

Product Information Packet

November 9, 2016

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

Model Number:	5KS284XAE6720C
Catalog Number:	V786
Instruction Manual:	GEK-95351
Connection Diagram:	GEM2034E-FIG7
Outline Drawing:	4002B5828PPP5341

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:	5KS284XAE6720C	Estimated Weight:	460 Lbs
Outline Drawing:	4002B5828PPP5341	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG7	Enclosure:	TEFC
Instruction Book:	GEK-95351	Encl Construction:	841
Design Code:	28BD1162A	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	L284LP10	Insulation Class:	H
Phases:	3	NEMA Design:	B
Poles:	4	Nominal Efficiency:	93.6 %
Output Power:	25HP 18.5KW	Guaranteed Efficiency:	92.4
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:	5212
Alt Service Factor:	--	Bearing - ODE:	6310-2ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

VERTICAL-841
 PREMIUM EFFICIENT MOTOR
 DE BRG 5212 ODE BRG 50BC03JP3
 INLINE MOTOR
 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:5KS284XAE6720C 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 - LP 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 .0015" TIR

RCF 5000 CPM, STATIC DEFLECTION .0014 INCHES &
CENTER OF GRAVITY 12.00 INCHES
SOLID SHAFT INLINE
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 8760 HOURS AT 1300 LB THRUST

Performance Characteristics

1st Winding 1st Connection

Design: 28BD1162A

Marks:

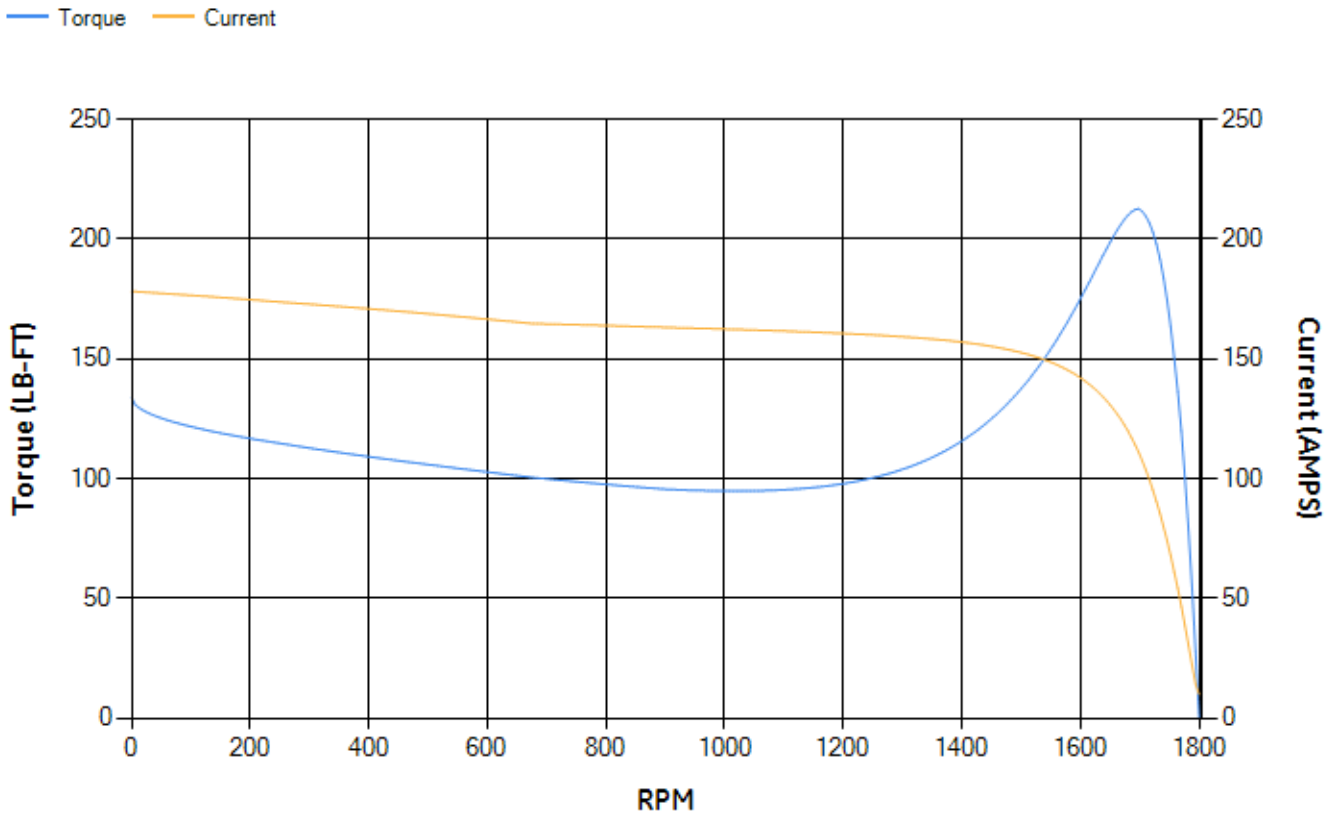
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	92.52	92.94	93.68	94.08	94.02	91.68	0.00
% PF	86.96	86.73	85.92	82.68	74.44	52.93	4.42
AMPS	36.35	33.38	29.05	22.56	16.72	12.05	9.8

