



# WINNING COMBINATION

## VARIABLE SPEED PUMPS AND AUTOMATION

The Pool Pro's Guide to Breakthrough Efficiency, Convenience and Profitability

# AS ENERGY PRICES RISE, NOW IS THE TIME TO INSTALL REVOLUTIONARY VARIABLE SPEED PUMPS

Welcome to the new, more efficient, reliable, convenient, capable and profitable world of pool pumps and automation systems. This booklet will introduce you to the revolutionary and intelligent IntelliFlo® and IntelliPro® Variable Speed Pumps.

It will also explain how to marry these breakthrough products to control systems from Pentair for maximum convenience, even greater operating efficiency, superior overall value for your customers and a system strategy that will help you sell more higher value pumps and control systems. As you'll see, combining Pentair pumps with control systems creates capabilities and advantages never before possible for pool pros and pool owners.

Please note that our goal with this booklet is to provide an overview of the tremendous capabilities of IntelliFlo and IntelliPro pumps linked with control systems. You'll want to talk with your Pentair representative and attend an upcoming training session on when and how to apply these products. We'll support you every step of the way as you sell and install these game-changing and profit-building innovations.

## THE INTELLIGENT PUMPS THAT ARE CHANGING ALL THE RULES

IntelliFlo vF, IntelliFlo and IntelliPro Variable Speed, and IntelliFlo and IntelliPro VS+SVRS pumps are, without question, the new standard in pool pumps. Onboard intelligence, breakthrough variable speed motor technology and superior hydraulic design combine to deliver:

- **Dramatic utility savings:** up to \$1,500 compared to so-called high-efficiency single-speed and two-speed pumps.\*
- **The quietest operation available:** dramatically quieter operation, as low as 45 decibels.
- **Unmatched longevity:** because these pumps operate at the minimum speed required for each job they perform, critical parts don't wear as quickly. With IntelliFlo vF, IntelliFlo and IntelliPro Variable Speed, and IntelliFlo and IntelliPro VS+SVRS pumps, you are able to set eight different, optimum speeds per function. With IntelliFlo vF pumps, power and speed settings are virtually unlimited and electronically controlled to find the lowest possible requirements to accomplish each task.

In simplest terms, Pentair variable speed pumps provide the same level of pinpoint control over water flow and energy usage as a dimmer switch does for light intensity. It's no longer about "on and off." Now it's about "degrees of economy in operation."

With IntelliFlo and IntelliPro pumps you:

- Slash utility bills.
- Provide the quietest pumps ever invented.
- Provide pump/control systems with expanded capabilities for greater customer convenience.
- Provide unmatched service life.



\* Savings based on variable speed pump compared to a single-speed pump running 12 hours per day at an average of \$0.16 per kWh in a 20,000 gallon pool. Actual savings may vary based on local utility rates, pool size, pump run time, pump horsepower, pump rpm, plumbing size and length, pump model, service factor and other hydraulic factors.



Displays inform you of run time, mode and current status

IntelliFlo v<sub>r</sub> pump tells you when and how to backwash your filter

Manual mode lets you override programming and run the pump using RPM or flow settings of your choosing

Programming is push-button easy—simple menus lead the way



Password protected Safety Lock-out feature prevents settings from being changed by anyone but you

Display indicator shows SVRS mode is activated

Function buttons to set speeds for separate operations

Arrow buttons to navigate through menus and change settings

Alarm status light alerts you of conditions that may need attention (messages appear on LED display)

Quick Clean button is used to start filter backwashing or vacuum cycles

ENERGY STAR® Certified IntelliFlo and IntelliPro Variable Speed pumps from Pentair meet strict energy efficiency criteria set by the U.S. Environmental Protection Agency and the U.S. Department of Energy. These pumps save money, reduce energy use and protect the environment.



# GETTING TO KNOW THE INTELLIFLO® VF VARIABLE FLOW PUMP

The IntelliFlo VF pump is the first pump to deliver the exact amount of water needed to perform different tasks. It is adaptable to any application at 230 volts and 160 gallons per minute. With its onboard computer, you simply program the rate of flow (in GPMs) to suit the application. Each IntelliFlo VF pump can be programmed to manage multiple functions.

The IntelliFlo VF pump automatically sets itself and adjusts as needed since it is constantly monitoring water flow and electrical current.

The IntelliFlo VF pump is also on the lookout for loss of prime or flow interruptions, under and over voltage situations, and thermal overload or freezing. It either takes steps to correct each situation or signals that corrective action is needed.

The IntelliFlo VF pump is the first to use a permanent magnet synchronous motor, which is more efficient than conventional induction motors—often using just a fraction of the horsepower of standard pumps—reducing energy use dramatically. In one example, the difference was an operating cost of approximately 3¢ per hour versus 28¢ for older technology—that's a 90%\* reduction.

