



**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.

<b>Model Number:</b>	<b>5KS184XAA221BW8</b>
<b>Catalog Number:</b>	<b>M6621</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG1
<b>Outline Drawing:</b>	4002B5818PAP5913

## 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>5KS184XAA221BW8</b>	<b>Estimated Weight:</b>	101 Lbs
<b>Outline Drawing:</b>	4002B5818PAP5913	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG1	<b>Enclosure:</b>	TEFC
<b>Instruction Book:</b>	GEI-56128	<b>Encl Construction:</b>	661
<b>Design Code:</b>	18BD1001A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	184T	<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>	88.5 %
<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>	NU206ECJ/C3
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	6206ZC3

Enclosure is Totally Enclosed Fan-Cooled

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Stamped Nameplate Notes:

API-STD-661  
 DE BRG 30RU02X3 ODE BRG 30BC02JP30  
 IP 56  
 ROLLER BEARING - FOR BELTED LOAD ONLY  
 STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KS184XAA221BW8 S/N: XXX  
 CSA CERTIFIED CSA09.2216219 FOR EX NA IIC 200 C GC  
 CL1ZONE2 AEXNAIIC 200 C; CL1DIV2 GRP ABCD 200 C  
 IN -25C <= AMB <= 40C, 1.0 SF ON SINE-WAVE PWR  
 SURF TEMP 200 C AT 1.15 SF ON SINE-WAVE PWR  
 OR 200 C VT OR 215 C CT OR 200 C CHP PWM CONTROL  
 ALTERNATE RATING FOR PWM CONTROL 1.0 SF 40 C AMB  
 VT 0-60 HZ, CT 6-60 HZ, CHP 60-90 HZ.



**Additional Information:**

4P - T EXTN  
STANDARD WALL MOUNT SHAFT UP  
C/BOX 55 CU IN-1.00 NPT  
VERTICAL MOUNT SHAFT UP  
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  
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  
B5F4C4 HIGH FATIGUE STEEL AISI 4142 SHAFT MATERIAL



