

# Product Information Packet

May 26, 2017

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

<b>Model Number:</b>	<b>5KAF365SAA323B</b>
<b>Catalog Number:</b>	<b>M9331</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG9
<b>Outline Drawing:</b>	239C5200AW

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		

## Table of Contents

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



**Marks:**

<b>MODEL NUMBER:</b>	<b>5KAF365SAA323B</b>		
<b>Outline Drawing:</b>	239C5200AW	<b>Service Factor:</b>	1.15
<b>Connection Diagram:</b>	GEM2034E-FIG9	<b>Alt Service Factor:</b>	--
<b>Instruction Book:</b>	GEI-56128	<b>ASD Type:</b>	PWM
<b>Design Code:</b>	36BD3073A	<b>Time Rating:</b>	CONT
<b>Type:</b>	KAF	<b>Enclosure:</b>	TEFC
<b>Frame:</b>	365T	<b>Encl Construction:</b>	A\$D
<b>Phases:</b>	3	<b>Ambient Max (°C):</b>	40
<b>Poles:</b>	6	<b>Alt Ambient Max(°C):</b>	--
<b>Output Power:</b>	50HP 37KW	<b>Insulation Class:</b>	H
<b>Output Power (2):</b>	50HP 37KW	<b>NEMA Design:</b>	-
<b>Output Power (3):</b>	0HP 0KW	<b>Nominal Efficiency:</b>	94.5 %
<b>RPM:</b>	1785	<b>Guaranteed Efficiency:</b>	93.6 %
<b>RPM (2):</b>	1190	<b>3/4 Load Efficiency:</b>	94.6 %
<b>RPM (3):</b>	0	<b>KVA Code:</b>	K
<b>Voltage:</b>	230/460	<b>Max KVAR:</b>	23.4
<b>Voltage (2):</b>	230/460	<b>Power Factor:</b>	79.0
<b>Voltage (3):</b>	6.5/13	<b>Service Factor SINE:</b>	1.15
<b>Hertz:</b>	90	<b>Service Factor ASD:</b>	1
<b>Hertz – 2:</b>	60	<b>Min Supply Wires:</b>	75 C
<b>Hertz – 3:</b>	0.6	<b>IP:</b>	55
<b>Amps – FL:</b>	113.8/56.9	<b>Vibration Limit:</b>	0.04 mm/s
<b>Amps – FL- 2:</b>	125.4/62.7	<b>Bearing Lubrication:</b>	NULL
<b>Amps - FL- 3:</b>	125.4/62.7	<b>Bearing - DE:</b>	6314ZC3
<b>Speed Range RPM:</b>	1-1190	<b>Bearing - ODE:</b>	6314ZC3
<b>Const HP RPM:</b>	1190-1785	<b>Estimated Weight:</b>	1010 Lbs

**Enclosure is Totally Enclosed Fan-Cooled**

**Stamped Nameplate Notes:**

INVERTER DUTY PER NEMAMG1 PART31 WITH PWM CONTROL  
 THERMOSTAT LEADS TB1-TB2 TRIP  
 IP 55  
 CLASS H INS WITH CLASS F RISE AT 1.15SF,

**Additional Information:**

6P - T EXTN  
 346 CU IN - 3.00" NPT  
 E/S GROUND BOLT MTD ON DE C/BOX SIDE NEAR FOOT  
 OIL RESISTANT SLEEVING ON LEADS  
 TACH PROVISION MOTOR  
 N.C. TRIP TSTAT LDS TO MAIN CONDUIT BOX  
 F1 MOUNTING  
 PAINTED ODE ACCESSORY RABBET  
 SHAFT GROUNDING RING MOUNTED ON DE BRG CAP  
 WHEN TACH / ENCODER IS USED, IT'S MANDATED TO BE  
 USED IN CONTROL CIRCUITS PER CLASS 2 CIRCUITS OF

CANADIAN ELECTRIC COMMISSION RULE 16-222(1)(A)

