

# Product Information Packet

November 9, 2016

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

<b>Model Number:</b>	<b>5KS184XAE6722A</b>
<b>Catalog Number:</b>	<b>V781</b>
<b>Instruction Manual:</b>	GEK-95351
<b>Connection Diagram:</b>	GEM2034E-FIG1
<b>Outline Drawing:</b>	4002B5818PPP5325

Accessory Connection Diagrams			
<b>Bearing Thermocouple:</b>	None	<b>Heater:</b>	None
<b>RTD:</b>	None	<b>Thermistor:</b>	None
<b>Thermostat:</b>	None	<b>Winding Thermocouple:</b>	None
<b>Bearing RTD:</b>	None		

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**Marks:**

<b>MODEL NUMBER:</b>	<b>5KS184XAE6722A</b>	<b>Estimated Weight:</b>	101 Lbs
<b>Outline Drawing:</b>	4002B5818PPP5325	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG1	<b>Enclosure:</b>	TEFC
<b>Instruction Book:</b>	GEK-95351	<b>Encl Construction:</b>	841
<b>Design Code:</b>	18BD1001A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	L184LP10	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	4	<b>Nominal Efficiency:</b>	89.5 %
<b>Output Power:</b>	5HP 3.7KW	<b>Guaranteed Efficiency:</b>	87.5
<b>RPM:</b>	1755	<b>3/4 Load Efficiency:</b>	90.4
<b>Voltage:</b>	460	<b>KVA Code:</b>	J
<b>Hertz:</b>	60	<b>Max KVAR:</b>	2.0
<b>Amps - FL:</b>	6.6	<b>Power Factor:</b>	79.5
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	5307
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	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 5307 ODE BRG 30BC02JP3  
INLINE MOTOR  
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:5KS184XAE6722A 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 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 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 26280 HOURS AT 1200 LB THRUST

**Performance Characteristics**

1st Winding 1st Connection

**Design: 18BD1001A**

Marks:

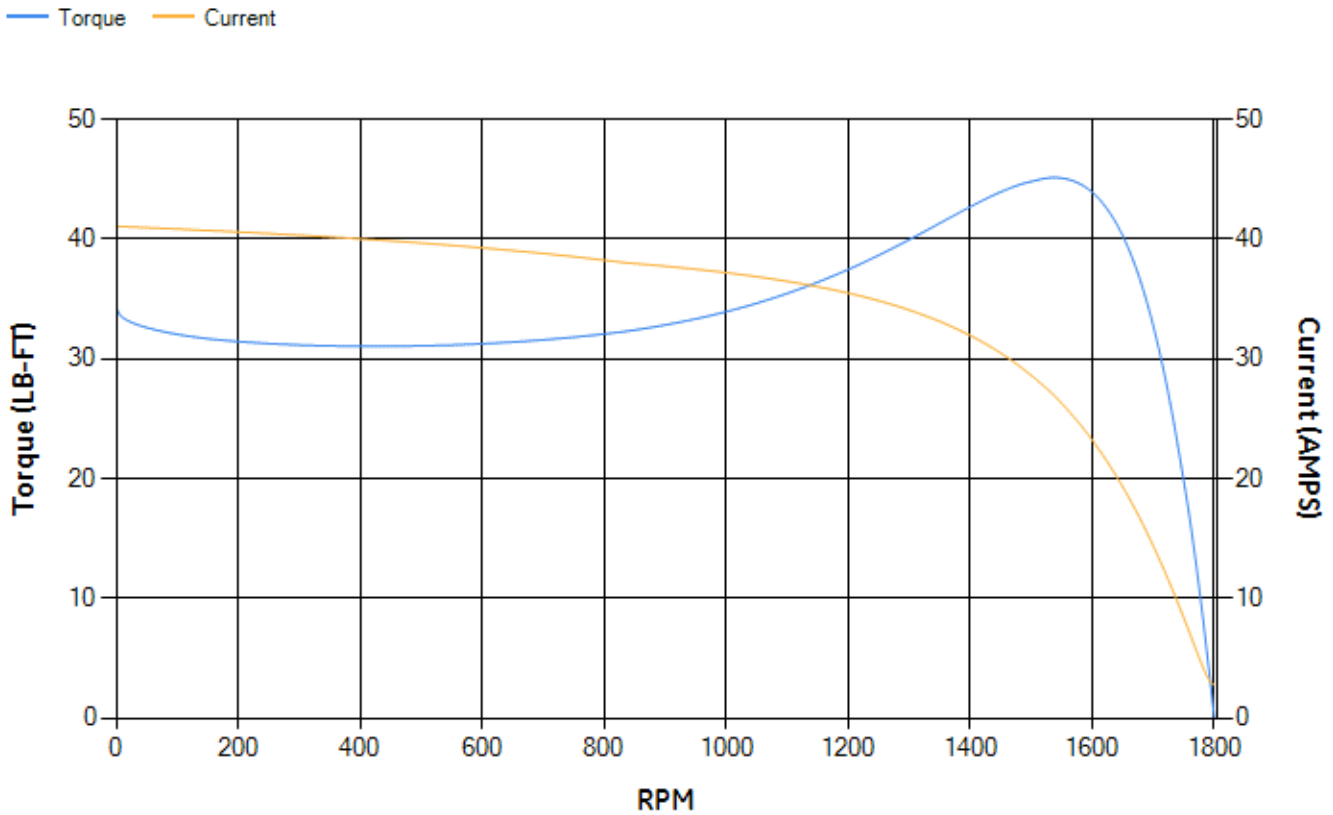
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	88.12	88.78	89.81	90.44	90.1	85.98	0.00
% PF	81.6	80.98	80.8	74.23	63.37	41.66	5.79
AMPS	8.14	7.49	6.45	5.23	4.1	3.27	2.74

