



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:	5KS284XAA139D5
Catalog Number:	M8951
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		

Table of Contents

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

Marks:

MODEL NUMBER: 5KS284XAA139D5
Outline Drawing: 4002B5828PBP5471
Connection Diagram: GEM2034E-FIG7
Instruction Book: GEI-56128
Design Code: 28BD0159A
Type: KS
Frame: 284TSC
Phases: 3
Poles: 2
Output Power: 25HP 18.5KW
RPM: 3550
Voltage: 460
Hertz: 60
Amps - FL: 28.0
Service Factor: 1.15
Alt Service Factor: --

Estimated Weight: 460 Lbs
Time Rating: CONT
Enclosure: TEFC
Encl Construction: 841
Ambient Max(°C): 40
Alt Ambient Max(°C): --
Insulation Class: H
NEMA Design: B
Nominal Efficiency: 91.7 %
Guaranteed Efficiency: 91.0 %
3/4 Load Efficiency: 92.5 %
KVA Code: G
Max KVAR: 4.7
Power Factor: 91.0
Bearing - DE: 6310ZC3
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:5KS284XAA139D5 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 12-60HZ, 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: 28BD0159A

Marks:

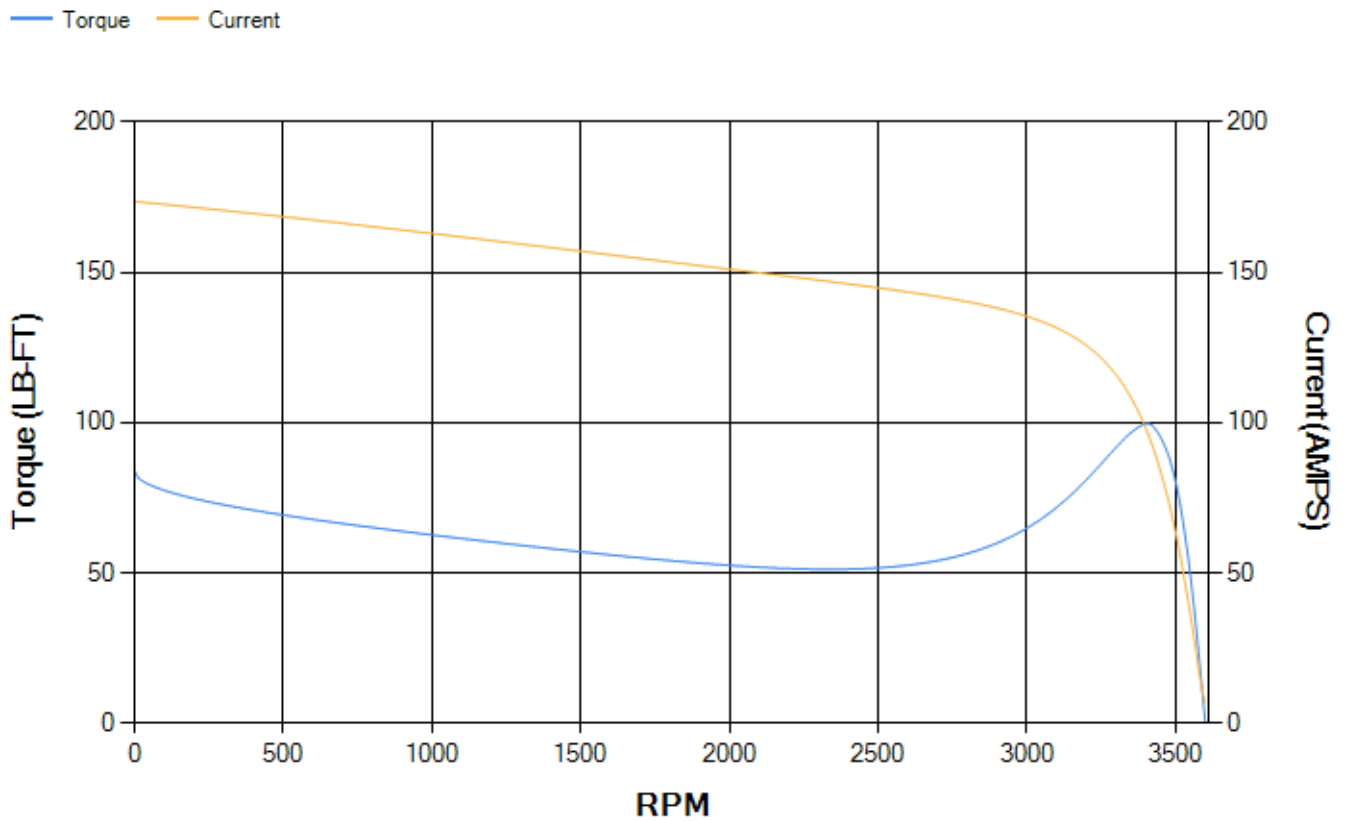
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	90.58	91.11	92	92.54	92.43	89.45	0.00
% PF	90.85	91	90.9	89.53	84.78	68.17	8.68
AMPS	35.54	32.46	27.98	21.18	14.93	9.59	6.66

TORQ(FL)#FT	36.99	TORQ(LR)%FL	226.64	TORQ(BD)%FL	268.62
AMPS(LR)	173.61	PF AT START	0.39		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 79 Lb-Ft Sq (3.33 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 40 seconds cold, 22 seconds hot. Rotor inertia is 2.11 Lb-Ft Sq (0.09 Kg-meter Sq).