**Performance Characteristics**

1st Winding 1st Connection

**Design: 36BD3073A**

**Marks:**

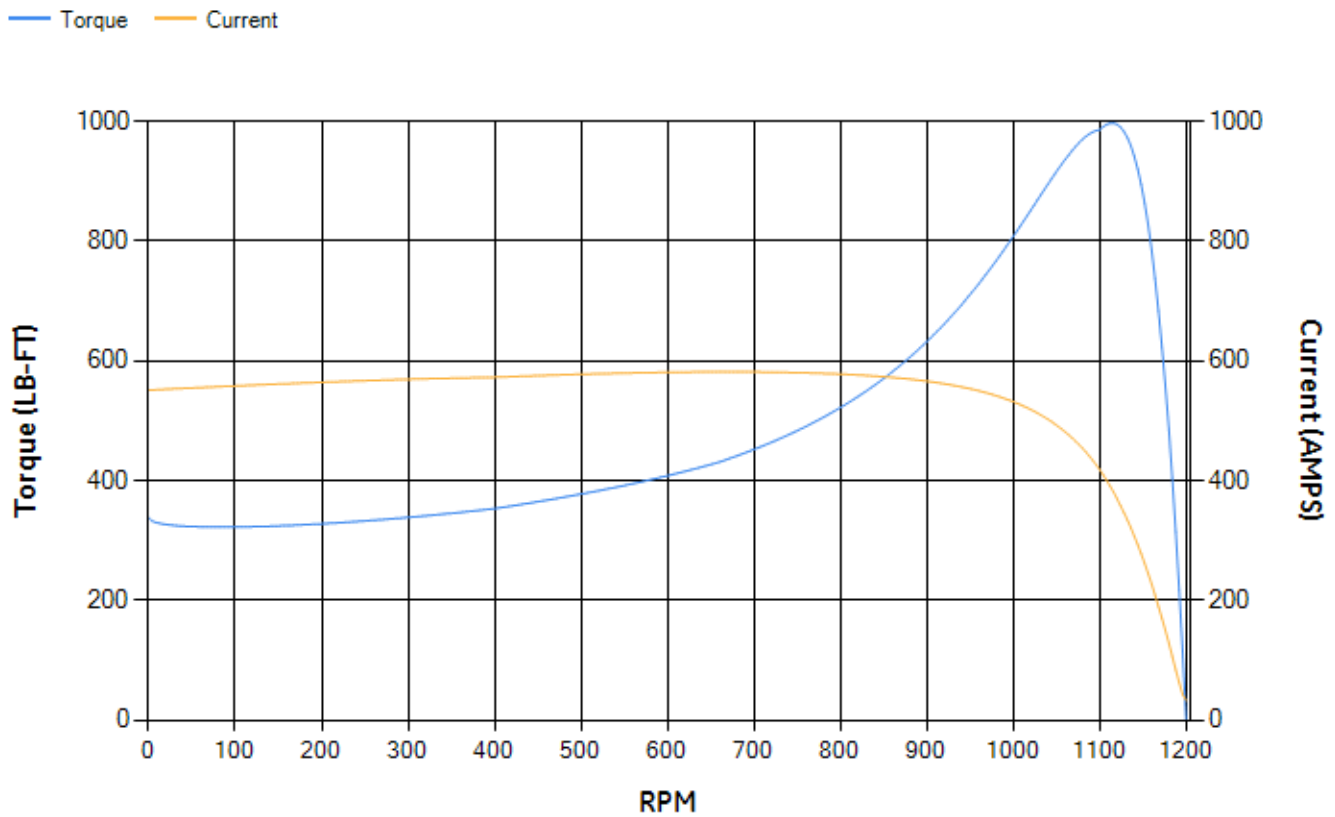
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	94.19	94.36	94.75	94.6	93.92	90.62	0.00
% PF	83.04	81.64	78.89	71.62	58.64	36.12	3.03
AMPS	74.79	69.86	62.48	51.8	42.49	35.74	32.59

<b>TORQ(FL)#FT</b>	220.78	<b>TORQ(LR)%FL</b>	153.14	<b>TORQ(BD)%FL</b>	445.27
<b>AMPS(LR)</b>	551.1	<b>PF AT START</b>	0.32		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 2352 Lb-Ft Sq (99.02 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 22 seconds. Safe stall time at 100% voltage is 54 seconds cold, 32 seconds hot. Rotor inertia is 21.76 Lb-Ft Sq (0.92 Kg-meter Sq).

<b>Open Circuit A-C:</b>	0.485	<b>Short Circuit D-C:</b>	0.012
<b>Short Circuit A-C:</b>	0.022	<b>X/R Ratio:</b>	4.545
<b>Stator Slots:</b>	72	<b>Rotor Slots:</b>	58

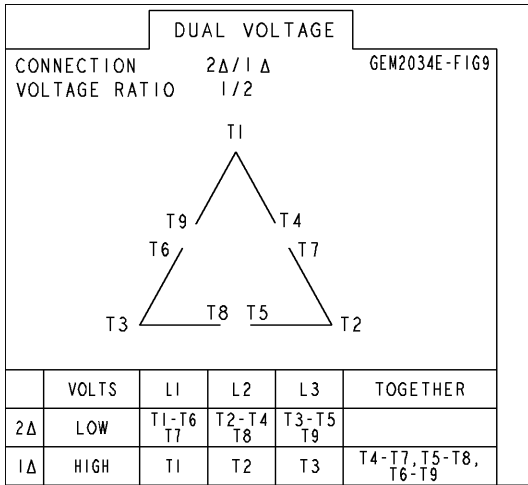
**Speed Torque Current Curve (First Connection, First Speed)**



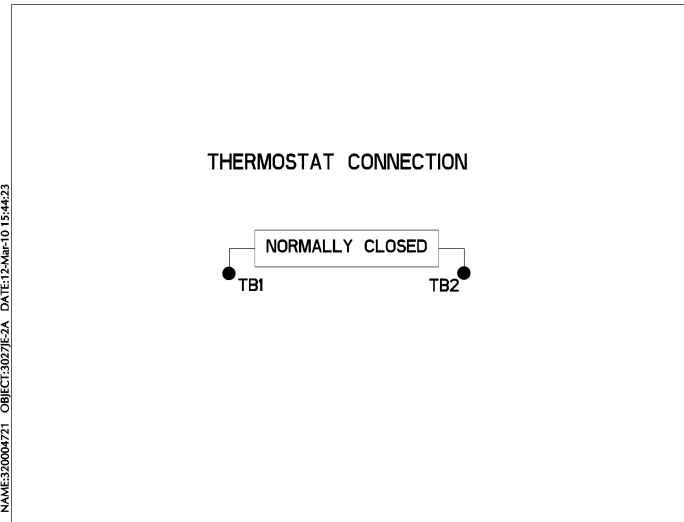


Marks:

**Connection Diagram**  
**GEM2034E-FIG9**



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



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E4250AC1	179B8802AA-G04
Bearing	235A2616AA01	235A2616AA01
Slinger/Inproseal	149C4399G05	149C4399G05

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C7100G01
Fan Cover	

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	149C4429AA2

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	