TORQ(FL)#FT	14.97	TORQ(LR)%FL	228.66	TORQ(BD)%FL	298.67
AMPS(LR)	41.06	PF AT START	0.51		

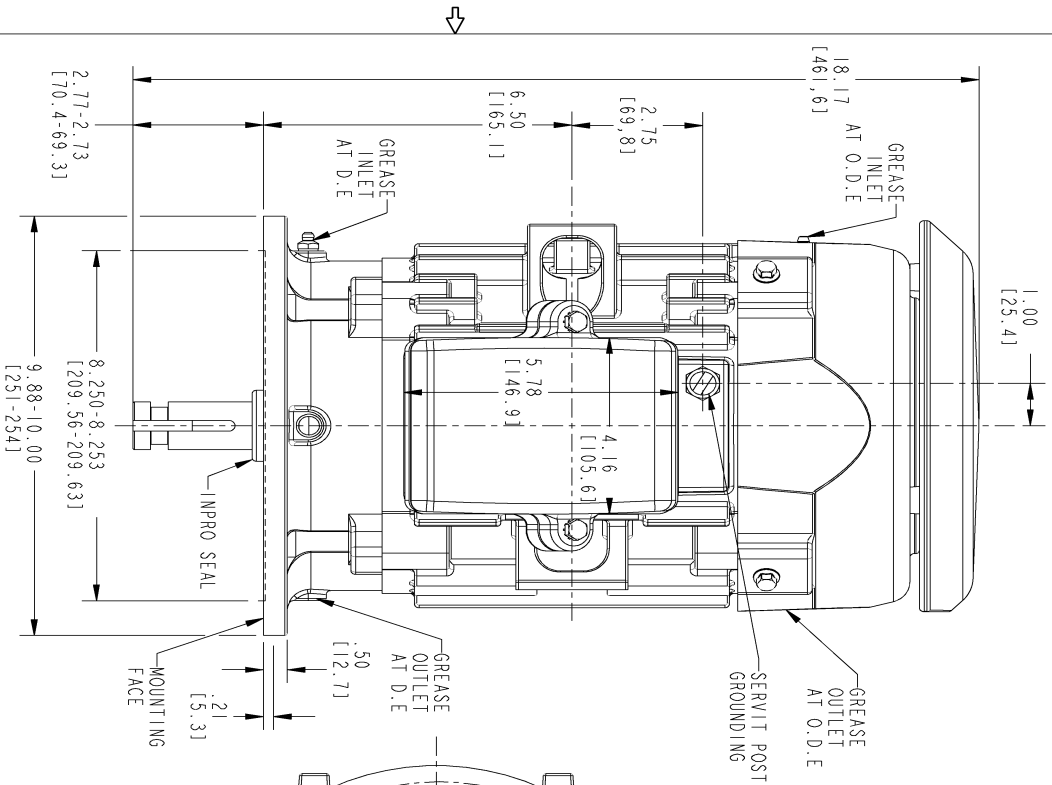
This motor is capable of two cold or one hot start with a maximum connected load inertia of 183 Lb-Ft Sq (7.7 Kg-meter Sq) at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 36 seconds. Safe stall time at 100% voltage is 79 seconds cold, 51 seconds hot. Rotor inertia is 0.35 Lb-Ft Sq (0.01 Kg-meter Sq).

