

APPLICATION NOTE: 123DV SERIES

The 123DV DC speed control offers an affordable option to **UNINTERRUPTABLE POWER SUPPLIES**.

The question is how do you keep critical devices running if there is a power failure? Any driven device where power interruption could be detrimental becomes a potential. These devices include pumps, compressors, blowers, etc. used on critical applications. These could include medical equipment in hospitals or nursing homes, conveyor drives for making delicate IC's or pumps used in volatile chemical processes.

The application is straight forward. The equipment is driven by a 24 VDC or 36 VDC motor controlled by a 123DV control. The 123DV is powered from AC line power through a step-down transformer. A battery is held as a back-up power source. When there's a power failure a spring loaded DPDT relay switches the motor to the battery. This allows the motor to operate until the power is restored.

This system is inexpensive to build, inexpensive to operate, durable and low in maintenance. Other advantages to this approach include: No U.L. is required since it is below 48 Volts, 24-36 Volts is less dangerous and less likely to arc.

A **SIMILAR APPLICATION** is when a system needs to alternate between Mobile and Stationary operation. When the equipment is stationary it can run with a 123DV from AC power. When mobile it uses battery power. Agricultural equipment, airport service vehicles and floor maintenance equipment are possible examples.

BATTERIES ARE EXPENSIVE! Limiting the hours on batteries not only saves operation dollars but even more in reduced battery replacement.

Applications are limited to the capacity of the 123DV control which is 5.5 - 10.0 Amps if mounted to an additional heatsink.

