

IPS CONTROLLER 3000 HVAC Variable Speed Pump Control Unit

The IPS Controller 3000 is an automated control device designed specifically for HVAC chilled water and heating water pumping applications. The IPS Controller 3000 is capable of operating up to three variable speed pumps, configured as either parallel or standby operation. By selecting from a series of pre-engineered algorithms optimized for HVAC applications, users are able to easily automate a variety of pump sequencing speed control, and safety related pump system functionality. The IPS Controller 3000 is available in the following configurations:

- IPS Controller 3001 - up to 2 zones, 3 pumps**
- IPS Controller 3002 - up to 5 zones, 4 pumps**



Standard Features

- A 4-row x 20-digit back-lit LCD display
- 6 button keypad
- 4 LED alarms and indicators
- 115 V, 60 Hz power connection
- Menu-driven process for data entry
- Manual or automatic system control (H-O-A selection)
- Remote or local start/stop mode of operation
- 2-level (field and factory) password security
- Fault memory and alarm history
- Adjustable PID control loop
- NEMA 1 rated enclosure
- UL Listed and CSA Certification
- Internal circuit breaker protection
- Automatic or manual pump alternation
- End-of-curve pump run-out protection
- 3 standard alarm relays: (1) drive, motor, or pump failure, (2) system fault, (3) zone signal fault
- Logic outputs for VFD automatic by-pass control
- Digital inputs for pump differential pressure switches
- Output for remote alarm/horn signal
- Input for silencer of remote alarm/horn
- Separate input menu for remote zone setpoints, input of DP sensor operating range, status of pumps, pump speed(s), drive status, status of remote zone signals, zone faults, zone setpoint and active control zone
- Embedded logic to prevent hunting, pump flow surge and motor overloading
- Menu for fixed-speed, by-pass and selected variable speed settings
- Secure front cabinet door with lock and key
- Diagnostic test of CPU, RAM, and Flash memory
- Support for multiple communications protocols: LonWorks, Trend, Modbus MetaSys, BACNet, TCP/IP and pLAN (requires an optional serial port)

Optional Features

- Serial communications port for integration into a Building Automation System
- Optional communications gateways for BACNet, MetaSys and Webgate (TCP/IP)
- Serial communications port to receive full information from the variable speed drives (Modbus)
- Flash memory card, expandable to 6 MB
- Armstrong can load project-specific field adjustable data at the factory, including zone DP setpoints, sensor range, number of pumps, and duty/standby configuration
- 230 V power supply
- Modem for telephone communications or control
- NEMA 4 or NEMA 12 enclosure
- Operating Range: -10°C to 60°C, %rh 90 non-condensing

Dimensions and Weights

Model	Width	Height	Depth	Weight
IPS3000	20 (508)	20 (508)	8 (203)	60 (27)

NOTE: Dimensions are in inches (mm). Weights are in lbs. (kg).

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