

Product Information Packet

November 8, 2016

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

Model Number:	5KS284SAA105D1
Catalog Number:	M9174
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG9
Outline Drawing:	4002B5828PAP5201

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:	5KS284SAA105D1	Estimated Weight:	460 Lbs
Outline Drawing:	4002B5828PAP5201	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG9	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	X\$D
Design Code:	28BD0159A	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	60
Frame:	284T	Insulation Class:	H
Phases:	3	NEMA Design:	B
Poles:	2	Nominal Efficiency:	91.7 %
Output Power:	25HP 18.5KW	Guaranteed Efficiency:	91.0
RPM:	3550	3/4 Load Efficiency:	92.5
Voltage:	230/460	KVA Code:	G
Hertz:	60	Max KVAR:	4.7
Amps - FL:	56.0/28.0	Power Factor:	91.0
Service Factor:	1.15	Bearing - DE:	6310ZC3
Alt Service Factor:	1.00	Bearing - ODE:	6310ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

STAMP NP249A5564P051 AS BELOW:
 MODEL:5KS284SAA105D1 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 260C AT 1.15SF ON SINE-WAVE PWR
 OR 200 C VT OR 215 C CT OR 215 C CHP PWM CONTROL
 ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB
 VT 0-60 HZ, CT 12-60 HZ , CHP 60-90 HZ.

Additional Information:

2P - T EXTN
 STANDARD FLOOR MOUNT
 C/BOX 137 CU IN-1.50 NPT
 F1 CONDUIT BOX MOUNTING
 OIL RESISTANT SLEEVING ON LEADS

Performance Characteristics

1st Winding 1st Connection

Design: 28BD0159A

Marks:

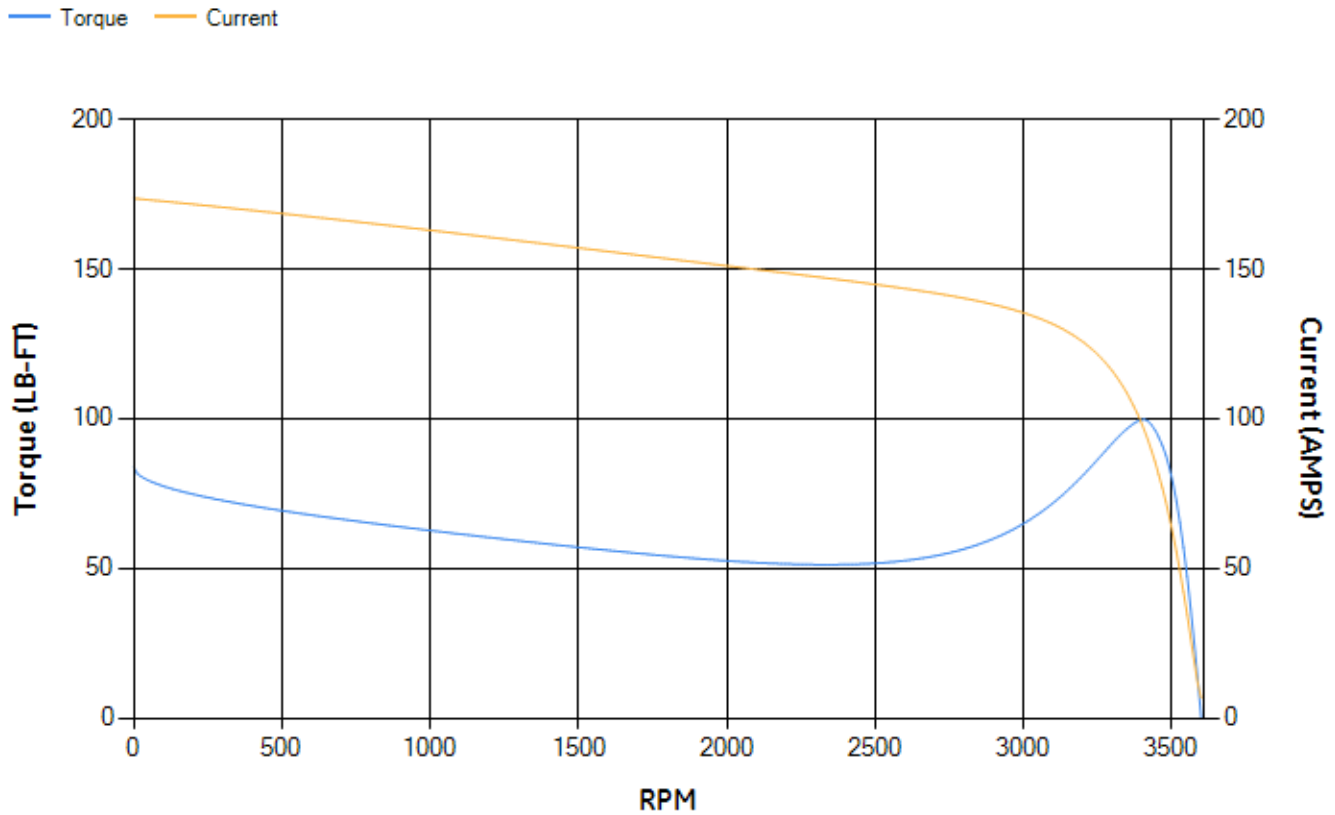
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	90.58	91.12	92	92.55	92.44	89.45	0.00
% PF	90.9	91.04	90.96	89.6	84.9	68.38	8.73
AMPS	35.52	32.44	27.96	21.16	14.91	9.56	6.61

