FEATURES
Input Power*: 196-264 Volts, single phase 2-wire, grounded
Output Power: Up to 230V three phase (based on input voltage).
Motor rated for 208-230 V.
Input Controls: Press and hold pressure increase/decrease buttons.
Minimum speed and motor overload switch.
Signal Light: Power on, pump running, pump stopped, faults/errors.
Electrical Efficiency: Over 95%
Protection Against: Short circuit, over/under voltage, motor overload, dead
heading, suction loss, sensor fault, bound pump, over/under temperature.
Ambient Temperature: 14º F to 122º F
Maximum Humidity: 95% at 122º F, non-condensing
Enclosure: NEMA 3R, IP 22 (Rain-tight)
Mounting: Mount vertically, screws included
Cooling: Convection with heat sink and fan
Transducer: 0.5 - 4.5 VDC with 5 VDC power supply, 80” 3-wire cable.
* Low input voltage will affect motor operation.
PRODUCT OVERVIEW

Think of it as “Cruise Control” for your pump.
The Aquavar ABII+ pump controller provides an economical answer for municipal and private water systems with low water pressure. Both domestic and light commercial above ground boosters can benefit. As water use increases, the controller changes pump speed to maintain pressure. Large supply tanks are eliminated and up to 50% of the energy required by a full speed pump is saved.

CONTROLLER MODEL NUMBERS AND AMPERAGE / HP RANGES

- **3AB2** - 10.0 maximum amps, 3 HP, 230V, 3Ø Motors
- **5AB2** - 16.6 maximum amps, 5 HP, 230V, 3Ø Motors

SPECIFICATIONS

**Controller Temperature Range:**
- Minimum Ambient Temperature: 14º F (-10º C)
- Maximum Ambient Temperature: 122º F (50º C)

**Input Voltage:** 196 - 264 Volts, 1Ø, 2-Wire Grounded

**Output Voltage:** Up to 230V, 3Ø based on input voltage

**Enclosure Dimensions:**
- Height: 18.6”
- Width: 9.9”
- Depth: 5.3”

**Packaged Dimensions:**
- Height: 21”
- Width: 13”
- Depth: 8”

**3AB2 Specifications:**
- Amperage / HP Range: 10.0A / 3 HP maximum
- Unit Weight: 21 lbs.
- Packaged Weight: 23 lbs.
- Pressure Set Point: adjustable from 20 - 85 PSI with 100 PSI transducer
- Includes: 100 PSI Transducer, 80” Transducer Cable, Mounting Screws and Ground Clamp

**5AB2 Specifications:**
- Amperage / HP Range: 16.6A / 5 HP maximum
- Unit Weight: 22 lbs.
- Packaged Weight: 24 lbs.
- Pressure Set Point: adjustable from 20 - 100 PSI with 200 PSI transducer
- Includes: 200 PSI Transducer, 80” Transducer Cable, Mounting Screws and Ground Clamp

### 3AB2 AND 5AB2 PRESSURE RANGE DATA

<table>
<thead>
<tr>
<th>Transducer</th>
<th>ABII</th>
<th>3AB2</th>
<th>5AB2</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 PSI</td>
<td>20</td>
<td>85</td>
<td>—</td>
</tr>
<tr>
<td>200 PSI</td>
<td>40</td>
<td>170</td>
<td>20</td>
</tr>
</tbody>
</table>

1 Standard on 3AB2  
2 Standard on 5AB2

- Maximum system pressure for 3AB2 with 100 PSI Transducer is 85 PSI
- Maximum system pressure for 5AB2 with 100 PSI Transducer is 100 PSI
- System Pressure is Suction (Incoming) Pressure plus Pump “boost” Pressure. A pump that produces 50 PSI at 10 GPM with 30 PSI of suction pressure will provide 10 GPM at 80 PSI (50 + 30) System Pressure.

**Complete Systems:** pump with pre-wired controller, transducer with cable and tank tee are available. See Aquavar ABII and ABII+ Systems Bulletin, BAQUABII+ for data and variable speed curves.

AGENCY LISTINGS

Tested to UL 778, 508C and CSA 22.2 108-M89, 14-95

Standards By Canadian Standards Association File #LR38549

The ABII+ Advantage

![The ABII+ Advantage](chart)

Typical home water pressure drops when demand is high.

The ABII makes up the pressure difference at peak demand for constant home water pressure.
WITH ADDED FEATURES THE ABII+ PROVIDES CONSTANT PRESSURE CONTROL PLUS MORE FOR THE 3 HP AND 5 HP MOTOR SIZES

NEW FEATURES

- LED numerical and text display clearly indicates actual system pressure, output frequency, current draw and error log
- Dual system set points for advanced system application.
- Programmable output relay can be configured to run optional accessories such as a chlorinator, or link to a home monitoring system.