TORQ(FL)#FT	73.83	TORQ(LR)%FL	181.28	TORQ(BD)%FL	286.96
AMPS(LR)	178.14	PF AT START	0.38		

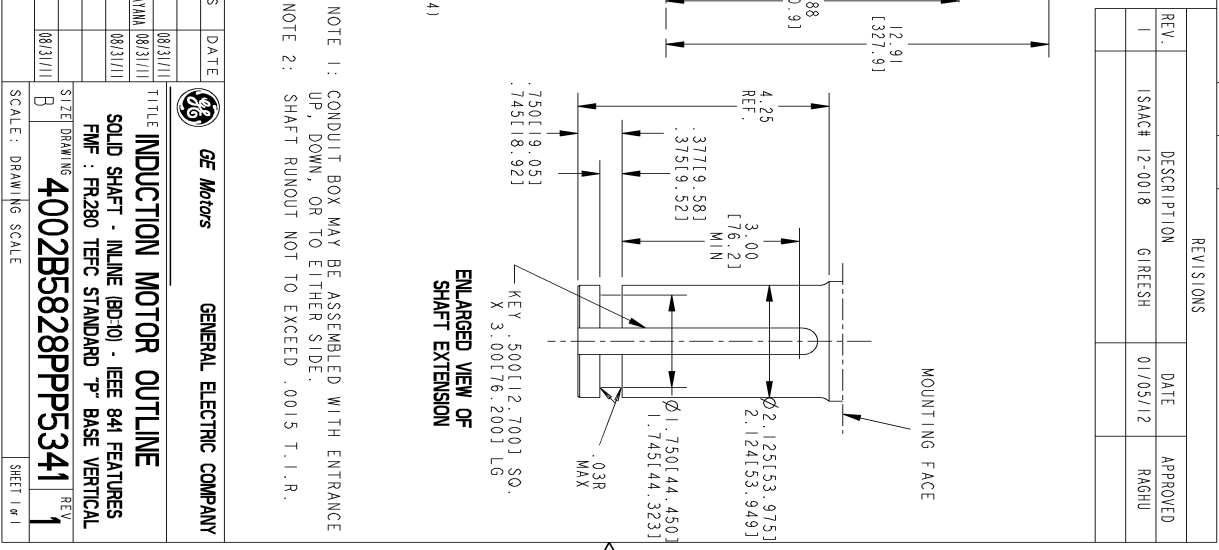
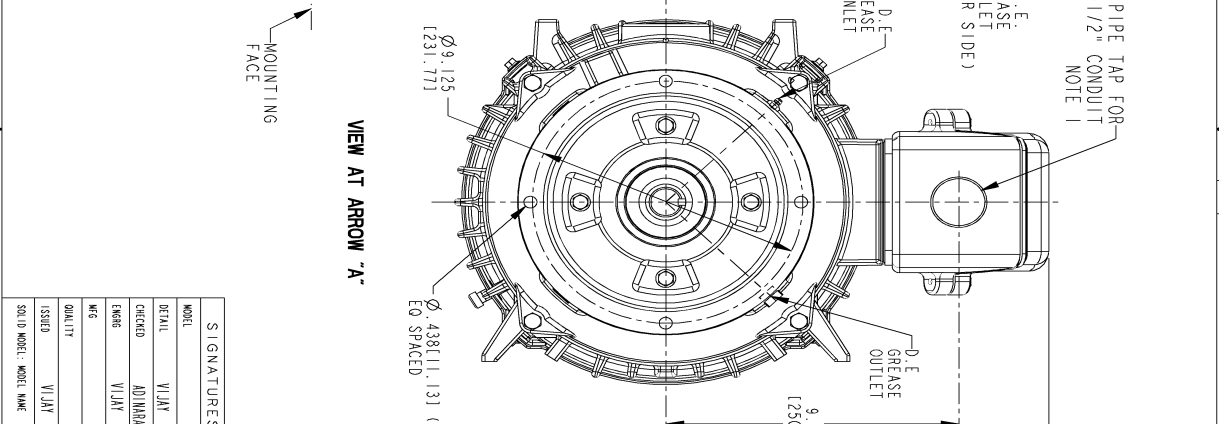
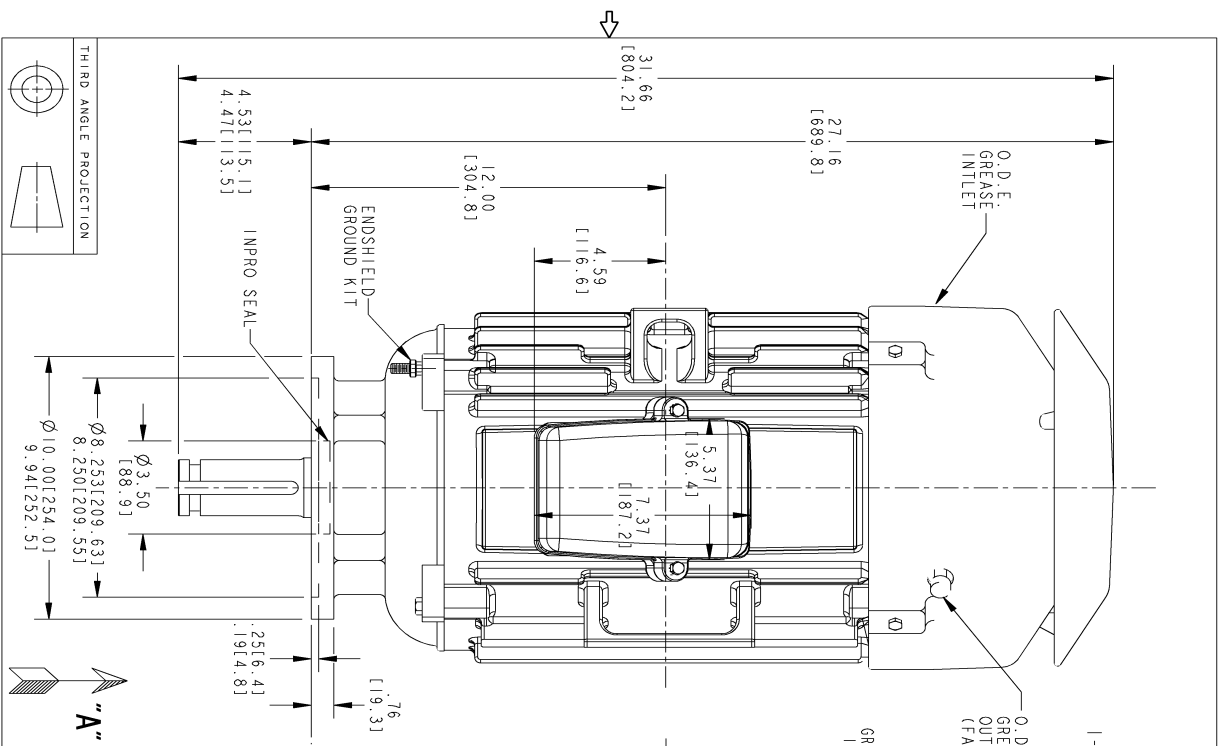
This motor is capable of two cold or one hot start with a maximum connected load inertia of 887 Lb-Ft Sq (37.34 Kg-meter Sq) at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 56 seconds. Safe stall time at 100% voltage is 100 seconds cold, 67 seconds hot. Rotor inertia is 4.93 Lb-Ft Sq (0.21 Kg-meter Sq).

