

Product Information Packet

November 9, 2016

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

Model Number:	5KS182XAE6421A
Catalog Number:	V868
Instruction Manual:	GEK-95351
Connection Diagram:	GEM2034E-FIG1
Outline Drawing:	4002B5818PNP5323

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:	5KS182XAE6421A	Estimated Weight:	76 Lbs
Outline Drawing:	4002B5818PNP5323	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG1	Enclosure:	TEFC
Instruction Book:	GEK-95351	Encl Construction:	841
Design Code:	18BD1124AA	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	L182VP10	Insulation Class:	H
Phases:	3	NEMA Design:	B
Poles:	4	Nominal Efficiency:	89.5 %
Output Power:	3HP 2.2KW	Guaranteed Efficiency:	87.5
RPM:	1765	3/4 Load Efficiency:	89.7
Voltage:	460	KVA Code:	K
Hertz:	60	Max KVAR:	1.3
Amps - FL:	4.0	Power Factor:	78.0
Service Factor:	1.15	Bearing - DE:	7307
Alt Service Factor:	--	Bearing - ODE:	6206-2ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

EXCEPTION TO IEEE-STD-841-2009:THRUST BRG ON DE
VERTICAL-841
PREMIUM EFFICIENT MOTOR
DE BRG 35BT03XP3 ODE BRG 30BC02JP3
SEVERE DUTY
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:5KS182XAE6421A 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 55 CU IN-1.00 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
BURNDY SERVIT POST ON FRAME
SHAFT RUNOUT LIMIT .001" TIR



RCF 5000 CPM, STATIC DEFLECTION .0014 INCHES &
CENTER OF GRAVITY 6.5 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 1206 LB THRUST

Performance Characteristics

1st Winding 1st Connection

Design: 18BD1124AA

Marks:

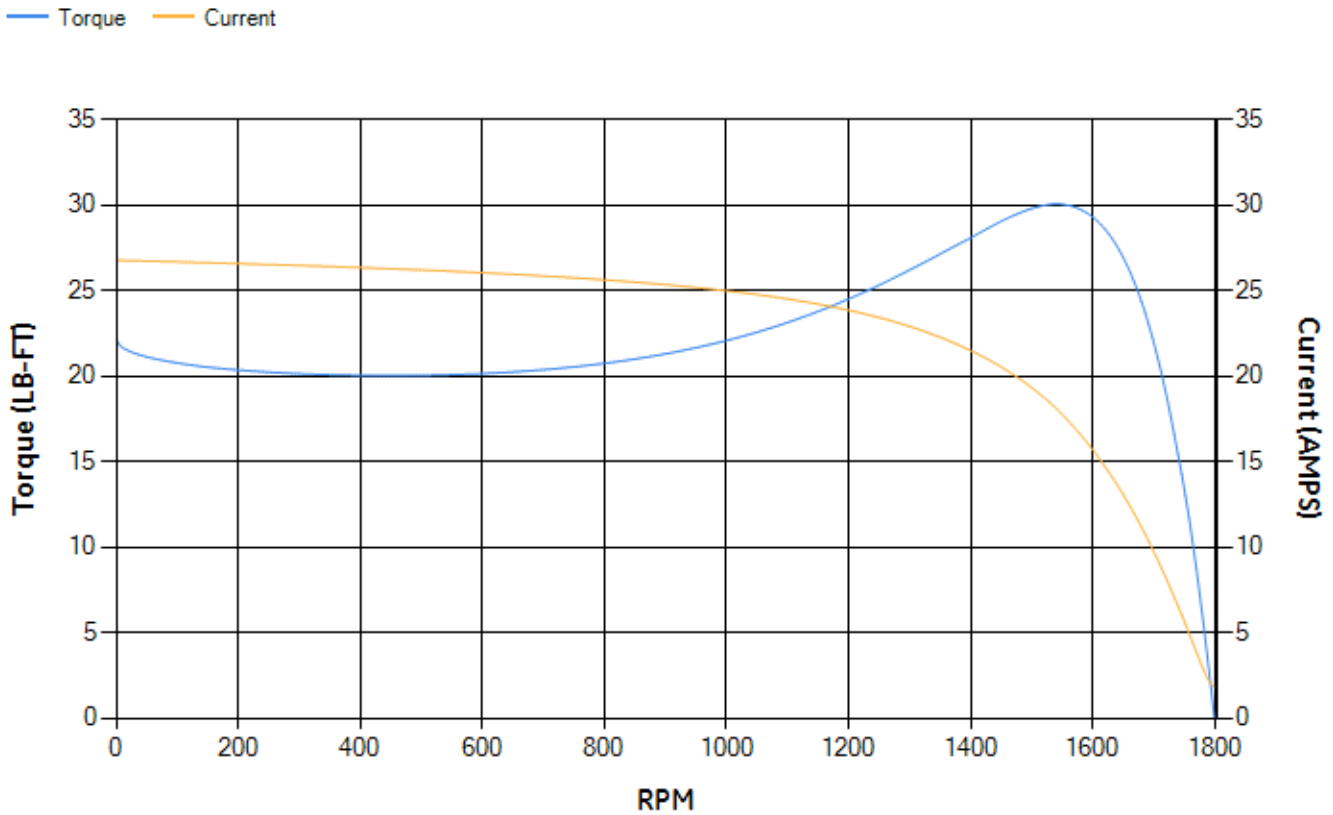
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	88.75	89.14	89.75	89.66	88.36	82.36	0.00
% PF	81.28	80.34	79.73	72.32	60.92	39.89	7.35
AMPS	4.87	4.51	3.92	3.25	2.61	2.14	1.82

