ARMSTRONG

IPS4000

Integrated Pump System

SOLUTION OUTLINE

FILE NO: 90.104
DATE: DECEMBER 2013
SUPERSEDES: 90.104
DATE: OCTOBER 2013

Industry professionals are always searching for ways to improve their results. Reducing project costs, minimizing risk and improving occupant comfort are top priorities, and the pressure to meet all of these objectives at the same time is a constant reality.

Today's control technologies allow building operations and control networks to meet and exceed industry codes for variable speed pump operation. The convenience and cost savings achieved, however, depends on the choice of control strategy. The more advanced the strategies are, the easier it is to meet all your objectives. The many pump control solutions currently available are not all alike, and involve varying levels of cost, risk and performance.

A key opportunity for savings involves choosing a system that does not rely on remote sensors. Avoiding the costs to purchase and install remote sensors reduces the time and material requirements and can also improve lifetime system efficiency.

As experience has shown, HVAC installations offer an opportunity for cost savings through optimizing the performance of the pumping system. Leveraging your existing investment in BMS technology, and taking full advantage of the pump efficiencies available can save even more energy than you might realize.

Upgrading to variable speed technology offers tremendous opportunities for energy savings, and the change to variable speed is easy to manage, regardless of whether the building already has a BMS system installed.

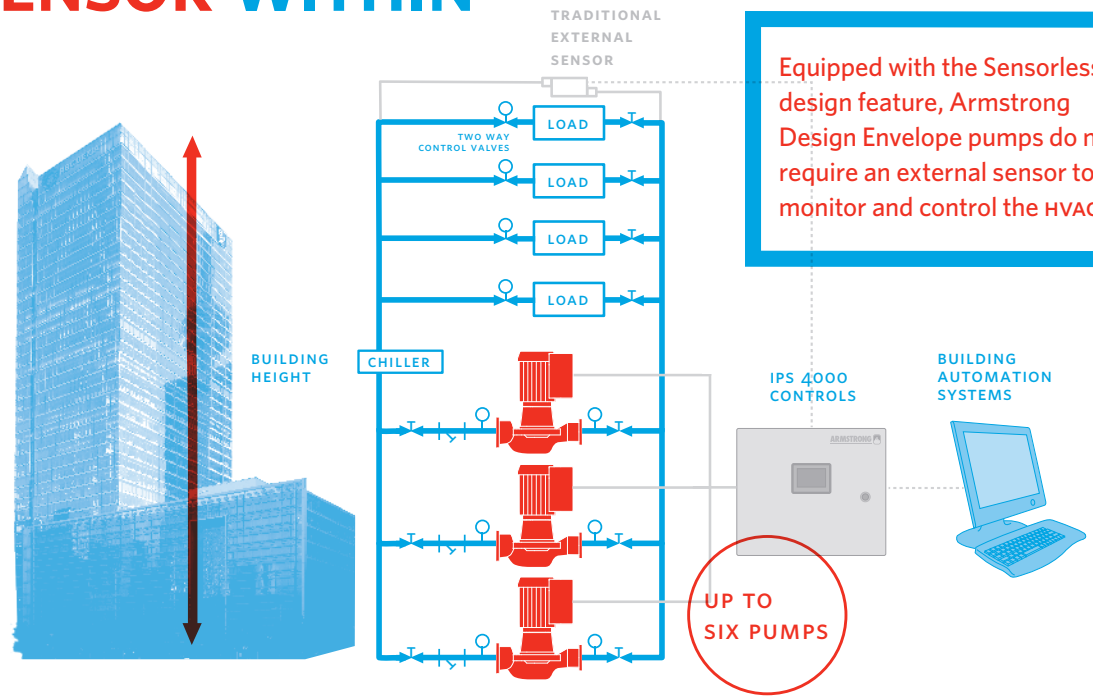
REDUCE TIME REQUIRED FOR RESEARCH

REMOVE UNCERTAINTY AROUND SELECTING A CONTROL SOLUTION

A comprehensive control solution can help you make the most of the improvement potential in your mechanical system. The ideal choice will add value in areas such as:

- Pre-engineered control solutions offered as a complete package
- Maximizing the performance profile of the pump
- Operation in either a stand-alone mode or networked through the BMS
- Low installed costs
- Time savings on installation
  No programming required

THE SENSOR WITHIN



Equipped with the Sensorless design feature, Armstrong Design Envelope pumps do not require an external sensor to monitor and control the HVAC load.

KEY BENEFITS

The Armstrong IPS 4000 Pump Controller is an advanced solution that optimizes the control of any variable flow HVAC system. By specifying the Armstrong IPS 4000 for your next project, you can serve your building occupants, your business objectives, and enjoy:

- **Cost certainty and lowest installed cost**
- **Certainty of long-term performance and monitoring accuracy**
- **Energy savings under any operating conditions**
- **Performance efficiency exceeding ASHRAE 90.1 2010 standards, achieving IE3 and MEI 2015 compliant**
- **Easy installation and integration with existing HVAC systems**
- **Field configurable by the user interface**

KEY FEATURES

The value offered by the Armstrong IPS 4000 Pump Controller includes:

- **Parallel Sensorless Technology** (patent pending)
- **Enhanced Control Capabilities and performance data for optimized staging of pumps**
- **Easy selection of a pre-engineered catalog offering**
- **Support for full serial communication using industry standard protocols**
- **Integration with a new or existing HVAC system, operating either in a standalone mode, or through a bms.**
- **Multi zone control**

IPS 4000 APPLICATION RANGE

MODEL	CONTROL CONFIGURATION	MAX EQUIPMENT QUANTITY		SENSOR CONTROL			
		PUMPS	ZONES*	DP SWITCHES	DP ZONE SENSOR	RETURN TEMP SENSORS	EOC BY DP OR FLOW**
IPS 4001	Variable secondary or tertiary pumping control	3	2	▪	▪	▪	▪
IPS 4002	Variable secondary or tertiary pumping control	4	5	▪	▪	▪	▪
IPS 4003	Variable secondary or tertiary pumping control	6	12	▪	▪	▪	▪

PANEL RATINGS: UL, CSA, CE NEMA
ELECTRICAL RATINGS: 120 VAC/60Hz, 230 VAC/50Hz
COMMUNICATION PROTOCOLS:
BACNET MSTP/IP, MODBUS, LONWORKS

* Parallel Sensorless available for all configurations using Armstrong Design Envelope pumps
**End of curve protection

No other pump control solution available offers you the same combination of control capabilities, low installed cost, easy selection and BMS integration.

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