Open Circuit A-C:	0.627	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:



REV.	DESCRIPTION	DATE	APPROVED
1	ISAAC # 12-0018 GIREESH	01/05/12	RAGHU

SIZE DRAWING NO. B 4002B5828PP5341

REV 1 SHEET 1

SIGNATURES	DATE
MODEL	08/31/11
DETAIL V/LAY	08/31/11
CHECKED A01NANANAN	08/31/11
ENGR V/LAY	08/31/11
ISSUED	08/31/11
SOLID MODEL MODEL NAME	

GE Motors GENERAL ELECTRIC COMPANY

TITLE INDUCTION MOTOR OUTLINE

SOLID SHAFT - INLINE (BD-10) - IEEE 841 FEATURES

FMF : FR280 TEFC STANDARD "P" BASE VERTICAL

SIZE DRAWING 4002B5828PP5341

SCALE: DRAWING SCALE

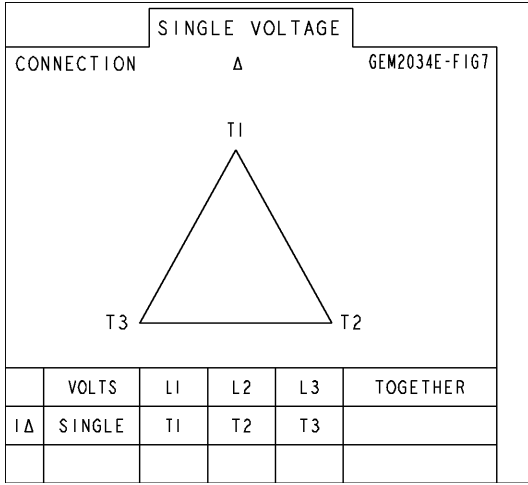
SHEET 1 OF 1

NOTE 1: CONDUIT BOX MAY BE ASSEMBLED WITH ENTRANCE UP, DOWN, OR TO EITHER SIDE.

NOTE 2: SHAFT RUNOUT NOT TO EXCEED .0015 T.I.R.

Marks:

Connection Diagram
GEM2034E-FIG7



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	128D6229PM1	4004D5284SZ1
Bearing		
Slinger/Inproseal		

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C6700G02
Fan Cover	

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	