



**PENTEK**  
**INTELLIDRIVE™**  
INTELLIGENT VARIABLE FREQUENCY DRIVE



## Water Pressure Control Center

*Provides Constant Pressure for Well Water Systems*



**3-Wire Compatible, 1- and 3-Phase Output**



**Pentair**  
**Water™**



PENTEK INTELLIDRIVE™ Product Range			
Pump Motor	Input	Output	HP Range
3-Wire	1-Phase	1-Phase	0.5 - 2.0
3-Wire	1-Phase	3-Phase	0.5 - 3.0

## Constant Pressure for Well Pump Systems

### Works with Submersible Well Pumps to Control Changes in Water Demand

The PENTEK INTELLIDRIVE Water Pressure Control Center automatically adjusts motor speeds to meet changes in water demand. Instantaneous feedback from an electronic pressure transducer instructs the drive to change the submersible well pump motor speed to maintain constant pressure throughout the system.

PENTEK INTELLIDRIVE Variable Frequency Drives install easily with residential water systems and act as a water pressure "traffic cop" for the home.

### PENTEK INTELLIDRIVE Applications

#### Residential water systems

Maintain pressure similar to municipal water systems

#### Landscape irrigation

Maintain constant pressure with a consistent spray pattern, every time, when run off home water system

#### Pool and spa filling

Maintain constant pressure during high-volume filling applications

### PENTEK INTELLIDRIVE Homeowner Benefits

#### Maintains Constant Pressure Output

Regardless of fluctuating demand

#### Extends life of pump and motor

VFD has Soft Start / Coast-to-Stop Functionality to minimize mechanical stress on pumping system