TORQ(FL)#FT	8.93	TORQ(LR)%FL	247.75	TORQ(BD)%FL	333.63
AMPS(LR)	26.76	PF AT START	0.52		

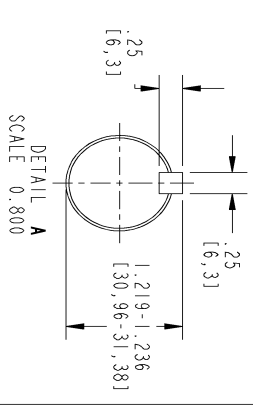
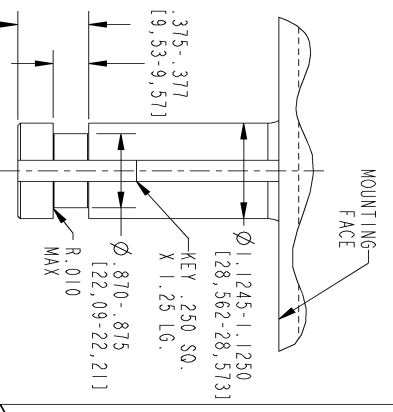
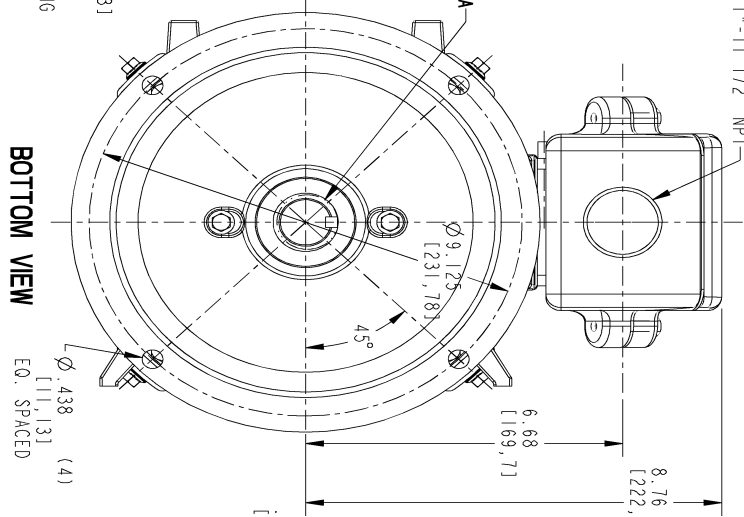
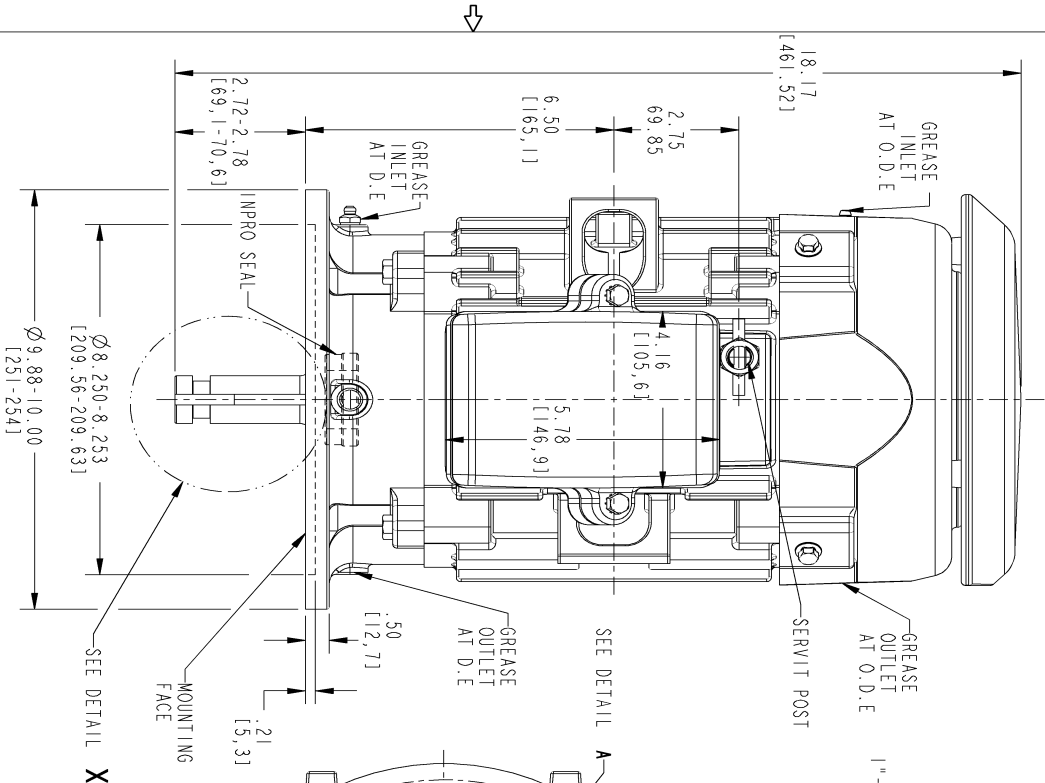
This motor is capable of two cold or one hot start with a maximum connected load inertia of 160 Lb-Ft Sq (6.74 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 47 seconds. Safe stall time at 100% voltage is 105 seconds cold, 83 seconds hot. Rotor inertia is 0.28 Lb-Ft Sq (0.01 Kg-meter Sq).

Open Circuit A-C:	0.271	Short Circuit D-C:	0.009
Short Circuit A-C:	0.014	X/R Ratio:	3.257
Stator Slots:	36	Rotor Slots:	28

Speed Torque Current Curve (First Connection, First Speed)