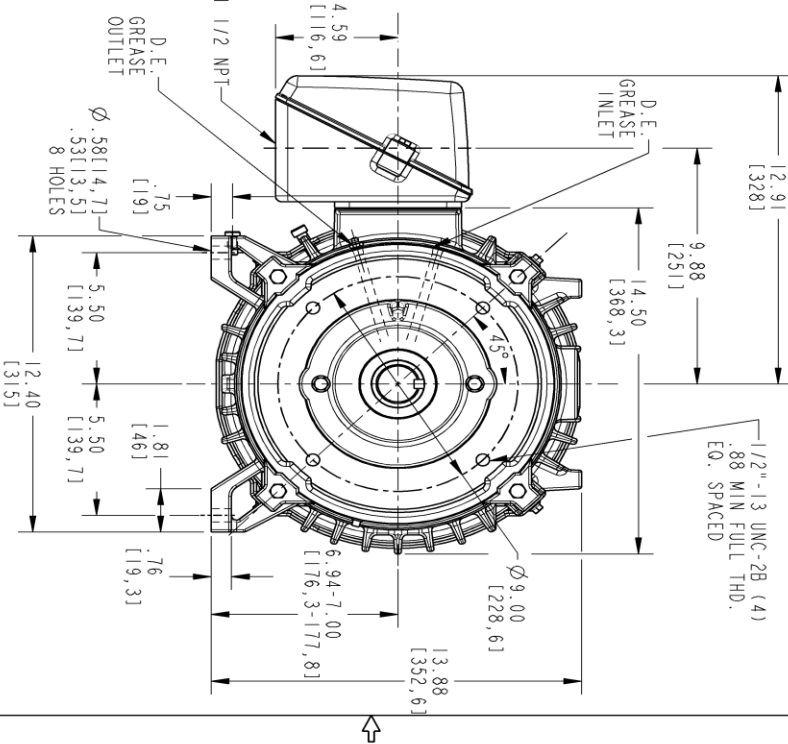
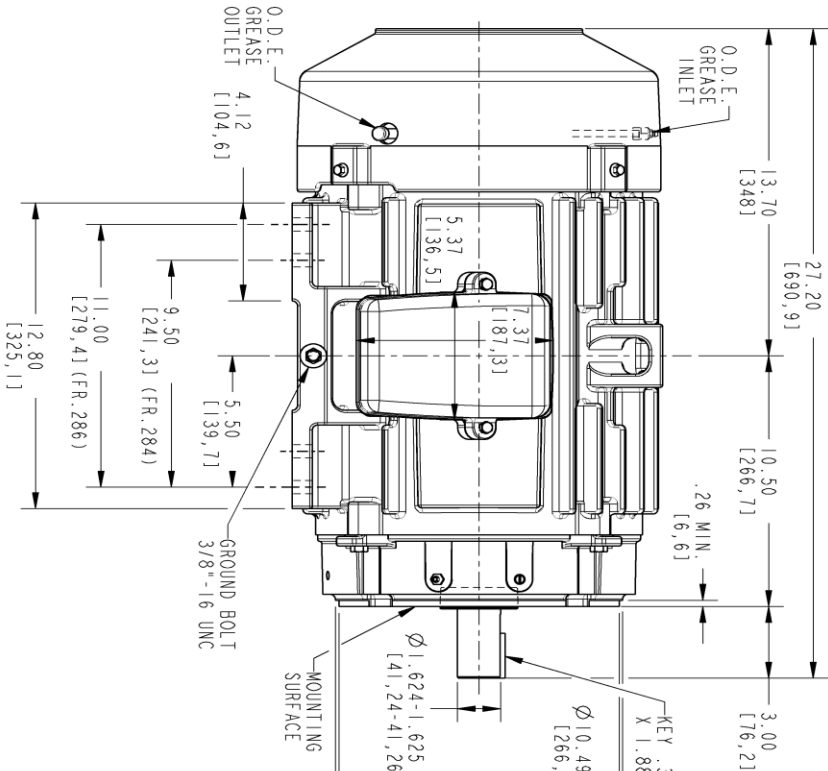
Open Circuit A-C:	0.793	Short Circuit D-C:	0.013
Short Circuit A-C:	0.027	X/R Ratio:	4.793
Stator Slots:	48	Rotor Slots:	38

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)

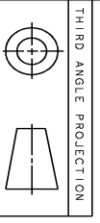


PROPRIETARY INFORMATION
 © COPYRIGHT 2018 Molong Electric America LLC AND/OR ITS AFFILIATES.
 All rights reserved. This document and the information it contains is the property of Molong Electric America LLC and/or its affiliates. It has been provided solely for transmission for design and engineering use and may not be reproduced, stored, or otherwise used in any form without the express written permission of Molong Electric America LLC. Any other use is strictly prohibited except as expressly authorized in writing by Molong Electric America LLC.

REV.	DESCRIPTION	DATE	APPROVED
1	ISAAC# 18-0869	11/12/18	PRASHANTH

REVISIONS

REV.	DESCRIPTION	DATE	APPROVED
001			



SIGNATURES	DATE
MODEL LAKHAKANTH	03/10/17
DETAIL LAKHAKANTH	03/10/17
DESIGN PIVOSH	03/10/17
ENGR PIVOSH	03/10/17
CHK	
QUALITY	
ISSUED LAKHAKANTH	03/10/17
SOLID MODEL: 4002B5828PBP5471	

GE INDUSTRIAL MOTORS
 a molong company

TITLE: INDUCTION MOTOR OUTLINE
 IEEE-941 SPECIFICATION (N507 RABERT)
 FR. 284/286TSC TFC

SCALE: 0.225 REF. No.: 4002B5828PBP5313

4002B5828PBP5471

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	159C6704G02
Fan Cover	4003C5789PA1

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