TORQ(FL)#FT	36.99	TORQ(LR)%FL	226.67	TORQ(BD)%FL	268.66
AMPS(LR)	173.6	PF AT START	0.39		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 79 Lb-Ft Sq (3.33 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 18 seconds. Safe stall time at 100% voltage is 40 seconds cold, 22 seconds hot. Rotor inertia is 2.13 Lb-Ft Sq (0.09 Kg-meter Sq).

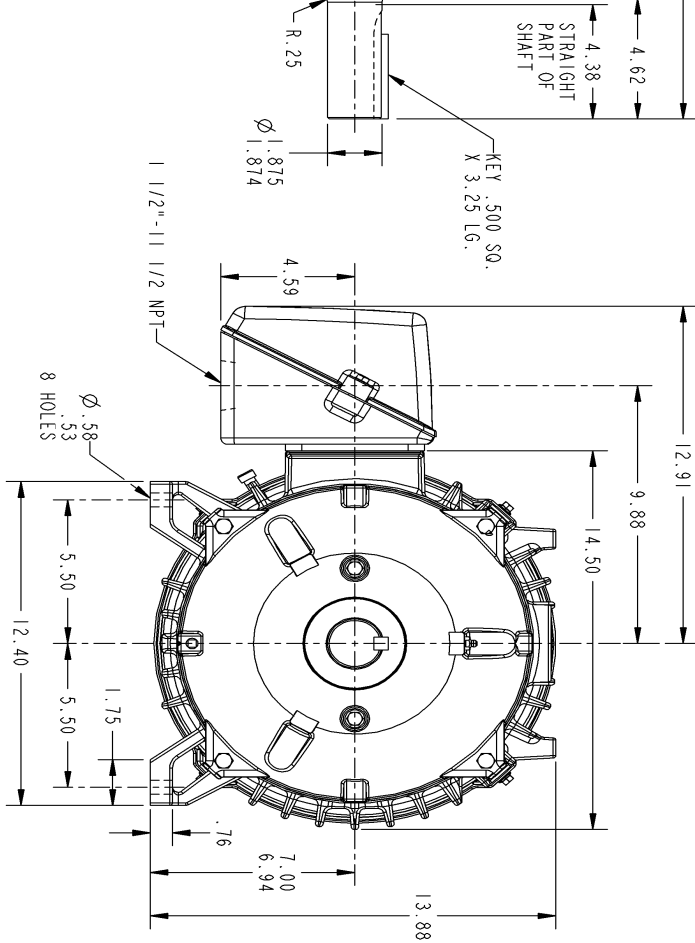
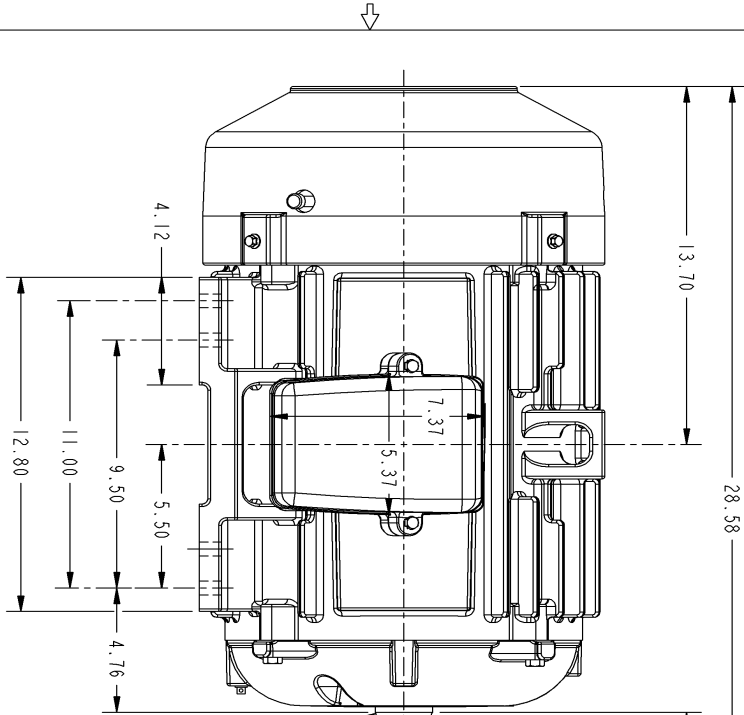
Open Circuit A-C:	0.798	Short Circuit D-C:	0.013
Short Circuit A-C:	0.027	X/R Ratio:	4.793
Stator Slots:	48	Rotor Slots:	38

