### **Product Description**

### **The 1336 PLUS II**

#### The standard solution to your application needs.

The 1336 PLUS II provides ratings from 0.37-448 kW (0.5-600 HP) in three voltage ranges – 200-240V AC, 380-480V AC and 500-600V AC. The 1336 PLUS II is a micro-processor based adjustable frequency PWM AC drive. Its advanced design provides

exceptional reliability when controlling 3-phase motors. The output can be tuned to provide optimum performance for virtually any load condition. Selectable *Sevences vectors* or V/Hz operation provides outstanding motor control.

### Simplicity

#### Design and programming simplicity is evident in:

- Condensed packaging that allows for easy mounting, installation and wiring in all types of applications.
- Common assembly parts that reduces the need to stock a multitude of parts.
- Easy to program parameters that are organized in a group and element structure for quick access to related functions.
- Simple tuning for optimum torque performance.

- An easy to read Supertwist Liquid Crystal Display gives 2 lines of 16 characters each for easy "one finger" programming and drive monitoring.
- Serial communications that provide easy integration and access to peripheral equipment – Fully compatible with all Allen-Bradley PLC<sup>®</sup> or SLC<sup>™</sup> equipment.
- Common options that are used throughout the entire family of Drives.

### Flexibility

## Digitally programmable to help provide precise and accurate control.

The I336 PLUS II uses digitally programmable features to achieve precise and consistently accurate control, setup and operation. The drive can be programmed locally from the Human Interface Module or through a serial communications port using a PLC, SLC, or **DriveTools**<sup>™</sup> programming software.

### Performance

#### Powerful algorithms provide unparalleled **SERIEGALESS VECTOR** performance.

Starting acceleration and running torque in excess of 250% combined with a constant torque speed range of 120:1 allow the 1336 PLUS II to handle the tough applications other drives can't.

## Configurable I/O allows simple connection to many customer preformed control schemes.

Control inputs and outputs can be programmed to meet nearly every application requirement.

# **Specifications**

### **Protection Specifications**

	200-240V Drive	380-480V Drive	500-600V Drive
AC Input Overvoltage Trip	285V AC	570V AC	690V AC
AC Input Undervoltage Trip	138V AC	280V AC	343V AC
Bus Overvoltage Trip	405V DC	810V DC	1013V DC
Bus Undervoltage Trip	200V DC	400V DC	498V DC
Nominal Bus Voltage	324V DC	648V DC	810V DC
Heat Sink Thermistor	Monitored by microprocessor overtemp trip.		
Drive Overcurrent Trip	Software Current Limit:20 to 160% of VT rated current.Hardware Current Limit:180 to 250% of VT rated current (dependent on drive rating).Instantaneous Current Limit:220 to 300% of VT rated current (dependent on drive rating).		
Line transients	Up to 6000 volts peak per IEEE C62.41-1991.		
Control Logic Noise Immunity	Showering arc transients up to 1500 volts peak.		
Power Ride-Thru	15 milliseconds at full load (refer to <b>Page 13</b> ).		
Logic Control Ride-Thru	0.5 seconds minimum, 2 seconds typical (refer to Page 13).		
Ground Fault Trip	Phase-to-Ground on Drive Output.		
Short Circuit Trip	Phase-to-Phase on Drive Output.		

<b>Environmental Specifications</b>			
Altitude	1000 m (3300 ft) maximum without derating. (refer to the Derating Guidelines on <b>Pages 56-60</b> ).		
Ambient Operating Temperature	IP00, Open: IP20, NEMA Type 1: IP54, NEMA Type 12: IP65, NEMA Type 4: (refer to the Derating Guidelines (	0 to 50 degrees C (32 to 122 degrees F). 0 to 40 degrees C (32 to 104 degrees F). 0 to 40 degrees C (32 to 104 degrees F). 0 to 40 degrees C (32 to 104 degrees F). on <b>Pages 56-60</b> ).	
Storage Temperature (all constructions)	- 40 to 70 degrees C (- 40 to 158 degrees F).		
Relative Humidity	5 to 95% non-condensing.		
Shock	15G peak for 11 ms duration (±1.0 ms).		
Vibration	0.006 inches (0.152 mm) displacement, 1G peak.		
Agency Certification	U.L. Listed CSA Certified		
	Marked for all applicable directives <sup>1</sup>		
	Emissions	EN 50081-1 EN 50081-2 EN 55011 Class A EN 55011 Class B	
	Immunity	EN 50082-1 EN 50082-2 IEC 801-1, 2, 3, 4, 6, 8 per EN 50082-1, 2	
	Low Voltage	EN 60204-1 PREN 50178	

<sup>1</sup>Note: Installation guidelines called out in Appendix C of the 1336 PLUS II User Manual (publication 1336 PLUS-5.3) must be adhered to.