

# Product Information Packet

January 12, 2017

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

<b>Model Number:</b>	<b>5KS286CAA114C</b>
<b>Catalog Number:</b>	<b>E9631</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	4002B5828RAP5221

## Accessory Connection Diagrams

<b>Bearing Thermocouple:</b>	None	<b>Heater:</b>	None
<b>RTD:</b>	None	<b>Thermistor:</b>	None
<b>Thermostat:</b>	3027JE-2A	<b>Winding Thermocouple:</b>	None
<b>Bearing RTD:</b>	None		

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**Marks:**

<b>MODEL NUMBER:</b>	<b>5KS286CAA114C</b>	<b>Estimated Weight:</b>	510 Lbs
<b>Outline Drawing:</b>	4002B5828RAP5221	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG7	<b>Enclosure:</b>	TEFC
<b>Instruction Book:</b>	GEI-56128	<b>Encl Construction:</b>	XP
<b>Design Code:</b>	28BD0124B	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	286TS	<b>Insulation Class:</b>	F
<b>Phases:</b>	3	<b>NEMA Design:</b>	A
<b>Poles:</b>	2	<b>Nominal Efficiency:</b>	92.4 %
<b>Output Power:</b>	30HP 22.2KW	<b>Guaranteed Efficiency:</b>	91.0
<b>RPM:</b>	3550	<b>3/4 Load Efficiency:</b>	93.4
<b>Voltage:</b>	575	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	5.1
<b>Amps - FL:</b>	26.4	<b>Power Factor:</b>	92.0
<b>Service Factor:</b>	1.00	<b>Bearing - DE:</b>	6310ZC3
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	6310ZC3

**Enclosure is Totally Enclosed Fan-Cooled**

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**Stamped Nameplate Notes:**

EXPLOSION PROOF MOTOR  
TEMP CODE T3C  
THERMOSTAT LEADS TB1-TB2  
STAMP NP249A5571AD "CL I (C & D) CL II (F & G)"

**Additional Information:**

2P - TS EXTN  
STANDARD FLOOR MOUNT  
C/BOX 250 CU IN-2.00 NPT  
F1 CONDUIT BOX MOUNTING  
AUX LEADS EXIT WITH MOTOR LEADS  
CL I C & D CL II F & G EXPLOSION PROOF MOTOR

**Performance Characteristics**

1st Winding 1st Connection

**Design: 28BD0124B**

**Marks:**

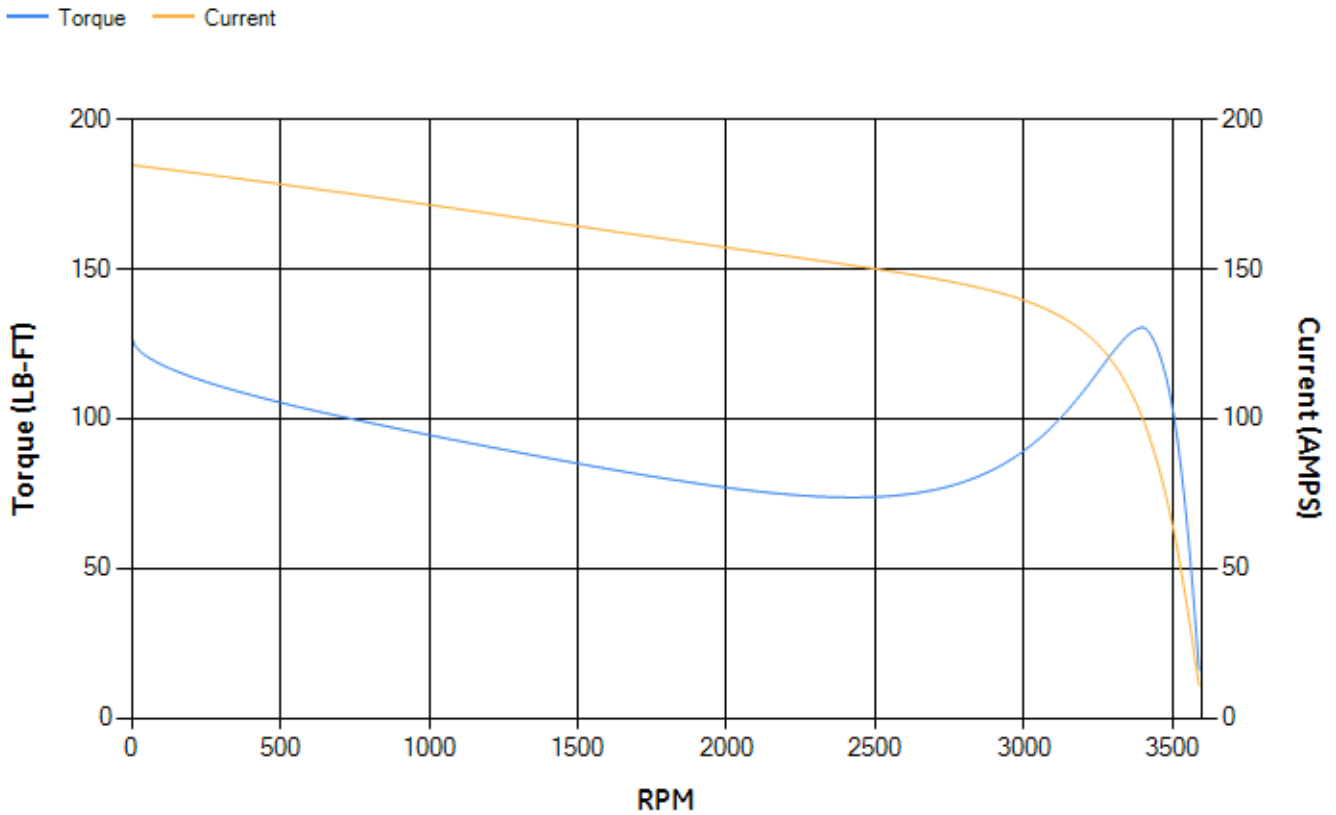
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	91.74	92.19	92.97	93.41	93.31	90.65	0.00
% PF	92.07	92.19	92.11	90.94	86.81	71.48	8.5
AMPS	33.24	30.39	26.23	19.83	13.87	8.67	5.71

