

## AC Variable Speed Controllers – Why use an AC Variable Speed Controller?

A “Variable” frequency drive uses an electronic controller to monitor the amount of electrical power being supplied to the motor. It adds more current/power when it’s needed and reduces current/power when it’s not needed.

Single speed drives do not control the amount of power being supplied to the motor. When the power is turned on, the motor starts abruptly at full current, which subjects the motor to high torque and current surges up to 10 times the motor’s full load capacity.

A variable speed frequency drive provides a soft start, gradually ramping up a motor to operating speed. This gradual increase in current, lessens mechanical and electronic stress on the motor which reduces maintenance and repair costs and extends motor life.

Consider upgrading to a variable speed controller when:

- the application requires an accurate and continuous speed (when speed control is vital)
- smooth acceleration is important (a smooth acceleration prevents damage and jams)
- production speeds vary from day to day
- the application requires indexing (frequent stops and starts)
- belt speeds vary with information supplied from accessories like photo eyes or stop/start push buttons

### AC Variable Speed Controller (Simple, low cost speed control)

- Keypad speed control, digital readout and overload protection
- Pre-wired motor and power cord packages optional
- NEMA 12 enclosure with mounting hardware
- Stop/Start/Forward/Reverse
- Capable of controlling up to (1) input device (photo eye, E-stop, etc.)

### AC Variable Speed Controller with Parameter Programming (Full feature variable speed controller used for simple accessory input applications.)

- Pre-wired motor and power cord packages optional
- Keypad speed control, digital readout and overload protection
- NEMA 12 enclosure with mounting hardware (Nema 4X available)
- Stop/Start/Forward/Reverse
- Capable of controlling up to (1) input device (photo eye, E-stop, etc.)

### AC Variable Speed Controller with Parameter Programming with up to 5 Inputs

(Full feature variable speed controller used with more complicated accessory applications.)

- Units pre-programmed parameters can be easily over-ridden to customize the program for your needs.
- Pre-wired motor and power cord packages optional
- Internal terminals for hardwired PLC or machine interface
- Keypad speed control, digital readout and overload protection
- Communication card available
- Stop/Start/Forward

### The “Super Drive” Programmable AC Variable Speed Controller with up to 5 inputs

(This powerful controller is used when your application includes input and output from multiple locations and devices, ie – indexing applications, zone accumulations, controlled product throughout and gap control, PLC integration.)

- Many general purpose applications are pre-programmed at the factory
- Pre-wired motor and power cord packages optional
- Internal terminals for hardwired PLC or Machine interface
- Easy on site programming (instructions included)
- 24/7/365 programming help center
- LED digital read out display
- Communication card available
- Full feature VFD control
- Operator interface panel
- NEMA 12 Enclosure



AC Variable Speed Controller



AC Variable Speed Controller with One Input Receptacle



AC Variable Speed Controller with up to 5 inputs



The “Super Drive” Programmable AC Variable Speed Controller with up to 5 Inputs



**AC Variable Speed Drive Packages\***

AC Variable Speed Drive Packages include an inverter duty motor and an AC variable speed frequency controller, with 4' of cord between motor and controller.

Description	Phase	NLE Part #	Description	Phase	NLE Part #
1/3 HP Motor 115/230 Volt AC	1	100235	1 HP Motor 460 Volt AC	3	100251
1/3 HP Motor 230 Volt AC	3	100240	1-1/2 HP Motor 115/230 Volt AC	1	100239
1/3 HP Motor 460 Volt AC	3	100248	1-1/2 HP Motor 230 Volt AC	3	100244
1/2 HP Motor 115/230 Volt AC	1	100236	1-1/2 HP Motor 460 Volt AC	3	100252
1/2 HP Motor 230 Volt AC	3	100241	2 HP Motor 230 Volt AC	3	100245
1/2 HP Motor 460 Volt AC	3	100249	2 HP Motor 460 Volt AC	3	100253
3/4 HP Motor 115/230 Volt AC	1	100237	3 HP Motor 230 Volt AC	3	100246
3/4 HP Motor 230 Volt AC	3	100242	3 HP Motor 460 Volt AC	3	100254
3/4 HP Motor 460 Volt AC	3	100250	5 HP Motor 230 Volt AC	3	100247
1 HP Motor 115/230 Volt AC	1	100238	5 HP Motor 460 Volt AC	3	100255
1 HP Motor 230 Volt AC	3	100243			