

Product Information Packet

February 25, 2017

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

Model Number:	5KS284DAE6044ZBZ
Catalog Number:	V4409
Instruction Manual:	GEI-56128-SP
Connection Diagram:	GEM2034E-FIG9
Outline Drawing:	4002B5828NMP5216

Accessory Connection Diagrams

Bearing Thermocouple:	None	Heater:	3027JE-1C
RTD:	None	Thermistor:	None
Thermostat:	None	Winding Thermocouple:	None
Bearing RTD:	None		

Table of Contents

Specification	01
Performance Characteristics	02
Outline Drawing	03
Connection Drawing(s)	04
Spare parts	05



Marks:

MODEL NUMBER:	5KS284DAE6044ZBZ	Estimated Weight:	420 Lbs
Outline Drawing:	4002B5828NMP5216	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG9	Enclosure:	WPI
Instruction Book:	GEI-56128-SP	Encl Construction:	OPEN
Design Code:	28BD1161A	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	L284TP16	Insulation Class:	H
Phases:	3	NEMA Design:	B
Poles:	4	Nominal Efficiency:	93.6 %
Output Power:	25HP 18.5KW	Guaranteed Efficiency:	92.4
RPM:	1780	3/4 Load Efficiency:	--
Voltage:	230/460	KVA Code:	G
Hertz:	60	Max KVAR:	7.4
Amps - FL:	58.8/29.4	Power Factor:	85.0
Service Factor:	1.15	Bearing - DE:	7310
Alt Service Factor:	--	Bearing - ODE:	6210-2ZC3

Enclosure is Weather Protected One

Stamped Nameplate Notes:

PREMIUM EFFICIENT MOTOR
 NEMA ENCL WPI AND CSA ENCL DP
 ROT CCW FACING ODE LEAD/PH SEQUENCE 1-2-3/1-2-3
 HTR LDS HE1-HE2 115V 60W
 INVERTER DUTY PER NEMA MG1 PART 31
 ALTERNATE RATING FOR PWM CONTROL:
 1.0 SF VAR TORQUE RANGE 20-60 HZ
 SUITABLE FOR 20HP, 190/380V,
 50 HZ WITH 57/28.5AMPS AND 1480 RPM AT 1.0 SF

Additional Information:

4P - TP EXTN
 C/BOX 137 CU IN-1.50 NPT
 AUX LEADS EXIT WITH MOTOR LEADS
 RCF 5000 CPM, STATIC DEFLECTION .0014 INCHES &
 CENTER OF GRAVITY 12.00 INCHES
 HOLLOW SHAFT HIGH THRUST
 OIL RESISTANT SLEEVING ON LEADS
 BEARING LIFE 8760 HOURS AT 2960 LB THRUST
 BALL TYPE COUPLING
 COUPLING WILL BE ORDERED SEPARATELY
 DP STOCK 10/24/2016
 ENGINEERED BY: BALASUBRAMANIANH/BILURP

Performance Characteristics

1st Winding 1st Connection

Design: 28BD1161A

Marks:

