

GV/GV6 Common Specifications

Specifications	GV (GV6)-L3E	GV (GV6)-U3E	GV (GV6)-U6E	GV (GV6) -U12E	GV (GV6)-H20E
Drive Input Power					
Voltage	95-132VAC	95-265VAC	95-265 VAC	95-265 VAC	208-265 VAC
Phase	1Ø	1Ø	1Ø	1Ø	3Ø
Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
24V Keep Alive (Optional)	24 VDC +/- 20% @ x Amps max	24 VDC +/- 20%	24 VDC +/- 20%	24 VDC +/- 20%	24 VDC +/- 20%
Drive Output Power					
Bus Voltage	170 VDC	170/340 VDC	170/340 VDC	170/340 VDC	295/340 VDC
PWM/Nom. Ripple Freq	40/80 kHz	40/80 kHz	8/16, 16/32, 20/40 KhZ User selectable (current deration applies)		
Continuous Current *	3 Amps	3 Amps	6 Amps	12 Amps	20 Amps
Continuous Power *	0.44 kW	0.88 kW	1.75 kW	3.5 kW	5.9 kW
Peak Current	7.5 Amps	7.5 Amps	15 Amps	30 Amps	50 Amps
Peak Power	1.1 kW	2.2 kW	4.4 kW	8.75 kW	14.7 kW
Commutation	Sinusoidal	Sinusoidal	Sinusoidal	Sinusoidal	Sinusoidal

* Peak of sine wave

Performance

Accuracy

Solid lines represent 240VAC operation, continuous and peak. Dashed lines represent performance using 120VACinput. Speed/torque curves may vary +/- 10%.5 arc min (0.0833°), encoder dependant

Command Inputs – GV

Velocity and Torque Mode
 Position Mode

+/- 10 V
 Step & Direction/CW & CCW/Encoder Tracking

Inputs – GV

Enable, Reset
 Neg/Pos Limits
 User Fault
 Encoder

5-24VDC Selectable, 1/3 1/3 1/3 voltage switching threshold
 5-24VDC Selectable, 1/3 1/3 1/3 voltage switching threshold
 5-24VDC Selectable, 1/3 1/3 1/3 voltage switching threshold
 8 MHz Post Quadrature

Inputs – GV6

8 Programmable
 Enable, Reset
 Encoder

5-24VDC Selectable, 1/3 1/3 1/3 voltage switching threshold
 5-24VDC Selectable, 1/3 1/3 1/3 voltage switching threshold
 8 MHz Post Quadrature

Outputs – GV

Fault, At Limit
 Position Error
 Analog Monitors
 Encoder
 Relay

Open collector, 300mA sink capability
 Open collector, 300mA sink capability
 +/- 10 V scalable, 8 bit (not to be used as control functions)
 Programmable up to 1,024,000 counts/rev post quadrature
 Normally open, dry contact

Outputs – GV6

6 Programmable
 Analog Monitors
 Encoder
 Relay

Open collector, 300mA sink capabilities
 +/- 10 V scalable, 8 bit (not to be used as control functions)
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Communications

Type
 Baud Rate
 Daisy Chain – GV6

RS232/ RS485 (4-wire), 8 bit binary protocol
 Fixed at 9600
 Up to 99

Environmental

Temperature
 Humidity
 Shock/Vibration

Still air: 113°F (45°C), moving air: 122°F (50°C)
 0-95%, non-condensing
 Shock:15G half-sine @ 11 msec/ vibration: 2G, 10-2000 Hz

Protection

Short Circuit
 Brownout
 Over Temperature

Phase-to-phase, phase-to-ground
 AC drops below 85 VAC
 Shutdown fault at 131°F (55°C)

Standards

Physical

Compumotor motors
 Non-Compumotor motors
 Connectors
 Serial
 Motor and power
 Command and I/O
 Feedback
 +24VDC/Relay

UL, cUL, CE (LVD), CE (EMC)

 SM Series, NeoMetric Series, J Series, and Linear Motors
 Please refer to the GV and GV6 Hardware Installation Guide

 9-pin D-shell (male)
 Barrier screw terminal
 50-pin High density Amp Champ - .050 Series II (with screw attachment)
 26-pin High density Amp Champ - .050 Series II (with screw attachment)
 4-pin removable terminal block

* See product user guide

Drives & Drive/Controllers