**Performance Characteristics**

1st Winding 1st Connection

**Design: 18BD1001A**

**Marks:**

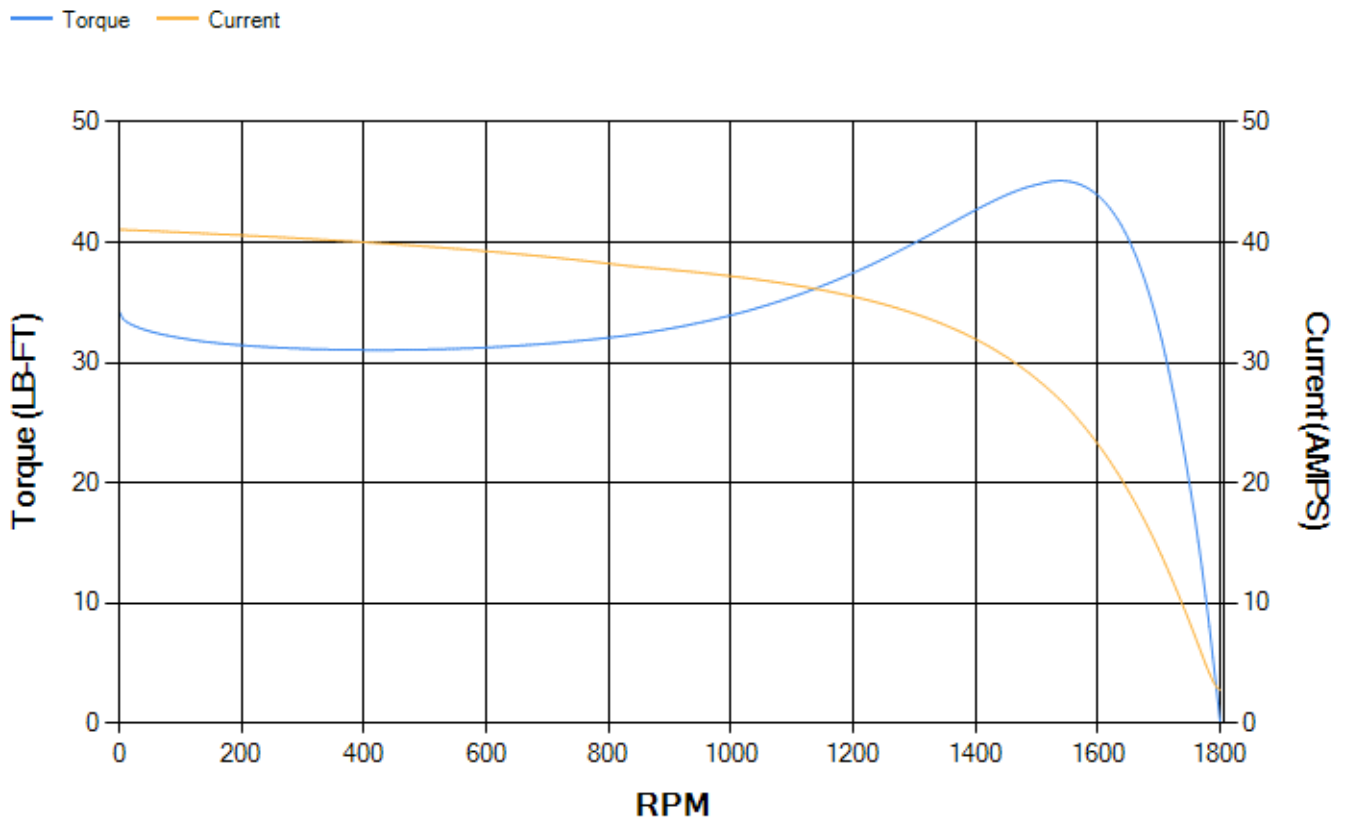
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	88.11	88.78	89.8	90.44	90.1	85.97	0.00
% PF	81.57	80.95	80.77	74.19	63.32	41.61	5.78
AMPS	8.14	7.49	6.45	5.23	4.1	3.27	2.75

<b>TORQ(FL)#FT</b>	14.97	<b>TORQ(LR)%FL</b>	228.65	<b>TORQ(BD)%FL</b>	298.64
<b>AMPS(LR)</b>	41.06	<b>PF AT START</b>	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 0.34 Lb-Ft Sq (0.01 Kg-meter Sq).

