

PowerFlex® 400



AC Drive Optimized for Commercial Fan and Pump Applications

Providing users with easy installation in mechanical fan and pump systems, the Allen-Bradley PowerFlex® 400 AC drive offers a wide range of built-in features allowing for seamless building system integration. Available in power ratings of 3.0-150 HP @ 380 – 480V AC and 3.0-50 HP @ 200 – 240V AC, the PowerFlex 400 is designed to meet global OEM, contractor and end-user demands for flexibility, space savings and ease-of-use. The PowerFlex 400 is a cost-effective solution for speed control in variable torque fan and pump applications.

Features

- Integral **PID Controller** allows a process variable to be maintained by automatically adjusting the output frequency
- Three programmable **Skip Frequencies and Bands** prevent the drive from running continuously at resonant speeds which could cause mechanical breakdowns
- Selectable **Fan/Pump Curves** provide reduced voltage patterns for centrifugal fan and pump loads
- **Sleep Function** allows the drive to be cycled off when the system demand drops below a preset level and to be restarted automatically when the demand increases
- For applications that require unattended operation, the **Start At PowerUp Function** provides the ability to resume running once power is restored after a power outage
- Connection to fire and life safety systems via **Freeze/Fire and Purge** inputs
- **Auxiliary Motor Control** allows staging of additional line-started motors to meet system demand
- **Damper Input** can be used to disable the drive output until desired damper position is obtained, even with a valid run command

Operator Keypad:



- Integral keypad features 2 line, 16 character LCD display
- 5 LED indicators provide system configuration and fault status
- Configurable Hand/Off/Auto function buttons



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Communications:

- RS485 communications integral to base drive
- Embedded Modbus RTU and Metasys N2 protocols are parameter selectable and require no additional hardware or software
- Supports Drive Serial Interface (DSI) communication modules and accessories
- DriveExplorer™ and DriveTools™ SP software can be used to easily program, monitor and control the drives

Packaging:

- Installation flexibility is enhanced by the UL plenum rating allowing for direct mounting in an air handling system
- Disconnect and contactor bypass packages simplify installation and startup by combining operator interface, control, communications and power options in preconfigured assemblies
- Contactor bypass packages supplied with 3 - contactors allowing drive test functionality and drive isolation when in bypass mode
- Meets seismic requirements of the 2003 International Building Code as specified by AC156

