

Product Information Packet

November 8, 2016

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

Model Number:	5KS256SAA104D1
Catalog Number:	M9749
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG7
Outline Drawing:	4002B5825PAP5201

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:	5KS256SAA104D1	Estimated Weight:	350 Lbs
Outline Drawing:	4002B5825PAP5201	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG7	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	X\$D
Design Code:	25BD0065B	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	65
Frame:	256T	Insulation Class:	H
Phases:	3	NEMA Design:	B
Poles:	2	Nominal Efficiency:	91 %
Output Power:	20HP 14.8KW	Guaranteed Efficiency:	90.2
RPM:	3540	3/4 Load Efficiency:	92.5
Voltage:	575	KVA Code:	G
Hertz:	60	Max KVAR:	2.3
Amps - FL:	18.1	Power Factor:	91.0
Service Factor:	1.15	Bearing - DE:	6309ZC3
Alt Service Factor:	1.00	Bearing - ODE:	6309ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

STAMP NP249A5564P051 AS BELOW:
 MODEL:5KS256SAA104D1 S/N: XXX
 CSA CERTIFIED CSA09.2216219 FOR EX NA IIC 200C GC
 CL 1 ZONE2 AEX NA IIC 200C;CL 1 DIV2 GRP ABCD 200C
 IN -40C <= AMB <= 40C, 1.0 SF ON SINE-WAVE PWR
 SURF TEMP 300C AT 1.15SF ON SINE-WAVE PWR
 OR 200 C VT OR 200 C CT OR 200 C CHP PWM CONTROL
 ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB
 VT 0-60 HZ, CT 15-60 HZ , CHP 60-90 HZ.

Additional Information:

2P - T EXTN
 STANDARD FLOOR MOUNT
 C/BOX 137 CU IN-1.25 NPT
 F1 CONDUIT BOX MOUNTING
 OIL RESISTANT SLEEVING ON LEADS

Performance Characteristics

1st Winding 1st Connection

Design: 25BD0065B

Marks:

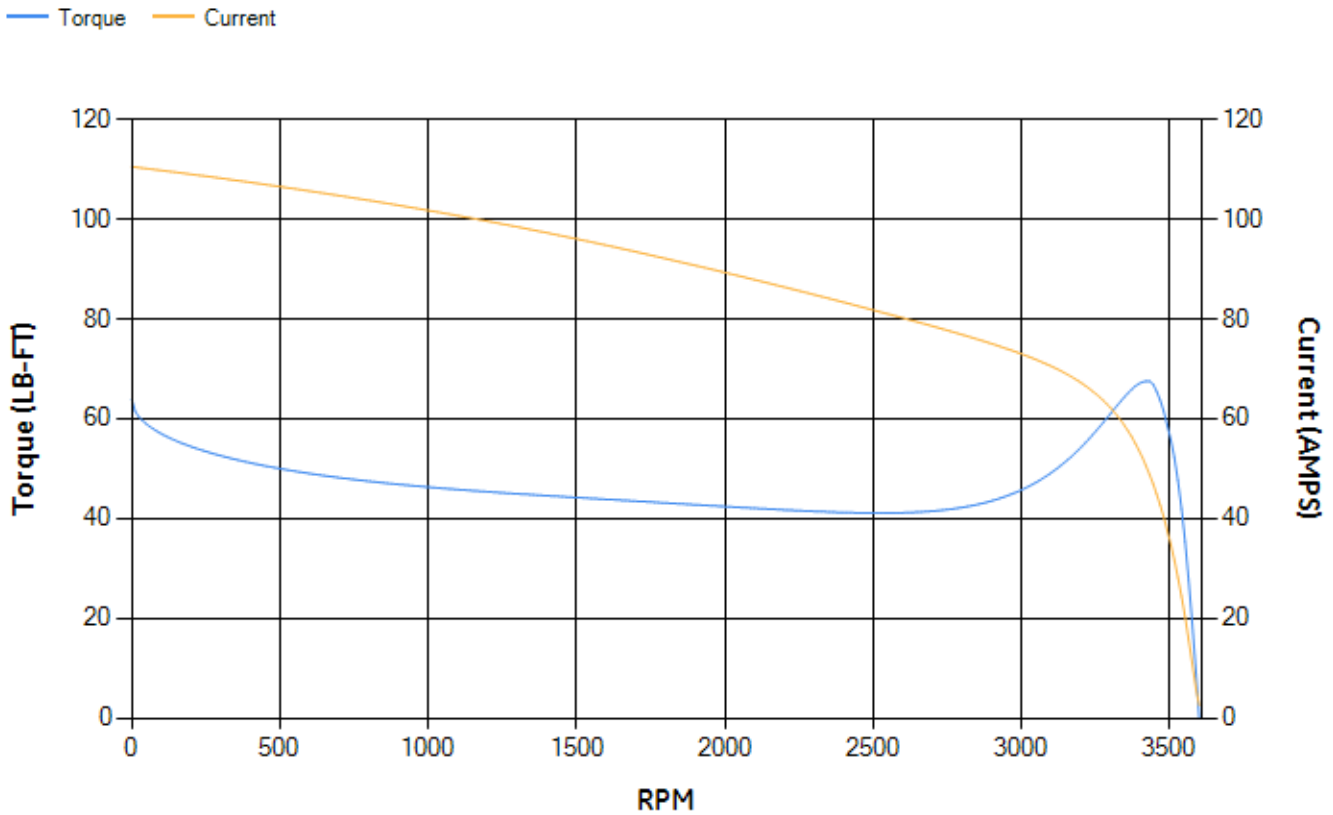
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	89.15	90.06	91.38	92.51	92.99	91.04	0.00
% PF	88.8	89.85	90.98	91.73	90.4	81.46	11.65
AMPS	23.64	21.28	18.01	13.24	8.91	5.05	2.52