DIMENSIONS - 3AB2 AND 5AB2

3AB2 UIB

WITH ADDED FEATURES THE ABII+ PROVIDES CONSTANT PRESSURE CONTROL PLUS MORE FOR THE 3 HP AND 5 HP MOTOR SIZES

NEW FEATURES

- LED numerical and text display clearly indicates actual system pressure, output frequency, current draw and error log
- Dual system set points for advanced system application.
- Programmable output relay can be configured to run optional accessories such as a chlorinator, or link to a home monitoring system.

DIMENSIONS - 3AB2 AND 5AB2

3AB2 UIB

WITH ADDED FEATURES THE ABII+ PROVIDES CONSTANT PRESSURE CONTROL PLUS MORE FOR THE 3 HP AND 5 HP MOTOR SIZES

NEW FEATURES

- LED numerical and text display clearly indicates actual system pressure, output frequency, current draw and error log
- Dual system set points for advanced system application.
- Programmable output relay can be configured to run optional accessories such as a chlorinator, or link to a home monitoring system.

DIMENSIONS - 3AB2 AND 5AB2

3AB2 UIB

WITH ADDED FEATURES THE ABII+ PROVIDES CONSTANT PRESSURE CONTROL PLUS MORE FOR THE 3 HP AND 5 HP MOTOR SIZES

NEW FEATURES

- LED numerical and text display clearly indicates actual system pressure, output frequency, current draw and error log
- Dual system set points for advanced system application.
- Programmable output relay can be configured to run optional accessories such as a chlorinator, or link to a home monitoring system.

DIMENSIONS - 3AB2 AND 5AB2

3AB2 UIB

WITH ADDED FEATURES THE ABII+ PROVIDES CONSTANT PRESSURE CONTROL PLUS MORE FOR THE 3 HP AND 5 HP MOTOR SIZES

NEW FEATURES

- LED numerical and text display clearly indicates actual system pressure, output frequency, current draw and error log
- Dual system set points for advanced system application.
- Programmable output relay can be configured to run optional accessories such as a chlorinator, or link to a home monitoring system.

DIMENSIONS - 3AB2 AND 5AB2

3AB2 UIB

WITH ADDED FEATURES THE ABII+ PROVIDES CONSTANT PRESSURE CONTROL PLUS MORE FOR THE 3 HP AND 5 HP MOTOR SIZES

NEW FEATURES

- LED numerical and text display clearly indicates actual system pressure, output frequency, current draw and error log
- Dual system set points for advanced system application.
- Programmable output relay can be configured to run optional accessories such as a chlorinator, or link to a home monitoring system.

DIMENSIONS - 3AB2 AND 5AB2

3AB2 UIB

WITH ADDED FEATURES THE ABII+ PROVIDES CONSTANT PRESSURE CONTROL PLUS MORE FOR THE 3 HP AND 5 HP MOTOR SIZES

NEW FEATURES

- LED numerical and text display clearly indicates actual system pressure, output frequency, current draw and error log
- Dual system set points for advanced system application.
- Programmable output relay can be configured to run optional accessories such as a chlorinator, or link to a home monitoring system.

DIMENSIONS - 3AB2 AND 5AB2

3AB2 UIB

WITH ADDED FEATURES THE ABII+ PROVIDES CONSTANT PRESSURE CONTROL PLUS MORE FOR THE 3 HP AND 5 HP MOTOR SIZES

NEW FEATURES

- LED numerical and text display clearly indicates actual system pressure, output frequency, current draw and error log
- Dual system set points for advanced system application.
- Programmable output relay can be configured to run optional accessories such as a chlorinator, or link to a home monitoring system.

DIMENSIONS - 3AB2 AND 5AB2

3AB2 UIB

WITH ADDED FEATURES THE ABII+ PROVIDES CONSTANT PRESSURE CONTROL PLUS MORE FOR THE 3 HP AND 5 HP MOTOR SIZES

NEW FEATURES

- LED numerical and text display clearly indicates actual system pressure, output frequency, current draw and error log
- Dual system set points for advanced system application.
- Programmable output relay can be configured to run optional accessories such as a chlorinator, or link to a home monitoring system.

DIMENSIONS - 3AB2 AND 5AB2

3AB2 UIB

WITH ADDED FEATURES THE ABII+ PROVIDES CONSTANT PRESSURE CONTROL PLUS MORE FOR THE 3 HP AND 5 HP MOTOR SIZES

NEW FEATURES

- LED numerical and text display clearly indicates actual system pressure, output frequency, current draw and error log
- Dual system set points for advanced system application.
- Programmable output relay can be configured to run optional accessories such as a chlorinator, or link to a home monitoring system.