Another key benefit of the IntelliFlo VF pump is the ability to change or add equipment without having to change or add pumps to maintain peak system efficiency. Just program the new or added flow requirements to assure top system performance.

The result? For the first time, a single pump can serve virtually every application—today's and tomorrow's—and do it more efficiently than ever before. (P/N 011012)



# GETTING TO KNOW INTELLIFLO AND INTELLIPRO® VARIABLE SPEED PUMPS

IntelliFlo and IntelliPro pumps allow programming of up to eight different speeds for different jobs. Each setting can range from 400 to 3450 RPMs. By dialing in the minimum speed required for a task, the pump works less and uses less energy compared to single or two-speed pumps (which typically operate near the top of their range for all tasks). Pump speeds are adjusted with the push of an up or down arrow button. Programming the

pump with custom speeds is also easy—just pick the speed and assign it to a quick launch button.

This ability to pinpoint and alter multiple pump speeds also allows you and your customer to optimize the efficiency of new pool features or replacement equipment with different flow requirements. You meet more pump requirements without replacing or adding more pumps!

Again, the result is a dramatic increase in energy efficiency. Plus, your customers receive the ultra-quiet operation and superior service life that only these pumps can deliver. (P/N 011018, P/N P6E6VS4H-209L)



# LINKING CONTROLS TO VARIABLE SPEED PUMPS:

## For the ultimate in operating efficiency, automation and “wow!”

The advantages of variable speed pumps are many. Plus, they couldn't be more timely as energy prices continue to rise and pool owners hunger for more convenient, time-saving, efficient and higher technology equipment solutions. In fact, even public utilities are getting behind these energy savers with special rebate and co-promotion programs. There has never been a better time for these breakthrough products.

The next step toward meeting these ever-higher customer expectations: the marriage of variable speed pumps to Pentair control systems.

The inherent superiority of digital communications and variable speed technology lets you deliver the extraordinary

value of variable speed pumps while meeting the increased demand for automated equipment operation...all with less hardware and less wiring...to create an economical, yet powerful solution.

By taking advantage of the multiple control capabilities of Pentair variable speed pumps, you don't need to specify more capable (and more costly) control systems to manage multiple pumps. A variable speed pump takes care of its many jobs at the instruction of a master controller, but you don't need any expensive relays to control other pool, spa and poolscape features.

Plus, joining pumps to controls creates a total system that may require less time to install and less time to diagnose and service.

And now, the optional ScreenLogic® Interface is available to control access from your iPad®, iPhone® or iPod touch® mobile digital device or Android® device.

The result is you provide greater functionality and control at a more competitive cost. And that's a sure-fire formula for selling more while assuring customer satisfaction.

Here's a review of the capabilities and advantages with combinations of variable speed pumps and controls.





## INTELLIFLO® VF VARIABLE FLOW PUMPS WITH AN INTELLITOUCH® CONTROL SYSTEM

### A flow-based, digital-to-digital approach

With this combination, the IntelliTouch system becomes the master controller for one or multiple (up to eight) IntelliFlo VF pumps.

#### Advantages of an IntelliTouch system linked to an IntelliFlo VF pump

- True digital communication capabilities—read all data and issue all instructions from the IntelliTouch system.
- No pump relays needed, so the IntelliTouch system's functionality is increased, allowing for control of more functions with less costly installations.
- Link and control all pump functions and other pool equipment and accessories from a central control station.

#### Advantages of an IntelliFlo VF pump linked to an IntelliTouch system

- Program multiple custom flows per pump...up to eight pumps.
- All pump information relayed to the IntelliTouch system—no trips to the pad for greater customer convenience.



## INTELLIFLO AND INTELLIPRO® VARIABLE SPEED PUMPS WITH AN INTELLITOUCH CONTROL SYSTEM

### A speed-based, digital-to-digital approach

With this combination, the IntelliTouch system becomes the master controller over a single IntelliFlo or IntelliPro Variable Speed pump or up to four networked together.

#### Advantages of the IntelliTouch system linked to an IntelliFlo or IntelliPro Variable Speed pump

- True digital communication capabilities—read all data and issue all instructions from the IntelliTouch system.
- No pump relays needed, so the IntelliTouch system's functionality is increased, allowing for control of more functions with less costly installations.
- Link and control all pump functions and other pool equipment and accessories from a central control station.

#### Advantages of the IntelliFlo or IntelliPro Variable Speed pump linked to the IntelliTouch system

- Program eight speeds.
- All information is displayed on an easy-to-read LCD screen through your IntelliTouch system.
- Saves relays in your IntelliTouch system.
- Watts are also shown on the IntelliTouch system's display.

