

Product Information Packet

January 26, 2017

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

Model Number:	5KS286XAE6429D
Catalog Number:	V861
Instruction Manual:	GEK-95351
Connection Diagram:	GEM2034E-FIG7
Outline Drawing:	4002B5828PNP5364

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:	5KS286XAE6429D	Estimated Weight:	510 Lbs
Outline Drawing:	4002B5828PNP5364	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG7	Enclosure:	TEFC
Instruction Book:	GEK-95351	Encl Construction:	841
Design Code:	28BD1157A	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	L286VP10	Insulation Class:	H
Phases:	3	NEMA Design:	B
Poles:	4	Nominal Efficiency:	93.6 %
Output Power:	30HP 22.2KW	Guaranteed Efficiency:	92.4
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:	7310
Alt Service Factor:	--	Bearing - ODE:	6310-2ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

VERTICAL-841
 PREMIUM EFFICIENT MOTOR
 DE BRG 50BT03XP3 ODE BRG 50BC03JP3
 SEVERE DUTY
 EXCEPTION TO IEEE-STD-841-2009:THRUST BRG ON DE
 INVERTER DUTY PER NEMA MG1 PART 31
 ALTERNATE RATING FOR PWM CONTROL:
 1.0 SF VAR TORQUE RANGE 0-60 HZ
 MAX EXPOSED INTERNAL AND EXTERNAL SURFACE
 TEMPERATURES UNDER USUAL SERVICE CONDITIONS
 AT 1.00 S.F. DO NOT EXCEED 200 DEG C
 STAMP NP249A5499AP AS BELOW:
 MODEL:5KS286XAE6429D S/N: XXX
 EX NA IIC T3 GC CSA.09.2216219
 CLASS I, ZONE 2, AEX NA IIC T3
 CLASS I, DIV 2, GROUPS A, B, C, D T3
 -25C <= TAMB <= 40C

Additional Information:

4P - VP EXTN
 C/BOX 137 CU IN-1.50 NPT
 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
 SHAFT RUNOUT LIMIT .001" TIR

RCF 5000 CPM, STATIC DEFLECTION .0014 INCHES &
CENTER OF GRAVITY 12.00 INCHES
SOLID SHAFT HIGH THRUST
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
BEARING LIFE 26280 HOURS AT 2011 LB THRUST

Performance Characteristics

1st Winding 1st Connection

Design: 28BD1157A

Marks:

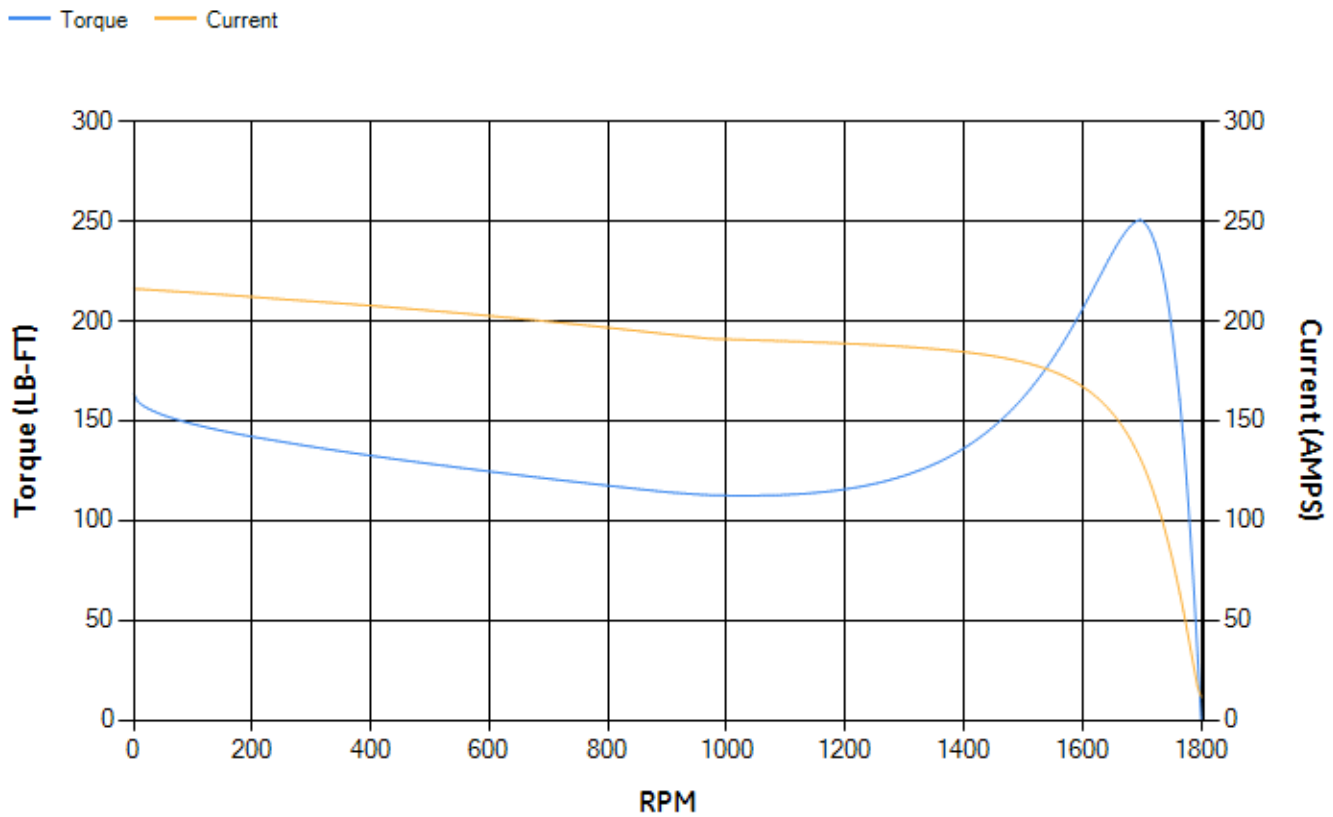
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	92.5	92.93	93.68	94.1	94.05	91.75	0.00
% PF	86.93	86.75	86.04	82.98	75.01	53.73	4.5
AMPS	43.65	40.05	34.82	26.97	19.9	14.24	11.48