Speed Torque Current Curve (First Connection, First Speed)



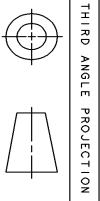
Marks:

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.



SIZE 0
 4002B5828PAP5201

REV.	DESCRIPTION	DATE	APPROVED



SIGNATURES	DATE	REV.
DRAWN	GARY WARDNER	DEC 13/01
CHECKED	GARY WARDNER	FEB 28/02
ISSUED	GARY WARDNER	MAR 03/02

APPLIED PRACTICES

SCALE: 0.250 REF. NO.: 4002B5828PAP5201 SHEET 1 OF 1

GE Industrial Systems
GENERAL ELECTRIC COMPANY
 Fort Wayne, Indiana

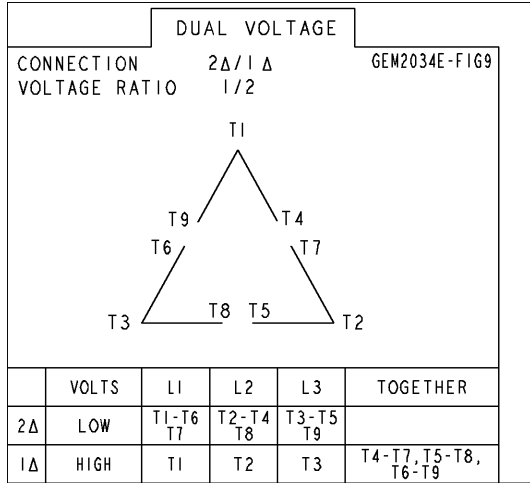
INDUCTION MOTOR OUTLINE
 STANDARD CONSTRUCTION

FME: FR280T TFC XSD ULTRA
4002B5828PAP5201

DISTRIBUTION: PMP-18K15

Marks:

Connection Diagram
GEM2034E-FIG9



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	4004D5284PB1	4004D5284SE1
Bearing	235A2608AA01	235A2608AA01
Slinger/Inproseal	149C4399G03	149C4399G03

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C6704G02
Fan Cover	4003C5789PA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	4002B5728PA-G01

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	