#### Space-Saving Solution

A system using a VFD drive utilizes a smaller pressure tank to save space

#### Energy Savings

Variable speed based on water demand

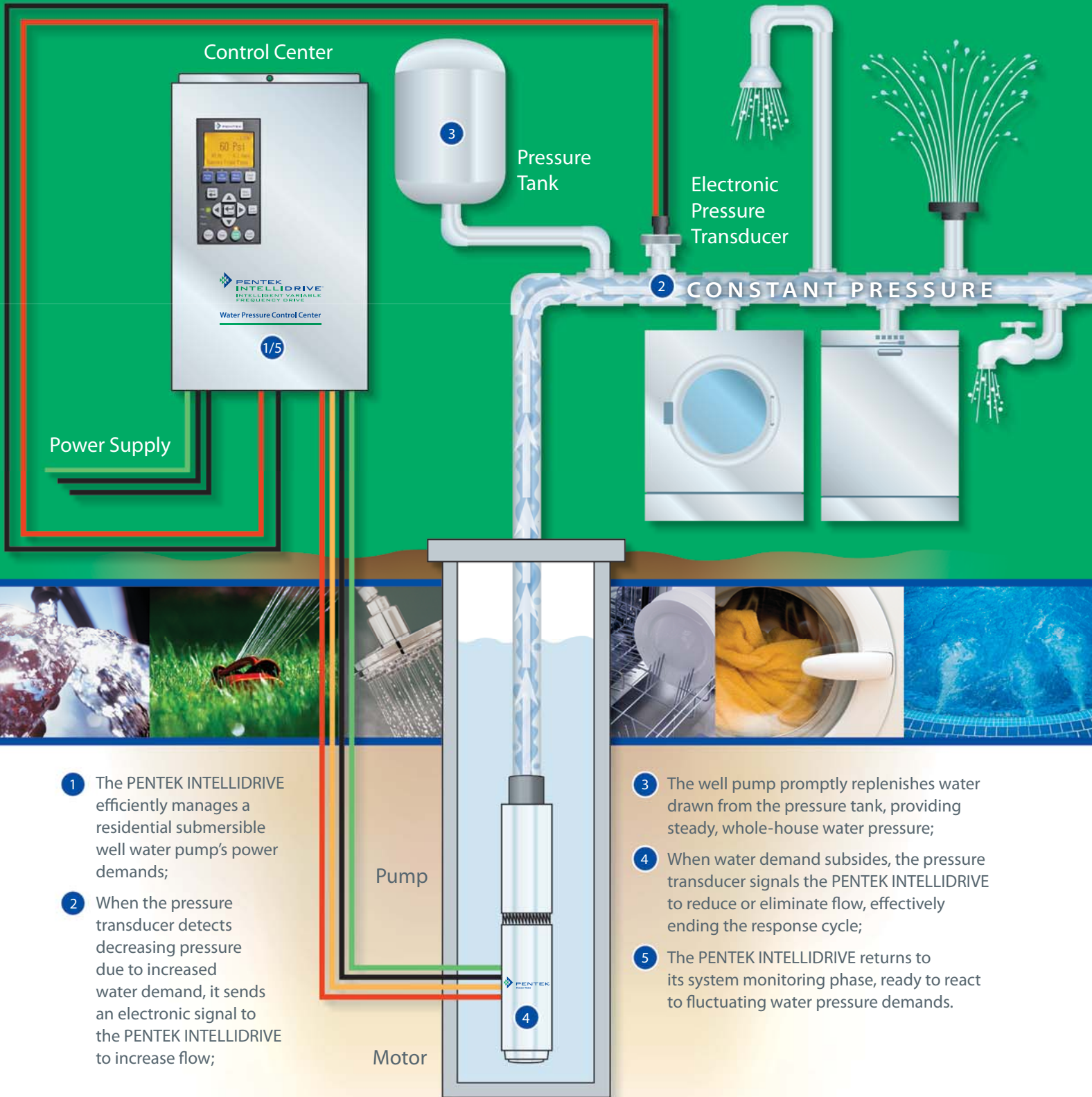


# How It Works

## The Water Pressure Management System

The PENTEK INTELLIDRIVE™ Water Pressure Control Center eliminates pressure cycling during long-running applications, such as lawn irrigation, spa operation or pool filling.

An integral part of a premium residential water system, the PENTEK INTELLIDRIVE combines reliability and state-of-the-art technology to deliver the right amount of consistent, managed water pressure.



## All the Features Pump Professionals Demand



### Keyhole Mount

For fast / easy installation

### User Interface with LCD Display

Quick installation and status indication in easy-to-understand language (not codes)



### Electronic Pressure Transducer

Robust design – more accurate, durable and reliable than mechanical pressure switch. Features piezo resistive technology specially designed to withstand water hammer

### Temperature Sensitive Intelligent Fan

Operates as necessary, supporting quieter operation and conserving energy and maintenance costs

### Robust EMI / RFI Filter

Superior noise and interference protection (including AM radio)

### Spring Terminals

Easy installation and secure connections - no special tools required

### Spacious Wiring Area

Easy installation

### Removable Terminal Blocks

Ease of wiring motor and power supply - field replaceable

### Programmable Input /Output Relays

Support application versatility

### Accessible Conduit Openings

Fits 1/2", 3/4" or 1-1/4".  
Openings align with appropriate terminals for straight-in accessibility.



# The Intelligent Control

## The PENTEK INTELLIDRIVE™ Keypad is Designed for Simple, “Plug and Play” Operation

## Pre-Programmed to Fit Residential Water System Applications

The PENTEK INTELLIDRIVE keypad offers a compact package of power, control and operator interface designed to meet homeowner demands for simplicity and reliability. Easy-to-use touchpad operation offers a broad spectrum of features allowing the user to easily configure the drive to meet most residential water control applications.

### Simple Start-Up Process

- 1) Enter service factor amps
- 2) Enter current time
- 3) Enter current date
- 4) Choose “Pump-Out” or “Auto Start”



Service Factor Amps



Time



Date

### On-Screen Diagnostics Indicator

Self-diagnostic messaging for ease of service



### Pump-Out Button

Easy cleaning of new wells and troubleshooting

### LED Status Indication



### Backlit LCD Display

Status indication and diagnostic messaging

### Fault Log

Stores 15 faults with timestamps

### Keypad Lockout

Provides operational security from unintended adjustments

### Multi-Lingual Options

Choose English, French or Spanish









### Auto-Start

With automatic line-fill functionality

# A Closer Look

## Competitive Product Comparison



	PENTEK INTELLIDRIVE™		Competition
1 Operating Range		<b>3-Wire Compatible,</b> 1-Phase Output (60 Hz) / 3-Phase Output (60 Hz / 80 Hz)*	Most competitors do not offer a 3-wire 1-phase solution
2 Pressure Control Device		Piezo resistive transducer for precise pressure control, <b>greater dependability</b> and protection against water hammer.	Some competitors offer mechanical pressure switches, which are less accurate, and prone to wear over time
3 Fully Programmable Drive		<b>Easily programmable</b> for a variety of applications and specific settings	Most competitors offer factory-configured settings, which limit flexibility in applications
4 Diagnostics		LCD display provides on-demand information for <b>easy diagnostics</b> and troubleshooting	Most competitors offer a flashing LED sequence, which provides unclear diagnostic information
5 EMI / RFI Filters		<b>Best in the industry</b> to eliminate potential interference	Most industry competitors offer limited interference filtering capabilities
6 Connections		Easy-access conduit holes align with appropriate terminal blocks for <b>straight-in accessibility</b>	Some competitors are designed with tight, cramped access – less space makes connections more challenging
7 Terminal Blocks		<b>Removable and replacable</b> terminal blocks for ease of wiring motor and power supply	Some competitors with fixed blocks require replacement of drive for stripped terminals
8 Fan		Temperature-sensitive intelligent fan operates as necessary, <b>conserving energy and maintenance costs</b>	Most operate continuously, increasing energy consumption, maintenance costs, and operational noise

\*60 Hz operation is recommended as the industry standard. Intermittent 80 Hz operation is an acceptable option. Ongoing 80 Hz operation may reduce the life of the pump and motor.