DIMENSIONS - 3AB2 AND 5AB2

3AB2 UIB

WITH ADDED FEATURES THE ABII+ PROVIDES CONSTANT PRESSURE CONTROL PLUS MORE FOR THE 3 HP AND 5 HP MOTOR SIZES

NEW FEATURES

- LED numerical and text display clearly indicates actual system pressure, output frequency, current draw and error log
- Dual system set points for advanced system application.
- Programmable output relay can be configured to run optional accessories such as a chlorinator, or link to a home monitoring system.

DIMENSIONS - 3AB2 AND 5AB2

3AB2 UIB

WITH ADDED FEATURES THE ABII+ PROVIDES CONSTANT PRESSURE CONTROL PLUS MORE FOR THE 3 HP AND 5 HP MOTOR SIZES

NEW FEATURES

- LED numerical and text display clearly indicates actual system pressure, output frequency, current draw and error log
- Dual system set points for advanced system application.
- Programmable output relay can be configured to run optional accessories such as a chlorinator, or link to a home monitoring system.

DIMENSIONS - 3AB2 AND 5AB2

3AB2 UIB

WITH ADDED FEATURES THE ABII+ PROVIDES CONSTANT PRESSURE CONTROL PLUS MORE FOR THE 3 HP AND 5 HP MOTOR SIZES

NEW FEATURES

- LED numerical and text display clearly indicates actual system pressure, output frequency, current draw and error log
- Dual system set points for advanced system application.
- Programmable output relay can be configured to run optional accessories such as a chlorinator, or link to a home monitoring system.

DIMENSIONS - 3AB2 AND 5AB2

3AB2 UIB

WITH ADDED FEATURES THE ABII+ PROVIDES CONSTANT PRESSURE CONTROL PLUS MORE FOR THE 3 HP AND 5 HP MOTOR SIZES

NEW FEATURES

- LED numerical and text display clearly indicates actual system pressure, output frequency, current draw and error log
- Dual system set points for advanced system application.
- Programmable output relay can be configured to run optional accessories such as a chlorinator, or link to a home monitoring system.

DIMENSIONS - 3AB2 AND 5AB2

3AB2 UIB

WITH ADDED FEATURES THE ABII+ PROVIDES CONSTANT PRESSURE CONTROL PLUS MORE FOR THE 3 HP AND 5 HP MOTOR SIZES

NEW FEATURES

- LED numerical and text display clearly indicates actual system pressure, output frequency, current draw and error log
- Dual system set points for advanced system application.
- Programmable output relay can be configured to run optional accessories such as a chlorinator, or link to a home monitoring system.

DIMENSIONS - 3AB2 AND 5AB2

3AB2 UIB

WITH ADDED FEATURES THE ABII+ PROVIDES CONSTANT PRESSURE CONTROL PLUS MORE FOR THE 3 HP AND 5 HP MOTOR SIZES

NEW FEATURES

- LED numerical and text display clearly indicates actual system pressure, output frequency, current draw and error log
- Dual system set points for advanced system application.
- Programmable output relay can be configured to run optional accessories such as a chlorinator, or link to a home monitoring system.

DIMENSIONS - 3AB2 AND 5AB2

3AB2 UIB

WITH ADDED FEATURES THE ABII+ PROVIDES CONSTANT PRESSURE CONTROL PLUS MORE FOR THE 3 HP AND 5 HP MOTOR SIZES

NEW FEATURES

- LED numerical and text display clearly indicates actual system pressure, output frequency, current draw and error log
- Dual system set points for advanced system application.
- Programmable output relay can be configured to run optional accessories such as a chlorinator, or link to a home monitoring system.

DIMENSIONS - 3AB2 AND 5AB2

3AB2 UIB

WITH ADDED FEATURES THE ABII+ PROVIDES CONSTANT PRESSURE CONTROL PLUS MORE FOR THE 3 HP AND 5 HP MOTOR SIZES

NEW FEATURES

- LED numerical and text display clearly indicates actual system pressure, output frequency, current draw and error log
- Dual system set points for advanced system application.
- Programmable output relay can be configured to run optional accessories such as a chlorinator, or link to a home monitoring system.

DIMENSIONS - 3AB2 AND 5AB2

3AB2 UIB

WITH ADDED FEATURES THE ABII+ PROVIDES CONSTANT PRESSURE CONTROL PLUS MORE FOR THE 3 HP AND 5 HP MOTOR SIZES

NEW FEATURES

- LED numerical and text display clearly indicates actual system pressure, output frequency, current draw and error log
- Dual system set points for advanced system application.
- Programmable output relay can be configured to run optional accessories such as a chlorinator, or link to a home monitoring system.
Installing the check valve on the discharge side of pump will allow faster turn off at no flow.

**Note:** Fittings and valves are not included with ABII and ABII+ controllers.