TORQ(FL)#FT	88.62	TORQ(LR)%FL	184.78	TORQ(BD)%FL	281.75
AMPS(LR)	216.09	PF AT START	0.38		

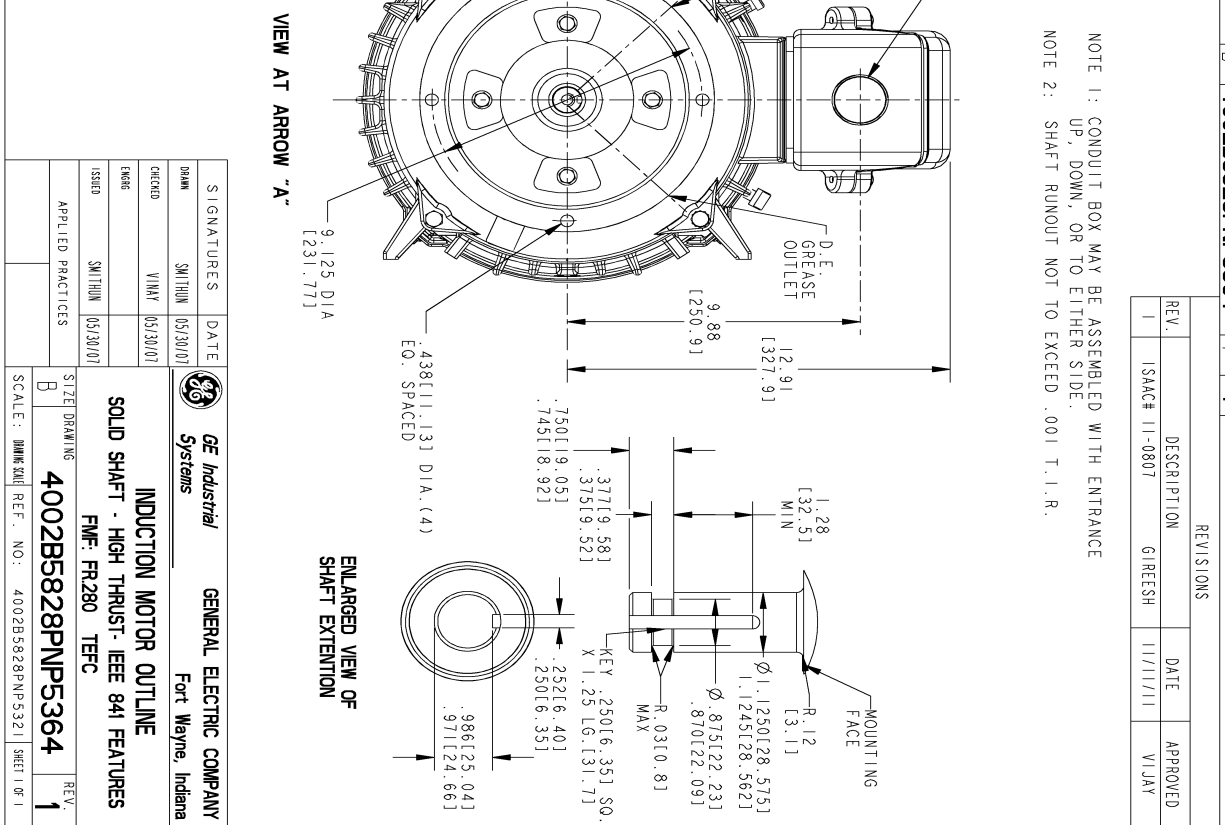
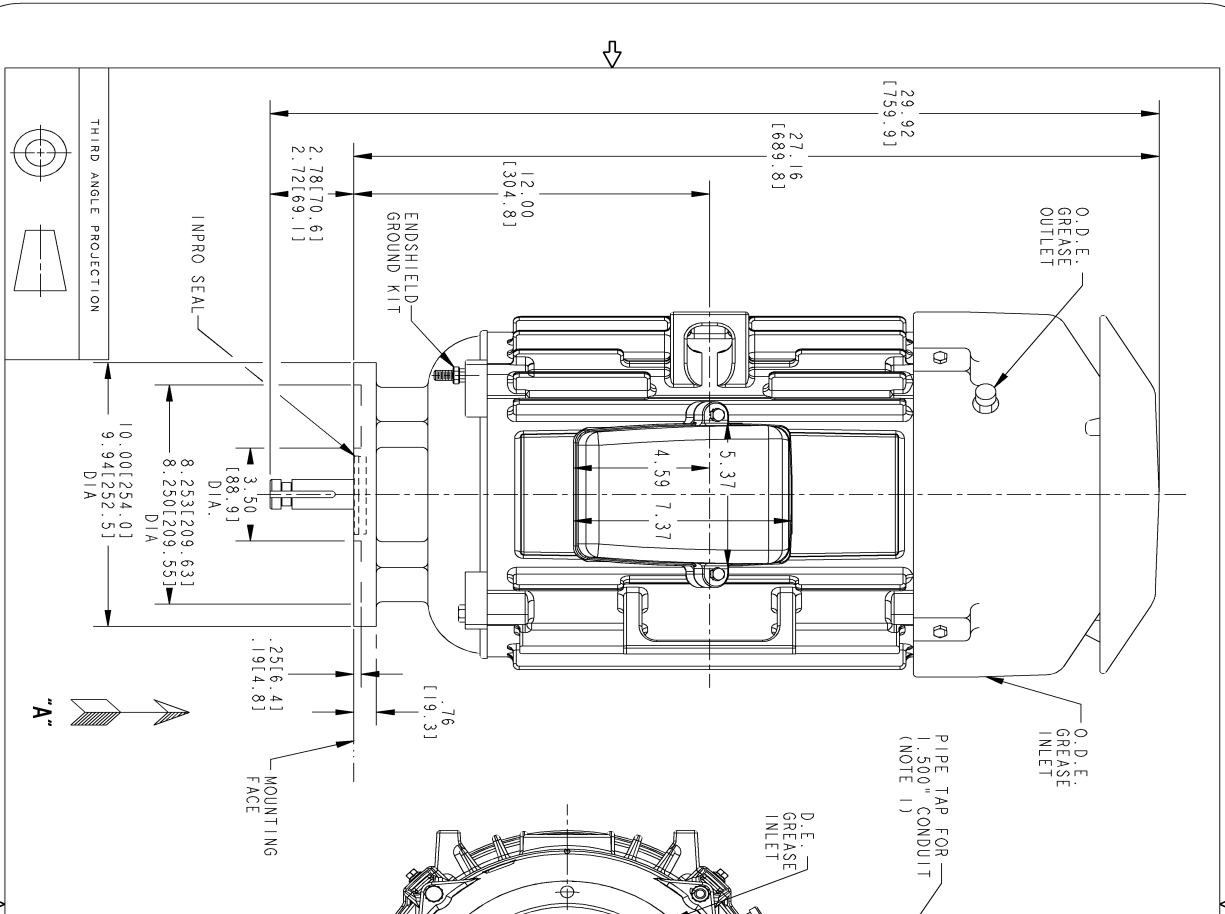
This motor is capable of two cold or one hot start with a maximum connected load inertia of 969 Lb-Ft Sq (40.79 Kg-meter Sq) at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 51 seconds. Safe stall time at 100% voltage is 90 seconds cold, 61 seconds hot. Rotor inertia is 5.44 Lb-Ft Sq (0.23 Kg-meter Sq).

Open Circuit A-C:	0.635	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: SHAFT RUNOUT NOT TO EXCEED .001 T.I.R.

REV.	DESCRIPTION	DATE	APPROVED
1	ISAC# 11-0807 GIREESH	11/11/11	V/JAY

SIGNATURES	DATE	GE Industrial Systems GENERAL ELECTRIC COMPANY Fort Wayne, Indiana
DRAWN SWITHUN	05/30/07	
CHECKED VINAY	05/30/07	
ENGRD ENGRB		
ISSUED SWITHUN	05/30/07	
APPLIED PRACTICES		
SCALE: DIMENSIONS	REF. NO: 4002B5828PNP5321	SHEET 1 OF 1

DISTRIBUTION: INDUCTION MOTOR OUTLINE
 SOLID SHAFT - HIGH THRUST - IEEE 841 FEATURES
 FWF: FR280 TEFC
 4002B5828PNP5364
 REV. 1

Marks:

Connection Diagram
GEM2034E-FIG7



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	128D6229PH1	4004D5284SZ1
Bearing	235A2508ET01	235A2508EB01
Slinger/Inproseal	4002B5918CD4	4002B5914AG5

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C6900G01
Fan Cover	4003C5528BN-G01

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	