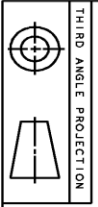
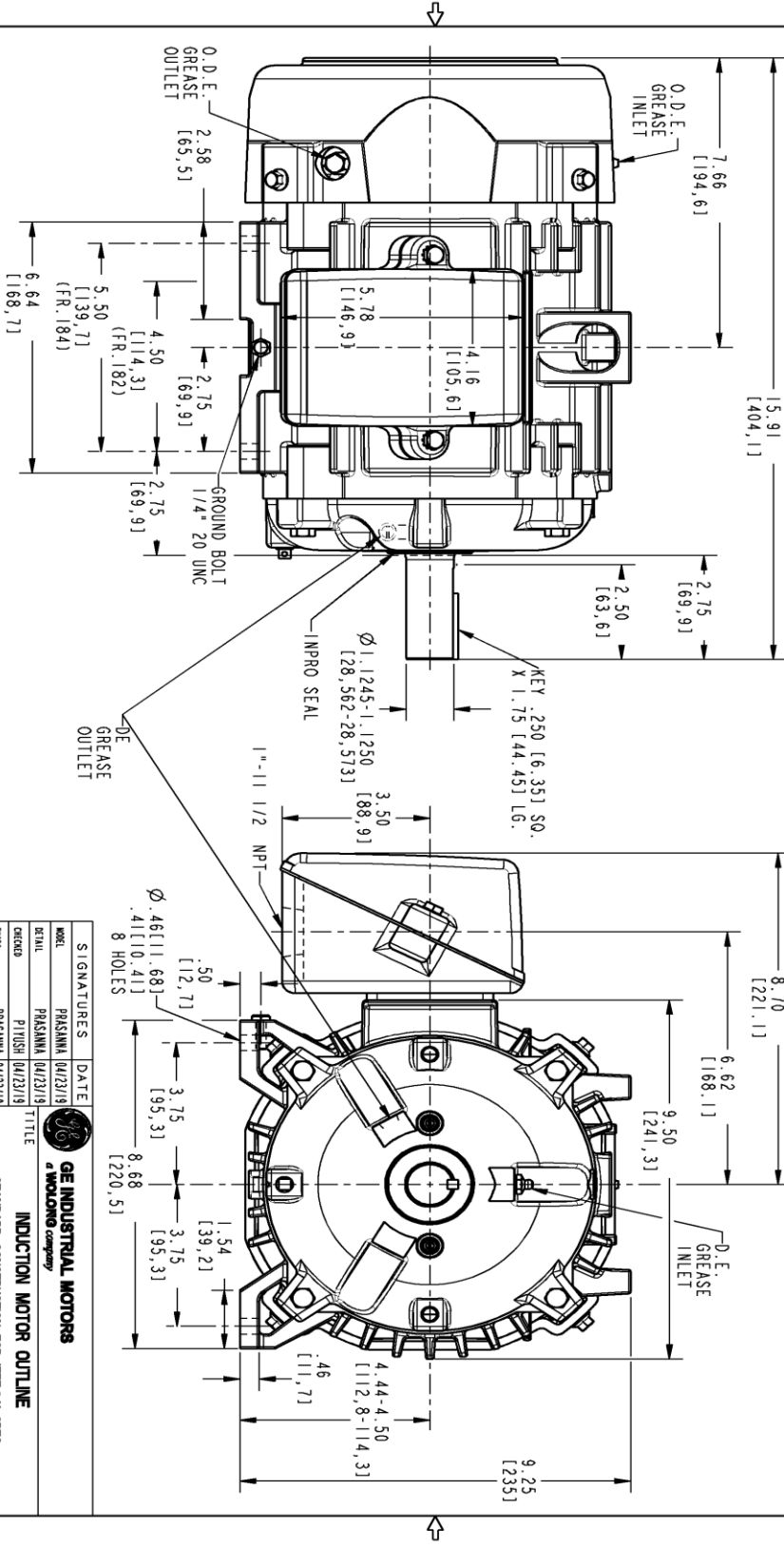
<b>Open Circuit A-C:</b>	0.236	<b>Short Circuit D-C:</b>	0.008
<b>Short Circuit A-C:</b>	0.012	<b>X/R Ratio:</b>	3.151
<b>Stator Slots:</b>	36	<b>Rotor Slots:</b>	28

**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: SHAFT RUNOUT WILL NOT EXCEED .001 T.I.R.  
 NOTE 4: ALL DIMENSIONS ARE IN INCHES, BRACKETED DIMENSIONS ARE IN METRIC (MILLIMETERS).



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REV.	DESCRIPTION	DATE	APPROVED

SIGNATURES	DATE
PRASANKA	04/23/19
PRASANKA	04/23/19
PRASANKA	04/23/19
PRASANKA	04/23/19
PRASANKA	04/23/19

**GE INDUSTRIAL MOTORS**  
 a WOLSKO company  
**INDUCTION MOTOR OUTLINE**  
 STANDARD CONSTRUCTION FOR IEEE-841 SEC  
 R182/184 T TFC, MW 65  
**4002B5818PAP5913 000**  
 SCALE: 0.400 REF. NO.: 4002B5818PAP5301  
 SHEET 1 of 1

**Marks:**

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



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	4004D5281PT1	4004D5281SG1
Bearing	235A2520AB01	235A2502AM01
Slinger/Inproseal	4002B5914GK2	4002B5914AG2

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	4001A5914AM-G01
Fan Cover	4003C5786PA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	4002B5721PA-G01

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

