PENTEK INTELLIDRIVE™
The constant water pressure solution

PENTEK INTELLIDRIVE Variable Frequency Drives install easily with residential water systems and act as a water pressure “traffic cop” for the home. Works with submersible well pumps to control changes in water demand.

NEMA 3R

230V Single-Phase IN/230V Single-Phase OUT, 1/2–2 HP, 230V Single-Phase IN/230V Three-Phase OUT, 1/2–3 HP
Available in NEMA 1 or NEMA 3R Type Enclosure

APPLICATIONS

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.

- 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

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

NEMA 1

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NEMA 1
Constant Pressure for Well Pump Systems

Keyhole Mount
For fast / easy installation

User Interface with LCD Display
Quick installation and status indication in easy-to-understand language (not codes)

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

EMI / RFI Filter
Superior noise and interference protection (including AM radio)

Temperature-Sensitive Intelligent Fan
Operates as necessary, supporting quieter operation and conserving energy and maintenance costs

Spacious Wiring Area
Easy installation

Spring Terminals
Easy installation and secure connections — no special tools required

Programmable Input / Output Relays
Support application versatility

Removable Terminal Blocks
Ease of wiring motor and power supply — field replaceable

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

Drive Products
The Intelligent Control™
The PENTEK INTELLIDRIVE™ keypad is designed for simple, "plug and play" operation

On-Screen Diagnostics Indicator
Self-diagnostic messaging for ease of service

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”
Pump and Controller Sizing

**INCLUDES**

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

**PID SERIES VARIABLE FREQUENCY DRIVES**

<table>
<thead>
<tr>
<th>Enclosure Dimensions (see diagram at right for reference)</th>
<th>ENCLOSURE WIDTH (A)</th>
<th>ENCLOSURE HEIGHT (B)</th>
<th>ENCLOSURE DEPTH (C)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9.25&quot;</td>
<td>17.5&quot;</td>
<td>6.0&quot;</td>
</tr>
<tr>
<td>CARTON DIMENSIONS (IN.)</td>
<td>10.4&quot; width</td>
<td>22.3&quot; height</td>
<td>9.4&quot; depth</td>
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<tr>
<td>SHIPPING WEIGHT (LBS.)</td>
<td>22 lbs.</td>
<td></td>
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</tr>
<tr>
<td>AMBIENT TEMPERATURE RANGE</td>
<td>-20°C (-4°F) to 60°C (140°F)</td>
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<tr>
<td>AMBIENT HUMIDITY RANGE</td>
<td>95% non-condensing</td>
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</table>

**PID SERIES Variable Frequency Drives**

**1-PHASE INPUT / 1-PHASE OUTPUT**

<table>
<thead>
<tr>
<th>PART NUMBERS</th>
<th>MOTOR TYPE</th>
<th>HP RANGE</th>
<th>INPUT VOLTAGE</th>
<th>MAXIMUM OUTPUT AMPS</th>
<th>ENCLOSURE TYPE</th>
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</thead>
<tbody>
<tr>
<td>PID-6-9A7-1</td>
<td>✓</td>
<td>1/2 HP – 1 HP</td>
<td>190V – 265V</td>
<td>9.7A</td>
<td>NEMA 1 Indoor</td>
</tr>
<tr>
<td>PID-6-9A7-3</td>
<td>✓</td>
<td>1/2 HP – 1 HP</td>
<td>190V – 265V</td>
<td>9.7A</td>
<td>NEMA 3R Outdoor</td>
</tr>
<tr>
<td>PID-6-12A2-1</td>
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<td>1 HP – 2 HP</td>
<td>190V – 265V</td>
<td>12.2A</td>
<td>NEMA 1 Indoor</td>
</tr>
<tr>
<td>PID-6-12A2-3</td>
<td>✓</td>
<td>1 HP – 2 HP</td>
<td>190V – 265V</td>
<td>12.2A</td>
<td>NEMA 3R Outdoor</td>
</tr>
</tbody>
</table>

**1-PHASE INPUT / 3-PHASE OUTPUT**

<table>
<thead>
<tr>
<th>PART NUMBERS</th>
<th>MOTOR TYPE</th>
<th>HP RANGE</th>
<th>INPUT VOLTAGE</th>
<th>MAXIMUM OUTPUT AMPS</th>
<th>ENCLOSURE TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PID-1-4A7-1</td>
<td>✓</td>
<td>1/2 HP – 1 HP</td>
<td>190V – 265V</td>
<td>9.7A</td>
<td>NEMA 1 Indoor</td>
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<tr>
<td>PID-1-4A7-3</td>
<td>✓</td>
<td>1/2 HP – 1 HP</td>
<td>190V – 265V</td>
<td>9.7A</td>
<td>NEMA 3R Outdoor</td>
</tr>
<tr>
<td>PID-1-7A6-1</td>
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<tr>
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<td>NEMA 3R Outdoor</td>
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<tr>
<td>PID-1-10A1-1</td>
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<td>10.1A</td>
<td>NEMA 1 Indoor</td>
</tr>
<tr>
<td>PID-1-10A1-3</td>
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<td>2 HP – 3 HP</td>
<td>190V – 265V</td>
<td>10.1A</td>
<td>NEMA 3R Outdoor</td>
</tr>
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