# Control Center Dimensions and Specifications

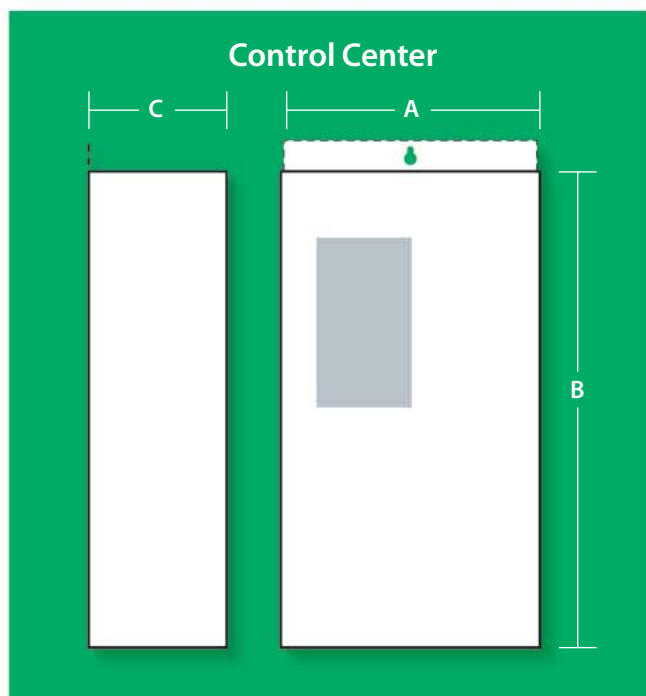
## PID Series Variable Frequency Drives

### Enclosure Dimensions (see diagram at right for reference)

Enclosure Width (A)	Enclosure Height (B)	Enclosure Depth (C)
9.25"	17.5"	6.0"
Carton Dimensions (in.)		10.4" Width • 22.3" Height • 9.4" Depth
Shipping Weight (lbs.)		22 lbs.
Ambient Temperature Range		-20°C (-4°F) to 60°C (140°F)
Ambient Humidity Range		95% non-condensing

#### Includes:

- Variable Frequency Drive
- Transducer
- Transducer Cable:  
10' length standard • 1/4" thread size • 18 NPT type



## PID Series Variable Frequency Drives

### 1-Phase Input / 1-Phase Output

Part Numbers	Motor Type	HP Range	Input Voltage	Maximum Output Amps	Enclosure Type
	3-Wire 1-Phase				
PID-6-9A7-1	✓	1/2 HP - 1 HP	190V - 265V	9.7A	NEMA 1 Indoor
PID-6-9A7-3	✓	1/2 HP - 1 HP	190V - 265V	9.7A	NEMA 3R Outdoor
PID-6-12A2-1	✓	1 HP - 2 HP	190V - 265V	12.2A	NEMA 1 Indoor
PID-6-12A2-3	✓	1 HP - 2 HP	190V - 265V	12.2A	NEMA 3R Outdoor

## PID Series Variable Frequency Drives

### 1-Phase Input / 3-Phase Output

Part Numbers	Motor Type	HP Range	Input Voltage	Maximum Output Amps	Enclosure Type
	3-Wire 3-Phase				
PID-1-4A7-1	✓	1/2 HP - 1 HP	190V - 265V	4.7A	NEMA 1 Indoor
PID-1-4A7-3	✓	1/2 HP - 1 HP	190V - 265V	4.7A	NEMA 3R Outdoor
PID-1-7A6-1	✓	1 HP - 2 HP	190V - 265V	7.6A	NEMA 1 Indoor
PID-1-7A6-3	✓	1 HP - 2 HP	190V - 265V	7.6A	NEMA 3R Outdoor
PID-1-10A1-1	✓	2 HP - 3 HP	190V - 265V	10.1A	NEMA 1 Indoor
PID-1-10A1-3	✓	2 HP - 3 HP	190V - 265V	10.1A	NEMA 3R Outdoor

## Efficient Water Pressure Management

### An Eco Select Choice

The Eco Select™ mark identifies Pentair Water's "greenest," most efficient product offering. Eco Select products save energy, conserve water, eliminate noise and contribute to a more environmentally responsive water system.



As the global leader in residential water delivery, Pentair Water strives to deliver eco-friendly options for our customers. We invite our customers to support our efforts by choosing Eco Select products for their residential water systems.



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