

# GV6000

## DRIVES

### The multi-purpose Industrial AC Drive that solves virtually all variable speed drive applications

The Reliance Electric GV6000 drive incorporates V/Hz, Sensorless Vector, and Flux Vector control. From simple to complex, the GV6000 drive will meet your application needs in a platform that is expandable and easiest to use in its class. The GV6000 package provides simplicity and broad application flexibility with the performance you need in an ultra compact rackline design, ideal for stand-alone, retrofit, or integration into new system designs where high power density is required.

#### Standard and Optional Features:

A zero slotting backshell design with 3 methods of control as standard:

- General Purpose (Scalar V/F Hz)
- Sensorless Vector Control (SVC)
- Flux Vector Control (FVC)

Each method provides a cost effective means to address the wide range of applications required by today's demanding drives customers. All methods are standard without the need for expensive or complicated option boards. Encoder feedback interface is included at no additional cost on each drive.

A simple, yet powerful keypad is supplied with every Reliance Electric GV6000 drive with a backlit LCD display providing an interface to the drive that is user friendly yet fully functional, including our CopyCat function for transferring parameter sets between drives.

Diagnostics is a very important attribute of the Reliance Electric GV6000 product line. A dedicated fault/alarm key directs you to the fault and alarm queues which have integral troubleshooting tips for each fault or alarm that may occur.

Dynamic tracking is provided with an integral wireless I/O converter (standard on line 600-4 series). Other optional features include a wide variety of external communications modules, software utilities, remote keypads and full-line I/O keypads.



#### Specifications - I/O:

- 6 programmable digital inputs available in 24VDC or 115VAC
- 2 analog inputs  $\pm 10V/4-20mA$  (11 bit + sign)
- 3 programmable digital outputs (dry contacts: 1 form C, 1 form A, and 1 form B)
- 2 analog outputs  $\pm 10V/4-20mA$  (11 bit + sign)
- Encoder feedback input
- Frequency input for drive reference

#### Specifications - General:

- 0° to 50°C, 1000m altitude without derating
- 5 to 95% humidity, noncondensing
- Input voltage operating range exceeds  $\pm 10\%$  of nominal and 47 to 63 Hz frequency
- Overcurrent on single phase power less than 10% of the nominal current rating
- 97.5% efficiency, near full line voltage and rated current
- Sinusoidal PWM with adjustable carrier frequency; motor frequency 0 to 420 Hz
- Speed regulation 0.001% across a 120:1 speed range, 1000:1 operating range; 250 rad/sec bandwidth (Flux Vector Control)

#### Agency Certifications/Listings:

- UL, cUL, CE, C-UL, Australian Certification  
Note: CE and C-UL are not available on 575 volt drives.

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