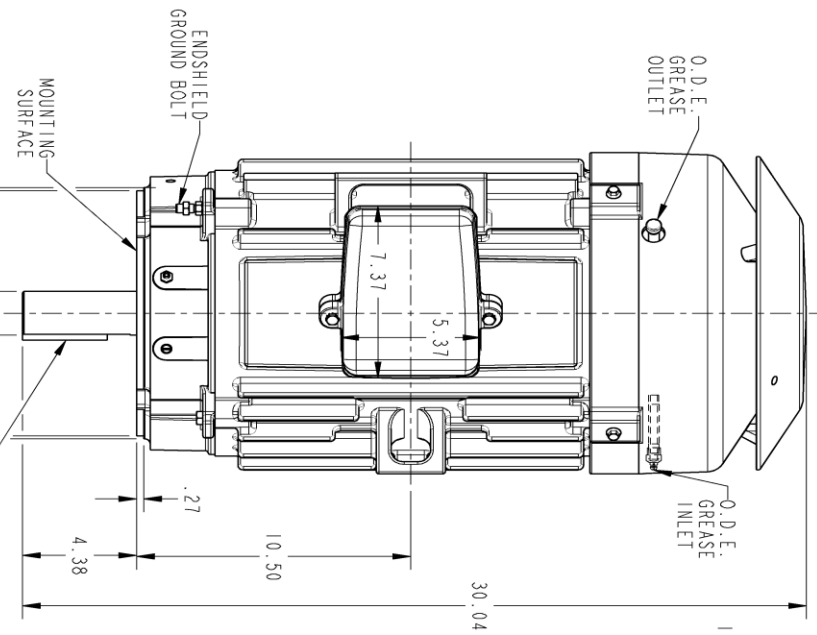
Marks:

- 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: 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.

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

SIZE DRAWING NO. **4002B5828PDP5389** REV. **001** SHEET **1**



SIGNATURES	DATE	TITLE
LAXMIKANTH	03/06/2017	INDUCTION MOTOR OUTLINE
LAXMIKANTH	03/06/2017	IEEE-841 SPEC AND DRIP COVER (0.50\"/>

QUALITY: LAXMIKANTH 03/06/2017
 ISSUE: LAXMIKANTH 03/06/2017
 SCALE: 0.220 REF. No.: 4002B5828PDP5310



4002B5828PDP5389 REV. **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	159C6700G02
Fan Cover	4003C5528BN-G01

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