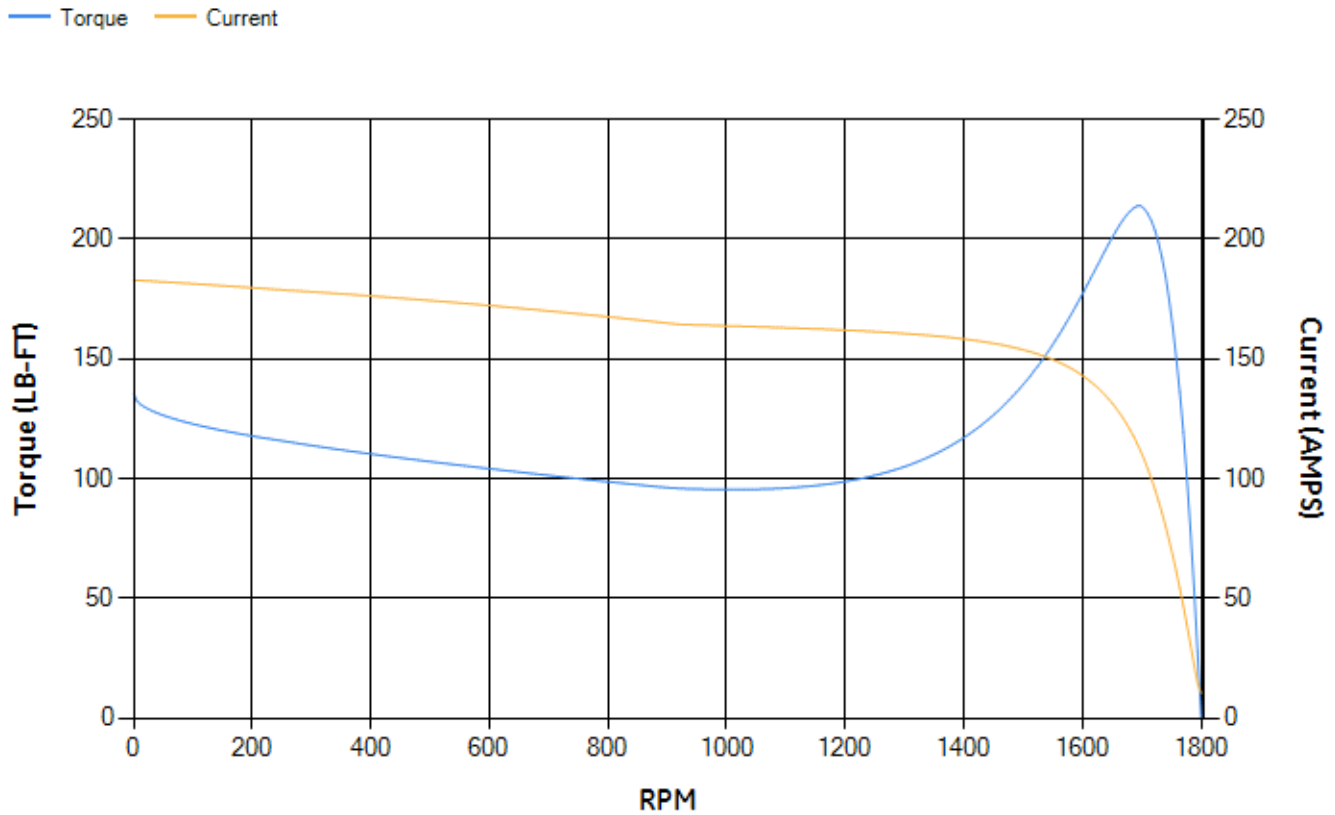
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	92.67	93.04	93.72	94.02	93.81	91.15	0.00
% PF	86.45	86.15	85.22	81.69	73.02	51.27	4.62
AMPS	36.51	33.57	29.28	22.85	17.08	12.52	10.32

TORQ(FL)#FT	73.74	TORQ(LR)%FL	183.55	TORQ(BD)%FL	289.22
AMPS(LR)	182.83	PF AT START	0.39		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 873 Lb-Ft Sq (36.75 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 54 seconds. Safe stall time at 100% voltage is 94 seconds cold, 80 seconds hot. Rotor inertia is 4.59 Lb-Ft Sq (0.19 Kg-meter Sq).

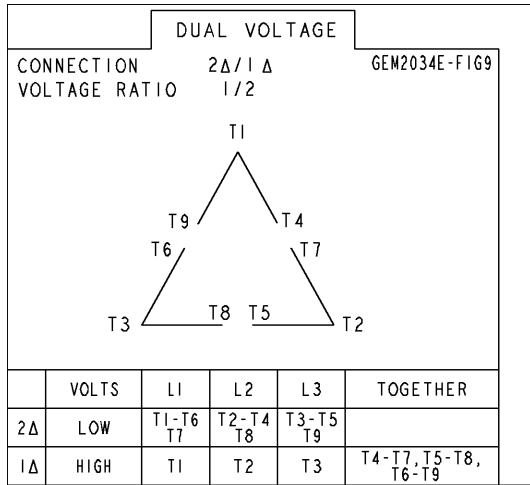
Open Circuit A-C:	0.665	Short Circuit D-C:	0.016
Short Circuit A-C:	0.03	X/R Ratio:	5.967
Stator Slots:	48	Rotor Slots:	40

Speed Torque Current Curve (First Connection, First Speed)



Marks:

Connection Diagram
GEM2034E-FIG9



Heater Connection
3027JE-1C



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

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	
Fan Cover	

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	