Open Circuit A-C:	0.237	Short Circuit D-C:	0.008
Short Circuit A-C:	0.012	X/R Ratio:	3.151
Stator Slots:	36	Rotor Slots:	28

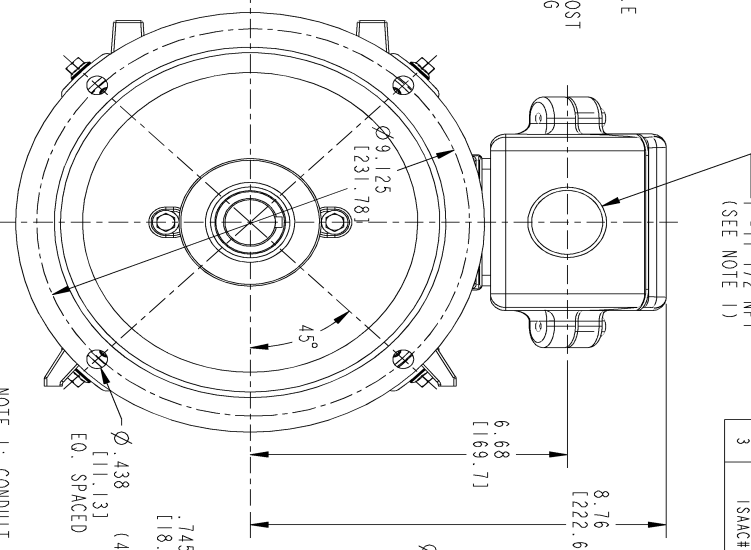
**Speed Torque Current Curve (First Connection, First Speed)**



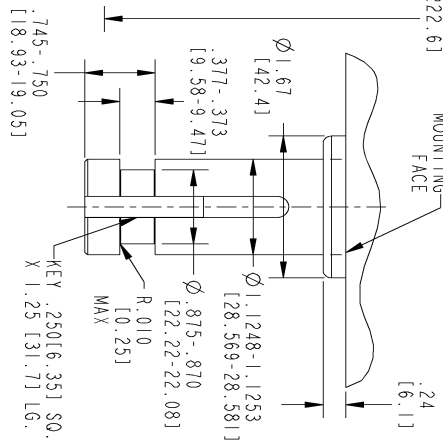
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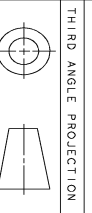
VIEW AT ARROW "A"



ENLARGED VIEW OF SHAFT EXTENSION



NOTE 1: CONDUIT BOX MAY BE ASSEMBLED WITH ENTRANCE DOWN OR TO EITHER SIDE.  
 NOTE 2: MOUNTING SURFACES WILL BE SQUARE AND CONCENTRIC WITH SHAFT WITHIN .004 T.I.R.  
 NOTE 3: SHAFT RUNOUT WILL NOT EXCEED .001 T.I.R.



"A"

MODEL	SMITHLIN IZ28201	SIGNATURES	DATE
DETAIL	HEMANTH IZ28201		
CHKD			
ENGR			
QC			
ISSUED	SMITHLIN IZ28201		
SOLD MODEL	4002B5818PP5325		

TITLE		INDUCTION MOTOR OUTLINE	
SOLID SHAFT INLINE WITH IEEE-941 SPEC		FME: FRIBOLP TFC 'P' BASE (BD-10)	
SIZE DRAWING	B	REV	3
SCALE: 0.400	REF. NO: 4002B5818PP5321	SHEET	1 of 1

REV.	DESCRIPTION	DATE	APPROVED
1	ISAAC 11-0298 KARTHIK	05/05/2011	VJAY
2	ISAAC# 11-0832 GIREESH	11/24/11	ADI
3	ISAAC# 13-0820 DHEERAJ	09/27/13	ADI

SIZE DRAWING NO. **4002B5818PP5325** 3  
 REVISIONS

Marks:

**Connection Diagram**  
**GEM2034E-FIG1**