TORQ(FL)#FT	29.66	TORQ(LR)%FL	215.56	TORQ(BD)%FL	226.73
AMPS(LR)	110.51	PF AT START	0.33		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 139 Lb-Ft Sq (5.85 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 44 seconds. Safe stall time at 100% voltage is 95 seconds cold, 55 seconds hot. Rotor inertia is 1.9 Lb-Ft Sq (0.08 Kg-meter Sq).

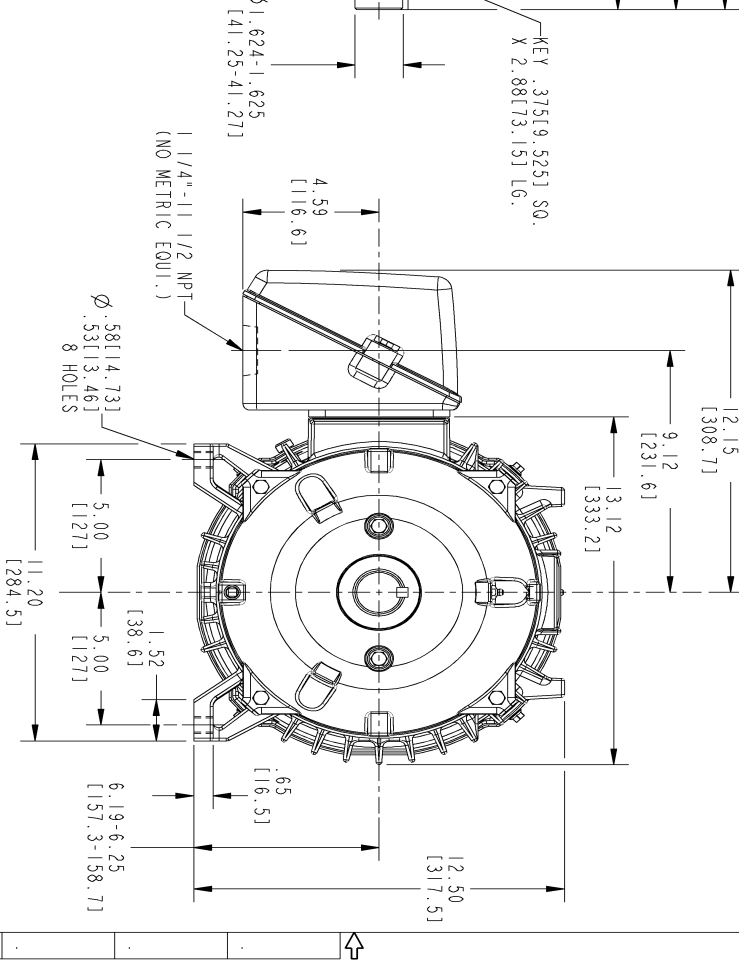
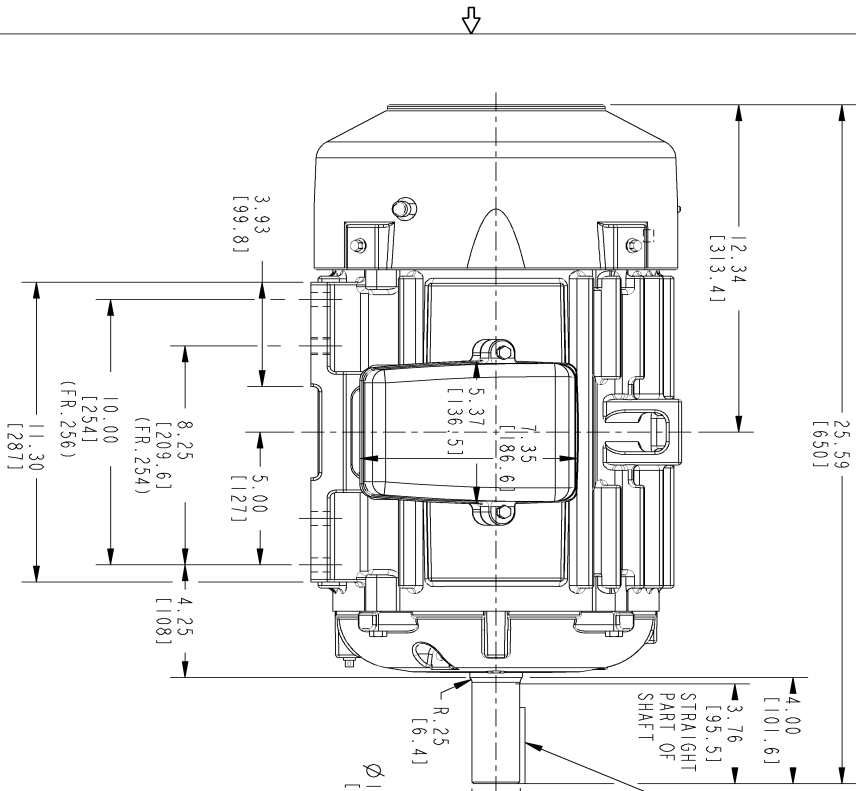
Open Circuit A-C:	1.251	Short Circuit D-C:	0.013
Short Circuit A-C:	0.028	X/R Ratio:	4.864
Stator Slots:	36	Rotor Slots:	26

Speed Torque Current Curve (First Connection, First Speed)



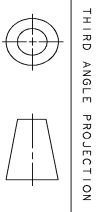
Marks:

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 .002 T.I.R.



REV.	DESCRIPTION	DATE	APPROVED
1	NOTE X50 ULTRA DELETED	05/20/03	SAJAJAY
2	ISAAC 09-0868	09/29/09	SAVANTHI
3	ISAAC 09-1036	12/02/09	RAJHU
4	ISSAC 12-0025	01/09/11	RAJHU

SIZE B DRAWING NO. 4002B5825PAP5201 SH 4 REV 4



SIGNATURES	DATE
DRAWN: GARY WARRNER	JAN 16/02
CHECKED: GARY WARRNER	JAN 16/02
ENGR: GARY WARRNER	SEP 03/02

APPLIED PRACTICES: B

SCALE: 0.250 REF. NO: 4002B5825PAP201 SHEET 1 OF 1

GE Industrial Systems
INDUCTION MOTOR OUTLINE
 STANDARD CONSTRUCTION
 FMR: FR250T TEFC

GENERAL ELECTRIC COMPANY
 Fort Wayne, Indiana

4002B5825PAP5201 REV. 4

DISTRIBUTION: PMP-18K15

Marks:

Connection Diagram
GEM2034E-FIG7



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	4004D5283PB1	4004D5283SE1
Bearing	235A2607AA01	235A2607AA01
Slinger/Inproseal	149C4399G02	149C4399G02

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C6704G02
Fan Cover	4003C5788PA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	4002B5728PA-G04

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	