<sup>1</sup>NOTE: IntelliTouch systems can support up to eight IntelliFlo Variable Speed, IntelliPro Variable Speed, IntelliFlo vs-svrs, IntelliPro vs-svrs or IntelliFlo VF pumps, or various combinations of models.



## INTELLIFLO AND INTELLIPRO VARIABLE SPEED PUMPS WITH AN EASYTOUCH® CONTROL SYSTEM

### A speed-based, digital-to-digital approach

With this combination, the EasyTouch system becomes the master controller for two variable speed pumps.

#### Advantages of an EasyTouch system when linked to an IntelliFlo or IntelliPro Variable Speed pump

- True digital communication capability—read all data and issue all instructions from the EasyTouch system for remote control of one pump.
- No pump relays needed so the EasyTouch system's functionality is increased, allowing for control of more functions with less costly installations.
- Link and control all pump functions and other pool equipment and accessories from a central control panel.
- Lower cost option to an IntelliTouch system.

#### Advantages of IntelliFlo and IntelliPro Variable Speed pump when linked to an EasyTouch system

- Assign up to four custom speeds for multiple functions.



## AUTOMATING INTELLIFLO AND INTELLIPRO PUMPS WITH THE INTELLICOMM® II INTERFACE ADAPTER (FOR THOSE WITH ANALOG CONTROLS OR NO CONTROLS AT ALL)

### A speed-based, analog-to-digital approach

For those with analog control systems, such as Compool® Control Systems, or no control system at all, we've developed the IntelliComm II adapter, an analog-to-digital communication interface to automate operations of Pentair variable speed pumps. With this combination, Pentair's built-in controls issue instructions to the pump while the IntelliComm II adapter serves as an input device between the user and the pump (when no control system is in place) or between the pump and a Compool system (or other brand of analog control system). It then converts analog instructions to digital and digital information to analog. One IntelliComm II adapter is required to achieve automation for each IntelliFlo vF, IntelliFlo Variable Speed or IntelliPro Variable Speed pump. (P/N 521109)

#### Advantages of an IntelliComm II adapter linked to IntelliFlo vF, and IntelliFlo and IntelliPro Variable Speed pumps

- Inexpensive solution to implement.
- "Set it and forget it" solution that requires no pool owner involvement.
- Provides flexibility with older Pentair controllers and other brand controllers.

#### Advantages of IntelliFlo vF, IntelliFlo or IntelliPro Variable Speed pumps when linked to an IntelliComm II adapter

- IntelliFlo vF can run four custom flow programs automatically through IntelliComm II.
- IntelliFlo or IntelliPro Variable Speed and IntelliFlo vF pumps can run eight custom speeds automatically through the IntelliComm II adapter.
- Saves relays.
- Solid-state, easy-to-wire terminals.

# INTELLIFLO® VS+SVRS VARIABLE SPEED PUMPS PROVIDE ADDED SWIMMER SAFETY



A monumental advance in energy efficiency and safety, the IntelliFlo VS+SVRS pump is the first pump with an integrated Safety Vacuum Release System (SVRS) to provide an important layer of protection against entrapment. Its built-in controller and proprietary software detect drain blockage and automatically shut the pump off. The IntelliFlo VS+SVRS pump meets ASME A112.19.1.2002 standards, thereby complying with new federal legislation related to public pools (Virginia Graeme Baker Pool Safety Act), as well as a growing number of state and local statutes/codes for residential pools where entrapment protection measures are required.

## OTHER EXCLUSIVE FEATURES INCLUDE:

- Ability to set minimum and maximum speeds—IntelliFlo pumps will only operate within the ranges you set to help ensure safer operation and long equipment life.
- Unlike other devices, the built-in SVRS protection with an IntelliFlo VS+SVRS pump cannot be turned off.
- Password protected—security features prevent unauthorized personnel from changing the settings.
- For added safety, if the SVRS becomes disabled, the pump will not run.
- No SVRS calibration is required.
- Clearly, the efficiency improvements with IntelliFlo pumps are revolutionary. Now, add the layer of swimmer protection provided with an integrated Safety Vacuum Release System (SVRS), and you'll know why the IntelliFlo VS+SVRS pump is the most valuable and responsible addition you can make to your pool.

AVAILABLE FROM:



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## AN ECO SELECT® BRAND PRODUCT

As Eco Select brand products, IntelliFlo and IntelliPro® Variable Speed Pumps, IntelliFlo vF, and IntelliFlo VS+SVRS pumps, along with IntelliTouch®



and EasyTouch® Control Systems, are among the greenest and most efficient equipment choices from Pentair.

As the global leader in pool and spa equipment manufacturing, we strive to provide greener choices to our customers. We hope you'll join us in embracing more eco-friendly pools by choosing Eco Select branded products.