

Industrial Fans

Application Overview

Variable speed fan control applications are ideal candidates for energy savings since the power requirement varies with the cube of the fan speed. VFDs offer significant energy savings when compared to traditional damper or inlet vane control and have a quicker payback period that depends on duty cycle. Emerson Control Techniques offer a wide range of easy to use Variable Frequency Drive solutions that include advanced features such as energy savings mode, setpoint PID control (for constant flow, pressure or temperature, etc.), built-in PLC and fieldbus connectivity.

Application Requirements

Control & Connectivity

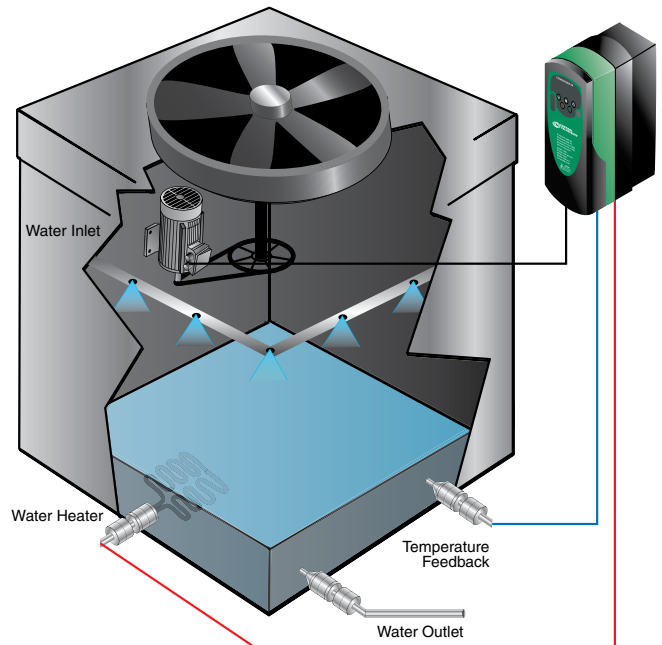
- Wide voltage & hp range
- Flexible accel/decel profiles
- Power-loss ride through
- On-the-fly restart
- Built-in PID control
- Connectivity to PLC—Operator Interface

Protection

- Motor, machine and system protection
- Minimize mechanical stress—Limit inrush current
- Avoid mechanical resonance—Critical frequencies

Minimize Operating Costs

- Energy conservation
- Maximize uptime—High reliability
- Ease of setup—Flexible control



Control Techniques' Solutions

VFDs and Packaged drives

- Available up to 2000 hp
- Global voltage ratings (115/230/480/575/690 VAC)
- Global standards (UL/cUL/CE/C-Tick/ISO9002)
- Compatible with standard NEMA B motors
- NEMA1/UL Type 1 options
- On-board PLC functionality
- Wide range of I/O option modules
- All major fieldbus connectivity options
- RS485 Modbus RTU standard
- Free commissioning software
- Free 'Energy Savings Estimator' software
- Industry leading warranties



CONSIDER IT SOLVED™

Industrial Fan Solutions

Control Techniques' Performance Advantages

Control

- Energy savings mode
- Built-in power meter, energy cost calculator
- Built-in independent PID
- Catch spinning motor (bi-directional)
- Volt/current/pulse speed reference options with automatic scaling
- 8 preset speeds; 8 sets of accel/decel rates
- V/Hz, OL vector & Rotor Flux Control* modes
- Built-in braking transistors
- DC injection braking
- High voltage braking
- Parameter cloning option
- Real Time Clock option

Total System Protection

- 3 Skip (critical) frequency bands
- S-ramp soft start for reduced mechanical stress
- Intelligent thermal motor protection
- Built-in diagnostics

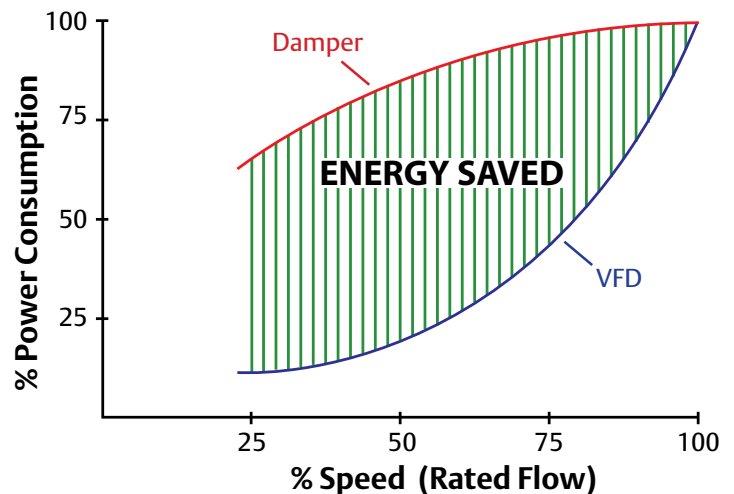
Maximum uptime

- Very high quality—Product reliability
- Supply loss ride through
- Automatic reset
- Easy Setup
- Auto tune—Static and rotational
- Last 10 trips logged

*Rotor Flux Control for high inertia loads is available in the Commander GP20.

World Class Products & Support

- Worldwide Application & Field Service Network
- 24/7 support line 1-800-893-2321



Packaged Drives



Commander SK



Commander GP20