Marks:



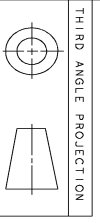
REV.	DESCRIPTION	DATE	APPROVED
1	ISAC #16-0423	05/04/2016	KARTHIK

SIZE DRAWING NO. 4002B5818PMP5323

REVISIONS

NOTE 1: ALL DIMENSIONS ARE IN INCHES. BRACKETED DIMENSIONS ARE IN METRIC (MILLIMETERS).

NOTE 2: SHAFT RUNOUT NOT TO EXCEED 0.001 T.I.R



THIRD ANGLE PROJECTION

SIGNATURES	DATE	GE Motors	GENERAL ELECTRIC COMPANY
MODEL	HARI 02/21/13		
DETAIL	HARI 02/21/13		
CHECKED	MANCH 02/21/13		
ENGR	MANCH 02/21/13		
QUALITY			
ISSUED	HARI 02/21/13		
SOLD MODEL	4002B5818PMP5323		

TITLE
INDUCTION MOTOR OUTLINE
 SOLID SHAFT-HIGH THRUST
 FWF: FRL180VP TFC (BD-10) IEEE-841 SPEC
4002B5818PMP5323
 SCALE: 0.400 REF. No.: 4002B5818PMP5322

REV 1

Marks:

Connection Diagram
GEM2034E-FIG1