<b>TORQ(FL)#FT</b>	44.35	<b>TORQ(LR)%FL</b>	287	<b>TORQ(BD)%FL</b>	293.25
<b>AMPS(LR)</b>	184.74	<b>PF AT START</b>	0.41		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 101 Lb-Ft Sq (4.25 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 16 seconds. Safe stall time at 100% voltage is 33 seconds cold, 19 seconds hot. Rotor inertia is 2.8 Lb-Ft Sq (0.12 Kg-meter Sq).

<b>Open Circuit A-C:</b>	0.926	<b>Short Circuit D-C:</b>	0.013
<b>Short Circuit A-C:</b>	0.025	<b>X/R Ratio:</b>	4.953
<b>Stator Slots:</b>	48	<b>Rotor Slots:</b>	38

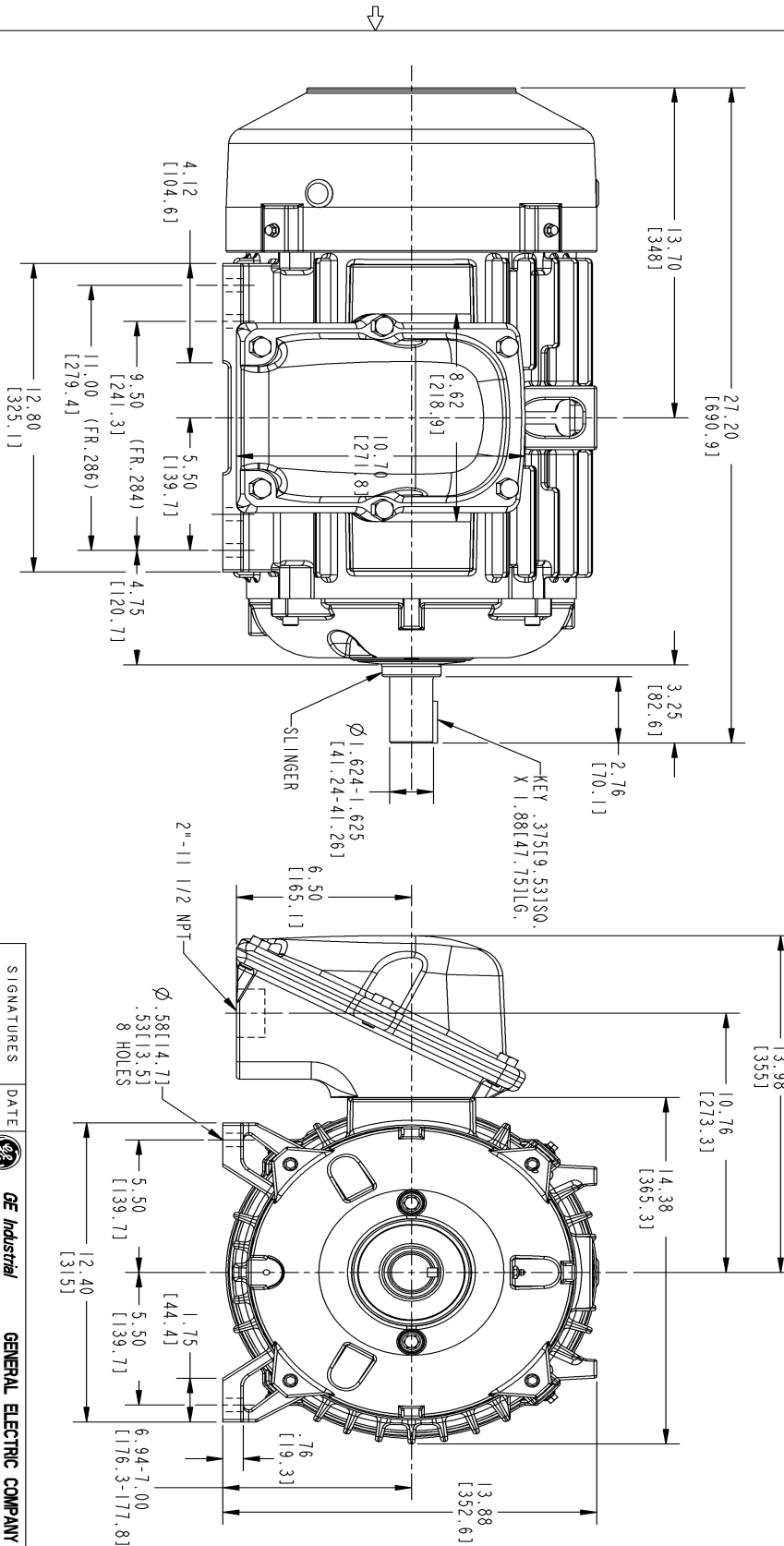
**Speed Torque Current Curve (First Connection, First Speed)**



NAME:501650421 OBJECT:4002B5828RAP5221 DATE:13-Mar-09 16:49:41

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.

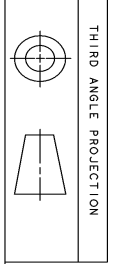


SIZE DRAWING NO. 4002B5828RAP5221

SH 2 REV

REVISIONS

REV.	DESCRIPTION	DATE	APPROVED
1	AS PER ISAC-07-1243	09/07/07	ROOPA
2	ISAC NO.#09-0164 PRADDEP	03/13/09	ADINARAYANA

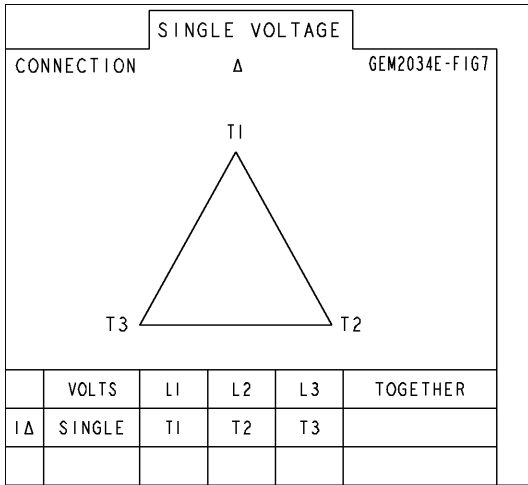


SIGNATURES	DATE	GE Logo	GENERAL ELECTRIC COMPANY
DRW: P. RAJU	02/02/14	Systems	Fort Wayne, Indiana
CHECKED: ADINARAYANA	02/02/14		
ENGR: ADINARAYANA	02/02/14		
ISSUED: P. RAJU	02/02/14		
APPLIED PRACTICES			
SIZE DRAWING	B		
SCALE: 0.250	REF. NO.: 4002B5828RAP221		
INDUCTION MOTOR OUTLINE			
STANDARD TS EXTENSION			
FNF: FR280TS TFC EXPLOSION PROOF			
4002B5828RAP5221			
REV. 2			

DISTRIBUTION: PMP-18K15

Marks:

**Connection Diagram**  
**GEM2034E-FIG7**



**Thermostat Connection**  
**3027JE-2A**



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	4004D5274PA1	4004D5274SA1
Bearing		
Slinger/Inproseal		

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

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	4002B5732RA-G01

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

